# **INITIAL STUDY**

# FOR

# SWC 8<sup>TH</sup> STREET AND HIGHLAND SPRINGS AVE.

Prepared for:

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# **SECTION 1.0 INTRODUCTION**

Independently reviewed, analyzed and exercised judgment in making the determination, by the Development Review Committee on \_\_\_\_\_\_, pursuant to Section 21082 of the California Environmental Quality Act (CEQA).

CEQA requires the preparation of an Initial Study when a proposal must obtain discretionary approval from a governmental agency and is not exempt from CEQA. The purpose of the Initial Study is to determine whether or not a proposal, not except from CEQA, qualifies for a Negative Declaration (ND) or whether or not an Environmental Impact Report (EIR) must be prepared.

Section 1.0 of this Initial Study (IS) describes the purpose, environmental authorization, the intended uses of the IS, documents incorporated by reference, and the processes and procedures governing the preparation of the environmental document. Pursuant to Section 15367 of the State of California *Guidelines for Implementation of the California Environmental Quality Act* (CEQA Guidelines), the City of Beaumont (City) is the Lead Agency under the California Environmental Quality Act (CEQA). The City has primary responsibility for compliance with CEQA and consideration of the Proposed Project.

- 1. **Project Title:** SWC 8<sup>th</sup> Street & North Highland Springs Ave
- 2. Lead Agency Name: City of Beaumont Planning Division 550 E. 6<sup>th</sup> Street Beaumont, CA 92223
- **3. Contact Person:** Carole Kendrick, Senior Planner **Phone Number:** 951-769-8518
- 4. **Project Location:** Southwest corner of the Highland Springs Ave. and 8<sup>th</sup> Street
- 5. Geographic Coordinates of Project Site: 33° 55'56.47" N, 116° 56' 51.24" W
- 6: USGS Topographic Map: Beaumont 7.5-minute USGS Topographic Quadrangle
- 7: **Public Land Survey System:** Township 3 South, Range 1 West, Section 11
- 8. Thomas Guide Location: Page 721, Grid C2, San Bernardino & Riverside Counties (2013)
- 9. Assessor Parcel Number: 419-150-034
- **10. General Plan Designation:** Community Commercial
- **11**. **Zoning:** Commercial Community

**12. Description of Project:** Evergreen Devco, Inc. ("Project Applicant") is proposing the development of a 3,500 square-foot quick service restaurant (QSR), a gas station with six fuel pumps with 12 dispensers, and a 4,088 square-foot convenience store on a 2.08-acre parcel in the City of Beaumont, Riverside County. The Project Site is located on the southwest corner of Highland Springs Avenue and East 8<sup>th</sup> Street (see Figure 1-Regional Location and Figure 2-Project Vicinity). The existing vacant parcel is described as Assessor's Parcel No. 419-150-034.

The Project Site is currently vacant and will be split into two lots as shown on Figure 3, via a Tentative Parcel Map. Lot A will be in Parcel 2 and consist of a QSR with an attached drive-thru and thirty-nine (39) parking spaces, 2 of which will be handicap-accessible parking spaces; Lot B will in Parcel 1 and consist of a gas station with six fuel pumps with twelve (12) fueling dispensers, and a convenience store with 49 parking spaces, 2 of which will be handicap-accessible parking spaces. The site design also includes two (2) 20K-gallon underground storage tanks (USTs) and one (1) Healy Tank(s) (clean air separator). One of the USTs will hold 20K-gallons of Regular Unleaded Gasoline. The other UST is a Split Tank, which will hold 8K-gallons of Premium Unleaded Gasoline and 12K-gallons of Diesel. An underground detention system with a minimum storage volume of 4,700 cubic feet is proposed for peak attenuation of storm flows.

The City of Beaumont requires a Conditional Use Permit for fast food restaurants with a drivethru use, a Gas/Service Station, as well as for the operation of an off-sale alcohol license. Access to the Project Site would be provided by a 35-foot driveway at 8<sup>th</sup> Street and a 35-foot driveway at Highland Springs Ave. The Proposed Project includes the installation of two (2) monuments illuminated signs, one in each frontage. Landscaping will be provided on the northern and eastern boundaries. Structure heights will be a maximum of 18.5 feet for the fueling station canopy and 22 feet for the building.

The Project Site has a current zoning of Commercial Community and General Plan land use designation of Community Commercial. The Community Commercial land use designation is characterized by commercial shopping centers that serve adjacent neighborhoods. The Project Site is surrounded by commercial development (medical and dental offices), ongoing development (Sundance Corporate Center), and public facilities (hospital and nursing facility).

**13. Surrounding Land Uses and Setting:** The Project Site has a current zoning of Commercial Community and a General Plan land use designation of Community Commercial. The Community Commercial land use designation is characterized by commercial shopping centers that serve adjacent neighborhoods. The Project Site is surrounded by commercial development (medical and dental offices), ongoing development (Sundance Corporate Center), and public facilities (hospital and nursing facility).

Location	Existing Use	Land Use Designation	Zoning
Site	Vacant	Community Commercial	Commercial Community
North	Vacant, Ongoing development	Single-Family Residential	Specific Plan Area
South	Medical and Dental offices	General Commercial	Commercial General
East	San Gorgonio Memorial Hospital (City of Banning)	Public Facilities	Public Facilities
West	Palmgrove Healthcare center	Multi-Family Residential	Residential- Multiple Family

14. Other agencies whose approval is required (e.g., permits, finance approval, or participation agreement):

• Fueling Dispensing Facility - South Coast Air Quality Management District

# 15. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

McKenna et Al. submitted a written request to the Native American Heritage Commission for a records search in the commission's Sacred Lands File. The NAHC provided a list dated November 21, 2019 of 21 tribes recommended for contact. The City of Beaumont initiated the AB 52 consultation process on May 8, 2020.





**REGIONAL LOCATION** Convenience Store and Gas Station Beaumont, California



Peet Source: Lilburn Corp., March, 2020. LILBURN CORPORATION

**PROJECT VICINITY** Convenience Store and Gas Station Beaumont, California

FIGURE 2



# FIGURE 3

Beaumont, California

LILBURN

# 1.1 EVALUATION FORMAT

This Initial Study is prepared in compliance with the California Environmental Quality Act (CEQA) Guidelines. This format of the study is presented as follows. The project is evaluated based upon its effect on eighteen (18) major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study Checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially	Less than	Less than	No Impact
Significant	Significant	Significant	
Impact	with Mitigation		

Substantiation is then provided to justify each determination. One of the four following conclusions is then provided as a summary of the analysis for each of the major environmental factors.

- 1. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.
- 2. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- 3. Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List mitigation measures)
- 4. Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are: (List the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized as being either self- monitoring or as requiring a Mitigation Monitoring and Reporting Program.

#### 1.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would potentially be affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklists on the following pages. For each of the potentially affected factors, mitigation measures are recommended that would reduce the impacts to less than significant levels.

	Aesthetics		Agriculture and Forestry Resources	Air Quality
$\boxtimes$	Biological Resources Geology /Soils	$\square$	Cultural Resources Greenhouse Gas Emissions	Energy Hazards & Hazardous Materials
$\boxtimes$	Hydrology/Water Quality		Land Use / Planning	Mineral Resources
	Noise Recreation Utilities/Service Systems		Population / Housing Transportation Wildfire	Public Services Tribal Cultural Resources Mandatory Findings of Significance

#### 1.3 ENVIRONMENTAL DETERMINATION

On the basis of this Initial Study, the City of Beaumont Environmental Review Committee finds:

- I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the Proposed Project would have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the Proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.

Signature

Carole Kendrick\_\_\_\_\_ Name <u>July 24, 2020</u> Date

Senior Planner Title

# 1.4 EVALUATION OF ENVIRONMENTAL IMPACTS

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- All answers must take account of the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if substantial evidence exists that an effect may be significant. If one or more "Potentially Significant Impact" entries are marked when the determination is made, an EIR is required.
- 4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from earlier analyses may be cross-referenced).
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 8. The explanation of each issue should identify:
  - a. the significance criteria or threshold, if any, used to evaluate each question; and the mitigation measure identified, if any, to reduce the impact to less than significant.
     \*Note: Instructions may be omitted from final document.

# **SECTION 2.0 – PROJECT DESCRIPTION**

# 2.1 PURPOSE OF THIS DOCUMENT

The City formally initiated the environmental process for the project with the preparation of this Initial Study (IS). The IS screens out those impacts that would be less than significant and do not warrant mitigation, while identifying those issues that require further mitigation to reduce impacts to a less than significant level. As identified in the following analyses, project impacts related to various environmental issues either do not occur, are less than significant (when measured against established significance thresholds) or have been rendered less than significant through implementation of mitigation measures. Based on these analytical conclusions, this IS supports adoption of an MND for the Proposed Project. This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines.

CEQA permits the incorporation by reference of all or portions of other documents that are generally available to the public. The IS has been prepared utilizing information from City planning and environmental documents, technical studies specifically prepared for the project, and other publicly available data. The documents utilized in the IS are identified in Section 3.0 and are hereby incorporated by reference. These documents are available for review at the City of Beaumont, Community Development Department.

Pursuant to Section 15367 of the State CEQA Guidelines, the City of Beaumont is the Lead Agency in the preparation of this Initial Study. The City has primary responsibility for approval or denial of this project. The intended use of this Initial Study is to provide adequate environmental analysis related to project construction and operation activities of the Proposed Project.

# 2.2 PROJECT LOCATION

The Project Site is an undeveloped parcel in the City of Beaumont, located approximately 1.71 miles northeast of the I-10 freeway and SR-79 highway intersection (refer to Figure 1 - Regional Map). It is adjacent to the City of Banning, in the southwestern corner of the Highland Springs Avenue and 8<sup>th</sup> Street intersection (refer to Figure 2-Vicinity Map). The property has a current General Plan land use designation of Community Commercial. It is surrounded by medical and dental offices to the south, a hospital to the east, ongoing commercial development to the north and a nursing facility to the west. The Project Site and its immediate vicinity is within the 6<sup>th</sup> Street Corridor Planning Area of the City General Plan, approved March 2007. Development in this area is largely commercial and industrial in character with many single-family and multiple-family residences located between commercial parcels. The area surrounding the Project Site and in Banning are a mix of general commercial development, high density residences and professional offices.

# 2.3 PROJECT DESCRIPTION

The Project Applicant is requesting the approval of Conditional Use Permit and Tentative Parcel Map to develop a QSR with an attached drive-thru use, gas station and convenience store. The Project Site is currently vacant. The Proposed Project would divide the square-shaped approximately 2.08-acre property into two commercial lots. Lot A in Parcel 2 is the western portion of the site and is proposed to consist of a QSR. Lot B in Parcel 1 is the eastern portion and is proposed to consist of a convenience store and gas station (refer to Figure 3-Site Plan). The gas station would consist of 6 fuel pumps with 12 dispensers and two USTs. Access to and egress from the Project Site would be provided by a 35-foot driveway on 8<sup>th</sup> Street and another one on Highland Springs Avenue. The Proposed Project would provide 88 parking spaces, 4 of which are handicap accessible. An illuminated monument sign would be installed on each frontage.

# SECTION 3.0 - CHECKLIST OF ENVIRONMENTAL ISSUES

# 3.1 AESTHETICS

1.	AESTHETICS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Have a substantial adverse effect on a scenic vista?			$\boxtimes$	
(b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				$\boxtimes$
(c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
(d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			$\boxtimes$	

#### 3.1.1 **Environmental Setting**

The City of Beaumont is located in north-central Riverside County, at the summit of the San Gorgonio Pass. Beaumont is bounded on the west by the City of Calimesa, on the north by the unincorporated community of Cherry Valley; on the south by the I-10 Freeway; and on the east by the City of Banning. Beaumont is located approximately 70 miles east of downtown Los Angeles, 21 miles northeast of the City of Riverside; and 21 miles southeast of the City of San Bernardino. The Project Site is surrounded by commercial development, public facilities and undeveloped lands.

# 3.1.2 Impact Analysis

# a) Would the project have a substantial adverse effect on a scenic vista?

Less than Significant Impact. The City General Plan does not contain any designated scenic vistas that would be affected by the implementation of the Proposed Project. The San Timoteo Badlands area is considered a scenic vista, therefore development proposals within the Badlands area will be given special attention.<sup>1</sup> The Project Site is 16 miles southeast of the San Timoteo Badlands and implementation of the Proposed Project would not have an effect on this scenic resource. The Project Site has a General Plan designation of Community Commercial.<sup>2</sup> The Proposed Project would be consistent with the General Plan designation. The Project Site is surrounded by vacant land undergoing development to the north, public facility to the east (hospital), nursing facility to the west, and General Commercial development to the south. The Proposed Project's building structures will not exceed 50 feet, as is required

<sup>&</sup>lt;sup>1</sup> City General Plan. https://www.beaumontca.gov/DocumentCenter/View/63/General-Plan?bidId=. Page 161

<sup>&</sup>lt;sup>2</sup>City General Plan. https://www.beaumontca.gov/DocumentCenter/View/63/General-Plan?bidld=. Page 26

by the City's municipal code standards for the Community Commercial zone. The Proposed Project is not anticipated to change the general aesthetics of the area or obstruct natural scenic views or vistas. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

**No Impact.** Implementation of the Proposed Project would not cause damage to any scenic resources or historic buildings within a State Scenic Highway. The Project Site is currently vacant and consists of grass and tumbleweeds. The Project Site is not adjacent to or near any State-eligible or State-designated Scenic Highway.<sup>3</sup> The nearest State Scenic Highway is Route 243, which is approximately 3.5 miles east of the Project Site. According to the City General Plan, proposed projects that are either within the San Timoteo Badlands or that could affect views of or alter ridgelines will be given special consideration to reduce aesthetic/visual resource impacts to a less-than-significant level.<sup>4</sup> The Proposed Project is 16 miles southeast of the San Timoteo Badlands and will not affect views of or alter ridgelines. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

c) Would the project in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. Development of the Proposed Project would not cause damage to the existing visual character or quality of the Project Site or its surroundings. The Proposed development would be consistent with the City General Plan designation and would enhance the surrounding community with commercial uses. The surrounding properties are either vacant, developed for residential or commercial uses, or a public facility. The Proposed Project would maintain similar aesthetics and building design as the surrounding establishments. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant Impact. Development of the Proposed Project would take place on a site that is currently vacant. The Proposed Project includes two LED-illuminated monument signs adjacent to the driveways, three LED-illuminated canopy signs at the gas station and an LED-illuminated wall sign outside the convenience store. Lights installed for the Proposed Project will be directed away from sensitive receptors. Sensitive receptors in the vicinity include hospital patients and staff on the east side of Highland Springs Avenue, and staff and patients in the nursing facility to the west. These facilities and commercial development south of the Project Site already include lighting on the outside of buildings and in parking lots

<sup>&</sup>lt;sup>3</sup> County General Plan. Circulation Element Figure C-8 Scenic Highways

<sup>&</sup>lt;sup>4</sup> City General Plan. <u>https://www.beaumontca.gov/DocumentCenter/View/63/General-Plan?bidId=</u>. Page 161

primarily for safety. Additionally, both 8<sup>th</sup> St. and Highland Springs Avenue have streetlights in the area of the project as well as traffic lights at intersections. Prior to issuance of the occupancy permit, the Project Applicant is required to install public streetlights along the frontage of perimeter streets. Streetlight installation shall be in accordance to the City's Approved Street Lighting Specifications. In addition, trees would be planted throughout the Project Site and along the perimeter, which would minimize light exposure. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

# 3.2 AGRICULTURE & FORESTRY RESOURCES

2.	AGRICULTURE & FOREST RESOURCES. (In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland.) In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.) Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?				
(b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				$\boxtimes$
(c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
(d)	Result in the loss of forest land or conversion of forest land to non-forest use?				
(e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or the conversion of forest land to non-forest use?				

# 3.2.1 Environmental Setting

The Project Site is in the northeastern portion of the City of Beaumont. As shown on the City General Plan Land Use Designations Map, it has a current zoning of Community Commercial. The Project Site is neither considered useful for agriculture nor is it within an existing zone for forest land. The Project Site is vacant with only non-native grasses and tumbleweeds present on-site. SALEM conducted a Phase I Environmental Site Assessment (ESA) of the Proposed Project in January 2020 (see Appendix A). According to their review of historical aerial photographs, the Project Site and adjacent properties appear to have been undeveloped or agricultural lands since the 1930s.

# 3.2.2 Impact Analysis

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

**No impact.** According to the City General Plan, properties within the General Plan Area are not designated as prime farmlands, unique farmlands, or farmlands of statewide importance.<sup>5</sup> The Project Site is identified as "Urban and Built-Up Land" in the Riverside County Important Farmland 2016 Sheet 1 of 3 maps.<sup>6</sup> Urban and Built-Up Land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Examples of this category are residential, industrial commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures. No prime farmland, unique farmland, or farmland of statewide importance occur on the Project Site. The Proposed Project would not convert farmland to a non-agricultural use. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

**No Impact.** The Project Site is not under a Williamson Act Contract, as confirmed by the Assessor's Agriculture Division. According to the City General Plan, no agricultural properties within the General Plan Area are currently covered under the provisions of a Williamson Act Contract.<sup>7</sup> Additionally, as shown on the Riverside County Information Technology (RCIT) Geographic Information Systems (GIS), the Project Site is not under Williamson Contract. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources

<sup>&</sup>lt;sup>5</sup> City General Plan. Page 138

<sup>&</sup>lt;sup>6</sup> California Department of Conservation. Important Farmland 2016 Sheet 1 of 3.

<sup>&</sup>lt;sup>7</sup> City General Plan. Page 138.

Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

**No Impact.** Beaumont does not have a zoning designation for, nor does it contain forestryrelated timberland or timberland production sites within city limits.<sup>8</sup> Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

**No Impact.** The Project Site is currently vacant and does not support forest land. Implementation of the Proposed Project would not result in loss of forest land or conversion of forest land to non-forest use. The City General Plan does not include any lands designated as forest land within the General Plan area. Therefore, no loss of forest land or conversion of forest land to non-forest use will result from the implementation of the Proposed Project. No impacts are identified or anticipated, and no mitigation measures are required.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or the conversion of forest land to non-forest use?

**No Impact.** The Project Site does not support agricultural or forest land use. Implementation of the Proposed Project would not result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use on-site or off-site. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

3.	AIR QUALITY. (Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.) Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Conflict with or obstruct implementation of the applicable air quality plan?			$\boxtimes$	
(b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				
(c)	Expose sensitive receptors to substantial pollutant concentrations?			$\boxtimes$	
(d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			$\boxtimes$	

# 3.3 AIR QUALITY

<sup>&</sup>lt;sup>8</sup> City General Plan. Page 26.

# 3.3.1 Environmental Setting

The City of Beaumont is located in the eastern portion of the South Coast Air Basin (SCAB). The SCAB is bounded by the San Jacinto, San Gabriel and San Bernardino Mountain Ranges. The primary source of air pollution affecting the City are pollutants transported by wind from urbanized areas located west towards Los Angeles. The South Coast Air Quality Management District (SCAQMD) has jurisdiction over air quality issues and regulations within the SCAB.

# 3.3.2 Impact Analysis

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

**Less than Significant Impact.** The Project Site is located in the South Coast Air Basin (SCAB). The South Coast Air Quality Management District (SCAQMD) has jurisdiction over air quality issues and regulations within the SCAB. The Air Quality Management Plan (AQMP) for the basin establishes a program of rules and regulations administered by SCAQMD to obtain attainment of the state and federal air quality standards. The most recent AQMP (AQMP 2016) was adopted by the SCAQMD on March 2017. The 2016 AQMP incorporates the latest scientific and technological information and planning assumptions, including transportation control measures developed by the Southern California Association of Governments (SCAG) using the 2016 Regional Transportation Plan/Sustainable Communities Strategy.

The Proposed Project is consistent with the City of Beaumont's Community Commercial land use designation. The General Plan was adopted before the 2016 AQMP was adopted. Therefore, the emissions associated with the Proposed Project have already been accounted for in the AQMP and approval of the Proposed Project would not conflict with the AQMP. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

**Less than Significant Impact.** On March 2020, an Air Quality and Greenhouse Gas Assessment was prepared for the Proposed Project by Lilburn Corporation (see Appendix B for report). The Proposed Project's construction and operational emissions were screened using California Emissions Estimator Model (CalEEMod) version 2016.3.2 prepared by the SCAQMD (see Appendix B for model output). CalEEMod was utilized to estimate the on-site and off-site construction emissions. The emissions incorporate Rule 402 and 403 by default as required during construction. The criteria pollutants screened for include reactive organic gases (ROG), nitrous oxides (NOx), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), and particulates (PM<sub>10</sub> and PM<sub>2.5</sub>). Two of the analyzed pollutants, ROG and NO<sub>x</sub>, are ozone precursors. Both summer and winter season emission levels were estimated.

# **Construction Emissions**

Construction emissions are considered short-term, temporary emissions and were modeled with the following construction parameters: site preparation, site grading (fine and mass grading), building construction, paving, and architectural coating. Construction is anticipated

to begin in early 2021 and be completed in late 2021. The resulting emissions generated by construction of the Proposed Project are shown in Table 1 and Table 2, which represent summer and winter construction emissions, respectively.

(Pounds per Day)								
Source/Phase	ROG	NOx	CO	SO <sub>2</sub>	<b>PM</b> 10	PM <sub>2.5</sub>		
Site Preparation	1.9	17.5	8.0	0.0	3.5	2.1		
Grading	1.6	24.6	7.9	0.0	3.8	2.0		
Building Construction	2.0	15.0	14.4	0.0	1.1	0.8		
Paving	1.2	7.8	9.3	0.0	0.5	0.5		
Architectural Coating	9.5	1.5	2.1	0.0	0.1	0.1		
Highest Value (lbs./day) 9.5 24.6 14.4 0.0 3.8					2.1			
SCAQMD Threshold	75	100	550	150	150	55		
Significant	No	No	No	No	No	No		

Table 1 Summer Construction Emissions Summary

Source: CalEEMod.2016.3.2 Summer Emissions

Phases do not overlap and represent the highest concentration.

Winter Construction Emissions Summary (Pounds per Day)									
Source/Phase ROG NO <sub>x</sub> CO SO <sub>2</sub> PM <sub>10</sub> PM <sub>2.5</sub>									
Site Preparation	1.6	17.4	7.8	0.0	3.4	2.1			
Grading	1.6	24.6	7.9	0.0	3.8	2.0			
Building Construction	2.0	15.0	14.2	0.0	1.1	0.8			
Paving	1.2	7.8	9.4	0.0	0.5	0.5			
Architectural Coating	9.5	1.5	2.0	0.0	0.1	0.1			
Highest Value (lbs./day) 9.5 24.6 14.4 0.0 3.8 2.1									
SCAQMD Threshold	75	100	550	150	150	55			
Significant	No	No	No	No	No	No			

# Table 2

Source: CalEEMod.2016.3.2 Winter Emissions.

Phases do not overlap and represent the highest concentration.

As shown in Table 1 and Table 2, construction emissions during either summer or winter seasonal conditions would not exceed SCAQMD thresholds.

#### Compliance with SCAQMD Rules 402 and 403

Although the Proposed Project does not exceed SCAQMD thresholds for construction emissions, the Project Proponent would be required to comply with all applicable SCAQMD rules and regulations as the SCAB is in non-attainment status for ozone and suspended particulates ( $PM_{10}$  and  $PM_{2.5}$ ).

The Project Proponent would be required to comply with Rules 402 nuisance, and 403 fugitive dust, which require the implementation of Best Available Control Measures (BACMs) for each fugitive dust source, and the AQMP, which identifies Best Available Control Technologies

(BACTs) for area sources and point sources. The BACMs and BACTs would include, but not be limited to the following:

- 1. The Project Proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.
  - (a) The Project Proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading activity on the site. Portions of the site that are actively being graded shall be watered regularly (2x daily) to ensure that a crust is formed on the ground surface and shall be watered at the end of each workday.
  - (b) The Project Proponent shall ensure that all disturbed areas are treated to prevent erosion until the site is constructed upon.
  - (c) The Project Proponent shall ensure that landscaped areas are installed as soon as possible to reduce the potential for wind erosion.
  - (d) The Project Proponent shall ensure that all grading activities are suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.

During construction, exhaust emissions from construction vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces, would increase  $NO_X$  and  $PM_{10}$  levels in the area. Although the Proposed Project does not exceed SCAQMD thresholds during construction, the Applicant/Contractor would be required to implement the following BMPs as required by SCAQMD:

- 2. To reduce emissions, all equipment used in grading and construction must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel. Site development will be limited to one acre disturbed per day.
- 3. The contractor shall utilize (as much as possible) pre-coated building materials and coating transfer or spray equipment with high transfer efficiency, such as high volume, low pressure (HVLP) spray method, or manual coatings application such as paint brush, hand roller, trowel, dauber, rag, or sponge.
- 4. The contractor shall utilize water-based or low VOC coating per SCAQMD Rule 1113. The following measures shall also be implemented:
  - Use Super-Compliant VOC paints whenever possible.
  - If feasible, avoid painting during peak smog season: July, August, and September.
  - Recycle leftover paint. Take any left-over paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
  - Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
  - For water-based paints, clean up with water only. Whenever possible, do not rinse the clean-up water down the drain or pour it directly into the ground or the storm drain. Set aside the can of clean-up water and take it to a hazardous waste center (www.cleanup.org).
  - Recycle the empty paint can.

- Look for non-solvent containing stripping products.
- Use Compliant Low-VOC cleaning solvents to clean paint application equipment.
- Keep all paint and solvent laden rags in sealed containers to prevent VOC emissions.
- 5. The Project Proponent shall ensure that existing power sources are utilized where feasible via temporary power poles to avoid on-site diesel power generation.6. The operator shall maintain and effectively utilize and schedule on-site equipment in order to minimize exhaust emissions from truck idling.
- 6. The Project Proponent shall ensure that construction personnel are informed of ride sharing and transit opportunities.
- 7. All buildings on the project site shall conform to energy use guidelines in Title 24 of the California Administrative Code as updated to reduce energy consumption and reduce GHG emissions.
- 8. The operator shall maintain and effectively utilize and schedule on site equipment and delivery trucks in order to minimize exhaust emissions from truck idling.

#### **Operational Emissions**

Operational emissions are categorized as energy (generation and distribution of energy to the end use), area (operational use of the project), mobile (vehicle trips), water (generation and distribution of water to the land use), and waste (collecting and hauling waste to the landfill). The Proposed Project will not include the manufacture or production of any products on-site; therefore, no industrial type emissions will be generated. The operational mobile source emissions were calculated using the Traffic Impact Analysis prepared by Urban Crossroads, dated April 23, 2020. The TIA determined that the Proposed Project would generate approximately 1,100 total daily trips. Emissions associated with the Proposed Project's estimated total daily trips were modeled and are listed in Table 3 and Table 4, which represent summer and winter operational emissions, respectively. In accordance with the site plan, CalEEMod operational emissions include the following design features: a) Improve Destination Accessibility with a two-mile distance to a downtown job center, b) Increase Transit Accessibility with a two-mile distance to the nearest transit station, and c) Improve Pedestrian Network by including improvements of the adjacent intersection, curb, gutter, and sidewalks.

(Pounds per Day)								
Source	ROG/ VOC <sup>1</sup>	NOx	CO	SO <sub>2</sub>	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>		
Area	0.2	0.0	0.0	0.0	0.0	0.0		
Energy	0.0	0.3	0.2	0.0	0.0	0.0		
Mobile	1.6	10.1	8.9	0.0	1.9	0.5		
Fuel Dispensing	1.5							
Total Value	3.3	10.4	9.1	0.0	1.9	0.5		
(lbs./day)								
SCAQMD Threshold	55	55	550	150	150	55		
Significance	No	No	No	No	No	No		

 Table 3

 Summer Operational Emissions Summary

 (Pounds per Day)

Source: CalEEMod 2016.3.2, Summer Emissions

<sup>1</sup> VOC emissions, SCAQMD guidelines (RULE 461-Gasoline Transfer and Dispensing).

(Founds per Day)									
Source	ROG/VOC <sup>1</sup>	NOx	СО	SO <sub>2</sub>	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>			
Area	0.2	0.0	0.0	0.0	0.0	0.0			
Energy	0.0	0.3	0.2	0.0	0.0	0.0			
Mobile	1.3	9.9	8.7	0.0	1.9	0.5			
Fuel Dispensing	1.5								
Total Value	3.0	10.2	8.9	0.0	1.9	0.5			
(lbs./day)									
SCAQMD Threshold	55	55	550	150	150	55			
Significance	No	No	No	No	No	No			

#### Table 4 Winter Operational Emissions Summary (Rounds per Day)

Source: CalEEMod 2016.3.2, Winter Emissions

<sup>1</sup> VOC emissions, SCAQMD guidelines (RULE 461-Gasoline Transfer and Dispensing).

As shown in Tables 3 and 4, both summer and winter season operational emissions are below SCAQMD thresholds. However, the Proposed Project would be required to comply with the following but limited to SCAQMD Rules:

- Rule 201-Permit to Construct: A person shall not build, erect, install, alter or replace any
  equipment or agricultural permit unit, the use of which may cause the issuance of air
  contaminants or the use of which may eliminate, reduce or control the issuance of air
  contaminants without first obtaining written authorization for such construction from the
  Executive Officer. A permit to construct shall remain in effect until the permit to operate
  the equipment or agricultural permit unit for which the application was filed is granted or
  denied, or the application is canceled.
- Rule 203-Permit to Operate: A person shall not operate or use any equipment or agricultural permit unit, the use of which may cause the issuance of air contaminants, or the use of which may reduce or control the issuance of air contaminants, without first obtaining a written permit to operate from the Executive Officer or except as provided in Rule 202.
- Rule 461-Gasoline Transfer and Dispensing Facilities: Applicability This rule applies to the transfer of gasoline from any tank truck, trailer, or railroad tank car into any stationary storage tank or mobile fueler, and from any stationary storage tank or mobile fueler into any mobile fueler or motor vehicle fuel tank.
- Rule 1138- Control of Emissions from Restaurants: (a) Applicability This rule applies to owners and operators of commercial cooking operations, preparing food for human consumption. The rule requirements currently apply to chain-driven charbroilers used to cook meat. All other commercial restaurant cooking equipment including, but not limited to, under-fired charbroilers, may be subject to future rule provisions.
- Rule 1401- New Source Review of Toxic Air Contaminants: This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants listed in Table I. The rule establishes allowable risks for permit units requiring new permits pursuant to Rules 201 or 203.

Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

#### c) Would the project expose sensitive receptors to substantial pollutant concentrations?

**Less than Significant Impact.** SCAQMD has developed a methodology to assess the localized impacts of emissions from a proposed project as outlined within the Final Localized Significance Threshold (LST) Methodology report; completed in June 2003 and revised in July 2008. The use of LSTs is voluntary, to be implemented at the discretion of local public agencies acting as a lead agency pursuant to CEQA. LSTs apply to projects that must undergo CEQA or the National Environmental Policy Act (NEPA) and are five acres or less. LST methodology is incorporated to represent worst-case scenario emissions thresholds. CalEEMod was used to estimate the on-site and off-site construction emissions. The LSTs were developed to analyze the significance of potential air quality impacts of proposed projects to sensitive receptors (i.e. schools, single family residences, etc.) and provide screening tables for small projects (one, two, or five acres). Projects are evaluated based on geographic location and distance from the sensitive receptor (25, 50, 100, 200, or 500 meters from the site).

For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, convalescent facility or anywhere that it is possible for an individual to remain for 24 hours. Additionally, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors. Commercial and industrial facilities are not included in the definition of sensitive receptor because employees do not typically remain on-site for a full 24 hours, but are usually present for shorter periods of time, such as eight hours.

The Project Site is approximately 2.08 acres, however the "2-acres scenario" was used to represent a worst-case scenario as larger sites are typically granted a larger emission allowance. CalEEMod version 2016.3.2 was used to estimate the on-site and off-site construction emissions. The nearest sensitive receptor land use is an assisted care facility located immediately west of the Project Site and therefore LSTs are based on 25-meter distance. The resulting Proposed Project's construction and operational emissions with the appropriate LST are presented in Table 5.

(Pounds Per Day)						
	NOx	CO	PN	10	PN	<b>A</b> <sub>2.5</sub>
Construction Emissions (Max. from Table 6 and Table 7)	9.5	14.4	3.	8	2	.1
Operational Emissions (Max. Total from Table 3 and Table $4$ ) <sup>1</sup>	11.9	9.1	0.1	10	0.0	)25
Highest Value (Ibs./day)	11.9	14.2	3.8	0.1 0	2.1	0.02 5
LST Thresholds	149	1,541	10*	3†	6*	2†
Greater Than Threshold	No	No	No	No	No	No

#### Table 5 Localized Significance Thresholds (Pounds Per Day)

As shown in Table 5, the Proposed Project's emissions are not anticipated to exceed the LSTs.

#### Toxic Air Contaminant Impacts

Emissions resulting from gasoline service station operations may include toxic air contaminants (TACs) (e.g., benzene, hexane, MTBE, toluene, xylene) and have the potential to contribute to health risk in the Project vicinity. Standard regulatory controls such as the SCAQMD's Rule 461 (Gasoline Transfer and Dispensing) would apply to the Project in addition to any permits required that demonstrate appropriate operational controls. Gasoline dispensing facilities are required to use Phase I/II EVR (enhanced vapor recovery) systems. Phase I EVR have an average efficiency of 98 percent and Phase II EVR have an average efficiency of 95.1 percent. Therefore, the potential for fugitive VOC or TAC emissions from the gasoline pumps is negligible. Prior to issuance of a Permit to Operate, each individual gasoline dispensing station is required to obtain permits from SCAQMD which identify the maximum annual throughput allowed based on specific fuel storage and dispensing equipment that is proposed by the operator.

The analysis reflects a maximum annual throughput of an estimated 1,000,000 gallons. However, ultimate fuel throughput allowances/requirements would be established by SCAQMD through the fueling station permitting processes. For purposes of this evaluation, cancer risk estimates have been made consistent with the methodology presented in SCAQMD's Risk Assessment Procedures for Rules 1401 & 212 which provide screening-level risk estimates for gasoline dispensing operations. The Project site is located within Source Receptor Area (SRA) 29.

The nearest residential receptor and worker receptor are both less than 25 meters (e.g. 82.02 feet) from the proposed fueling station.

Based on the established SCAQMD procedure outlined in the SCAQMD Permit Application Package "N" it is estimated that the maximum risk attributable to the gasoline dispensing would be 5.46 in one million for the nearest sensitive receptor and the maximum risk to workers would be 0.45 in one million both of which are below the threshold of 10 in one million. SCAQMD Permit Application Package "N" identifies the potential risk per one million gallons of gasoline dispensed at the defined downwind distances. The further the distance from the source the lower the risk. Refer to Table 6 for a linear regression risk estimate with distances of 25 and 50 feet from the source.

Linear Regression Risk Estimate					
Residential					
Distance	Risk				
25	5.46				
50	2.17				
Worker					
25	0.45				
50	0.17				
Source: Risk Tool V1.103					

# Table 6

As shown in Table 6, no sensitive receptors in the Project vicinity would be exposed to a cancer risk of greater than 10 in one million. The maximum risk estimate at any sensitive land use in the vicinity of the Project would be 5.46 in one million. The Project gas station operations would therefore not generate emissions that would cause or result in an exceedance of the applicable SCAQMD cancer threshold of 10 in one million. As such, the Project would not have a significant impact with respect to health risks from the gasoline dispensing stations.

Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

*d)* Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. The Proposed Project does not contain land uses typically associated with the emission of objectionable odors. Potential odor sources associated with the Proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities; and the temporary storage of domestic solid waste (refuse) associated with the Proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts resulting from construction activity. It should be noted that any construction odor emissions generated would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction activity. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City of Beaumont solid waste regulations. The Project would be also required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

4.	BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
(b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
(c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
(d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				

# 3.4 BIOLOGICAL RESOURCES

4.	BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			$\boxtimes$	
(f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

# 3.4.1 Environmental Setting

The Proposed Project consists of a QSR, convenience store and gas station in a 2.08-acre parcel. General Biological Resources Assessment, dated June 23, 2020, was prepared for the Proposed Project by Natural Resources Assessment, Inc. (NRAI) (see Appendix C for report). The assessment was conducted consistent with the requirement of the Western Riverside County Multiple Species Habitat Conservation Plan (MSCHP), which is intended to balance the growth of western Riverside County with the preservation of open space and protection for species. The MSHCP identifies vernal pools, fairy shrimp habitat and riparian/riverine as resources of concern for all the parcels within the MSHCP Conservation Area.

NRAI requested a report from the MSHCP website for the Project Site. NRAI completed a data search for information on plants and wildlife species known occurrences within the vicinity of the Project Site. The review included biological texts on general and specific biological resources, and those resources considered to be sensitive by various wildlife agencies, local government agencies and interest groups. NRAI used the data to focus their survey efforts in the field.

# 3.4.2 Impact Analysis

a) Would the project have a substantial adverse effect, either directly or through habitat modification, on any species identified as candidate, sensitive or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

# Less than Significant with Mitigation Incorporated.

# Wildlife Observations

Mourning dove (Zenaida macroura), house finch (Haemorhous mexicanus), savannah sparrow (Passerculus sandwichensis) and house sparrow (Passer domesticus) were either seen or heard during the field survey. California ground squirrel (Otospermophilus beecheyi) and Botta's gopher (Thomomys bottae) burrows were observed. No other sign of native mammal species was observed.

#### Riparian Birds

No riverine/riparian bird species are present or will use the site, and no impacts to these species or their habitat will occur. No impacts are identified or anticipated, and no mitigation measures are required.

#### Fairy Shrimp

For the Proposed Project, the MSHCP requires an assessment for fairy shrimp habitat. Fairy shrimps are confined to temporary pools that fill in spring and evaporate by late spring to early summer. There are no pools on the Project Site and no potential for pools to form based on the soils and site conditions. Therefore, no shrimp species would be impacted by the Proposed Project.

#### Narrow Endemic Plant Species

The MSHCP did not identify any Narrow Endemic Plant Species as potentially present on the Project Site. The Proposed Project is consistent with MSHCP Section 6.1.3.

#### Criteria Area Plant Species

The MSHCP did not identify any Criteria Area Species as potentially present on the Project Site. The Proposed Project is consistent with MSHCP Section 6.3.2.

#### Amphibians

The MSHCP did not identify any amphibian species as potentially present on the Project Site.

#### **Burrowing Owl**

The MSHCP does not identify burrowing owl as potentially present on the Project Site and it is not in the mapped survey area for burrowing owl. The Proposed Project is consistent with MSHCP Section 6.3.2.

#### Mammals

The MSHCP does not identify mammal species as potentially present on the Project Site and it is not in the mapped survey area for protected mammals.

#### Delhi Sands Flower-Loving Fly

The MSHCP did not identify Delhi sands flower-loving fly as potentially present on the Project Site. The property is not in the mapped survey area for Delhi sands flower-loving fly.

# Raptors and Migratory Birds

Raptors and all migratory bird species are protected under the Migratory Bird Treaty Act (MBTA). In addition, bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (BEPA). Based on their field survey, NRAI found that the Project Site had very limited marginal nesting habitat for ground-nesting bird species. To ensure the Proposed Project complies with the MBTA and BEPA, NRAI recommends the following mitigation measures:

**Mitigation Measure BIO-1:** If construction is scheduled to occur between February 1 and August 31, a breeding bird survey following the recommended guidelines of the MBTA may be required to determine if nesting is occurring. A qualified biologist shall conduct a breeding bird survey no more than 30 days prior to the start of construction to determine if nesting is occurring. If occupied nests are found, they shall not be disturbed unless the qualified biologist verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are capable of independent survival. If the biologist is not able to verify one of the above conditions, then no disturbance shall occur within a distance specified by the qualified biologist for each nest or nesting site. The qualified biologist will determine the appropriate distance in consultation with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

**No Impact.** For the Proposed Project, the MSHCP requires an assessment for riverine and riparian habitats. According to the BRA, there are no riparian/riverine habitats on site. No riparian/riverine species will be impacted by Proposed Project.

#### **Riparian Birds**

No riverine/riparian bird species are present or will use the site, and no impacts to these species or their habitat will occur. No impacts are identified or anticipated, and no mitigation measures are required.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

**No Impact.** NRAI assessed any bodies of water that may be under the jurisdiction of Army Corps of Engineers, Regional Water Quality Control Board, and the California Department of Fish and Wildlife. NRAI found no jurisdictional waters on site. Additionally, there is no wetland or riparian habitat on site. For the Proposed Project, the MSHCP requires an assessment for vernal pools. There are no vernal pools on the property and therefore, no vernal pools or vernal pools species will be impacted by Proposed Project. (see Appendix C). Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

d) Would the project Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact. The Project Site is currently surrounded by residential and commercial development, public facilities, ongoing development, a designated arterial highway, and a proposed arterial highway. It is in a developed area where habitat fragmentation has already occurred. It would not be suitable as a native resident or migratory wildlife corridor or for facilitating the movement of any native resident or migratory wildlife species. The Urban/Wildland Interface guidelines of the MSHCP address indirect effects associated with locating development in the MSHCP Conservation Area near wildlands or other open space areas. The Project Site is not near or in the vicinity of the MSHCP Conservation Area, and no impacts to Urban/Wildland Interface would result from implementation of the Proposed Project. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

e,f) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservancy Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than Significant Impact. The MSHCP will provide for the protection and preservation of important and significant biological resources consistent with local, State and Federal

regulations.<sup>9</sup> As a local permittee, the City of Beaumont has adopted the MSHCP and will comply with all applicable requirements when considering actions associated with the General Plan's implementation.

Through the MSHCP Consistency Analysis, NRAI assessed the Proposed Project's relationship to Reserve Assembly. Reserve Assembly is concerned with the identification of specific areas that are necessary to assemble a sufficiently large and diverse parcel to protect the resources of concern for the reserve. Each Area has a designated conservation plan and is referred to as an Area Plan. A Criteria Cell is defined as "A unit within the Criteria Area generally 260 acres in size."

The Project Site is located within the MSHCP Plan Area but not located within or adjacent to any Criteria Cells or MSCHP Conservation Area (see Appendix C). Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

5.	CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				
(b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
(c)	Disturb any human remains, including those interred outside of dedicated cemeteries?				

# 3.5 CULTURAL RESOURCES

# 3.5.1 Environmental Setting

A Phase I Cultural Resources Investigation, dated November 29, 2019 and revised May 20, 2020, was prepared by McKenna et al. for the Project Site (see Appendix D for report). The purpose of the assessment was to identify and document any cultural resources that may occur within the Project Site and to evaluate resources pursuant to §15064.5. The cultural remains of the Native American Cahuilla peoples and the early Euro-American peoples have been found in multiple locations throughout the City of Beaumont. As such, the Project Site is considered sensitive for buried cultural resources.

# 3.5.2 Impact Analysis

a/b) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant with Mitigation Incorporated. McKenna et al. completed a standard archaeological records search for the Project Site through the University of California,

<sup>&</sup>lt;sup>9</sup> City General Plan. Page 61.

Riverside, Eastern Information Center, Riverside, California. This search included the following reviews: previously completed projects within one mile of the project area; recorded cultural resources within one mile of the project area; and listings for the National Register of Historic Places, the California Register of Historical Resources, California Landmarks, and California Points of Historical Interest; and historic maps.

Historic background research was done through a review of the Bureau of Land Management, General Land Office Records; San Bernardino County Archives; Riverside County Archives, Riverside County Assessor data; local research; and research through the McKenna et al. inhouse library. The staff also searched through the University of California, Riverside, Historic Map Library and on-line aerial photographs.

McKenna et al. identified 29 studies done within one miles of the Project Site. Six cultural resources, both historic and prehistoric, were identified from those studies. Resources identified included properties found in the Office of Historic Preservation Historic Property Data File. The Project Site has not been previously surveyed for cultural resources. No recorded prehistoric or historic archaeological resources are associated with the Project Site.

Additionally, McKenna completed a field survey for the site. The Project Site was subjected to an intensive level of survey with paralleling swaths averaging 15 meters apart. The surveyor recorded any identified resource using a Garmin GPS unit. A portion of a semi-buried concrete pad determined to be modern was found on the site. Based primarily on visual examination of the native soils, there is no evidence of prehistoric or historic archaeological resources within the Project Site. However, the Project Site is considered moderately sensitive for archaeological resources because the City of Beaumont has been associated with historic land uses. According to the City General Plan, prehistoric cultural remains may be present within the City because of the nature of alluvial deposits throughout the City. There is a potential for buried resources that were not evident during a surface survey.

The Project Site and the surrounding area are associated with the San Gorgonio Pass, a narrow valley located between the San Bernardino Mountains and San Jacinto Mountains. The area of San Gorgonio Pass is associated with early Beaumont and Banning development and has the potential to yield historic archaeological resources in a relatively shallow context. Therefore, possible significant impacts have been identified or anticipated, and McKenna et al. recommends the following mitigation measure be implemented to reduce impacts to a level of less than significant:

**Mitigation Measure CR-1**: A qualified archaeologist shall oversee excavations in the younger alluvial deposits during the first two days of ground disturbance. If the archaeologist determines it necessary, an archaeological monitoring program shall be implemented. The monitoring program should be in accordance with current professional guidelines and protocols. The program should be flexible and account for changes in findings by treating resources in a professional manner and evaluated in accordance with current CEQA criteria.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant with Mitigation Incorporated. McKenna et al. did not encounter any evidence of human remains during the field survey. However, construction activities, particularly grading, could potentially disturb unknown buried human remains. To ensure

potential impacts are reduced to less than significant, the following mitigation measure shall be implemented:

**Mitigation Measure CR-2:** If any bones are uncovered during the course of project-related ground disturbance and the archaeologist determines that it is likely human, all appropriate cultural resources and health and safety laws will be followed and the developer will work with the NAHC-appointed Most Likely Descendent to determine appropriate measures for avoidance and preservation or other suitable treatment.

# 3.6 ENERGY

6.	ENERGY Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?			$\boxtimes$	
(b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			$\boxtimes$	

# 3.6.1 Environmental Setting

Energy efficiency can reduce the demand for electricity generation. California has implemented energy efficiency standards and programs, resulting in annual increases of conservation savings for electricity. In 2017, the cumulative annual efficiency and conservation savings for electricity surpassed 70,000 gigawatt hours in California (California Energy Commission, 2018). Energy conservation state laws, like Title 24 of the California Administrative Code and Uniform Building Code, will be enforced by the City of Beaumont. Furthermore, the City encourages measures to reduce energy consumption during construction and operation of proposed projects.

# **Building Energy Conservation Standards**

The California Energy Commission (CEC) adopted Title 24, Part 6, of the California Code of Regulations: Energy Conservation Standards for new residential and nonresidential buildings in June 1977 and standards are updated every three years. In addition to reducing California's energy consumption, Title 24 also decreases GHG emissions. Title 24 ensures that building designs conserve energy. The requirements allow for opportunities to incorporate new energy efficiency technologies and methods into proposed developments. In June 2015, the CEC updated the 2016 Building Energy Efficiency Standards. The 2016 Standards improved upon the previous 2013 Standards for new construction of and additions and alterations to residential and nonresidential buildings. The CEC updated the 2019 Building Energy Efficiency Standards in May 2018. The 2019 Title 24 standards state that nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades. The updated Standards enable the use of highly efficient air filters to trap hazardous particulates from both outdoor air and cooking and improve kitchen ventilation systems.

#### Senate Bill 350

Senate Bill (SB) 350 (de Leon) was signed into law in October 2015. SB 350 establishes new clean energy, clean air and greenhouse gas reduction goals for 2030. SB 350 also establishes periodic increases to the Renewable Portfolio Standard (RPS): 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. It requires California to double statewide energy efficiency savings in electricity and natural gas end uses by 2030, thereby increasing the use of RPS eligible resources.

#### Senate Bill 100

Senate Bill 100 (SB 100) was signed into law September 2018 and increased the required Renewable Portfolio Standards. SB 100 requires that the total kilowatt-hours of energy sold by electricity retailers to their end-use customers must consist of at least 50 percent renewable resources by 2026, 60 percent renewable resources by 2030, and 100 percent renewable resources by 2045. SB 100 also includes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

# 3.6.2 Impact Analysis

a) Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?

#### Less than Significant Impact.

#### Electricity

The Proposed Project consists of a gas station, convenience store and restaurant. Southern California Edison (SCE) provides electricity to the City of Beaumont. The commercial building sector of the Southern California Edison planning area consumed 37260.897803 Gigawatt Hour (GWh) of electricity in 2018.<sup>10</sup> Gigawatt hour is a unit of energy representing one billion watt hours. The Project Site is currently vacant and does not use electricity. The implementation of the Proposed Project would result in an increase in electricity demand. The estimated electricity demand for the Proposed Project 0.2178114 GWh per year. The existing SCE electrical facilities will meet this increased demand. Total electricity demand in SCE's service area is estimated to increase by approximately 12,000 GWh between the years 2015 and 2026. The increase in electricity demand for SCE's entire service area and SCE's 2018 commercial building sector's demand. Therefore, projected electrical demand would not significantly impact SCE's level of service.

The Proposed Project shall comply with the 2019 Building Energy Efficiency Standards. During the design phase, the architect, mechanical engineer, and lighting designer must determine whether the building or system design complies with the Energy Standards. The Proposed Project would also be required to adhere to CALGreen, which outlines planning and

<sup>&</sup>lt;sup>10</sup> California Energy Commission. California Energy Consumption Database.

design standards for sustainable developments and energy efficiency. Therefore, the Proposed Project would not result in significant environmental impact due to wasteful, inefficient or unnecessary consumption of energy, or wasteful use of energy resources.

# Natural Gas

The Project Site would be serviced by Southern California Gas Company (SoCalGas). The Project Site is currently vacant and has no demand for natural gas. Therefore, development of the Proposed Project would create a permanent increase in demand for natural gas. Despite the ever-growing demand for electric power, the overall gas demand for electric generation is expected to decline at 1.4 percent per year for the next 17 years due to more efficient power plants, statewide efforts to reduce GHG emissions, and use of power generation resources that produce little to no carbon emissions. According to the California Energy Commission, the natural gas consumption of the SoCalGas planning area commercial building sector was 937.882107 therms in 2018.<sup>11</sup> The Proposed Project's estimated natural gas demand is 0.00096611 therms per year; it would represent an insignificant percentage to the overall natural gas demand in SoCalGas's commercial building sector. The Proposed Project would not result in a significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

# <u>Fuel</u>

During construction of the Proposed Project, transportation energy consumption is dependent on the type of vehicles used, number of vehicle trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Temporary transportation fuel use such as gasoline and diesel during construction would result from the use of delivery vehicles and trucks, construction equipment, and construction employee vehicles. Additionally, most construction equipment during grading would be powered by gas or diesel. Based on output from CalEEMod version 2016.3 for (see Appendix E for fuel calculations), the Proposed Project construction activities would consume an estimated 20,954 gallons of diesel fuel for operation of heavy-duty equipment. Assuming all construction worker trips are from light duty autos, it is estimated 4,780 gallons of fuel will be consumed and fuel consumption from construction vendor (material deliver) trips is 2,649 gallons. Construction worker and vendor fuel consumption are based on CalEEMod's default data for vehicles miles traveled (VMT). Construction would represent a "single-event" diesel and gasoline fuel demand and would not require continuous or permanent commitment of these fuel resources. Impacts related to transportation energy use during construction would be temporary and would not require the use of additional use of energy supplies or the construction of new infrastructure.

During operations of the Proposed Project, fuel consumption would be from customer visits, trips by maintenance staffs, employee vehicle trips and delivery trucks. The Proposed Project is the development of a convenience store, gas station, drive-thru and car wash. The Proposed Project would result in an estimated 83,049 gallons of fuel consumption per year based on 900,150 miles driven. As a worst case analysis, half the miles were modeled with an automobile fuel efficiency of 24 miles per gallon and half were modeled at 7 miles per

<sup>&</sup>lt;sup>11</sup> California Energy Commission. California Energy Consumption Database.
gallon.<sup>12</sup> Trip generation and VMT generated by the Proposed Project are consistent with other uses of similar scale and configuration. The Proposed Project does not include uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, or associated wasteful vehicle energy consumption. It is not expected to result in a substantial demand for energy that would require expanded supplies or the construction of other infrastructure or expansion of existing facilities. Therefore, the Proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

# b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

**Less than Significant Impact.** The City of Beaumont has prepared a Climate Action Plan (CAP) with the goal of reducing greenhouse gas emissions from the building energy sector. The City has partnered with Southern California Edison (SCE) and Southern California Gas Company (SCG) to form the Energy Leader Partnership (ELP). ELP's goal is to reduce the City's municipal and community-wide energy footprint. CAP also involves implementing a variety of retrofits in municipal lighting and heating, ventilation, and air-conditioning (HVAC) systems and conducting various forms of outreach in the community to encourage adoption of energy efficiency and renewable energy programs offered by SCE and SCG. Under CAP, commercial buildings will be held to net-zero energy performance standards by 2030.

Under Resource Management Element Policy 8 of the City General Plan, the City encourages incorporation of energy conservation features in new developments. In addition, the City shall continue to enforce the energy conservation standards in Title 24 of the California Administrative Code, the Uniform Building Code (UBC) and other state laws on energy conservation design, insulation and appliances.<sup>13</sup> Project design and operation would comply with Beaumont's CAP, UBC and 2019 Building Energy Efficiency Standards (Title 24). Project development is not anticipated to cause inefficient, wasteful and unnecessary energy consumption. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

<sup>&</sup>lt;sup>12</sup> United States Department of Transportation, Bureau of Transportation Statistics. 2018. National Transportation Statistics 2018. Available at: https://www.bts.gov/sites/bts.dot.gov/files/docs/browse-statistical-products-and-data/national-transportation-statistics/223001/ntentire2018q4.pdf.

<sup>&</sup>lt;sup>13</sup> City General Plan. Page 76.

## 3.7 GEOLOGY AND SOILS

7.	GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
(a)	<ul> <li>i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.</li> </ul>				
	ii)Strong seismic ground shaking?			$\boxtimes$	
	iii)Seismic-related ground failure, including liquefaction?			$\boxtimes$	
	iv)Landslides?				$\boxtimes$
(b)	Result in substantial soil erosion or the loss of topsoil?		$\boxtimes$		
(c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			$\boxtimes$	
(d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				
(e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				
(f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		$\boxtimes$		

# 3.7.1 Environmental Setting

Beaumont is located along the northern boundary of the Peninsular Ranges in the San Gorgonio Pass.<sup>14</sup> The City is located within a seismically active region at the junction of the Transverse Ranges and the Peninsular Ranges. The City could be affected by the San Jacinto Fault, the San Andreas Fault Zone in the San Gorgonio pass area, the Banning Fault, and Beaumont Plains Fault Zone. The City and its designated spheres of influence are mostly undeveloped; nearly one-half of the City's land area consists of vacant land.

A Geotechnical Engineering Report, dated January 31, 2020, was prepared by Salem Engineering Group, Inc. for the Project Site (see Appendix F for report). The Project Site is suitable for the Proposed Project given that SALEM's recommendations are incorporated into the

<sup>&</sup>lt;sup>14</sup> City General Plan. Page 60.

Project design and construction. The Project Applicant is required to comply with the recommendations in the Report and as approved by the City. SALEM shall review the project grading and foundation plans prior to final design submittal to assess whether recommendations have been properly implemented and evaluate is additional analysis or recommendations are required.

# 3.7.2 Impact Analysis

a)i) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

**Less than Significant Impact.** The San Jacinto Fault, considered to be one of the most active faults in southern California, crosses the southern portion of the City and sphere of influence.<sup>15</sup> The San Andreas Fault is approximately six miles northeast of the City. The branch of the Banning Fault closest to Beaumont is inactive. The Project Site is not within a state designated Alquist Priolo Earthquake Fault Zone.<sup>16</sup> Furthermore, according to the Riverside County General Plan: Safety Element, the Project Site is also not within a Riverside County Fault Zone.<sup>17</sup> The nearest fault zone is the Beaumont Plain Fault Zone, which is located approximately 1.5 miles west of the Project Site. The likelihood for on-site rupture is considered low due to the absence of known faults and fault zones within the vicinity. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

a)ii)Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less than Significant Impact. According to the City General Plan, the Beaumont Plains Fault Zone consists of a series of parallel faults in the northern portion of the City that were found to be inactive and are not considered ground rupture hazards. The Department of Conservation Division of Mines and Geology found that unconsolidated soils, which can settle as a result of ground shaking and cause damage to structures, do not exist within the City limits. The County of Riverside adopted the Uniform Building Code (UBC), which requires that the construction of structures be in compliance with the California Building Code (CBC) to reduce the hazard risks posed by earthquakes. Adhering to these codes would ensure that potential ground-shaking impacts are reduced to less than significant level. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

a)iii)Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

<sup>&</sup>lt;sup>15</sup> City General Plan. Page 60.

<sup>&</sup>lt;sup>16</sup> California Department of Conservation. Fault Activity Map of California 2010.

<sup>&</sup>lt;sup>17</sup> County General Plan. Safety Element. Figure S-2.

**Less than Significant Impact.** Areas overlying groundwater within 30 to 50 feet of the surface are considered susceptible to liquefaction hazards. According to the United States Geological Survey's (USGS) Professional Paper 1360 highlighted in the City General Plan, the City of Beaumont is considered to have a moderate potential for liquefaction based on depth to groundwater in the area. Unstable earth conditions or changes in geologic substructures are not anticipated to occur with the excavation, grading and paving necessary for future development. Ground shaking may cause unconsolidated soils to settle, which can result in significant damage to structures. According to geologic investigations performed by the Department of Conservation, Division of Mines and Geology for the City General Plan Draft EIR, studies indicate that no such soils exist within City limits. The Project Site and its immediate vicinity have low susceptibility to liquefaction.<sup>18</sup>

Although the post-liquefaction settlement of liquefied sands could cause damage to the Proposed Project during seismic shaking, the Project Site is considered to have low liquefaction potential due to the absence of shallow groundwater (see Appendix F). According to regional groundwater well data reported by SALEM, the historically highest groundwater is estimated to be at a depth of more than 50 feet below ground surface. However, it should be acknowledged that water table elevation is dependent upon seasonal precipitation, irrigation, land use, localized pumping, and climatic conditions. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

a)iv)Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

**No Impact.** Landslides and slope failure can result from ground motion generated by earthquakes. The slopes within the San Timoteo Badlands are the most susceptible to landslides in the City. These slopes are approximately 16 miles northwest of the Project Site. The Project Site and its surrounding areas are relatively flat. The Project Site is not on or close to areas with existing landslides or with high susceptibility to seismically induced landslides and rockfalls.<sup>19</sup> Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

b) Would the project result in substantial soil erosion or the loss of topsoil?

**Less than Significant with Mitigation Incorporated**. According to the City General Plan, future development under the General Plan will not result in any additional soil erosion or loss of topsoil. Soils within City limits are classified as Ramona-Placentia, Hanford, and Yolo Soils Association.<sup>20</sup> These soils are generally well drained, have low soil permeability, and have relatively low inherent fertility. Moreover, the Project Applicant is required to design temporary drainage facilities and erosion control measures to minimize erosion and silt deposition during the grading operation.

Underground buried structures and/or utility lines encountered during demolition and construction should be properly removed and the resulting excavations backfilled with Engineered Fill (see Appendix F). Demolition activities of the existing structures may disturb

<sup>&</sup>lt;sup>18</sup> County General Plan: Safety Element. Figure S-3 Generalized Liquefaction.

<sup>&</sup>lt;sup>19</sup> County General Plan: Safety Element. Figure S-4 Earthquake-Induced Slope Instability Map.

<sup>&</sup>lt;sup>20</sup> City General Plan. Page 105.

the upper soils. The upper soils are moisture-sensitive and moderately collapsible under saturated conditions. Soils of this type possess moderate risk to construction in terms of possible post-construction movement of the foundations and floor systems. To reduce soil movement, the collapsible soil would need to be over-excavated and recompacted, as is required under Mitigation Measures GEO-1 to GEO-3 below. Therefore, impacts would be less than significant with mitigation measures incorporated.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. The Project Site is relatively flat with a 2 to 5 percent slope. Ramona sandy loam (RaB2) is the only soil type found within the Project Site.<sup>21</sup> RaB2 is welldrained, has low permeability and occurs on alluvial fans and terraces. According to the City General Plan, "soils that underlie the City include the Romona-Placentia, Hanford, and Yolo Soils Associations. All of these soils are generally well drained, have low soil permeability, and their inherent fertility is relatively low. Thus, no unusual soil constraints to future development in the City are anticipated." As stated above, the Project Site is not located within or near a Liquefaction Zone and is in an area with low susceptibility to liquefaction. SALEM considers the Project Site to have a low likelihood of lateral spreading due to its relatively flat topography and low liquefaction potential. Moreover, it is concluded that a landslide is not a potential hazard to the Proposed Project because there are no known landslides at the Project Site, and nor is it in the path of any known or potential landslides. The Project Site is neither located in an area with documented subsidence nor in an area susceptible to subsidence.<sup>22</sup> State and City Building Codes establish engineering and construction criteria designed to mitigate potential impacts associated with unstable soils, landslides, lateral spreading, subsidence, liquefaction, soils collapse and expansive soils. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than Significant with Mitigation Incorporated. Expansive soils are fine grained clay soils that swell in volume when they absorb water and shrink when they dry. This change in volume causes stress on buildings and other loads placed on expansive soils. The upper soils of the Project Site are moisture-sensitive and moderately collapsible under saturated conditions (refer to Appendix A of the attached Appendix F). These soils, in their present condition, possess moderate risk to construction in terms of possible post-construction movement of the foundations and floor systems if no mitigation measures are employed. Accordingly, measures are considered necessary to reduce anticipated expansion and collapse potential. Mitigation measures will not eliminate post-construction soil movement but will reduce the soil movement. Success of the mitigation measures will depend on the thoroughness of the contractor in dealing with the soil conditions. The near surface soils identified as part of the investigation are, generally, slightly moist to moist due to the absorption characteristics of the soil. Earthwork operations may encounter very moist unstable soils which may require removal to a stable bottom. Native soils exposed as part of

<sup>&</sup>lt;sup>21</sup> United States Department of Agriculture. Web Soil Survey.

<sup>&</sup>lt;sup>22</sup> County General Plan: Safety Element. Figure S-7 Documented Subsidence.

site grading operations shall not be allowed to dry out and should be kept continuously moist prior to placement of subsequent fill. To reduce anticipated expansion and collapse potential, the recommendations in the Geotechnical Engineering Report as approved by the City shall be followed including the following mitigation measures:

**Mitigation Measure GEO-1:** Overexcavation and recompaction within the proposed building areas should be performed to a minimum depth of **four (4) feet** below existing grade or **two (2) feet** below proposed shallow footing bottom, whichever is deeper. The overexcavation and recompaction should also extend laterally to a minimum of 5 feet beyond the outer edges of the proposed footings.

**Mitigation Measure GEO-2**: Within pavement and canopy areas, it is recommended that the overexcavation and recompaction be performed to a minimum depth of **one (1) foot** below existing grade or proposed grade, whichever is deeper. The overexcavation and recompaction should also extend laterally to a minimum of 2 feet beyond the pavement area.

**Mitigation Measure GEO-3**: Prior to placement of fill soils, the upper 10 to 12 inches of native subgrade soils should be scarified, moisture-conditioned to no less than the optimum moisture content and recompacted to a minimum of 95% (90% for fine grained, cohesive soils) of the maximum dry density based on ASTM D1557 Test Method.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

**Less than Significant Impact.** The Proposed Project does not include the installation of a new septic tank or any other alternative wastewater disposal system. The Proposed Project will construct sewer laterals from each structure to an existing sewer line in Highland Springs Avenue. Therefore, no significant adverse impact is identified or anticipated, and no mitigation measures are required.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**Less than Significant with Mitigation Incorporated.** The Project Site is located in an area of undetermined potential for paleontological resources.<sup>23</sup> The majority of level areas throughout the City contain very few significant paleontological sites.<sup>24</sup> The extreme southern areas of the Beaumont planning area have a higher potential for paleontological findings since it remains less disturbed by agricultural cultivation and is subject to less human disturbance. The Project Site is in the northern part of the planning area.

The Project Site is currently vacant with only insignificant rocks, and a mix of native and nonnative vegetation occurring on the site (see Appendix D). No unique geologic feature is present on the site. The Natural History Museum of Los Angeles County completed a paleontological overview for the Project Site. This information along with the data from the

<sup>&</sup>lt;sup>23</sup> Riverside County Information Technology GIS. Map My County.

<sup>&</sup>lt;sup>24</sup> City General Plan. Page 119.

Riverside County GIS system were used to assess the potential for the Project Site to yield evidence of fossil specimens.

According to McKenna et al., no recorded paleontological resources are associated with the Project Site. In addition, the field survey concluded no evidence of paleontological resources within the Project Site. The Project Site is considered moderately sensitive for paleontological resources and consists of Quaternary Alluvium, derived from the San Jacinto Mountains. In a letter appended to McKenna's report, the Natural History Museum of Los Angeles County confirmed that the shallow deposits of Quaternary Alluvium in the vicinity are not considered sensitive for paleontological specimens. Shallow excavations will not likely impact fossil bearing deposits, but deeper excavations may. To ensure that potential impacts to paleontological resources are reduced to less than a significant level, the following mitigation measure should be implemented:

**Mitigation Measure GEO-4:** Deep excavations for utilities and underground storage tanks shall be monitored to detect and professionally collect any fossils uncovered without impeding development. If required a paleontological monitoring program shall be prepared and filed with the City.

8.	GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			$\boxtimes$	
(b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			$\boxtimes$	

## 3.8 GREENHOUSE GAS EMISSIONS

# 3.8.1 <u>Environmental Setting</u>

The environmental efforts in California emphasized the need to reduce greenhouse gas (GHG) emissions. According to the City's Climate Action Plan, Beaumont is committed to planning sustainably to reduce GHG emissions among other things. Executive Order S-3-05, which was passed in 2005, established GHG emissions targets for California for the subsequent decades: 1990 levels by 2020 and 80% below 1990 levels by 2050. According to the California Air Resources Board, as of 2017, California has emitted 7 MMTCO2e below the 2020 GHG Limit.

# 3.8.2 Impact Analysis

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**Less than Significant Impact.** According to CEQA Guidelines Section 15064.4, when making a determination of the significance of greenhouse gas emissions, the "lead agency shall have discretion to determine, in the context of a particular project, whether to (1) use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use." In addition, CEQA Guidelines section 15064.7(c)

provides that "a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts" on the condition that "the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

The Global Warming Solutions Act of 2006 requires that by the year 2020, the Greenhouse Gas (GHG) emissions generated in California be reduced to the levels of 1990. The City of Beaumont has not adopted its own thresholds of significance for greenhouse gas emissions. However, the City finds persuasive and reasonable the approach to determining significance of greenhouse gas emissions established by SCAQMD.

Emissions were estimated using the CalEEMod version 2016.3.2 (see Appendix B for model output). Construction is anticipated to begin in early 2021 and completed in late 2021. Other parameters which are used to estimate construction emissions such as those associated with worker and vendor trips, and trip lengths were based on the CalEEMod defaults. The operational mobile source emissions were calculated using the Traffic Impact Analysis prepared by Urban Crossroads, which determined that the Proposed Project would generate 1,100 total daily trips.

Many gases make up the group of pollutants that are believed to contribute to global climate change. However, three gases are currently evaluated and represent the highest concertation of GHG: Carbon dioxide (CO2), Methane (CH4), and Nitrous oxide (N2O). The Proposed Project would not generate Fluorinated gases as defined by AB 32, only the GHGs (CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O) that are emitted by construction equipment. SCAQMD provides guidance methods and/or Emission Factors that are used for evaluating a project's emissions in relation to the thresholds. A threshold of 3,000 MTCO2E per year has been adopted by SCAQMD for non-industrial type projects.

As shown in Table 7 and Table 8, the Proposed Project's emissions would not exceed the SCAQMD's 3,000 MTCO<sub>2</sub>e threshold of significance. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

(Metric Tons per Year)					
Source/Phase	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> 0		
Site Preparation	1.6	0.0	0.0		
Grading	9.4	0.0	0.0		
Building Construction	249.5	0.0	0.0		
Paving	6.5	0.0	0.0		
Architectural Coating	1.6	0.0	0.0		
Total MTCO2e	268.6				
SCAQMD Threshold	3,000				
Significant	No				

Table 7
<b>Greenhouse Gas Construction Emissions</b>
(Metric Tons per Year)

Source: CalEEMod.2016.3.2 Annual Emissions.

Source/Phase	CO <sub>2</sub>	CH₄	N <sub>2</sub> 0		
Area	0.0	0.0	0.0		
Energy	121.0	0.0	0.0		
Mobile	566.2	0.0	0.0		
Waste	8.2	0.5	0.0		
Water	5.8	0.0	0.0		
Construction Amortized over 30 years	s 8.9				
Total MTCO2e		725.3			
SCAQMD Threshold	3,000				
Significant		No			

#### Table 8 Greenhouse Gas Operational Emissions (Metric Tons per Year)

Source: CalEEMod.2016.3.2 Annual Emissions.

b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**Less than Significant Impact.** On October 2015, the City adopted a climate action plan known as the "Sustainable Beaumont: The City's Roadmap to Greenhouse Gas Reduction," which commits the City to a more energy efficient pathway. The Project Site has a current land use designation of Community Commercial under the General Plan. The future emissions estimates of the City's climate action plan therefore account for the implementation of the Proposed Project as it is consistent with the General Plan. The project design incorporates standards such as Title 24 to lower GHG emissions. In addition, approval of the project will bring products and services to consumers that are not currently being met thereby, reducing vehicle miles travelled. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

# 3.9 HAZARDS AND HAZARDOUS MATERIALS

9.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		$\boxtimes$		
(b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			$\boxtimes$	
(d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				

9.	HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(e)	For a project located within an airport land use plan or, where such a plan had not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
(f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			$\boxtimes$	
(g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				

## 3.9.1 Environmental Setting

The transportation of hazardous substances through the City poses a threat to public health and safety. Many of Beaumont's businesses produce, use and store hazardous materials. The transport, storage, use and disposal of hazardous materials and wastes is extensively regulated at all levels. The Safety Element under the City General Plan is concerned with identifying ways to reduce the potential for accidents and the health risk posed from hazards and hazardous materials.

## 3.9.2 Impact Analysis

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

**Less than Significant with Mitigation Incorporated.** Components of the Proposed Project that may involve potential impacts from hazardous materials include a fueling station, two USTs, and one healy tank (clean air separator). One of the USTs will hold 20K-gallons of Regular Unleaded Gasoline. The other UST is a Split Tank, which will hold 8K-gallons of Premium Unleaded Gasoline and 12K-gallons of Diesel.

A permit to operate a UST system is required per California Code of Regulations Title 23, Division 3, Chapter 16, California Health and Safety Code Section (25280-25299.8) and Riverside County Ordinance 617. These regulations mandate the testing and frequent inspections of the UST facilities. The proposed USTs and healy tank would be located on the northeastern corner of the Project Site. The fuel island would be located south of the USTs.

The Project Applicant would be required to prepare a Spill Contingency Plan with the County of Riverside Hazardous Materials Department, and all operations of the fueling station and related USTs would be required to comply with all federal, state and local laws regulating the management and use of hazardous materials. Therefore, impacts associated with long-term operation would not result in significant impacts.

Development of the Project Site would disturb approximately 2.08 acres and would therefore be subject to the National Pollutant Discharge Elimination System (NPDES) permit

requirements. Requirements of the permit include development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

The purpose of the SWPPP is to: 1) identify pollutant sources that may affect the quality of discharges of storm water associated with construction activities and 2) identify, construct, and implement storm water pollution control measures to reduce pollutants in storm water discharges from the construction site during and after construction. The SWPPP must include Best Management Practices (BMPs) to control and abate pollutants. Implementation of Mitigation Measure WQ-1 in Section 3.11 would ensure that potential impacts associated with the release of hazardous materials to the public or to the environment are reduced to a less than significant level. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

**Less than Significant Impact.** Hazardous or toxic materials transported in association with construction of the Proposed Project may include items such as oils, paints, and fuels. The United States Department of Transportation, California Department of Transportation, and SCAQMD regulate the transportation and delivery of gasoline and diesel fuel. All materials required during construction would be kept in compliance with State and local regulations. With the implementation of BMPs and compliance with all applicable regulations, potential impacts from the use of construction-related hazardous materials is considered less than significant.

AB 3777 was enacted to minimize potential emergencies involving acutely hazardous materials by requiring facilities which handle these materials to submit Risk Management Prevention Plans (RMP). An RMP will list the equipment and procedures that will be used to prevent, mitigate and abate release of hazardous materials. The Riverside County Department of Environmental Health Hazardous Materials Breach began implementation of this Program County-wide.

The City of Beaumont will work with County, State and Federal agencies involved in the regulation of hazardous materials' storage, use and disposal. The City will work with the Riverside County Fire Department in requiring hazardous materials users and generators to identify safety procedures for responding to accidental spills and emergencies. Additionally, the Proposed Project is subject to NPDES permit requirements and would therefore include a SWPPP.

The construction, installation, and operation of the USTs and gas station is to adhere to all regulations and requirements set forth in the 'California Code of Regulations; Title 23, Division 3, Chapter 16: Underground Storage Tank Regulations.' These regulations provide mandatory product implementation and operational procedures to reduce the risk of accidental release. Some of these required appurtenances include, but are not limited to, primary and secondary containment chambers, installation of 24/7 monitoring devices, monitoring programs and reporting procedures, constant vacuum seal of the fueling system, and vapor sensors. Permitting and design of fueling system must be diligently reviewed and approved by County Programs, including the 'South Coast Air Quality Management District' and 'Riverside County Department of Environmental Health, Hazardous Materials

Management Branch.' The California Health and Safety Code, Statutes of Chapter 6.7, Underground Storage of Hazardous Materials provides further regulations in regard to permitting the operation of the USTs. Site design and operating procedures are to adhere to California Stormwater Quality Association standard BG-22, which requires implementation of operational BMPs to avoid above ground storm water pollution and discharge into storm drain system. Some of these operational requirements include training employees on proper leak and spill prevention and cleanup practices, and the maintenance and cleaning of the fueling area. Furthermore, an UST permit mut be obtained from the County Hazardous Materials Management Branch, which is responsible for routine inspections of fueling station operations and USTs.

Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

**Less than Significant Impact.** The Project Site is approximately 0.28 miles from the building structure of Sundance Elementary School, located at 1520 E. 8<sup>th</sup> Street. Additionally, the Site is approximately 0.21 miles east of the nearest parking lot of the school. The Proposed Project would be required to comply with all federal, state, and local laws regulating the management and use of hazardous materials which would minimize or eliminate potential impacts to schools. The Proposed Project would adhere to all California Code of Regulations, Title 23, Chapter 16 - Chapter 18 requirements and pursue the proper permitting and design approvals. It would comply with all Environmental Protection Agency requirements by adhering to all requirements set forth in the 2015 UST Regulations. The Proposed Project would adhere to all local ordinances with approval from the pertinent Riverside County departments. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

**Less than Significant Impact.** There is no existing toxic or hazardous material being recognized as an environmental concern at the Project Site.<sup>25</sup>

SALEM conducted a Phase I Environmental Site Assessment (ESA) of the Proposed Project in January 2020 to identify any "Recognized Environmental Conditions (REC)" (see Appendix A for report). REC is defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at the property. SALEM found no evidence of any REC in connection with the Project Site. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

<sup>&</sup>lt;sup>25</sup> Department of Toxic Substances Control. Envirostor Database: Hazardous Waste and Substances list. Accessed November 25, 2019.

e) For a project located within an airport land use plan or, where such a plan had not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

**No Impact.** The Project Site is located approximately 5.2 miles northwest of the Banning Municipal Airport. The Project Site is neither within an airport land use plan, nor is it located within two miles of a public airport or public use airport. The Proposed Project would not result in a substantial safety hazard related to airports. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

**Less than Significant Impact.** Highland Springs Road is a major roadway identified as an evacuation route.<sup>26</sup> The Proposed Project would be required to comply with the City's Multi-Hazard Functional Plan that outlines responsibilities and procedures to be followed in the event of an emergency or Citywide disaster. The City and the Riverside County Fire Department established certain design standards to ensure that site planning and building design consider public safety and fire prevention; these standards include requirements governing emergency access. During construction, the contractor would be required to maintain adequate emergency access for emergency vehicles as required by the City and County. Site access for operations would be subject to approval of the Site Plan by the City. Therefore, no significant impacts are anticipated, and no mitigation measures are required.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

**Less than Significant Impact.** Proposed development under the General Plan is subject to environmental and building permit review procedures to ensure adequate and appropriate site design and construction methods are implemented to reduce the risk of wildland fires. For new development, the creation of defensible areas around building structures, and use of fire-resistant building materials will provide protection from wildland fires. The Project Site does not lie within a Very High Fire Hazard Severity Zone (VHFHSZ) and is not in area considered a wildland fire risk.<sup>27</sup> Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

# 3.10 HYDROLOGY AND WATER QUALITY

10.	HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality?				

<sup>&</sup>lt;sup>26</sup> City General Plan. Exhibit 5.3

<sup>&</sup>lt;sup>27</sup> Calfire. Very High Fire Hazard Severity Zone. Local Responsibility Area Map for the Western Riverside County Region.

10.	HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
(c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	<ul> <li>Result in a substantial erosion or siltation on- or off-site;</li> </ul>			$\boxtimes$	
	<ul> <li>ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flood on- or off-site;</li> </ul>				
	iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
	iv) Impede or redirect flood flows?			$\square$	
(d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				$\boxtimes$
(e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

# 3.10.1 Environmental Setting

According to the City General Plan, the City's water supply has been sourced from groundwater supplies within the Beaumont Groundwater Storage Unit (BSU). The BSU is part of the Beaumont Hydrologic Subarea of the San Timoteo Hydrologic Area and the northern portion of the Santa Ana River Hydrologic Unit. The City is serviced by the Beaumont/Cherry Valley Water District. The District draws groundwater from shallow wells in Little San Gorgonio Canyon. The increase in urban runoff due to increasing urban/suburban growth has resulted in the degradation of the surface water quality. The Project Site is part of the Riverside County Flood Control and Water Conservation District (RCFC and WCD) Master Drainage Plan for the Beaumont Area (Zone 5) tributary to the Santa Ana River, which is located approximately 24 miles west of the project site. Under existing conditions, the Project Site is undeveloped and generally sheet flows from northwest to southeast. The site runoff sheet flows to Highland Springs Avenue where flows are conveyed southerly via curb and gutter. Runoff is captured via storm drain curb inlets along Highland Springs Avenue, which connect directly into the Highland Springs Channel, a concrete RCFC and WCD Facility. Runoff is conveyed southerly and discharges into the Sant Timoteo Creek, which discharges into the Santa Ana River.

Kimley-Horn prepared a Preliminary Drainage Study for the Project Site on July 2020 (see Appendix G for report). The Project Site is part of the Riverside County Flood Control and Water Conservation District (RCFC and WCD) Master Drainage Plan for the Beaumont Area (Zone 5) tributary to the Santa Ana River, which is located approximately 24 miles west of the project site. Under existing conditions, the Project Site is undeveloped and generally sheet flows from northwest to southeast. The site runoff sheet flows to Highland Springs Avenue

where flows are conveyed southerly via curb and gutter. Runoff is captured via storm drain curb inlets along Highland Springs Avenue, which connect directly into the Highland Springs Channel, a concrete RCFC and WCD Facility. Runoff is conveyed southerly and discharges into the San Timoteo Creek, which discharges into the Santa Ana River.

## 3.10.2 Impact Analysis

a,e) Would the project violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality? Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant with Mitigation Incorporated. The Proposed Project would disturb approximately 2.08 acres and is therefore subject to the National Pollution Discharge Elimination System (NPDES) permit requirements. The State of California is authorized to administer various aspects of the NPDES. Construction activities covered under the State's General Construction permit include removal of vegetation, grading excavating, or any other activity that causes the disturbance of at least one acre. The General Construction permit requires recipients to reduce or eliminate non-storm water discharges into stormwater systems, and to develop and implement a SWPPP.

The NPDES also requires a Water Quality Management Plan (WQMP). In February 2020, a Preliminary WQMP was prepared for the Proposed Project by Kimley-Horn and Associates, Inc. (on file with City). The WQMP is intended to comply with the requirements of the City of Beaumont, which includes the requirement for the preparation and implementation of a Project-Specific WQMP. The implementation of the WQMP is enforceable under the City of Beaumont Water Quality Ordinance. Review and approval of the WQMP by the City would ensure that all potential pollutants of concern are minimized or otherwise appropriately treated prior to being discharged from the Project Site. To ensure potential impacts are reduced to less than significant, the following mitigation measure shall be implemented:

**Mitigation Measure WQ-1:** The Project Proponent shall implement all permanent, structural BMPs and Operations BMPs as listed in the final WQMP to be approved by the City.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

**Less than Significant Impact.** According to the City General Plan, the City of Beaumont historically has drawn from groundwater supplies available within the Beaumont Groundwater Storage Unit (BSU), which underlies the City and surrounding areas. The BSU is within Area 4 of the Beaumont and Banning Hydrologic Subarea of the San Timoteo Hydrologic Area, and within the northern portion of the Santa Ana River Hydrologic Unit.

The Project Site would be served by the Beaumont-Cherry Valley Water District (BCVWD), which draws groundwater from shallow wells in Little San Gorgonio Canyon. The Beaumont

Groundwater Basin has a large storage capacity for banked water.<sup>28</sup> During wet years, BCVWD can bank State Water Program water for dry years.

At the time the UWMP was prepared, the population served by BCVWD is expected to nearly double by 2040-50, based on the City 2007 General Plan projected build-out population. The build-out population estimate will set the ultimate water demand. The Proposed Project is the development of a QSR, gas station and convenience store. It includes 22,700 square-feet of landscaping, which is 25 percent of the total site. The Proposed Project is consistent with the General Plan and would therefore be included in BCVWD's projections for water demands.

Compliance with BCVWD's development conditions, as listed in the Preliminary Review, will ensure that the Proposed Project does not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. The Proposed Project is required to conform to the City of Beaumont and County of Riverside Landscaping Ordinances that pertain to water efficient landscape requirements. In addition, as is required by BCVWD, landscaped areas which have turf shall have smart irrigation controllers and systems shall have automatic rain sensors. Landscaping in non-turf areas should be drought-tolerant with drip or bubbler irrigation systems. No significant impacts are identified or anticipated, and no mitigation measures are required.

- c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
- i) result in substantial erosion or siltation on- or off-site

## Less than Significant Impact.

The Proposed Project's uses are not anticipated to affect drainage patterns or add substantial on or off-site erosion or siltation. Erosion is the process by which soils are removed from a property most commonly by wind or water. Erosion is more likely to occur if soils are left unprotected. The Proposed Project would be approximately 75% impervious area and 25% landscape.

According to the City General Plan, future development under the General Plan will not result in any additional soil erosion or loss of topsoil. Soils within City limits are classified as Ramona-Placentia, Hanford, and Yolo Soils Association.<sup>29</sup> These soils are generally well drained, have low soil permeability, and have relatively low inherent fertility. The Project Site does not fall within any geological boundary which would contribute to the soil erosion or loss of topsoil to the Project Site or surrounding properties. Moreover, the Project Applicant is required to design temporary drainage facilities and erosion control measures to minimize erosion and silt deposition during site grading activities. In accordance with the Geotechnical Engineering Investigation, temporary excavations and slope faces shall be protected from rainfall and erosion; surface runoff shall be directed away from excavations and slopes.

<sup>&</sup>lt;sup>28</sup> Beaumont-Cherry Valley Water District. 2015 Urban water Management Plan.

<sup>&</sup>lt;sup>29</sup> City General Plan. Page 105.

Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

*ii)* substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

**Less than Significant with Mitigation Incorporated.** The Project Site is within the Riverside County Flood Control District. The Federal Emergency Management Agency (FEMA) maps portions of the City within the 100-year flood plain zones. According to the City General Plan, the General Plan Area is not exposed to significant hazards due to dam or levee failure(s). The majority of the Project Site is within Other Areas Zone X, which is areas outside the 0.2% annual chance of flood hazard. The eastern edge of the Project Site within the Other Flood Areas Zone X, which is areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than one foot or with drainage areas less than one square mile; and areas protected by levees from 1% annual chance flood.<sup>30</sup>

Uncontrolled infiltration of irrigation excess and storm runoff into the soils can adversely affect the performance of the planned improvements (see Appendix F). Saturation of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change to important engineering properties. Proper drainage should be maintained at all times. To maintain proper surface drainage at all times to prevent on-site flooding, SALEM recommends the following mitigation measures:

**Mitigation Measure WQ-2:** The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than 5 percent for a minimum distance of 10 feet.

**Mitigation Measure WQ-3:** Impervious surfaces within 10 feet of the building foundation shall be sloped a minimum of 2 percent away from the building and drainage gradients maintained to carry all surface water to collection facilities and off site. These grades should be maintained for the life of the project. Ponding of water should not be allowed adjacent to the structure. Over-irrigation within landscaped areas adjacent to the structure should not be performed.

**Mitigation Measure WQ-4:** Roof drains should be installed with appropriate downspout extensions out-falling on splash blocks so as to direct water a minimum of 5 feet away from the structures or be connected to the storm drain system for the development.

Implementation of the mitigation measures above would reduce the amount and rate of surface runoff to prevent on and off-site flooding.

iii,iv) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources or polluted runoff; or impede or redirect flood flows

Less than Significant Impact. Design review at the project level will ensure that the Proposed Project will not create nor modify drainage patterns that would impede or redirect flood flows. Implementation of the Proposed Project is anticipated to increased peak volume

<sup>&</sup>lt;sup>30</sup> Federal Emergency Management Agency. National Flood Hazard Layer.

by 4,696 cubic feet (see Appendix G). As a result, an underground detention system with minimum storage volume of 4,700 cubic feet is proposed for peak attenuation. A detailed detention analysis will be provided to the during final design and approved prior to issuance of grading permits.

Under proposed conditions, storm water runoff would sheet flow on the majority of the QSR into various storm drain inlets via curb and gutter and ribbon gutter. The gutters would ultimately connect to the existing RCFC and WCD curb inlet, which discharges to the Highland Springs Channel. The Proposed Project's uses are not anticipated to affect drainage patterns or add substantial runoff that cannot be supported by existing RCFC and WCD Facilities. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

**No Impact.** Due to the Project Site's distance from the Pacific Ocean and any other significant body of water, tsunamis and seiches are not potential hazards in the vicinity of the Project Site. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

# 3.11 LAND USE AND PLANNING

11.	LAND USE/PLANNING Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Physically divide an established community?				$\boxtimes$
(b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				$\boxtimes$

# 3.11.1 Environmental Setting

The City and its spheres of influence contain significant tracts of undeveloped land. Development under the General Plan will largely affect undeveloped and rural areas within the City Sphere of Influence. Future development would result in intensified existing urban uses and convert open space into urban land. The General Plan's Community Development Element establishes the policy statements to preclude or reduce the potential for disruption or division of established communities.

# 3.11.2 Impact Analysis

## a) Would the project physically divide an established community?

**No impact.** The Citys General Plan Area has been subdivided into smaller Planning areas. The Project Site is part of the 6<sup>th</sup> Street Corridor Planning Area. Commercial and industrial uses are the predominant land uses within this Planning Area, with residential uses south of 8<sup>th</sup> street. The Project Site is currently vacant. The Proposed Project would be consistent with the General Plan designation and would serve nearby residential development. The physical division of an established community is typically associated with construction of a linear feature, such as a major highway or railroad tracks, or removal of a means of access, such as a local road or bridge, which would impair mobility in an existing community or between a community and an outlying area. The Proposed Project is the development of a convenience store, gas station and quick-service restaurant with an attached drive-thru. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**No impact.** The Project Site has a current land use designation of Community Commercial (CC). With approval of the CUP, the Proposed Project would comply with applicable requirements for structures in the CC zone. The Proposed Project would not conflict with any land use plan, policy or regulation with the purpose of avoiding or mitigating an environmental effect. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

12.	MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			$\boxtimes$	
(b)	Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			$\boxtimes$	

# 3.12 MINERAL RESOURCES

# 3.12.1 Environmental Setting

The General Plan Area is lacking in any known or identified mineral resources. Development under the General Plan will not restrict access to mineral resources outside of the General Plan Area. There may be accretions of aggregates along watercourses and drainage ways that can be valuable for local construction.

# 3.12.2 Impact Analysis

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

**Less than Significant Impact.** According to the California Department of Conservation, Mineral Land Classification map, the Project Site is located in the San Bernardino Production-Consumption (P-C) region, specifically in Special Report (SR) 143. The Project Site and its immediate vicinity occur within Mineral Resource Zone 3 (MRZ-3).<sup>31</sup> This zone is defined as

<sup>&</sup>lt;sup>31</sup> California Department of Conservation. Mineral Land Classification Map SR 143 Plate 7.16.

an area containing mineral deposits with a significance that cannot be evaluated from available data. There are no known or identified mineral resources of regional or Statewide importance within the General Plan Area.<sup>32</sup> Additionally, development under the General Plan will not restrict access to mineral resources outside of the General Plan Area. The Proposed Project's demand for mineral resources will be considered less than significant due to the abundance of available aggregate resources in the Southern California region. Mineral resource mining would not be compatible with the surrounding land uses and the General Plan designation for the Project Site. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less than Significant Impact. Analysis under the City General Plan concludes that development under the General Plan will result in a less than significant loss of available locally important mineral resource recovery site. There are no delineated sites of mineral resources within the General Plan Area. Undeveloped parts of the General Plan Area may yield sand, gravel and aggregate that can be used for local construction activities as long as mineral extraction does not conflict with other policies or land uses. The Project Site has a current zoning of Commercial Community and general land use designation of Community Commercial. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

## 3.13 NOISE

13.	NOISE Would the project result in:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
(b)	Generation of excessive groundborne vibration or groundborne noise levels?			$\boxtimes$	
(c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

# 3.13.1 Environmental Setting

Highland Springs Avenue is designated as an Arterial Highway under the General Plan. 8th Street is a designated Major Highway and a proposed Arterial Highway. A Noise Impact Analysis, dated May 4, 2020, was prepared for the Proposed Project by Urban Crossroads to determine the

<sup>&</sup>lt;sup>32</sup> City General Plan. Page 152.

potential noise impacts and the necessary noise mitigation measures, if any, for the Proposed Project (see Appendix H for report).

# 3.13.2 Impact Analysis

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

**Less than Significant Impact.** Noise can be measured in the form of a decibel (dB), which is a unit for describing the amplitude of sound. The predominant rating scales for noise in the State of California are the Equivalent Continuous Sound Level ( $L_{eq}$ ), and the Community Noise Equivalent Level (CNEL), which are both based on the A-weighted decibel (dBA). The  $L_{eq}$  is the average of the sound level energy for a one-hour period and employs an A-weighted decibel correction that corresponds to the optimal frequency response of the human ear. The CNEL is based upon 24 one-hour  $L_{eq}$  measurements. The average noise levels for the late evening and early morning hours (the period between 10:00 PM and 7:00 AM) are weighted 10 decibels. This is to take into account a person's increased sensitivity to noise during the early morning and late evening periods. A decibel is a unit used for measuring the intensity of sound. Zero on the decibel scale represents the lowest limit of sound that can be heard by humans.

The Noise Impact Analysis was been prepared to satisfy applicable City of Beaumont standards and thresholds of significance based on guidance provided by Appendix H of CEQA guidelines.

## Off-Site Traffic Noise Analysis

Traffic generated by the operation of the Project will influence the traffic noise levels in surrounding off-site areas. To quantify the off-site traffic noise increases on the surrounding off-site areas, the changes in traffic noise levels on 16 study-area roadway segments were calculated using the transportation related twenty-four hour community noise equivalent levels (CNEL) based on the change in the average daily traffic (ADT) volumes. The traffic noise levels provided in this analysis are based on the traffic forecasts found in the Traffic Impact Analysis prepared by Urban Crossroads, Inc. To assess the off-site noise level impacts associated with the Proposed Project, noise contour boundaries were developed for Existing 2020, and Opening Year Cumulative (OYC) 2021 conditions (see Tables 9 and 10). The analysis shows that the unmitigated Project-related traffic noise level increases under all with Project traffic scenarios are considered less than significant impacts at receiving land uses adjacent to the study area roadway segments. No mitigation measured are required.

ID	Road	Segment	Noise- sensitive land use?	Project Increase (dBA) <sup>1</sup>	Noise Level Increase Significance Criteria <sup>2</sup>	Exceeded?
1	Pennsylvania Ave.	n/o 8th St.	Yes	0.1	1.5	No
2	Pennsylvania Ave.	s/o 8th St.	Yes	0.0	1.5	No
3	Xenia Ave.	n/o 8th St.	Yes	0.0	1.5	No
4	Allegheny St.	s/o 8th St.	Yes	0.9	5.0	No
5	Highland Springs Ave.	n/o Wilson St.	Yes	0.0	1.5	No
6	Highland Springs Ave.	s/o Wilson St.	No	0.1	5.0	No
7	Highland Springs Ave.	n/o Ramsey St.	No	0.1	5.0	No
8	Highland Springs Ave.	s/o Ramsey St.	No	0.1	3.0	No
9	Highland Springs Ave.	s/o I-10	No	0.0	3.0	No
10	8th St.	w/o Pennsylvania Ave.	Yes	0.1	3.0	No
11	8th St.	e/o Pennsylvania Ave.	Yes	0.3	3.0	No
12	8th St.	e/o Xenia Ave.	Yes	0.3	3.0	No
13	8th St.	e/o Driveway 1	Yes	0.4	1.5	No
14	Wilson St.	e/o Highland Springs Ave.	Yes	0.1	1.5	No
15	6th St.	w/o Highland Springs Ave.	No	0.1	5.0	No
16	Ramsey St.	e/o Highland Springs Ave.	No	0.1	3.0	No

 Table 9

 Existing 2020 with Project Traffic Noise Level Increases

<sup>1</sup> Community Noise Equivalent Levels (CNEL) at receiving land use. The CNEL is calculated at the boundary of the right-of-way of each Roadway and the property line of the receiving land use. <sup>2</sup>Does the Project create an off-site transportation related noise level increase exceeding the significance criteria (Table 4-2 of Appendix H)? "RW" = Location of the respective noise contour falls within the right-of-way of the road. "MFR"= Multi-Family Residential; "SFR"= Single-Family Residential; "GC"= General Commercial; "LDR"= Low Density Residential; "CC"= Community Commercial; "PF"= Public Facilities; "PO"= Professional Office; "PFRI"= Public Facilities- Railroad/Interstate; "HDR"= High Density Residential; "MHP"= Mobile Home Parks.

Tabl	le 10
<b>Opening Year 2021 with Pro</b>	ject Traffic Noise Increases

ID	Road	Segment	Noise- sensitive land use?	Project Increase (dBA) <sup>1</sup>	Noise Level Increase Significance Criteria <sup>2</sup>	Exceeded?
1	Pennsylvania Ave.	n/o 8th St.	Yes	0.0	1.5	No
2	Pennsylvania Ave.	s/o 8th St.	Yes	0.1	1.5	No
3	Xenia Ave.	n/o 8th St.	Yes	0.1	1.5	No
4	Allegheny St.	s/o 8th St.	Yes	0.8	5.0	No
5	Highland Springs Ave.	n/o Wilson St.	Yes	0.0	1.5	No
6	Highland Springs Ave.	s/o Wilson St.	No	0.1	3.0	No
7	Highland Springs Ave.	n/o Ramsey St.	No	0.1	5.0	No
8	Highland Springs Ave.	s/o Ramsey St.	No	0.1	3.0	No
9	Highland Springs Ave.	s/o I-10	No	0.0	3.0	No
10	8th St.	w/o Pennsylvania Ave.	Yes	0.1	1.5	No

ID	Road	Segment	Noise- sensitive land use?	Project Increase (dBA) <sup>1</sup>	Noise Level Increase Significance Criteria <sup>2</sup>	Exceeded?
11	8th St.	e/o Pennsylvania Ave.	Yes	0.2	1.5	No
12	8th St.	e/o Xenia Ave.	Yes	0.2	1.5	No
13	8th St.	e/o Driveway 1	Yes	0.2	1.5	No
14	Wilson St.	e/o Highland Springs Ave.	Yes	0.1	1.5	No
15	6th St.	w/o Highland Springs Ave.	No	0.0	5.0	No
16	Ramsey St.	e/o Highland Springs Ave.	No	0.1	3.0	No

<sup>1</sup> Community Noise Equivalent Levels (CNEL) at receiving land use. The CNEL is calculated at the boundary of the right-of-way of each Roadway and the property line of the receiving land use.

<sup>2</sup>Does the Project create an off-site transportation related noise level increase exceeding the significance criteria (Table 4-2 of Appendix H)? "RW" = Location of the respective noise contour falls within the right-of-way of the road. "MFR"= Multi-Family Residential; "SFR"= Single-Family Residential; "GC"= General Commercial; "LDR"= Low Density Residential; "CC"= Community Commercial; "PF"= Public Facilities; "PO"= Professional Office; "PFRI"= Public Facilities- Railroad/Interstate; "HDR"= High Density Residential; "MHP"= Mobile Home Parks.

## **Operational Noise Analysis**

For noise-sensitive residential properties, the City of Beaumont Municipal Code, Section 9.02.050, identifies base ambient noise level (BANL) stationary-source noise level limits for the daytime (7:00 a.m. to 10:00 p.m.) hours of 55 dBA  $L_{eq}$  and 45 dBA  $L_{eq}$  during the nighttime (10:00 p.m. to 7:00 a.m.) hours. For industrial and commercial land uses, the BANL is 75 dBA  $L_{eq}$  for the daytime hours and of 50 dBA  $L_{eq}$  during the nighttime hours. Section 9.40.050 states that actual decibel measurements exceeding the levels set forth hereinabove at the times and within the zones corresponding thereto shall be employed as the "base ambient noise level. In effect, when the ambient noise levels exceed the base exterior noise level limits, the noise level standard shall be adjusted as appropriate to encompass or reflect the ambient noise level.

Using reference noise levels to represent the expected noise sources from the Project Site, the operational analysis estimates the Project-related stationary-source noise hourly average  $L_{eq}$  levels at nearby sensitive receiver locations. Receiver locations are located in outdoor living areas (e.g., backyards) at 10 feet from any existing or proposed barriers or at the building façade, whichever is closer to the Project site. Distance is measured in a straight line from the project boundary to each receiver location.

- R1: Located approximately 114 feet north of the Project site, R1 represents vacant land. Traffic noise from 8<sup>th</sup> Street represents the primary noise source at this location.
- R2: Location R2 represents the existing San Gorgonio Memorial Hospital located approximately 196 feet east of the Project site and Highland Springs Avenue.
- R3: Location R3 represents the existing Westco Medical Supplies office use. The medical office use is located approximately 103 feet south of the Project site.
- R4: Location R4 represents the existing single-family residence located at 720 Allegheny Street approximately 296 feet south west of the Project site.

R5: Location R5 represents the existing Palm Grove Health Care Center skilled nursing facility located at 1665 E 8th Street approximately 71 feet south west of the Project site.

The typical activities associated with the Proposed Project are anticipated to include roof-top air conditioning units, trash enclosure activity, drive-thru speakerphone and gas station activity. The operational noise analysis shows that the Project will satisfy the City of Beaumont stationary-source exterior hourly average  $L_{eq}$  noise levels of 55 dBA  $L_{eq}$  daytime and 45 dBA  $L_{eq}$  nighttime noise level standards at all nearby receiver locations (see Table 11). Therefore, the Project-related operational noise level impacts are considered less than significant, and no mitigation measures are required.

Receiver	Project Operational Noise Levels (dBA Leq) <sup>2</sup>		Noise Leve (dBA	l Standards Leq) <sup>3</sup>	Noise Level Standards Exceeded? <sup>4</sup>	
Location	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	45.9	44.3	55	45	No	No
R2	43.3	40.7	55	45	No	No
R3	47.0	42.1	55	45	No	No
R3	42.3	38.2	55	45	No	No
R4	48.5	43.6	55	45	No	No

Table 11Operational Noise Level Compliance

<sup>1</sup> See Exhibit 9-A of Appendix H for the receiver locations.

<sup>2</sup> Proposed Project operational noise levels as shown on Tables 9-2 and 9-3 of Appendix H.

<sup>3</sup> Exterior noise level standards for noise sensitive residential land use, as shown on Table 4-2 of Appendix H.

<sup>4</sup> Do the estimated Project operational noise source activities exceed the noise level standards?

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

## **Construction Noise Analysis**

Project construction noise level standards are typically described as exterior noise level limits in order to assess the potential impacts. Therefore, to describe the Project construction noise levels at off-site sensitive receiver locations, an exterior construction-related noise level threshold of 75 dBA  $L_{eq}$  is used. Since typical building construction will provide a Noise Reduction (NR) of approximately 20 dBA with "windows closed", an unmitigated exterior noise level standard of 75 dBA  $L_{eq}$  when measured at the building façade is used to describe the for noise sensitive residential uses. This exterior construction noise level standard represents the combination of the City of Beaumont 55 dBA  $L_{eq}$  interior noise level limit and the 20 dBA noise reduction associated with typical building construction.

Using sample reference noise levels to represent the planned construction activities of the Proposed Project, this analysis estimates the Project-related construction noise levels at nearby sensitive receiver locations. The Project-related short-term construction noise levels are expected to range from 53.2 to 70.8 dBA  $L_{eq}$  and will satisfy the acceptable 75 dBA  $L_{eq}$  threshold at all receiver locations (see Table 12). Therefore, based on the results of this analysis, all nearby sensitive receiver locations will experience less than significant impacts due to Project construction noise levels, and no mitigation measures are required.

	Construction Noise Levels (dBA Leq)						
Receiver Location <sup>1</sup>	Highest Construction Noise Levels <sup>2</sup>	Threshold <sup>3</sup>	Threshold Exceeded? <sup>4</sup>				
R1	69.2	75	No				
R2	65.9	75	No				
R3	69.3	75	No				
R4	63.3	75	No				
R5	70.8	75	No				

Table 12Construction Noise Level Compliance

<sup>1</sup>Noise receiver locations are shown on Exhibit 10-A of Appendix H.

<sup>2</sup> Highest construction noise level calculations based on distance from the construction noise source activity to nearby receiver locations as shown on Table 10-2 of Appendix H.

<sup>3</sup> Exterior construction noise level standard represents the combination of the City of Beaumont 55 dBA Leq interior noise level limit and the 20 dBA noise reduction associated with typical building construction.<sup>4</sup> Do the estimated Project construction noise levels exceed the construction noise level threshold?

# b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

**Less than Significant Impact.** There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment and/or activities

Ground-borne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. However, due to the rapid drop-off rate of ground-borne vibration and the short duration of the associated events, vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used.

Ground-borne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA). Construction activities that would have the potential to generate low levels of ground-borne vibration within the Project site include grading. At distances ranging from 71 feet (at location R5) to 296 feet (at location R4) from Project construction activities (at the Project Site

boundary), construction vibration levels are estimated to range from 54.8 to 73.4 VdB and will remain below the FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria of 78 VdB for daytime residential uses at all receiver locations (see Table 13). Moreover, the vibration levels reported at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter. Therefore, the Project-related vibration impacts are considered less than significant during the construction activities at the Project Site, and no mitigation measures are required.

	Distance to	Receiver Vibration Levels (VdB) <sup>2</sup>						
Receiver Location <sup>1</sup>	Construction Activity (Feet)	Small Bulldozer	Jack- hammer	Loaded Trucks	Large Bulldozer	Highest Vibration Levels	Threshold VdB <sup>3</sup>	Threshold Exceeded? <sup>4</sup>
R1	114'	38.2	59.2	66.2	67.2	67.2	78	No
R2	196'	31.2	52.2	59.2	60.2	60.2	78	No
R3	103'	39.6	60.6	67.6	68.6	68.6	78	No
R4	296'	25.8	46.8	53.8	54.8	54.8	78	No
R5	71'	44.4	65.4	72.4	73.4	73.4	78	No

Table 13Project Construction Vibration Levels

<sup>1</sup>Noise receiver locations are shown on Exhibit 10-A of Appendix H.

 $^{\rm 2}$  Based on the Vibration Source Levels of Construction Equipment included on Table 6-5 of Appendix H.

<sup>3</sup> Source: FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria.

4 Does the vibration level exceed the maximum acceptable vibration threshold?

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

**Less than Significant Impact.** The Project Site is located approximately 5.2 miles southeast of the Banning Municipal Airport. The Project Site is neither within an airport land use plan, nor is it located within two miles of a public airport or public use airport.<sup>33</sup> The Proposed Project would not expose people residing or working in the project area to excessive noise levels. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

<sup>&</sup>lt;sup>33</sup> Riverside County Information Technology GIS. Map My County.

# 3.14 POPULATION AND HOUSING

14.	POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
(b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

## 3.14.1 Environmental Setting

According to the 2010 United States Census Bureau, the City of Beaumont had a population of 36,877. For 2018, the City was estimated to have a population of 49,241. The City is one of the fastest growing cities in Riverside County and in California. The Community Development Element of the City General Plan outlines the standards for development intensity and population density for each land designation.

## 3.14.2 Impact Analysis

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant Impact. The General Plan is not intended to induce population growth but rather, to identify the plans, policies and programs necessary to accommodate anticipated growth within the City and surrounding region. The population growth estimates based on the General Plan Update are consistent with SCAG growth forecasts. If there is a minor increase in population growth as a result of the implementation of the Proposed Project, this population growth would be accounted for in the General Plan and considered insignificant. The Proposed Project would require an estimate of four to six employees. It is anticipated that this demand for employment will be met by the existing local population. Short-term construction activities at the Project Site would not attract new employees to the area since a pool of construction labor exists in the region. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**No Impact.** The Project Site is currently vacant and does not contain housing that could potentially be displaced. The Project Site is designated "Community Commercial", which is intended to serve adjacent neighborhoods. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

## 3.15 PUBLIC SERVICES

15.	PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Fire Protection?			$\boxtimes$	
(b)	Police Protection?			$\boxtimes$	
(c)	Schools?			$\boxtimes$	
(d)	Parks?			$\boxtimes$	
(e)	Other public facilities?			$\boxtimes$	

# 3.15.1 Environmental Setting

The City of Beaumont will oversee the development of adequate and dependable services to meet the needs of existing and future development (Community Development Element Policy 20). These services include fire protection, law enforcement, hospital/healthcare services and education.

## 3.15.2 Impact Analysis

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?

**Less than Significant Impact.** The City of Beaumont contracts with the Riverside County Fire Department (RCFD) for Citywide services, including fire protection, public service and emergency medical aid response. Fire protection services are supplemented by the California Department of Forestry station in the City. Six County fire stations serve the city, with three stations based outside but near Beaumont's boundaries. Fire Station No. 20, located at 1550 E. Sixth Street, is approximately 0.16 miles southwest of the Project Site. In order to minimize the need for additional fire station facilities, the Fire Department reviews all new development plans. Proposed projects are required to comply with applicable fire protection and prevention requirements, such as building setbacks, emergency access and interior sprinklers. Additionally, the Project Applicant will be required to pay a one-time mitigation fee to support the development of new fire station facilities under Beaumont City Ordinance 795 and a separate fee for emergency preparedness under City Ordinance 814. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

b) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental

impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection?

Less than Significant Impact. The Beaumont Police Department provides police protection services in the area of the Project Site. The closest police station, located at 660 Orange Avenue, is approximately 1.5 miles southwest of the Project Site. According to the City General Plan, City General Fund revenues are typically used to provide and supplement police services, as required. Revenues from the Proposed Project would be allocated to finance an increased demand for police protection services. The Project Applicant would be required to pay a one-time basic service facility fee under City Ordinance 506. An increase in demand for police protection resulting from the Proposed Project's commercial use has been accounted for in the General Plan and would be considered insignificant. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

c) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?

**Less than Significant Impact.** The Project Site is located within the Beaumont Unified School District (BUSD). The increase in employment from the Proposed Project is anticipated to be fulfilled by the existing population. The Proposed Project is not anticipated to result in an increase in population growth within the area, thereby not increasing the number of students. The Project Applicant will be required to pay applicable development fees in support of public school facilities. This fee will be sufficient in mitigating potential impacts of the Proposed Project on schools. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

d) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?

**Less than Significant Impact.** The City shall improve the requirement of establishing five acres of parkland for every one thousand persons in conjunction with residential development.<sup>34</sup> The City of Beaumont and Cherry Valley Recreation and Park District own and operate park facilities. Population growth resulting from the implementation of the General Plan will lead to an increased demand for public parks. The City's Local Park Code and the State of California Quimby Act require new development to provide parkland dedications or appropriate fees in case the Proposed Project might have direct or indirect impacts on parks. The increase in employment from the Proposed Project is anticipated to be fulfilled by the local population. Therefore, the Proposed Project would not require the construction or expansion of parks to meet demands. No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

<sup>&</sup>lt;sup>34</sup> City General Plan. Page 52.

e) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?

**Less than Significant Impact.** The Proposed Project is not anticipated to have a significant impact on public facilities/services because an increase in the City's population is not anticipated with the Proposed Project. Furthermore, the Project Applicant's payment of development impact fees will mitigate any potential impacts on public services. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

# 3.16 RECREATION

16.	RECREATION. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
(b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

# 3.16.1 Environmental Setting

The General Plan's Resource Management Element addresses open space and recreational resources. The City manages parks and recreational facilities to ensure these facilities stay in good condition. The City intends to increase the recreational facilities available to residents. The Project Site is primarily surrounded by commercial and residential development.

# 3.16.2 Impact Analysis

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less than Significant Impact. The implementation of the Proposed Project is not expected to lead to substantial population growth. As a result, the Proposed Project would not lead to substantial physical deterioration of neighborhood and regional parks or other recreational facilities. It would not require the construction or expansion of park or other recreational facilities to meet demands. The Project Applicant's payment of required fees will serve to mitigate any potential impacts related to the use of existing parks and other recreational facilities from the Proposed Project. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

**No Impact.** The Proposed Project is a commercial development and its demand for employment is anticipated to be filled by the local population. It would not require the construction or expansion of recreational facilities to meet demands of residential development. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

# 3.17 TRANSPORTATION

17.	TRANSPORTATION. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities?		$\boxtimes$		
(b)	Conflict or be inconsistent with CEQA Guidelines s § 15064.3, subdivision (b)?		$\boxtimes$		
(c)	Substantially increase hazards due to a geometric design feature (e. g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			$\boxtimes$	
(d)	Result in inadequate emergency access?		$\square$		

# 3.17.1 Environmental Setting

The Proposed Project is anticipated to open in 2021. Access to and from the Project Site would be via a right-in/right-out only driveway on 8<sup>th</sup> Street and another on Highland Springs Avenue. Regional access to the Project Site is available from the I-10 Freeway via Highland Springs Avenue. A Traffic Impact Analysis (TIA), dated April 23, 2020, was prepared for the Proposed Project by Urban Crossroads to provide an assessment of potential traffic impacts that may result from the Proposed Project and to identify traffic mitigation measures required to maintain the established Level of Service (LOS) standard for the elements of the impacted roadway system (see Appendix I for report).

# 3.17.2 Impact Analysis

a,b) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities? Conflict or be inconsistent with CEQA Guidelines s § 15064.3, subdivision (b)?

Less than Significant with Mitigation Incorporated. The Proposed Project is the development of a QSR, convenience store and gas station. It is a land use project that would allow commercial services to be more accessible to residents of the neighborhoods north and west of the Project Site. The Beaumont Transit Department plans to have a bus stop adjacent to the Project Site, so the Proposed Project would be easily accessible to residents.

The traffic study was prepared in accordance with the County of Riverside's Traffic Impact Analysis Preparation Guide (August 2008), the California Department of Transportation

(Caltrans) Guide for the Preparation of Traffic Impact Studies, and through consultation with City of Beaumont staff during the scoping process. The LOS operations included in the TIA for study area intersections and freeway facilities are informational and are not anticipated to support Senate Bill 743, which would replace automobile delay-based LOS with vehicle miles traveled (VMT). A traffic study scoping package was reviewed and approved by the City of Beaumont and the City of Beaumont's requirements. The City of Beaumont has established LOS D as the minimum LOS for all roadways/intersections within the City. Therefore, any intersection operating at LOS E or F will be considered deficient for the purpose of the TIA. The City of Banning shall maintain peak hour LOS C or better on all local intersections.

Nine study area intersections, listed below, were evaluated in the TIA (see Exhibit 1-2 of Appendix I). This list includes intersections where the Proposed Project is anticipated to contribute 50 or more peak hour trips per the County of Riverside's traffic study guidelines. The 50-hour trip criterion is a traffic engineering rule of thumb that is accepted and widely used within the Riverside County for estimating a potential area of influence.

- Pennsylvania Av. & 8th St.
- Xenia Av. & 8th
- Allegheny St. & 8th St
- Driveway 1 & 8th St. Future Intersection
- Highland Springs Av. & 8th St./Wilson St.
- Highway Springs Av. & Driveway 2 Future Intersection
- Highland Springs Av. & 6th St./Ramsey St.
- Highland Springs Av. & I-10 WB Ramps
- Highland Springs Av. & I-10 EB Ramps

Trips generated by the Proposed Project have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, (10th Edition, 2017). The Proposed Project is anticipated to generate a total of 1,100 trip-ends per day, 145 AM peak hour trips and 100 PM peak hour trips.

For the traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions: existing (2020), existing plus Proposed Project, opening year cumulative (2021) without Proposed Project, and opening year cumulative (2021) with Proposed Project. The following intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2021) Without Project traffic conditions:

- Pennsylvania Avenue & 8th Street LOS F AM peak hour; LOS E PM peak hour
- Highland Springs Avenue & 8th Street/Wilson Street– LOS D AM peak hour; LOS F PM peak hour
- Highland Springs Avenue & 6th Street/Ramsey Street– LOS D PM peak hour only

With the addition of traffic generated from the Proposed Project, there are no additional study area intersections anticipated to operate at an unacceptable LOS under Opening Year Cumulative (2021) With Project traffic conditions, in addition to the intersections identified under Opening Year Cumulative (2021) Without Project traffic conditions. There are no

movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows for Opening Year Cumulative (2021) traffic conditions, consistent with Existing (2020) traffic conditions.

VMT Assessment: Removing LOS and congestion from CEQA and shifting to VMT as the metric for analyzing transportation impacts, is based on SB 743 which still preserves local government authority to make planning decisions (that is LOS and congestion can still be measured for planning purposes). VMT analysis is deemed beneficial for several reasons one of which is it is critical to achieving the State's GHG emissions reductions goals. It also aligns transportation analysis under CEQA with a number of state goals for planning, environmental protection, and improvement of human health. LOS traffic studies may be required for planning approvals but will no longer be part of the CEQA process as of July 1, 2020. The CalEEMod output from modeling the Proposed Project's air quality and greenhouse gas emissions show the project vehicle miles traveled, based on use to be 900,150 per year, or an average daily VMT of 2.466.26. The CaleEEMod construction emissions were estimated based on parameters used to estimate construction emissions such as those associated with worker and vendor trips, and trip lengths. The operational mobile source emissions were calculated using the Traffic Impact Analysis prepared by Urban Crossroads, which determined that the Proposed Project would generate 1,100 total daily trips. Operational emissions do not exceed the SCAQMD's 3,000 MTCO<sub>2</sub>e threshold of significance.

Because the Proposed Project is consistent with the current land use designation of Community Commercial under the General Plan, the future emissions estimates of the City's Climate Action Plan therefore account for the implementation of the Proposed Project. The project emissions do not exceed thresholds for Greenhouse Gas emissions (see Section 3.8) and it will also meet Title 24 to lower GHG emissions.

The Proposed Project is not anticipated to require the construction of any other off-site improvements, but there are improvement needs identified at off-site intersections for future cumulative traffic analysis scenarios. Therefore, the Project Applicant's responsibility for the Project's contributions towards off-site deficient intersections is fulfilled through payment of fair share and/or payment into pre-existing fee programs (if applicable) that would be assigned to the future construction of the identified recommended improvements. The Project Applicant would be required to pay requisite fees and/or fair share contributions consistent with the City's requirements.

The following mitigation measures shall be implemented to minimize potential on-site/access impacts to a level below significant:

**Mitigation Measure T-1:** – Driveway 1 & 8th Street– install a stop control on the northbound approach and a right turn lane (driveway).

**Mitigation Measure T-2:** Highland Springs Avenue & Driveway 2 - install a stop control on the eastbound approach and a right turn lane (driveway).

**Mitigation Measure T-3:** 8th Street is an east-west oriented roadway located along the Project's northern boundary. According to the City of Beaumont Circulation Element, 8th Street is currently built out to its ultimate half-section. Curb, gutter, and sidewalk improvements are recommended, as needed for site access along the Project's frontage, consistent with the City's standards.

**Mitigation Measure T-4:** Highland Springs Avenue is a north-south oriented roadway located along the Project's eastern boundary. According to the City of Beaumont Circulation Element, Highland Springs Avenue is currently built out to its ultimate half-section. Curb, gutter, and sidewalk improvements are recommended, as needed for site access along the Project's frontage, consistent with the City's standards.

With incorporation on these mitigation measures, the Proposed Project would be consistent CEQA guidelines and adhere to the established LOS standards of the City of Beaumont and City of Banning.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

**Less than Significant Impact.** The Proposed Project is the development of a gas station, convenience store and restaurant with an attached drive-thru. The Project Site includes a 35-inch driveway on 8<sup>th</sup> Street and another one on Highland Springs Avenue. The Proposed Project does not include geometric design features or incompatible uses that would substantially increase hazards. The Project Site is almost perfectly square-shaped and is not adjacent to windy roads. Furthermore, the 8<sup>th</sup> Street and Highland Springs Avenue intersection has traffic lights, which decreases potential safety hazards resulting from implementation of the Proposed Project. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

d) Would the project result in inadequate emergency access?

**Less than Significant with Mitigation Incorporated.** The Project Site includes a 35-inch driveway on 8<sup>th</sup> Street and another one on Highland Springs Avenue. The driveways are wide enough to allow evacuation and emergency vehicles simultaneous access. The City Fire Department shall have the authority to inspect the Project Site as often as necessary to ensure that there are no hazards violating fire safety, such as inadequate emergency access. Moreover, implementation of Mitigation Measures T-1 to T-4 will ensure potential significant impacts are reduced to less than significant.

## 3.18 TRIBAL CULTURAL RESOURCES

18.	TRIBAL CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
	i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				

18.	TRIBAL CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
	ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

# 3.18.1 Environmental Setting

In November 2019, McKenna et al. completed a Phase I Cultural Resources Investigation for the Project Site. The purpose of the assessment was to identify and document any tribal cultural resources as defined in Public Resources Code section 5020.1(k) that may potentially occur within the Project Site and to evaluate resources determined to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. The Pass Cahuilla, Desert Cahuilla and Mountain Cahuilla are the main Cahuilla populations associated with western Riverside County. Twenty-two Cahuilla villages were present in the larger Coachella Valley and San Gorgonio Pass, a relatively narrow valley associated with the Project Site and its surrounding area.

## 3.18.2 Impact Analysis

a,i,ii) Would the project cause a substantial adverse change in a listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? Would the project cause a substantial adverse change in a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

**Less than Significant Impact.** California Assembly Bill 52 (AB52) was approved by Governor Brown on September 25, 2014. AB52 specifies that CEQA projects with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource may have a significant effect on the environment. As such, the bill requires lead agency consultation with California Native American tribes traditionally and culturally affiliated with the geographic area of a proposed project, if the tribe requested to the lead agency, in writing, to be informed of proposed projects in that geographic area. The legislation further requires that the tribe-requested consultation be completed prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

According to the City General Plan, the cultural remains of the Native American Cahuilla peoples have been found in numerous locations throughout the City and region. In November 2019, Mckenna et al. completed a Phase I Cultural Resources Investigation for the Proposed Project, which included communication with Native American tribes identified by the Native

American Heritage Commission (NAHC) as local Native American representatives wishing to be notified of projects in the area.

The Commission reported that the Sacred Lands File (SFL) has no recorded tribal cultural resources occurring in the project area. McKenna et al. staff also sent letters to Native American representatives identified by the Commission, requesting information pertaining to issues, concern, or resources they may be aware of. As of November 29, 2019, McKenna et al. has not received responses to letters sent to local Native American representatives who may have knowledge of cultural resources in the Project Site. The Morongo Band of Mission reservation is relatively close to the Project Site. The Morongo are likely to contact the City directly and will request copies of technical reports to review to ensure that no Native American resources will be impacted by the Proposed Project.

According to CEQA Guidelines, the identification of potential "tribal cultural resources" is beyond the scope of the study prepared by Mckenna et al. and needs to be addressed through government-to-government consultations between the City of Beaumont and the pertinent Native American groups pursuant to AB52. On May 7, 2020, letters were sent out to 15 tribal contacts informing them of the project and inviting to consult. Tribes' requests for additional project information, coordination, or consultation with the Lead Agency, and/or Native American monitoring, have been acknowledged at the conclusion of the AB52 consultation with the City. The review period ended on July 9, 2020. Responses and consultation requests are summarized in Appendix J. No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

19.	UTILITIES/SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
(b)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			$\boxtimes$	
(c)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
(d)	Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure?			$\boxtimes$	
(e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid wastes?			$\boxtimes$	

## 3.19 UTILITIES AND SERVICE SYSTEMS
# 3.19.1 Environmental Setting

The City is serviced by the Beaumont/Cherry Valley Water District (BCVWD) for water treatment and delivery system. The City of Beaumont Wastewater Treatment Plant (WWTP) recycles wastewater made available to the community. Electrical service is provided by Sempra Energy Company, which will be able to provide service to future development within the City. The SoCal Gas Company provides basic residential and business gas services with no constraints to substantial future development. Landfill and recycling services are provided by Waste Management.

# 3.19.2 Impact Analysis

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or expansion of which could cause significant environmental effects?

Less than Significant Impact. The implementation of the City's Sewer Master Plan will avoid the need for additional septic tank use within the General Plan Area. New development under the General Plan will be served through the City sewer system and wastewater treatment plant. The Project Site would be served by an existing sewer collection system with connection to an existing sewer lateral in Highland Springs Avenue. The BCVWD will provide water service to the Proposed Project. There is an existing 6-inch water line in 8th Street that the Proposed Project would connect to. Implementation of the Proposed Project would not require the construction of new water or wastewater treatment facilities or existing facilities.

Design review at the project level will ensure that the Proposed Project will not create nor modify drainage patterns that would impede or redirect flood flows. Implementation of the Proposed Project is anticipated to increased peak volume by 4,696 cubic feet (see Appendix G). As a result, an underground detention system with minimum storage volume of 4,700 cubic feet is proposed for peak attenuation. Implementation of the City Master Plan of Drainage ensures that future increases in the peak rates of runoff are managed and maintained within acceptable parameters. Furthermore, implementation of storm water Best Management Practices will ensure that the Proposed Project appropriately conveys storm water runoff without adversely impacting upstream or downstream drainage characteristics. Therefore, no construction or expansion of stormwater drainage facilities are required with implementation of the Proposed Project.

Southern California Edison (SCE) will provide basic electrical services to the Project Site. The Proposed Project will receive electrical power by connecting to SCE's existing power lines. Total electricity demand in SCE's service area is estimated to increase by approximately 12,000 Gigawatt Hour (GWh) between the years 2015 and 2026. Gigawatt hour is a unit of energy representing one billion watt hours. The commercial building sector of the Southern California Edison planning area consumed 37260.897803 Gigawatt Hour (GWh) of electricity in 2018.<sup>35</sup> The estimated electricity demand for the Proposed Project 0.2178114 GWh per year. The increase in electricity demand from the Proposed Project is insignificant compared to the projected electricity demand for SCE's entire service area.

<sup>&</sup>lt;sup>35</sup> California Energy Commission. California Energy Consumption Database.

The Project Site would be serviced by Southern California Gas Company (SoCalGas). According to the California Energy Commission, the natural gas consumption of the SoCalGas planning area commercial building sector was 937.882107 therms in 2018.<sup>36</sup> The Proposed Project's estimated natural gas demand is 0.00096611 therms per year; it would represent an insignificant percentage to the overall natural gas demand in SoCalGas's commercial building sector. The existing SoCalGas facilities are expected to sufficiently serve the increased demand of natural gas.

The Proposed Project will be served by AT&T for telecommunication services. AT&T continues to drive reductions in emissions and increases in resource efficiency and alternative energy deployment. The company will enable their customers to lead more sustainable lives by expanding access technology, further integrating sustainability solutions.<sup>37</sup> The Proposed Project is the development of a gas station, convenience store and QSR with an attached drive-thru use. It would not adversely impact or conflict with AT&T's sustainability goals.

Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal dry and multiple dry years?

**Less than Significant Impact.** The Project Site will be serviced by the BCVWD. The BCVWD's 2015 Urban Water Management Plan (UWMP) estimated the City's water demand for multi-family, commercial, industrial, institutional/governmental and other categories from the actual 2015 through projected 2040. At the time the UWMP was prepared, the population served by BCVWD was expected to nearly double by 2040-50, based on the City 2007 General Plan projected build-out population.

The Project Site has a current General Plan designation of Community Commercial (CC), and the Proposed Project would be consistent with this designation. Any increase in demand for water resulting from the development and operation of the proposed uses has been accounted for in BCVWD's supply and demand projections.

The Beaumont Groundwater Basin has large storage capacity for banked water.<sup>38</sup> BCVWD banks imported water in BCVWD's storage account in the Beaumont Basin when available from San Gorgonio Pass Water Agency (SGPWA) and as funds permit. This imported water can be extracted in future years when water allocations are insufficient to meet demands. Banking water in the storage account is critical to meeting demands during dry years. During wet years, BCVWD can bank State Project Water for dry years.

Water supplies will be able to meet demand until 2040 for normal years. However, water supplies will not be able to meet demands for single and multiple dry years until 2040. The

<sup>&</sup>lt;sup>36</sup> California Energy Commission. California Energy Consumption Database.

<sup>&</sup>lt;sup>37</sup> AT&T. Progress Toward our 2020/2025 Goals. <u>https://about.att.com/ecms/dam/csr/sustainability-reporting/PDF/2017/ATT-Goals.pdf</u>.

<sup>&</sup>lt;sup>38</sup> Beaumont-Cherry Valley Water District. 2015 Urban Water Management Plan.

deficit in supply is anticipated to be provided from previously banked water in the Beaumont Basin.<sup>39</sup>

The Proposed Project would be subject to the five (5) stages of action in the event of a water shortage. The District would declare a water shortage and impose voluntary water conservation on all its customers. Water demand projections rely on growth and population estimates from local land use plans. The Proposed Project is accounted for in the City General Plan and will not result in unaccounted water demand increases. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Compliance with BCVWD's development conditions, as listed in the Preliminary Review, will ensure that the Proposed Project does not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. The Proposed Project is required to conform to the City of Beaumont and County of Riverside Landscaping Ordinances that pertain to water efficient landscape requirements. In addition, as is required by BCVWD, landscaped areas which have turf shall have smart irrigation controllers and systems shall have automatic rain sensors. Landscaping in non-turf areas should be drought-tolerant with drip or bubbler irrigation systems. No significant impacts are identified or anticipated, and no mitigation measures are required.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

**Less than Significant Impact.** According to the City General Plan, the City will continue to provide for the development of wastewater treatment infrastructure to accommodate future demand. The Proposed Project has a General Plan land designation of Community Commercial and its development is included in the City's expected future growth. Using data provided from a similar operation in Riverside County where total average monthly water use is 21,000 gallons and assuming 50% of the total water used is for irrigation, an average of 10,500 gallons per month would be discharged to the sewer system. The total daily wastewater generated to be treated at the City's facilities would therefore be 345 gallons per day.

As of 2015, the Beaumont WWTP had a wastewater treatment capacity of 4 million gallons per day (MGD) which is not sufficient to accommodate all expected future growth within the city. The facility is planned to expand to provide a minimum treatment capacity of 8.0 MGD. The Project Applicant will be required to pay developer impact fees to finance treatment plant expansion. Upon completion of the facility expansion, the Beaumont WTTP would have a surplus wastewater capacity of approximately 5.5 MGD to serve existing and future demands. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

<sup>&</sup>lt;sup>39</sup> Beaumont-Cherry Valley Water District. 2015 Urban Water Management Plan.

d) Would the project generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure?

Less than Significant Impact. The nearest landfill to serve the Proposed Project is the Riverside County Lamb Canyon Landfill. During a permit review process in 2007, the landfill's capacity was increased, and the life of the facility was extended from 2024 to 2029. Wastes generated under build-out conditions will be directed to landfills with available capacity, as determined by the County. The General Plan EIR concludes that, upon implementation of the General Plan, compliance with the City's adopted Source Reduction and Recycling Element (SRRE) target waste reduction and recycling goals, and proper management and disposal of waste streams would not result in a significant exceedance of permitted landfill capacities. The General Plan land use designation for the Project Site is Community Commercial (CC), and the Proposed Project would be developed in accordance with the requirements of this land use designation. Solid waste generation from the Proposed Project was accounted for in the General Plan and the City's expected increase in waste generation. Additionally, the Proposed Project is required to comply with Chapter 8.12 Solid Waste Management of the City's municipal code. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. The Riverside Countywide Integrated Waste Management Plan (CIWMP) was prepared in accordance with the California Integrated Waste Management Act of 1989 (AB 939). The SRRE is included in the CIWMP and analyzes the local wastestream to determine where to focus diversion efforts, including programs and funding. The City of Beaumont requires all development to adhere to all source reduction programs set forth in the SRRE for all the disposal of solid waste including yard waste. The Project would adhere to the SRRE and comply with all other applicable local, State, and federal solid waste disposal standards. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

# 3.20 WILDFIRE

20.	WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?			$\boxtimes$	
(b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
(c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				

20.	WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			$\boxtimes$	

# 3.20.1 Environmental Setting

Open space and undeveloped portions of the General Plan's Planning Area are at the highest risk for wildfires. However, since most of the Beaumont area consists of flat areas with sparse vegetation, the risk of wildfires is reduced. The City will continue to implement measures to reduce the potential for wildfires. The Project Site is not within a Very High Fire Hazard Severity Zone (VHFHSZ).

# 3.20.2 Impact Analysis

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

**Less than Significant Impact.** Highland Springs Road is considered a major evacuation route. The Proposed Project does not require significant alternations to this evacuation route. The City General Plan's Circulation Element provides for appropriate evacuation routes and circulation throughout the General Plan Area to facilitate rapid response to emergency situations. Moreover, the General Plan provides for public education related to emergency conditions and emergency preparedness, response and evacuation plans. The City General Plan does not include elements that would conflict or interfere with adopted emergency response or evacuation plans. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

b,c) Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less than Significant Impact. The Proposed Project is subject to environmental and building permit review procedures to reduce the risk of wildfires. The Project Site is relatively flat, with 2 to 5 percent slopes, and occurs at approximately 2603 to 2609 ft. in elevation. High winds are expected to cause potentially adverse effects within the General Plan Area. However, the implementation of the Proposed Project would reduce the risk of wildfires by eliminating the site's existing non-native grasses and providing a paved foundation. Moreover, the Project Site is surrounded by either vacant land, public facilities or commercial development and is not anywhere near an area of combustible vegetation. The risk of wildfires is low due to the lack of wildfire fuel factors. Riverside County Fire Department (RCFD) will review the final design to ensure the mitigation of fire hazards and minimal impacts to the environment.

Additionally, the Project Site is not within a VHFHSZ.<sup>40</sup> Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes?

**Less than Significant Impact.** The Project Site and its immediate vicinity is relatively flat and is not subject to post-fire slope instability. According to the City General Plan, peak rates of runoff will be managed within acceptable parameters throughout the implementation of the City Master Plan of Drainage and City Capital Improvement Programs. The implementation of associated storm water BMPs will ensure that the Proposed Project appropriately conveys storm water runoff without affecting upstream or downstream drainage characteristics. As a result, the Proposed Project will not expose people or structure to significant risks, such as downslope flooding or landslides. No significant impacts are identified or anticipated, and no mitigation measures are required.

21.	MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
(a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
(b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?)				
(c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			$\boxtimes$	

# 3.21 MANDATORY FINDINGS OF SIGNIFICANCE

# 3.21.1 Impact Analysis

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community,

<sup>&</sup>lt;sup>40</sup> Calfire. Fire Hazard Severity Zone Maps.

substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant with Mitigation Incorporated. The Project Site is not associated with any endangered species or any species of concern. Development of the Proposed Project would not cause fish or wildlife populations to drop below self-sustaining levels or restrict the movement/distribution of a rare or endangered species. The Proposes Project would not affect any threatened or endangered species or habitat. The Project Site is not within the Stephen's Kangaroo Rat fee area nor is it required by the MSHCP to undergo burrowing owl surveys. The Project Site has very limited marginal nesting for ground-nesting bird species. Potential impacts to migratory/nesting bird species would be mitigated to a less than significant level with adherence to Mitigation Measure BIO-1.

There are potential impacts to cultural resources identified in the Phase I Cultural Resources Investigation prepared for the Project Site. Implementation of Mitigation Measures CR-1, CR-2 and GEO-4 will ensure potential impacts to cultural resources are reduced to less than significant level. Implementation of these Mitigation Measures would prevent the elimination of important examples of major periods of California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects?)

Less than Significant with Mitigation Incorporated. Cumulative impacts are defined as two or more individual affects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period. The CEQA Guidelines, Section 15130 (a) and (b), states:

(a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

A cumulative project list was developed for the purposes of the Traffic Impact Analysis. Cumulative projects anticipated to contribute measurable traffic to study area intersections were included in the Opening Year Cumulative (2021) forecasts (see Appendix I, Table 4-2 for list of projects). The study area intersections are not anticipated to operate at an unacceptable Level of Service (LOS) under Opening year Cumulative (2021) with the addition of Proposed Project traffic.

Impacts associated with the Proposed Project would not be considered individually or cumulatively adverse or considerable. Impacts identified in this Initial Study can be reduced to a less than significant impact with implementation of Mitigation Measures T-1 to T-4.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

**Less than Significant Impact.** The incorporation of the City of Beaumont policies, standards, and guidelines and proposed Mitigation Measures as provided in this Initial Study would ensure that the Proposed Project would have no substantial adverse effects on human beings, either directly or indirectly on an individual or cumulative basis. Due to geologic hazards within the area of the Project Site, the Proposed Project can directly and indirectly human beings by causing the risk of loss, injury or death. Implementation of Mitigation Measures GEO-1 to GEO-4 would enforce structural integrity and minimize the potential threats relating to geologic hazards. The City has established LOS D as the minimum LOS for all roadways/intersection within the City. With the Project Applicant's payment of required fees and fair contributions, the Proposed Project would not significantly impact the City's circulation system. Furthermore, implementation of Mitigation Measures T-1 to T-4 would ensure safe access to and from the Project Site.

The Proposed Project would not conflict with South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan. The increases in emissions from construction and operations of the Proposed Project are below the SCAQMD threshold. Moreover, the Proposed Project would be required to comply with SCAQMD Rules 402 and 403 to minimize impacts posed by construction emissions. The noise generated from construction and operations of the Proposed Project would lead to noise level increases considered acceptable by City standards. Traffic generated by the operation of the Proposed Project will result in less than significant noise level increases at receiving land uses adjacent to the project area roadway segments.

Any potential adverse impacts identified can be reduced to a less than significant level with implementation of Mitigation Measures stated above.

#### SWC 8<sup>th</sup> Street and Highland Springs Ave. City of Beaumont

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APPENDIX A PHASE I ENVIRONMENTAL SITE ASSESSMENT JANUARY 9, 2020



8711 Monroe Court, Suite A Rancho Cucamonga, California 91730 (909) 980-6455 Office (909) 980-6435 Fax

January 9, 2020

Project No. 3-419-1167

Ms. Kaytlin Fox **Evergreen Devco, Inc.** 2390 East Camelback Road, Suite 410 Phoenix, AZ 85016

#### Subject: AAI PHASE I ENVIRONMENTAL SITE ASSESSMENT Proposed Fuel Station, QSR, and C-Store SWC 8<sup>th</sup> Street and Highland Springs Avenue Beaumont, CA

Dear Ms. Fox:

At your request and authorization, SALEM Engineering Group, Inc. (SALEM) has conducted this Phase I Environmental Site Assessment (ESA) of the proposed Fuel Station, Quick-Serve Restaurant (QSR), and Convenience Store (C-Store) located on the southwest corner of 8<sup>th</sup> Street and Highland Springs Avenue in Beaumont, California (subject property). During the course of this assessment, SALEM identified no evidence of Recognized Environmental Conditions (RECs) in connection with the subject property as defined by ASTM E1527-13. SALEM did identify evidence of the following Site Development Issue that is not a REC:

• SALEM's review of historical aerial photographs indicates that what appears to have been a singlefamily dwelling occupied the northwest corner of the subject property from at least 1949 until at least 1967. A septic system was likely associated with the former on-site dwelling. However, it is unknown if a septic system is currently located in the vicinity of the former on-site dwelling. The presence of a septic system is not anticipated to adversely environmentally impact the subject property due to its presumed use for domestic purposes only. If a septic system is identified during the re-development of the subject property, it should be properly abandoned/closed or destroyed in accordance with state and local guidelines.

We appreciate the opportunity to assist you with this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (909) 980-6455.

Respectfully submitted,

SALEM Engineering Group, Inc.

Reily Rivera Environmental Project Manager



# PHASE I ENVIRONMENTAL SITE ASSESSMENT

PROPOSED FUEL STATION, QSR, & C-STORE SWC 8<sup>TH</sup> STREET & HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

> SALEM PROJECT NO. 3-419-1167 JANUARY 9, 2020

> > PREPARED FOR:

MS. KAYTLIN FOX EVERGREEN DEVCO, INC. 2390 EAST CAMELBACK ROAD, SUITE 410 PHOENIX, AZ 85016

PREPARED BY:

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January 9, 2020

Project No. 3-419-1167

# PHASE I ENVIRONMENTAL SITE ASSESSMENT

#### PROPOSED FUEL STATION, QUICK SERVE RESTAURANT AND CONVENIENCE STORE SWC 8<sup>th</sup> Street and Highland Springs Avenue Beaumont, CA

# 1.0 EXECUTIVE SUMMARY

SALEM Engineering Group, Inc. (SALEM) has conducted a Phase I Environmental Site Assessment (ESA) of the proposed Fuel Station, Quick Serve Restaurant (QSR), and Convenience Store (C-Store) that will be located on the southwest corner of 8<sup>th</sup> Street and Highland Springs Avenue in Beaumont, California (subject property). The subject property consists of one irregular-shaped parcel of undeveloped land (Riverside County Assessor's Parcel Number [APN] 419-150-034) totaling approximately 2.08 acres. SALEM conducted this Phase I ESA of the subject property in conformance with the American Society for Testing and Materials (ASTM) E1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* The U.S. Environmental Protection Agency (USEPA) has determined that the ASTM E1527-13 Standard is consistent with the requirements for conducting an "All Appropriate Inquiry" under 40 C.F.R. Part 312. Thus, this Phase I ESA constitutes All Appropriate Inquiry (AAI) designed to identify Recognized Environmental Conditions (RECs) in connection with the previous ownership and uses of the subject property as defined by ASTM E1527-13 and 40 C.F.R. Part 312.

ASTM E1527-13 Section 1.1.1 *Recognized Environmental Conditions* – The term *recognized environmental conditions* is defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." The term as further defined by ASTM "is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies." Conditions determined to be *de minimis* are not *recognized environmental conditions*.

SALEM identified no evidence of Recognized Environmental Conditions (RECs) in connection with the subject property as defined by ASTM E1527-13. SALEM did identify evidence of the following Site Development Issue that is not a REC:

• SALEM's review of historical aerial photographs indicates that what appears to have been a singlefamily dwelling occupied the northwest corner of the subject property from at least 1949 until at least 1967. A septic system was likely associated with the former on-site dwelling. However, it is unknown if a septic system is currently located in the vicinity of the former on-site dwelling. The presence of a septic system is not anticipated to adversely environmentally impact the subject property due to its presumed use for domestic purposes only. If a septic system is identified during the re-development of the subject property, it should be properly abandoned/closed or destroyed in accordance with state and local guidelines.

#### 2.0 PURPOSE AND SCOPE OF ASSESSMENT

#### 2.1 Purpose

According to ASTM E1527-13, the purpose of this practice is to define good commercial and customary practice in the United States of America for conducting an *environmental site assessment* of a parcel of *commercial real estate* with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. §9601) and *petroleum products*. As such, this practice is intended to permit a *user* to satisfy one of the requirements to qualify for the *innocent landowner, contiguous property owner*, or *bona fide prospective purchaser* limitation on CERCLA liability (hereinafter, the *"landowner liability protections,"* or *"LLPs")*: that is, the practice that constitutes *"all appropriate inquiry* into the previous ownership and uses of the *property* consistent with good commercial or customary practice" as defined at 42 U.S.C. §9601(35) (B).

The Phase I ESA was conducted to identify 'Recognized Environmental Conditions' (RECs), 'Controlled Recognized Environmental Conditions' (CRECs) and 'Historical RECs' (HRECs) as defined by the American Society for Testing and Materials (ASTM) Designation E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Section 1.1.1 of the ASTM Designation E1527-13 defines an REC as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." The term as further defined by ASTM "is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies." Section 3.2.18 defines a CREC as a "recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)." Section 3.2.42 defines HREC as a "past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and land use limitations, institutional controls, or engineering controls)."

# 2.2 Scope of Work

The objective of the SALEM Phase I ESA scope of work is to provide an evaluation of RECs at the subject property and potential off-site sources. The scope of work for this Phase I ESA conforms to ASTM E1527-13. SALEM was provided authorization to conduct the Phase I ESA by Ms. Kaytlin Fox with Evergreen Devco, Inc. on December 19, 2019. In fulfillment of the SALEM scope of work for this Phase I ESA, SALEM was retained to perform the following tasks:

- Acquire readily available information regarding land-use history and property development by reviewing historical aerial photographs, pertinent building permit records, historic city directories, as well as reviewing recent and historic topographic land-use maps of the subject property and surrounding area.
- Reviewing readily available local, state and federal regulatory agency databases listed in ASTM E1527-13 and compiled by Environmental Data Resources, Inc. (EDR), including but not limited to CERCLA and NPL lists for sites within one mile of the subject property. State databases,



including but not limited to CALSITES, Hazardous Substance Account Act, Cortese, SWIS, SWAT, Well Investigation Program (AB1803), and LUFT, were reviewed for sites within one mile of the subject property.

- Performing a reconnaissance of the subject property and surrounding areas (up to one-half mile beyond site boundary), with regard to potential off-site sources of degradation to the subject property, which included photograph documentation of subject property conditions, and identification of potential environmental concerns.
- Interviews with persons knowledgeable of the previous and current ownership and uses of the subject property.
- > Identifying aboveground storage tanks and/or indications of underground storage tanks on-site.
- In addition to ASTM E1527-13, SALEM recognizes ASTM Standard Guide for Vapor Encroachment Screening (VES) on Property Involved in Real Estate Transactions (ASTM E2600-15) as an industry-accepted guideline to determine if a Vapor Encroachment Condition (VEC) exists at the target property. A VES consists of reviewing the Phase I ESA data combined with the application of professional judgment.
- SALEM evaluates the regulatory agency databases to determine if there are known or suspect contaminated sites within a minimum search distance of the target property. In addition, SALEM attempted to determine whether soil and/or groundwater have been impacted within the critical distances outlined in ASTM E2600-15.
- > Preparing this report of SALEM's findings and recommendations if warranted.

# 3.0 SITE DESCRIPTION

The subject property consists of one irregular-shaped parcel of land totaling approximately 2.08 acres located on the southwest corner of 8<sup>th</sup> Street and Highland Springs Avenue in Beaumont, California (Riverside County APN 419-150-034). At the time of SALEM's January 6, 2020 site reconnaissance, the subject property was undeveloped land covered in native vegetation. The subject property is located in Section 11, Township 3 South, Range 1 West, San Bernardino Baseline and Meridian, United States Geological Survey (U.S.G.S.) 7.5 Minute Topographic Map, Beaumont, California Quadrangle dated 2012.

# 4.0 PHYSIOGRAPHY AND HYDROGEOLOGIC CONDITIONS

The subject property is situated near the San Gorgonio Pass in the San Bernardino Mountains of the Transverse Ranges of Southern California. The San Gorgonio Pass is part of the tectonically active San Andreas Fault system, which includes the Beaumont Plain Fault Zone and bounds Beaumont Hydrologic Subarea which is an open, externally draining basin bounded by the San Bernardino Mountains to the northwest, the Little San Bernardino Mountains to the northeast, the San Jacinto Mountains to the south and the San Timoteo Badlands to the southwest. These mountain ranges and the basement rock underlying the Beaumont Plain Fault Zone are primarily composed of granitic and metamorphic rocks. Within the Beaumont Plain Fault Zone the basement complex is overlain by a series of unconsolidated and semiconsolidated, terrestrial, clastic sediments eroded from the surrounding mountain ranges.



The subject property is located within the Santa Ana River Hydrologic Unit, San Timoteo Hydrologic Area, Beaumont Hydrologic Subarea. The sedimentary deposits within this subarea are primarily heterogeneous unconsolidated surficial deposits consisting of sand and gravel deposits with intermittent deposits of clay, silt and fine sand.

According to California Regional Water Quality Control Board (RWQCB) records for the ARCO #5463 gasoline station leaking underground storage tank (LUST) site at 1696 Sixth Street, located approximately 750 feet south of the subject property, groundwater was first encountered between 160 and 200 feet below ground surface (bgs) with a general direction of flow to the southwest. However, local groundwater level and flow direction may vary due to seasonal fluctuations in precipitation, usage demands, geology, and/or surface topography.

# 5.0 SITE RECONNAISSANCE

A site reconnaissance, which included a visual observation of the subject property and properties within the subject area, was conducted by SALEM's environmental assessor on January 6, 2020. The objective of the site reconnaissance is to identify RECs, including the storage and handling of hazardous substances and petroleum products on or in the vicinity of the subject property which have the potential to environmentally impact on-site soils, surface water and groundwater.

#### 5.1 Observations

Table I summarizes the visual observations made during our site reconnaissance. A discussion of the physical observations follows Table I. Refer to the Site Map (Figure 1) and color photographs following the text for the locations of the features discussed in this section of the report.

FEATURE	OBSERVED	NOT OBSERVED					
Structures (existing)		Х					
Evidence of past uses	Х						
Hazardous substances and/or petroleum products (including containers)		Х					
Aboveground storage tanks (ASTs)		Х					
Underground storage tanks (USTs) or evidence of USTs		Х					
Strong, pungent, or noxious odors		Х					
Pools of liquid likely to be hazardous materials or petroleum products		Х					
Drums		Х					
Unidentified substance containers		Х					
Pad-mounted/Pole-mounted transformers/capacitors/other PCB-containing equipment		Х					
Subsurface hydraulic equipment		Х					
Heating/ventilation/air conditioning (HVAC)		Х					
Stains or corrosion on floors, walls, or ceilings		Х					
Floor drains and sumps		Х					
Pits, ponds, or lagoons		Х					
Stained soil and/or pavement		Х					
Stressed vegetation		Х					
Waste or wastewater discharges to surface or surface waters on subject property		v					
(including stormwater)	L	Λ					
Wells (irrigation, domestic, dry, injection, abandoned, monitoring wells)		Х					
Septic Systems		X					

 TABLE I

 Summary of Observations during Site Reconnaissance

The subject property consists of one irregular-shaped parcel of land totaling approximately 2.08 acres located on the southwest corner of 8th Street and Highland Springs Avenue in Beaumont, California (Riverside County APN 419-150-034). At the time of SALEM's site reconnaissance, the subject property was undeveloped land covered in native vegetation.



- What appeared to be a concrete pad (10'x15') was observed on the northwest portion of the subject property. No evidence of staining or spills were observed on the concrete during the site reconnaissance.
- During the visual observations of the subject property, no hazardous substances or petroleum products were observed to be stored or handled on the subject property. Exposed surface soils did not exhibit obvious signs of discoloration. No other obvious evidence (vent pipes, fill pipes, dispensers, etc.) of USTs was noted within the area observed.

# 5.2 Adjacent Streets and Property Usage

Table II summarizes the adjacent streets and properties uses observed during the SALEM's site reconnaissance.

Aujacent Streets and Froperty Use				
DIRECTION ADJACENT STREET ADJACENT PROPERTY USE				
North	8 <sup>th</sup> Street	Sundance Corporate Center (under construction)		
East	Highland Springs Avenue	San Gorgonio Memorial Hospital (600 N Highland Springs Avenue)		
South	None	Wesco Medical Supplies & Equipment (701 Highland Springs Avenue)		
West	None	Palm Grove Health Care Nursing Home (1665 East 8th Street)		

TABLE II
Adjacent Streets and Property Use

Based on the observed uses of the properties located immediately adjacent to the subject property, it is unlikely that significant quantities of hazardous substances or petroleum products are stored or handled at the adjacent properties.

# 5.3 **Potable Water Source**

The water purveyor for the subject property is the Beaumont-Cherry Valley Water District (BCVWD). The BCVWD's water quality monitoring is an on-going program with water samples obtained on a regular basis. It is the responsibility of the BCVWD to provide customers with potable water in compliance with the California Maximum Contaminant Levels (MCLs) for primary drinking water constituents in water supplied to the public.

# 5.4 Sewage Disposal System

On December 23, 2019, the City of Beaumont Department of Public Works (BDPW) was contacted regarding sewer service for the subject property. According to a BDPW representative, no records of sewer service are on file for the subject property.

# 5.5 Heating and Cooling Source

No structures are located on the subject property. Therefore, no heating or cooling sources exist at the subject property. No documentation of fuel oil use was identified during review of reasonably ascertainable records and no visual evidence of fuel oil use was identified during the site reconnaissance. Therefore, it is unlikely for a former fuel oil UST to have been used at the subject property and for a release to have occurred.

# 6.0 USER-PROVIDED INFORMATION

A review of the user-provided Title report and a Phase I ESA User Questionnaire was conducted in order to help identify pertinent information regarding potential environmental impacts associated with the subject property.



#### 6.1 Title Report

On January 3, 2020 a Commitment for Title Insurance Report for the subject property by First American Title Insurance Company, dated November 12, 2019 was provided to SALEM by Ms. Kaytlin Fox with Evergreen Devco, Inc. The Commitment for Title Insurance Report was reviewed to identify potential deed restrictions, environmental liens or activity and use limitations (AULs) which may have occurred on or exist in connection with the subject property as indicated by the Commitment for Title Insurance Report. SALEM's review of the Commitment for Title Insurance Report indicated no deed restrictions, environmental liens or AULs for the subject property. However, as quoted from the Commitment for Title Insurance, "this Commitment is not an abstract of Title, report of the condition of Title, legal opinion, opinion of Title, or other representation of the status of Title." Applicable environmental liens or AULs may not all be listed in the Commitment for Title Insurance. Therefore, SALEM recommends that at the close of the real estate transaction and upon the issuance of the Final Title Report that the Final Title Report be reviewed herein revealing evidence of RECs be added. Refer to Appendix A for a copy of the Commitment for Title Insurance reviewed herein revealing evidence of RECs be added. Refer to Appendix A for a copy of the Commitment for Title Insurance Report.

#### 6.2 Phase I Environmental Site Assessment User Questionnaire

On December 23, 2019, a completed Phase I ESA User Questionnaire was received from Ms. Laura Ortiz with Evergreen Devco, Inc. Please refer to Appendix B for a copy of the completed Phase I ESA User Questionnaire.

In order to quality for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "*Brownfields Amendments*"), the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in a determination that "*all appropriate inquiry*" is not complete. The user is asked to provide information or knowledge of the following:

- > Environmental cleanup liens that are filed or recorded against the site.
- Activity and land use limitations that are in place on the site or that have been filed or recorded in a registry.
- Specialized knowledge or experience of the person seeking to quality for the LLPs.
- > Relationship of the purchase price to the fair market value of the *property* if it were not contaminated.
- > Commonly known or *reasonably ascertainable* information about the *property*.
- The degree of obviousness of the presence or likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation.

According to Ms. Ortiz, to the best of her knowledge as the user of this Phase I ESA, no environmental cleanup liens and no activity or land use limitations have been filed or recorded against the subject property. Ms. Ortiz indicated that she did not have knowledge of the past or current spills or chemical releases or environmental cleanups at the subject property. Additionally, Ms. Ortiz indicated that the purchase price of the subject property reasonably reflects fair market value.

# 7.0 SITE USAGE SURVEY

In order to assess the subject property's history, SALEM reviewed a Phase I ESA Owner Questionnaire, historical aerial photographs, building department records, city directories, planning department records and SFIMs.



#### 7.1 Phase I Environmental Site Assessment Owner Questionnaire

On January 26, 2020, a Phase I ESA Owner Questionnaire was received from Mr. Ky Ngoc Nguyen, the current owner of the subject property. The Phase I ESA Owner Questionnaire is designed to provide pertinent information regarding potential environmental and historical impacts associated with the subject property. Mr. Nguyen reported that he had been familiar with the subject property since March 1986 and that the subject property is currently vacant.

According to Mr. Nguyen, to the best of his knowledge, no on-site treatment or discharge of waste; no on-site leach fields, dry wells, sumps, or disposal ponds; no use, storage, or disposal of hazardous substances and/or petroleum products; no existing or former USTs or ASTs; no hazardous material spills; no buried materials; no domestic or irrigation wells; or any additional items which may present an REC were associated with the subject property. Please refer to Appendix C for a copy of the completed Phase I ESA Owner Questionnaire.

#### 7.2 Historical Aerial Photograph Review

Historical aerial photographs of the subject property and vicinity dated 1938, 1949, 1953, 1961, 1967, 1975, 1985, 1989, 1990, 1996, 2002, 2006, 2009, 2012 and 2016 were reviewed to evaluate changes in land use for the subject property. The historical aerial photographs were supplied by EDR. Refer to Appendix D for a copy of the EDR-provided aerial photographs. A summary of the aerial photographs is provided below:

#### > <u>1938 Aerial Photograph</u>

The subject property and adjoining properties appear to be undeveloped land or agricultural land. An unpaved road (8<sup>th</sup> Street) is observed adjoining to the north, beyond which is undeveloped or agricultural land. A paved two-lane road (Highland Springs Avenue) is observed adjoining the subject property to the east, beyond which is undeveloped or agricultural land.

#### > <u>1949 Aerial Photograph</u>

The western portion of the subject property appears to have been developed with a barn or rural residential structure. The remaining portions of the subject property are undeveloped or agricultural land. An increase in rural residential or farming development is observed to the south and west of the subject property. The conditions on the north and east adjoining properties are similar to the 1938 aerial photograph.

#### > <u>1953 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 1949 aerial photograph. What appears to be the San Gorgonio Memorial Hospital is observed on the east adjoining property across Highland Springs Avenue.

#### > <u>1961 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 1953 aerial photograph.

# > <u>1967 Aerial Photograph</u>

The subject property appears to be undeveloped. The structure previously observed on the subject property is no longer visible. Conditions on the adjoining properties are similar to the 1961 aerial photograph, with the exception of new commercial buildings on the south and west adjoining properties. The development of Interstate Highway 10 is observed further to the south.

#### > <u>1975 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 1967 aerial photograph.



# > <u>1985 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 1975 aerial photograph.

# > <u>1989 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 1985 aerial photograph.

# > <u>1990 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 1989 aerial photograph.

# > <u>1996 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 1990 aerial photograph.

# > <u>2002 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 1996 aerial photograph. Grading for a residential tract is observed further to the north.

# > <u>2006 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 2002 aerial photograph. Residential development is observed further to the north of the subject property.

#### > <u>2009 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 2006 aerial photograph.

# > 2012 Aerial Photograph

The conditions on the subject property and adjoining properties are similar to the 2009 aerial photograph.

# > <u>2016 Aerial Photograph</u>

The conditions on the subject property and adjoining properties are similar to the 2012 aerial photograph.

# 7.3 Building Department Records Review

On December 23, 2019, a records request was made to the City of Beaumont Building and Safety Department (BBSD) for the subject property APN 419-150-034. According to a representative of the BBSD, no building permit records are available for the subject property APN. Therefore, no building permits for items which may present an REC to the subject property including USTs, ASTs, septic systems, demolition, or previous structures were on file.

# 7.4 City Directories

On December 27, 2019, SALEM contracted with EDR to provide a City Directory Image Report dated 1971 through 2014 for the subject property. The subject property was not listed in the City Directory Image Report. There were no earlier City Directory records available. Please refer to Appendix E for a copy of the EDR-provided City Directory Image Report.



# 7.5 Sanborn Fire Insurance Maps

SALEM reviews SFIMs to evaluate prior land use at the subject property and adjacent properties. SFIMs typically exist for cities with populations of 2,000 or more, the coverage dependent on the location of the property. On December 20, 2019, SALEM contracted with EDR to provide a Fire Insurance Map Abstract indicating the availability of historic SFIMs for the subject property and adjacent properties as far back as 1867. EDR's search of collections at the Library of Congress, University Publications of America, and various public and local sources revealed no coverage for the subject property and adjacent properties. Refer to Appendix F for a copy of the EDR SFIM No Coverage Certification.

#### 7.6 Agricultural Chemicals

Review of historical aerial photographs indicates the subject property has not been utilized for agricultural purposes since at least 1949. Based upon the length of time since the subject property was last used for agricultural purposes, it is not anticipated that elevated concentrations of environmentally persistent pesticides would be found in the near-surface soils of the subject property. SALEM's sampling and analysis of surface soils from properties with similar histories has typically yielded non-detectable concentrations of environmentally persistent pesticides. It is not anticipated that elevated concentrations of environmentally persistent pesticides would be found in the near-surface soils of the subject property and therefore, the former agricultural use of the subject property does not present an REC to the subject property.

#### 7.7 Phase I Environmental Site Assessment Interview - Previous Owner

SALEM attempted to interview the previous owner of the subject property to provide pertinent information regarding potential environmental and historical impacts associated with the subject property. However, a Phase I ESA interview with the previous owner of the subject property was not reasonably ascertainable because the previous owner was unknown.

#### 7.8 **Previous Environmental Reports**

SALEM was not provided with additional environmental reports for the subject property.

# 8.0 **REGULATORY AGENCY RECORDS REVIEW**

SALEM conducted a review of regulatory agency records for the purpose of determining if hazardous substance or petroleum products, as well as hazardous wastes have been stored or handled on the subject property and area properties of environmental concern. The most current records available were reviewed.

#### California Environmental Protection Agency, Department of Toxic Substances Control

SALEM's January 6, 2020 review of the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) Envirostor California cleanup sites database available via the DTSC Internet Website which tracks federal superfund sites, state response sites, voluntary cleanup sites, and school cleanup sites, indicated that no records of cleanup sites are on file with the DTSC for the subject property or adjacent properties.

#### **California Regional Water Quality Control Board**

SALEM's January 6, 2020 review of the RWQCB Geotracker leaking underground fuel tank (LUFT) database available via the RWQCB Internet Website indicated that no records of LUFTs are on file with the RWQCB for the subject property or adjoining properties.

#### California Division of Oil, Gas, and Geothermal Resources

SALEM reviewed the California Division of Oil, Gas, and Geothermal Resources (DOGGR) website (http://maps.conservation.ca.gov/doms/index.html) to evaluate the potential for existing/former oil, gas, or



geothermal wells on the subject property or adjoining properties. The subject property is located within DOGGR Southern District. The subject property vicinity is not located within an oil, gas, or geothermal field. The review of DOGGR information does not indicate that an oil, gas, or geothermal well has been drilled on the subject or adjacent properties.

#### **Riverside County Environmental Health Department**

On December 23, 2019, the Riverside County Environmental Health Department (RCEHD) was contacted regarding records of historical hazardous/flammable permits, hazardous materials handling, unauthorized releases of hazardous substances or petroleum products, hazardous/flammable incidents, and/or registered USTs for the subject property. According to a representative of the RCEHD, records are filed by street address, and a street address has not been assigned to the subject property. Therefore, no records of historical hazardous/flammable permits, hazardous materials handling, unauthorized releases of hazardous substances or petroleum products, hazardous materials handling, unauthorized releases of hazardous substances or petroleum products, hazardous/flammable incidents, and/or registered USTs were on file for the subject property.

#### **Riverside County Fire Department**

On December 23, 2019, the Riverside County Fire Department (RCFD) was contacted regarding records of historical hazardous/flammable permits, hazardous materials handling and registered USTs for the subject property. According to a representative of the RCFD, no records of historical hazardous/flammable permits, hazardous materials handling or registered USTs were on file for the subject property.

#### Local Area Tribal Records

According to the EDR Radius Map Report, no tribal records are listed for the subject property or the adjacent properties.

#### 8.1 Standard Environmental Record Sources

EDR performed a search of Federal, State and local regulatory agency databases for the subject property and surrounding area. The various search distances as required by ASTM E1527-13 extended up to one mile from the subject property. Several agencies have published documents that list businesses or properties which have handled hazardous materials or hazardous waste, or may have had a documented release of hazardous substances or petroleum products. The databases consulted in the course of this assessment were compiled by EDR on December 20, 2019 and represent reasonably ascertainable current listings. SALEM did not verify the locations and distances of every site listed by EDR. SALEM verified locations and distances of the sites SALEM deemed as having a potential to environmentally impact the subject property. The actual location of the off-site properties identified may differ from the EDR listing. Table III summarizes the listed properties located within the specified ASTM Search Radii. The EDR Radius Map report is included in Appendix G.

		SUBJECT	<1/8	<sup>1</sup> / <sub>8</sub> - <sup>1</sup> / <sub>4</sub>	1/4 - 1/2	1/2 - 1		
DATABASE	TYPE OF RECORDS	PROPERTY	MILE	MILE	MILE	MILE		
STANDARD ENVIRONME	STANDARD ENVIRONMENTAL RECORDS							
Federal NPL Site List								
NPL	National Priorities List	0	0	0	0	0		
Proposed NPL	Proposed National Priorities List	0	0	0	0	0		
NPL LIENS	Federal Superfund Liens	0	0	0	0	0		
Federal Delisted NPL Site Lis	t							
Delisted NPL	National Priority List Deletions	0	0	0	0	0		
Federal CERCLIS List								
SEMS	Superfund Enterprise Management System	0	0	0	0	0		

TABLE III EDR Radius Map Summary



# TABLE III (cont'd)EDR Radius Map Summary

	<b>F</b> = = = = = = = = = = = = = = = = = = =	-,	47	1/ 1/	1/ 1/	1/ 4
DATABASE	TYPE OF RECORDS	SUBJECT PROPERTY	< <sup>1</sup> / <sub>8</sub> MILE	<sup>1</sup> / <sub>8</sub> - <sup>1</sup> / <sub>4</sub> MILE	<sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>2</sub> MILE	<sup>1</sup> /2 - 1 MILE
Federal Facility	Federal Facility	0	0	0	0	0
Federal CERCLIS NFRAP S	ite List					
SEMS-ARCHIVE	Superfund Enterprise Management System Archive	0	0	0	0	
Federal RCRA CORRACTS	Facilities List					
CORRACTS	Corrective Action Report	0	0	0	0	0
Federal RCRA non-CORRAC	CTS TSD Facilities List					
RCRA-TSDF	Transporters, Storage, and Disposal	0	0	0	0	
Federal RCRA Generators Li	st					
RCRA – LQG	RCRA – Large Quantity Generators	0	0	0		
RCRA – SQG	RCRA – Small Quantity Generators	0	0	1		
RCRA – VSQG	RCRA - Very Small Quantity Generators	0	0	1		
Federal Institutional Controls	S/Engineering Controls Registries					
US ENG CONTROLS	Engineering Controls Sites List	0	0	0	0	
US INST CONTROL	Sites with Institutional Controls	0	0	0	0	
LUCIS	Land Use Control Information System	0	0	0	0	
Federal ERNS List						
ERNS	Emergency Response Notification System	0	0			
State and Tribal Equivalent N	IPI.	-				
RESPONSE	State Response Sites	0	0	0	0	0
State and Tribal Equivalent (		0	Ũ	Ű	Ŭ	Ŭ
ENVIROSTOR	Envirostor Database	0	3	0	0	1
State and Tribal Landfill and	or Solid Waste Disposal Site List	0	5	0	0	1
SWF/I F	Solid Waste Information System	0	0	0	0	
State and Tribal Leaking Stor	and Tank Lists	0	0	0	0	
LUST	Leaking Underground Storage Tanks	0	3	2	4	
	Statewide SLIC Cases	0	0	0	4	
INDIAN LUST	LUST on Indian Land	0	0	0	0	
State and Tribal Projectored St	torage Tank Lists	0	0	0	0	
EEMA UST	Underground Storage Tank Listing	0	0	0		
LIST	A ative LIST Eacilities	0	0	1		
	Active UST Facilities	0	<u> </u>	1		
AS I	Aboveground Storage Tank Facilities	0	1	3	0	0
INDIAN USI		0	0	0	0	0
State and Tribal Voluntary Cl	eanup Sues	0	0	0	0	
VCP	Voluntary Cleanup Program Properties	0	0	0	0	
INDIAN VCP	Voluntary Cleanup on Indian Land	0	0	0	0	
State and tribal Brownfields s		0	0	0		
BROWNFIELDS	Considered Brownfields Sites Listing	0	0	0		
ADDITIONAL ENVIRONM	IENTAL RECORDS					
Local Brownfield Lists			0	0	0	
US BROWNFIELDS	Brownfield Sites	0	0	0	0	
Local Lists of Landfill/Solid	Vaste Disposal Sites	2	0	0		
WMUDS/SWAT	Waste Management Unit Database	0	0	0	0	
SWRCY	Recycler Database	0	0	0	0	
HAULERS	Registered Waste Tire Haulers Lists	0	0			
INDIAN ODI	Report on Open Dumps on Indian Land	0	0	0	0	
DEBRIS REGION 9	Illegal Dump Site Locations	0	0	0	0	
ODI	Open Dump Inventory	0	0	0	0	
Local Lists of Hazardous Was	ste/Contaminated Sites					
CERS HAZ WASTE	CA Environmental Reporting System	0	3	4		
PFAS	PFAS Contamination Site Locations	0	0	0	0	
US CDL	Clandestine Drug Labs	0	0			
HIST Cal-Sites	Cal-Sites Database	0	0	0	0	0



# TABLE III (cont'd)EDR Radius Map Summary

		SUBJECT	~1/	1/ 1/	1/ 1/	16 1
DATABASE	TYPE OF RECORDS	<b>PROPERTY</b>	NILE	MILE	MILE	MILE
SCH	School Property Evaluation Program	0	2	0		
Toxic Pits	Toxic Pits Cleanup Act Sites	0	0	0	0	0
CDL	Clandestine Drug Labs	0	0			
US HIST CDL	Historic Clandestine Drug Labs	0	0			
Local Lists of Registered Stor	age Tanks					
CA FID UST	Facility Inventory Database	0	0	0		
HIST UST	Historical UST	0	0	7		
SWEEPS UST	SWEEPS UST Lists	0	1	4		
CERS TANKS	CA Environmental Reporting System	0	3	3		
Local Land Records						
LIENS 2	CERCLA Lien Information	0	0			
LIENS	Environmental Liens Listing	0	0			
DEED	Deed Restriction Listing	0	0	0	0	
<b>Records of Emergency Releas</b>	se Reports	I				
HMIRS	Hazardous Materials Information System	0	0			
CHMIRS	CA Hazardous Material Information System	0	0			
LDS	Land Disposal Sites Listing	0	0			
MCS	Military Cleanup Sites Listing	0	0			
SPILLS 90	Spills 90 data from First Search	0	0			
Other Ascertainable Records		-	, , ,			
RCRA Non-Gen	Non-Generators	0	3	4		
DOT OPS	Incident and Accident Data	0	0			
DOD	Department of Defense Sites	0	0	0	0	0
FUDS	Formerly Used Defense Sites	0	0	0	0	0
CONSENT	Superfund Consent Decrees	0	0	0	0	0
ROD	Records of Decision	0	0	0	0	0
US MINES	Mines Master Index File	0	0	0		
TRIS	Toxic Chemical Release Inventory System	0	0			
2020 COR ACTION	2020 Corrective Action Program List	0	0	0		
TSCA	Toxic Substances Control Act	0	0			
FTTS	FIFRA/TSCA Tracking System	0	0			
HIST FTTS	FIFRA/TSCA Tracking System	0	0			
SSTS	Section 7 Tracking Systems	0	0			
RMP	Risk Management Plans	0	0			
ICIS	Integrated Compliance Information System	0	0			
PADS	PCB Activity Database System	0	0			
MLTS	Material Licensing Tracking System	0	0			
RADINFO	Radiation Information Database	0	0			
FINDS	Facility Index System	0	0			
RAATS	RCRA Administrative Action Tracking	0	0			
FUSRAP	Formerly Utilized Sites Remedial Action Program	0	0	0	0	0
CA BOND FXP PLAN	Bond Expenditure Plan	0	0	0	0	0
WDS	Waste Discharge System	0	0			
Cortese	Cortese Hazardous Waste & Substance Sites	0	0	0	0	
HIST CORTESE	Historical Cortese sites	0	1	1	2	
CUPA Listings	Certified Unified Program Agency	0	0	0	2	
Notify 65	Proposition 65 Records	0	0	0	0	0
DRYCLEANERS	Cleaner Facilities	0	0	2	0	0
WIP	Well Investigation Program Case List	0	0	0		
HAZNET	Facility and Manifest Data	0	0	0		
FMI	Finissions Inventory Data	0	0			
ENE	Enforcement Action Listing	0	0			
EINF	Emorcement Action Listing	U	U			



EDK Kadius Map Summary							
DATABASE	TYPE OF RECORDS	SUBJECT PROPERTY	< <sup>1</sup> / <sub>8</sub> MILE	<sup>1</sup> / <sub>8</sub> - <sup>1</sup> / <sub>4</sub> MILE	<sup>1</sup> / <sub>4</sub> - <sup>1</sup> / <sub>2</sub> MILE	<sup>1</sup> /2-1 MILE	
INDIAN RESERV	Indian Reservations	0	0	0	0	0	
SCRD DRYCLEANER	State Coalition for Remediation of Cleaners	0	0	0	0		
FIN ASSUR	Financial Assurance	0	0				
HWP	Envirostor Permitted Facilities Listing	0	0	0	0	0	
HWT	Registered Hazardous Waste Transporter	0	0	0			
COAL ASH EPA	Coal Combustion Residues Surface List	0	0	0	0		
PCB TRANSFORMER	PCB Transformer	0	0				
COAL ASH DOE	Steam-Electric Plan Operation Data	0	0				
MWMP	Medical Waste Management Program	0	0	0			
NPDES	NPDES Permits Listing	0	0				
PEST LIC	Pesticide Regulation Licenses Listing	0	0				
PROC	Certified Processors Database	0	0	0	0		
UIC	Underground Injection Wells Listings	0	0				
WASTEWATER PITS	Oil Wastewater Pits Listing	0	0	0	0		
ECHO	Enforcement & Compliance History Information	0	0				
FUELS PROGRAM	EPA Fuels Program Registered Listings	0	0	0			
ABANDONED MINES	Abandoned Mines	0	0				
ICE	Permitted Facilities with Inspections/Enforcements	0	0				
US FIN ASSUR	US Financial Assurance	0	0				
EPA WATCH LIST	EPA Watch List	0	0				
PRP	Potentially Responsible Parties	0	0				
LEAD SMELTERS	Lead Smelter Sites	0	0				
US AIRS	Aerometric Information Retrieval System	0	0				
DOCKET HWC	Hazardous Waste Compliance Docket	0	0				
UXO	Unexploded Ordinance Sites	0	0	0	0	0	
CIWQS	CA Integrated Water Quality System	0	0				
CERS	CA Environmental Reporting System	0	0				
EDR HIGH RISK HISTOR	ICAL RECORDS						
EDR Exclusive Records							
EDR MGP	Manufactured Gas Plants	0	0	0	0	0	
EDR Hist Auto	EDR Historical Auto Stations	0	2				
EDR Hist Cleaner	EDR Historical Cleaners	0	0				
EDR RECOVERED GOVERNMENT ARCHIVES							
Exclusive recovered Government Archives							
RGA LF	Recovered Government Archive Solid Waste Facilities List	0					
RGA LUST	Recovered Government Archive Leaking Underground Storage Tank	0					

# TABLE III (cont'd)EDR Radius Map Summary

0 = No sites in radius identified

--- = Not Searched

The subject property was not listed in the EDR-provided government database report. Two sites with reported releases of hazardous substances or petroleum products to the subsurface were reported within a one-eighth-mile radius of the subject property.

• The former Ultramar Service Station at 501 Highland Springs Avenue, located approximately 129 feet southeast and down-gradient of the subject property, was observed during SALEM's site reconnaissance to actually be located approximately 1,546 feet south of the subject property. This site was identified on the CERS HAZ WASTE, CERS TANKS, HAZNET, EDR Hist Auto, RCRA NonGen/NLR, UST, CERS, CHMIRS, and LUST databases as having had an unauthorized release of gasoline and diesel reported May 12, 1997 and affected "soil only." The petroleum hydrocarbon-



impacted soils were remediated under the regulatory agency supervision of the RCDEH and a "case closed" status was issued on October 29, 1997. Based upon various influencing factors including the down-gradient location of the Ultramar Service Station LUST site from the subject property, media impacted ("soil only"), and the current regulatory agency status ("case closed"), the Ultramar Service Station LUST site is deemed to have a low potential to environmentally impact the subject property and therefore, does not present an REC to the subject property.

• The former Mobil 18-EWF fuel station at 300 South Highland Springs Avenue, located approximately 450 feet south-southeast and down-gradient of the subject property, was identified on the LUST database as having had an unauthorized release of gasoline during a piping upgrade in April 2001 which impacted "soil only" beneath the facility. The petroleum hydrocarbon-impacted soils were remediated under the regulatory agency supervision of the RCDEH and a "case closed" status was issued on February 20, 2002. Based upon various influencing factors including the down-gradient location of the Mobil 18-EWF LUST site from the subject property, media impacted ("soil only"), and the current regulatory agency status ("case closed"), the Mobil 18-EWF LUST site is deemed to have a low potential to environmentally impact the subject property and therefore, does not present an REC to the subject property

In general, only potentially hazardous substances or petroleum products released from facilities located approximately up-gradient and within a few hundred feet of the site, or in a cross-gradient direction close to the site, are judged to have a reasonable potential of migrating to the site. This opinion is based on the assumption that materials generally do not migrate large distances laterally within the soil, but rather tend to migrate with groundwater in the general direction of groundwater flow.

No orphan sites were identified in the EDR-provided government database report.

No engineering control sites, sites with institutional controls, or sites with deed restrictions were listed for the subject property, adjacent sites or vicinity properties in the EDR-provided government database report.

No Indian reservations or LUSTs on Indian land were reported on the subject property, adjacent sites or vicinity properties in the EDR-provided government database report.

The remaining properties identified by EDR within the specified search radius of the subject property, which appeared on local, state, or federally published lists of sites that use of have had releases of hazardous substances or petroleum products, were determined through SALEM's field observations to be of sufficient distance and/or situated hydraulically cross/down-gradient of the subject property, such that impacts to the subject property are not likely.

# 9.0 POTENTIAL VAPOR ENCROACHMENT CONDITION

Vapor intrusion is a way by which chemicals in soil and groundwater can migrate into indoor air. Chemical vapors moving up through soil and into a building are a potential source of indoor air contamination and may pose a risk to human health. In evaluating the potential for a vapor encroachment condition (VEC) on the subject property, SALEM attempted to determine if there was information indicating that chemicals of concern were located within the "critical distance", defined as the lineal distance between the nearest edge of a contaminated plume and the nearest target property boundary. Based on ASTM E 2600-10 *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, the "critical distance" is equal to 100 feet, with the exception of dissolved petroleum hydrocarbons, which have a "critical distance" of 30 feet. If non-aqueous phase petroleum hydrocarbons are present, the 100-foot "critical distance" is utilized.



#### 9.1 Vapor Encroachment Screening

SALEM has performed a Vapor Encroachment Screening (Tier 1) in general accordance with the scope and limitations of ASTM Standard Practice E2600-15 for the subject property. SALEM utilized site and site vicinity specific criteria including groundwater gradient, distance of area properties of environmental concern from the subject property, and the types of constituents of concern which were released to evaluate potential vapor encroachment issues. The purpose of this Vapor Encroachment Screening (Tier 1) is to identify the existing or potential Vapor Encroachment Conditions (VEC), (as defined by ASTM E2600-15) affecting the subject property. As part of the screening, SALEM has completed the following questionnaire, as duplicated from Section X3 of ASTM E2600-15.

QUESTION	RESPONSE	COMMENTS	
1. Property Type?	Vacant		
2. Are there buildings/structures on the subject property?	No		
3. Will buildings/structures be constructed on the subject property in the future?	Yes		
4. If buildings exist or are proposed, do/will they have elevators?	No		
5. Type of level below grade (existing or proposed)?	Slab-on-Grade (proposed)		
6. Is there ventilation below grade?	N/A		
7. Sump pumps, floor drains, or trenches (existing or proposed)?	No		
8. Radon or methane mitigation system installed?	N/A		
9. Heating system type (existing or proposed)?	HVAC (proposed)		
10 Type of fuel energy (existing or proposed)?	Electric/Natural Gas		
10. Type of fuel energy (existing of proposed):	(proposed)		
11. Have there ever been any environmental problems at the subject property?	No		
12. Does/will a gas station operate anywhere on the subject property?	Yes (proposed)	Proposed Fuel Station	
13. Do any tenants use hazardous chemicals in relatively large quantities on the subject property?	No		
14. Have any tenants ever complained about odors in the building or experience health-related problems that may have been associated with the building?	No		
15. Are the operations (or proposed operations to be performed) on the subject property OSHA regulated?	No		
16. Are there any existing or proposed underground storage tanks (USTs) or	Yes	Proposed Fuel Station	
aboveground storage tanks (ASTs) located on the subject property?	(proposed)	Toposed Puel Station	
17. Are there any sensitive receptors (children, elderly, people in poor health, etc.) that occupy or will occupy the subject property?	No		

 TABLE IV

 Vapor Encroachment Questionnaire

TABLE VAdditional VEC Criteria

QUESTION	Response	COMMENTS
1. Is the subject property known to have current or past contamination?	No	
2. Is contamination of the subject property suspected?	No	
3. Is an <u>adjacent</u> property known to have current or past contamination which may have impacted the subject property?	No	
4. Is a <u>nearby</u> property known to have current or past contamination which may have impacted the subject property?	No	
5. Is regional groundwater contamination known to exist beneath the subject property?	No	
6. Are you aware of other conditions which may result in vapor intrusion at the subject property?	No	

Based upon the results of SALEM's Tier 1 VES, it is SALEM's opinion that a potential VEC "likely does not exist" at the subject property. As such, no further assessment is recommended.



# 10.0 BUSINESS ENVIRONMENTAL RISKS

#### **10.1** Asbestos-Containing Building Materials

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used as an acoustic insulator, thermal insulation, fire proofing and in other building materials. Friable asbestos-containing material (ACM), when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACM can be crumbled, pulverized, or reduced to powder during machining, cutting, drilling, or other abrasive procedures. Friable ACM is more likely to release fibers when disturbed or damaged than non-friable ACM. Exposure to airborne friable asbestos may result in a potential health risk because persons breathing the air may breathe in asbestos fibers. Continued exposure can increase the amount of fibers that remain in the lung. Fibers embedded in lung tissue over time may cause serious lung diseases including: asbestosis, lung cancer, or mesothelioma. The Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 requires certain construction materials to be *presumed* to contain asbestos, for purposes of this regulation. All thermal system insulation (TSI), surfacing material, and asphalt/vinyl flooring that are present in a building constructed prior to 1981 and have not been appropriately tested are "presumed asbestos-containing material" (PACM).

During SALEM's site reconnaissance, no structures were observed on the subject property. Therefore, ACMs are not considered an on-site environmental concern at this time.

#### **10.2 Lead-Based Paint**

Lead is a highly toxic metal that affects virtually every system of the body. While adults can suffer from excessive lead exposures, the groups most at risk are fetuses, infants and children under 6. The Consumer Product Safety Commission banned the use of lead in paint in 1978. Most manufactures, however, had ceased using lead well before this time. Paint applied after 1978 is not considered suspect LBP. Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as "Title X," to protect families from exposure to lead from paint, dust, and soil. Section 1018 of this law directed the Housing and Urban Development (HUD) and the US EPA to require the disclosure of known information on lead-based paint (LBP) and LBP hazards before the sale or lease of most housing built before 1978. Sellers, landlords, and their agents are responsible for providing this information to the buyer or renter before sale or lease.

According to Section 1017 of Title X, "LBP hazard is any condition that causes exposure to lead from leadcontaminated dust; bare, lead-contaminated soil; or LBP that is deteriorated or intact LBP present on accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects." Therefore, under Title X intact lead-based paint on most walls and ceilings is not considered a "hazard," although the condition of the paint should be monitored and maintained to ensure that it does not become deteriorated. LBP is defined as any paint, varnish, stain, or other applied coating that has 1.0 mg/cm<sup>2</sup> (or 5,000 µg/g by weight) or more of lead.

During SALEM's site reconnaissance, no structures were observed on the subject property. Therefore, LBP is not considered an on-site environmental concern at this time.

#### 10.3 Radon

Radon is a naturally occurring gaseous substance resulting from the radioactive decay of uranium to radium and then to radon. Uranium is a common element found in many geologic formations and substrates, particularly igneous and metamorphic rocks. Radon has a half-life of only 3.8 days and decays to its daughter elements (polonium 218, polonium 214, bismuth 214, and lead 214). It is these daughter elements that represent the health hazard commonly associated with radon. Radon gas can enter a building through cracks in the foundation and walls and become attached to dust particles and inhaled which could cause



damage to human lung tissue. Radon is measured in picocuries per liter of air (pCi/L). The EPA has an established safe radon level of 4 pCi/L. Based on the EPA Radon Zone Map of California, the subject Property is located within **EPA Zone 2**, which has a predicted indoor radon screening between 2 pCi/L and 4 pCi/L (Low Potential). The EDR-provided radon data cites Riverside County has having 100% of 1<sup>st</sup> floor spaces with <4 pCi/L. However, radon levels may vary from one area to another and the only way to accurately assess radon gas levels on the subject property is to conduct a radon gas survey.

# 10.4 Mold

Molds are microscopic organisms found virtually everywhere, indoors and outdoors. Mold will grow and multiply under the right conditions, needing only sufficient moisture (e.g. in the form of very high humidity, condensation, or water from a leaking pipe, etc.) and organic material (e.g., ceiling tile, drywall, paper, or natural fiber carpet padding). Mold growths often appear as discoloration, staining, or fuzzy growth on building materials or furnishings and are varied colors of white, gray, brown, black, yellow, and green. In large quantities, molds can cause allergic symptoms when inhaled or through the toxins the molds emit.

During SALEM's site reconnaissance, no structures were observed on the subject property. Therefore, mold is not considered an on-site environmental concern at this time.

# 11.0 DISCUSSION OF FINDINGS

# Historical Uses

The subject property consists of one irregular-shaped parcel of land totaling approximately 2.08 acres located on the southwest corner of 8<sup>th</sup> Street and Highland Springs Avenue in Beaumont, California (Riverside County APN 419-150-034). SALEM's review of historical aerial photographs indicates that the subject property was undeveloped or agricultural land in at least 1938. By 1949, the western portion of the subject property was developed with what appears to be a single-family dwelling or barn. The structure was demolished by 1967. Based upon SALEM's review of historical aerial photographs, a site reconnaissance, and contact with local regulatory agencies, there is no evidence that RECs exist in connection with the historical use of the subject property.

# **Current Uses**

At the time of SALEM's January 6, 2020 site reconnaissance, the subject property was undeveloped land covered in native vegetation. What appeared to be a concrete pad (10'x15') was observed on the northwest portion of the subject property. No evidence of staining or spills were observed on the concrete during the site reconnaissance. During the visual observations of the subject property, no hazardous substances or petroleum products were observed to be stored or handled on the subject property. Exposed surface soils did not exhibit obvious signs of discoloration. No other obvious evidence (vent pipes, fill pipes, dispensers, etc.) of USTs was noted within the area observed.

Based on SALEM's field observations and contact with state and local regulatory agencies, the potential for adverse environmental impacts to the subject property associated with current site use appears to be low. Therefore, there is no evidence that RECs exist in connection with the current use of the subject property.

#### **Adjacent Properties**

Based on SALEM's field observations, review of the EDR Radius Map Report and consultation with local regulatory agencies, there is no evidence that RECs exist in connection with the subject property from adjacent property uses.



# 11.1 Evaluation of Data Gaps/Data Failure

In accordance with ASTM E1527-13 guidance, data gaps represent a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice. Data failure represents the failure to achieve the historical research objects of this practice even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. Data failure is one type of data gap. The following is a summary of data gaps encountered in the process of preparing this report including an observation as the presumed significance of that data gap to the conclusions of this assessment.

Some of the intervals between documented sources exceeded five years.

However, taken in consideration with the available information obtained in the course of preparing this report in conjunction with professional experience, there is no evidence to suggest that these data gaps might alter the conclusions of this assessment.

# 12.0 SUMMARY AND CONCLUSIONS

We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Practice E1527-13 of the proposed fuel station, quick-serve restaurant and convenience store located on the southwest corner of 8<sup>th</sup> Street and Highland Springs Avenue in Beaumont, California (Riverside County APN 419-150-034), the *property*. Any exceptions to, or deletions from, this practice are described in Section 13 of this *report*. During the course of this assessment, SALEM identified no evidence of RECs in connection with the subject property as defined by ASTM E1527-13. SALEM did identify evidence of the following Site Development Issue that is not a REC:

• SALEM's review of historical aerial photographs indicates that what appears to have been a singlefamily dwelling occupied the northwest corner of the subject property from at least 1949 until at least 1967. A septic system was likely associated with the former on-site dwelling. However, it is unknown if a septic system is currently located in the vicinity of the former on-site dwelling. The presence of a septic system is not anticipated to adversely environmentally impact the subject property due to its presumed use for domestic purposes only. If a septic system is identified during the re-development of the subject property, it should be properly abandoned/closed or destroyed in accordance with state and local guidelines.

# 13.0 LIMITATIONS

This Phase I ESA Report has been prepared for the exclusive use of **Evergreen Devco**, **Inc.** and its subsidiaries and affiliates. Unauthorized use of or reliance on the information contained in this report, unless given express written consent by SALEM and **Evergreen Devco**, **Inc.**, is strictly prohibited. The following limitations and exceptions apply:

• The scope of work completed was designed solely to meet the needs of SALEM's client. SALEM shall not be liable for any unintended usage of this report by another party. In addition, based on the ASTM guidelines, the ESA is only valid if completed within 180 days of an acquisition or the transaction necessitating the ESA.



- No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. This ESA was designed to reduce, but not eliminate the potential for RECs at the subject property, within reasonable limits of time and cost. The ESA is not intended to be exhaustive or all-inclusive and does not represent a guarantee of the identification of all possible environmental risk.
- An ESA is intended to be a non-intrusive investigation and generally does not include sampling or testing of air, soil, water or building materials. No destructive testing was completed and concealed areas, such as behind walls or within machinery, were not accessed. Testing, if any, is designed solely to meet the needs of the ESA, not to meet any local, state or federal regulations and should not be utilized as such.
- Information in this report is based on personal interviews, government records, published resources, and various historical documents. Accuracy and completeness of information varies among information sources and may be inaccurate or incomplete. The information utilized in this ESA is from sources deemed to be reliable; however, no representation or warranty is made as to the accuracy thereof. SALEM will have no ongoing obligation to obtain and include information that was not reasonably ascertainable, practically reviewable or provided to SALEM in a reasonable timeframe to formulate an opinion and complete the assessment by the agreed upon due date.
- The ESA includes some information that may be relevant to regulatory compliance, but is not intended and shall not be construed as a compliance audit and cannot be considered a verification of regulatory compliance. While the general environmental setting of the subject property is described, this assessment is not intended to be a formal flood plain or wetland determination, and no warranty is made thereof. Depending on its past, present or future intended use, the property under review may or may not be subject to regulation and permitting under environmental and health and safety laws, such as, but not limited to, the Clean Air Act, the Clean Water Act, the Solid Waste Disposal Act, the Occupational Safety and Health Act, and other federal, state and local regulations. SALEM assumes no responsibility or liability respecting regulatory permitting or compliance issues.
- Client is advised that if the ESA is obtained with the intent of qualifying the purchaser as an innocent landowner, contiguous property owner, or bona fide prospective purchaser under CERCLA, there will be continuing obligations of due care and responsiveness and additional legal requirements that likely apply to such status. SALEM accepts and undertakes no responsibility as to such requirements and advises that counsel be separately consulted with respect to such requirements.
- The findings and conclusions presented in this Phase I ESA Report are based on field review and observations and on data obtained from the sources listed in the report. The findings of this report are valid as of the present. The passage of time, natural processes or human intervention on the subject property or adjacent properties and changes in the regulations can cause changed conditions which can invalidate the findings and conclusions presented in this report.

# 14.0 QUALIFICATIONS

This Phase I ESA was conducted under the supervision or responsible charge of SALEM's undersigned environmental professional with oversight from the undersigned registered engineer. The work was conducted in accordance with ASTM E1527-13, generally accepted industry standards for environmental due diligence in place at the time of the preparation of this report, and SALEM's quality-control policies.



We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in §312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

#### **15.0 REFERENCES**

The following list summarizes the references utilized in preparing this report:

- > Aerial photographs provided by Environmental Data Resources, Inc.
- Beaumont-Cherry Valley Water District records.
- California Environmental Protection Agency, Recorded Deed Restriction List, 1994.
- > California Environmental Protection Agency, Department of Toxic Substances Control records.
- > California Regional Water Quality Control Board records.
- Cal-EPA Voluntary Cleanup Program records.
- California Statewide Radon Survey Screening results conducting during 1990-1991.
- City of Beaumont Building Department records.
- City of Beaumont Planning Department records.
- > City of Beaumont Department of Public Works records.
- > Federal and State regulatory agency lists compiled by EDR.
- Riverside County Assessor's Office records.
- Riverside County Environmental Health Department records.
- Riverside County Fire Department records.
- Sanborn Fire Insurance Maps for Beaumont, California (EDR).
- > The Munger Map Book, California Alaska Oil & Gas Fields, Munger Maps 1999.
- ▶ U.S. EPA Federal Superfund Liens List and the U.S. EPA California Liens, 1995.
- ▶ U.S. Geological Survey, 7.5 minute Beaumont, California topographic quadrangle map, dated 2012.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (909) 980-6455.

Respectfully submitted,

#### SALEM Engineering Group, Inc.

Reily Rivera Environmental Project Manager

Clarence Jiang, PE, GE Project Engineer RCE No. 50233/ RGE No. 2477

2c: herewith







Photo 1: View of subject property from the northeast corner facing west.



Photo 2: View of subject property from the northeast corner facing south.

	PROJECT NO.	
PHOTOGRAPHS	3-419-1167	
PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA	DATE: January 2020 PAGE: Page 1 of 7	engineering group, inc.


Photo 3: View of subject property from the southeast corner facing west.



Photo 4: View of subject property from the southeast corner facing north.

PHOTOGRAPHS	ргојест но. 3-419-1167	
PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA	DATE: January 2020 PAGE: Page 2 of 7	engineering group, inc



Photo 5: View of subject property from the southwest corner facing north.



Photo 6: View of subject property from the southwest corner facing east.

	PROJECT NO.	
PHOTOGRAPHS	3-419-1167	
PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA	DATE: January 2020 PAGE: Page 3 of 7	engineering group, inc.



Photo 7: View of subject property from the northwest corner facing east.



Photo 8: View of subject property from the northwest corner facing east.

	PROJECT NO.	
PHOTOGRAPHS	3-419-1167	
PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA	DATE: January 2020 PAGE: Page 4 of 7	engineering group, inc





Photo 10: View of concrete pad.

## PHOTOGRAPHS

ргојест но. 3-419-1167

DATE:

PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

January 2020 PAGE: Page 5 of 7





Photo 11: View of adjoining property to the north.



Photo 12: View of adjoining property to the east.

PHOTOGRAPHS	ргојест но. 3-419-1167	
PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA	DATE: January 2020 PAGE: Page 6 of 7	engineering group, inc.



Photo 13: View of adjoining property to the south.



Photo 14: View of adjoining property to the west.

PHOTOGRAPHS	ргојест no. 3-419-1167	
PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA	DATE: January 2020 PAGE: Page 7 of 7	engineering group, inc.





PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

 NTS
 Jan. 2020

 DRAWN BY:
 APPROVED BY:

 BR
 RR

 PROJECT NO.:
 FIGURE NO.:

 3-419-1167
 2

engineering group, inc.



APPENDIX







ALTA Commitment for Title Insurance

ISSUED BY



First American Title Insurance Company

File No: NCS-964442-PHX1

## COMMITMENT FOR TITLE INSURANCE

## **Issued By**

## FIRST AMERICAN TITLE INSURANCE COMPANY

## NOTICE

**IMPORTANT-READ CAREFULLY:** THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES, ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

## **COMMITMENT TO ISSUE POLICY**

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, First American Title Insurance Company, a Nebraska Corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

## First American Title Insurance Company

- J Comman

Dennis J. Gilmore President

Jeffrey S. Robinson Secretary

If this jacket was created electronically, it constitutes an original document.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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Form 50003700 (8-23-18)	Page 1 of 12	ALTA Commitment for Title Insurance (8-1-16)
, , , , , , , , , , , , , , , , , , ,	5	California

## **COMMITMENT CONDITIONS**

## 1. DEFINITIONS

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.
- 2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.
- 3. The Company's liability and obligation is limited by and this Commitment is not valid without:
  - (a) the Notice;
  - (b) the Commitment to Issue Policy;
  - (c) the Commitment Conditions;
  - (d) Schedule A;
  - (e) Schedule B, Part I-Requirements; and
  - (f) Schedule B, Part II—Exceptions.

## 4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

## 5. LIMITATIONS OF LIABILITY

- (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
  - (i) comply with the Schedule B, Part I—Requirements;
  - (ii) eliminate, with the Company's written consent, any Schedule B, Part II-Exceptions; or
  - (iii) acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

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## 6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

#### 7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

#### 8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

#### 9. ARBITRATION

Arbitration provision intentionally removed.

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## First American



ALTA Commitment for Title Insurance

ISSUED BY

## First American Title Insurance Company

File No: NCS-964442-PHX1

## Transaction Identification Data for reference only:

Issuing Agent: First American Title Insurance Company National Issuing Office: 2425 E. Camelback Road, Suite 300, **Commercial Services** 

Commitment No.: NCS-964442-PHX1

Property Address: Southwest Corner of East 8th Street, & Highland Springs Avenue, Beaumont, CA Revision No.: 03

Phoenix, AZ 85016 Issuing Office File No.: NCS-964442-PHX1 Escrow Officer/Assistant: Alix Graham/Lauren Ogino

Phone: (602)567-8141/(602)567-8140 Email: agraham@firstam.com/logino@firstam.com Title Officer/Assistant: Richard E. Brown/ Phone: (602)567-8100/ Email: ribrown@firstam.com/

## **SCHEDULE A**

- 1. Commitment Date: November 12, 2019 at 8:00 AM
- 2. Policy to be issued:
  - Proposed Insured: Evergreen Devco, Inc., a California corporation Proposed Policy Amount: \$ 2,100,000.00
  - Proposed Insured: To Be Determined Proposed Policy Amount: \$ To Be Determined
  - (c) □ 2006 ALTA® Policy Proposed Insured: Proposed Policy Amount: \$
- The estate or interest in the Land described or referred to in this Commitment is 3.

FEE

4. The Title is, at the Commitment Date, vested in:

KY NGOC NGUYEN, A SINGLE MAN

5. The Land is described as follows:

## See Exhibit "A" attached hereto and made a part hereof

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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	California



ALTA Commitment for Title Insurance

**First American Title Insurance Company** 

File No: NCS-964442-PHX1

Commitment No.: NCS-964442-PHX1

## SCHEDULE B, PART I

## Requirements

All of the following Requirements must be met:

- A. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
- B. Pay the agreed amount for the estate or interest to be insured.
- C. Pay the premiums, fees, and charges for the Policy to the Company.
- D. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
- E. Releases(s) or Reconveyance(s) of Item(s): None
- F. Other: None
- G. You must give us the following information:
  - a. Any off record leases, surveys, etc.
  - b. Statement(s) of Identity, all parties.
  - c. Other: None

The following additional requirements, as indicated by "X", must be met:

[X] H. Provide information regarding any off-record matters, which may include, but are not limited to: leases, recent works of improvement, or commitment statements in effect under the Environmental Responsibility Acceptance Act, Civil Code Section 850, et seq.

The Company's Owner's Affidavit form (as provided by the company) must be completed and submitted prior to close in order to satisfy this requirement. This Commitment will then be subject to such further exceptions and/or requirements as may be deemed necessary.

[X] I. An ALTA/NSPS survey of recent date, which complies with the current minimum standard detail requirements for ALTA/NSPS land title surveys, must be submitted to the Company for review. This Commitment will then be subject to such further exceptions and/or requirements as may be deemed necessary.

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[] J. The following LLC documentation is required from:

(i) a copy of the Articles of Organization
(ii) a copy of the Operating Agreement, if applicable
(iii) a Certificate of Good Standing and/or other evidence of current Authority to Conduct Business within the State
(iv) express Company Consent to the current transaction

[] K. The following partnership documentation is required :

 (i) a copy of the partnership agreement, including all applicable amendments thereto
 (ii) a Certificate of Good Standing and/or other evidence of current Authority to Conduct Business within the State

(iii) express Partnership Consent to the current transaction

[] L. The following corporation documentation is required:

(i) a copy of the Articles of Incorporation
(ii) a copy of the Bylaws, including all applicable Amendments thereto
(iii) a Certificate of Good Standing and/or other evidence of current Authority to Conduct Business within the State
(iv) express Corporate Resolution consenting to the current transaction

- [] M. Based upon the Company's review of that certain partnership/operating agreement dated Not disclosed for the proposed insured herein, the following requirements must be met: Any further amendments to said agreement must be submitted to the Company, together with an affidavit from one of the general partners or members stating that it is a true copy, that said partnership or limited liability company is in full force and effect, and that there have been no further amendments to the agreement. This Commitment will then be subject to such further requirements as may be deemed necessary.
- [] N. A copy of the complete lease, as referenced in Schedule A, #3 herein, together with any amendments and/or assignments thereto, must be submitted to the Company for review, along with an affidavit executed by the present lessee stating that it is a true copy, that the lease is in full force and effect, and that there have been no further amendments to the lease. This Commitment will then be subject to such further requirements as may be deemed necessary.
- [X] O. Approval from the Company's Underwriting Department must be obtained for issuance of the policy contemplated herein and any endorsements requested thereunder. This Commitment will then be subject to such further requirements as may be required to obtain such approval.
- [] P. Potential additional requirements, if ALTA Extended coverage is contemplated hereunder, and work on the land has commenced prior to close, some or all of the following requirements, and any other requirements which may be deemed necessary, may need to be met:
- [] Q. The Company's "Indemnity Agreement I" must be executed by the appropriate parties.

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- [] R. Financial statements from the appropriate parties must be submitted to the Company for review.
- [] S. A copy of the construction contract must be submitted to the Company for review.
- [] T. An inspection of the Land must be performed by the Company for verification of the phase of construction.
- [] U. The Company's "Mechanic's Lien Risk Addendum" form must be completed by a Company employee, based upon information furnished by the appropriate parties involved.

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		California

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ALTA Commitment for Title Insurance

Schedule BI & BII (Cont.)

First American Title Insurance Company

File No: NCS-964442-PHX1

Commitment No.: NCS-964442-PHX1

## SCHEDULE B, PART II

## Exceptions

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

- 1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I-Requirements are met.
- 2. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
- 3. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
- 4. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
- 5. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
- 6. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.

7. General and special taxes and assessments for the fiscal year 2019-2020.

First Installment:	\$2,411.74, PAID
Penalty:	\$0.00
Second Installment:	\$2,411.74, OPEN
Penalty:	\$0.00
Tax Rate Area:	002-027

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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Form 50003700 (8-23-18)	Page 8 of 12	ALTA Commitment for Title Insurance (8-1-16)
		California

A. P. No.: 419-150-034

- 8. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.
- 9. Taxes and assessments, if any, of the Beaumont Irrigation District.
- 10. This item has been intentionally deleted.
- 11. This item has been intentionally deleted.
- 12. Easements, Covenants and Conditions contained in the deed from J. Drew Funk, J.D. Reid, Pearl J. Grant, and Edward Cryer, as Grantor, to Frank W. Chambers, a single man, as Grantee, recorded January 31, 1946 as Book 715, Page 142 of Official Records. Reference being made to the document for full particulars.
- 13. Easements, Covenants and Conditions contained in the deed from J. Drew Funk and Ruby M. Funk, as Grantor, to William Cameron and Janet Cameron, husband and wife, as joint tenants, as Grantee, recorded April 27, 1948 as Book 904, Page 477 of Official Records. Reference being made to the document for full particulars.
- 14. An easement for utilities and incidental purposes, recorded November 13, 1962 as Instrument No. 104649 of Official Records.

In Favor of:	County of Riverside
Affects:	as described therein

15. An easement for road and incidental purposes, recorded August 31, 1970 as Instrument No. 85601 of Official Records.

In Favor of:	City of Beaumont
Affects:	as described therein

- An offer of dedication for public road, public utility and public services and incidental purposes, recorded November 06, 1975 as Instrument No. 138162 of Official Records.
   To: Highland Springs Avenue
- 17. The fact that the land lies within the boundaries of the Beaumont Redevelopment Project Area, as disclosed by the document recorded December 28, 1993 as Instrument No. 516923 of Official Records.
- 18. This item has been intentionally deleted.
- 19. Water rights, claims or title to water, whether or not shown by the public records.
- 20. Any facts, rights, interests or claims which would be disclosed by a correct ALTA/NSPS survey.
- 21. Rights of parties in possession.
- 22. A document entitled "Certificate of Acceptance" recorded September 03, 2019 as Instrument No. 2019-0341529 of Official Records.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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Form 50003700 (8-23-18)	Page 10 of 12	ALTA Commitment for Title Insurance (8-1-16)
		California

## INFORMATIONAL NOTES

# ALERT - CA Senate Bill 2 imposes an additional fee of \$75 up to \$225 at the time of recording on certain transactions effective January 1, 2018. Please contact your First American Title representative for more information on how this may affect your closing.

- 1. The property covered by this report is vacant land.
- 2. According to the public records, there has been no conveyance of the land within a period of twentyfour months prior to the date of this report, except as follows:

None

3. This preliminary report/commitment was prepared based upon an application for a policy of title insurance that identified land by street address or assessor's parcel number only. It is the responsibility of the applicant to determine whether the land referred to herein is in fact the land that is to be described in the policy or policies to be issued.

The map attached, if any, may or may not be a survey of the land depicted thereon. First American Title Insurance Company expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of this Commitment or the Policy, if any, to which the map is attached.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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Form 50003700 (8-23-18)	Page 11 of 12	ALTA Commitment for Title Insurance (8-1-16)
	_	California



ISSUED BY First American Title Insurance Company

File No: NCS-964442-PHX1

File No.: NCS-964442-PHX1

The Land referred to herein below is situated in the City of Beaumont, County of Riverside, State of California, and is described as follows:

PARCEL 1 OF PARCEL MAP NO. 5570, AS SHOWN BY MAP ON FILE IN BOOK 10, PAGE 34 OF PARCEL MAPS, RIVERSIDE COUNTY RECORDS.

For conveyancing purposes only: APN 419-150-034

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by First American Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions.

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Form 50003700 (8-23-18)	Page 12 of 12	ALTA Commitment for Title Insurance (8-1-16)
		California









8711 Monroe Court, Suite A Rancho Cucamonga, California 91730 (909) 980-6455 Office (909) 980-6435 Fax

## PHASE I ESA (ASTM E1527-13) USER QUESTIONNAIRE

#### PROPOSED FUEL STATION, QSR & C-STORE 8TH STREET & HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

Date: 12/20/19 Site Address: SWC 8th Street & Highland Springs Ave., Beaumont, CA

Respondent Name: Laura Ortiz

Phone No. (required): 602-808-8600

Company Name & Address: Evergreen Devco, Inc. 2390 E. Camelback Road, Suite 410, Phoenix, AZ 85016

## Introduction

"In order to qualify for one of the *Landowner Liability Protections (LLPs)* offered by the Small Business Liability Relief and Brownfield Revitalization Act of 2001 (the 'Brownfields Amendments'), the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that 'all appropriate inquiry' is not completed" - American Society for Testing and Materials (ASTM) E1527-13 Appendix X3: User Questionnaire

1. Are you aware of any environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state, or local law?

No, based on my actual knowledge and review of company records.

2. Are you aware of any activity use limitations (AULs) such as engineering controls, land use restrictions, or institutional controls that are in place at the subject property and/or have been filed or recorded in a registry under federal, tribal, state, or local law?

No, based on my actual knowledge and review of company records.

3. As the user of the Phase I Environmental Site Assessment (ESA), do you have any specialized knowledge or experience related to the subject property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the subject property or an adjacent property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

No, based on my actual knowledge and review of company records.



4. Does the purchase price being paid for the subject property reasonably reflect the fair market value of the subject property? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the subject property? We believe the purchase price represents fair market value.

5. Are you aware of commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:

- A. Do you know the past uses of the subject property? No, based on my actual knowledge and review of company records.
- B. Do you know of specific chemicals that are present or once were present at the subject property? No, based on my actual knowledge and review of company records.
- C. Do you know of spills or other chemical releases that have taken place at the subject property? No, based on my actual knowledge and review of company records.
- D. Do you know of any environmental cleanups that have taken place at the subject property? No, based on my actual knowledge and review of company records.

6. As the user of the Phase I ESA, based on your knowledge and experience related to the subject property, are there any obvious indicators that point to the presence or likely presence of contamination at the subject property?

No, based on my actual knowledge and review of company records.

I, the user of this Phase I ESA (or authorized representative of the User), do hereby attest that I have carefully considered the questions herein and have presented answers to the best of my knowledge and ability based upon the Responsibilities of the User as required within ASTM E1527-13 guidance.

Name Laura Ortiz

(Please Print)

Date 12/20/19

Signature QLL



APPENDIX







## PHASE I ESA (ASTM E1527-13) **OWNER QUESTIONNAIRE**

## PROPOSED FUEL STATION, QSR, & C-STORE SOUTHWEST CORNER OF 8<sup>th</sup> STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CA 92223

Date: 01/26/2020 Site Address: APN 419150034-5			
Owner Name: Ky Ngoc Nguyen Owner Phone No. (required): 714-717-0027			
Provide Name of Previous Owner(s) and Phone Number if known: Highland MV A general Partnership - 2670 Sumac Lane. Las Vegas NV 89121			
How long have you owned the subject property? Purchase 03/31/1986			
Have any previous investigations been conducted on the subject property?No			
What is the subject property currently used for? Vaccand Land			
Former Uses/Occupants of the subject property? Not know			
Age of onsite structure(s), if known? N/A			
Do you have any knowledge of existing or previous underground or aboveground storage tanks being located on the subject property? <u>No</u>			
Do you know of any chemical or hazardous materials, persistent pesticides/herbicides being used, stored or discharged on the subject property? <u>No</u>			
Do you know of any Environmental Cleanup Liens or slurry walls or vapor barriers filed or recorded against the subject property?None			
Do you know of any buried materials such as garbage dumps or burn pits on the subject property? None			
Are there currently or were there historically any septic systems and/or water wells located on the subject property?Not Know			
Any dry wells/monitoring wells? No			
Are there any drainage or disposal ponds located on the subject property? No			
Is the subject property connected to municipal water and sewer systems? Not Know			
Do you have any commonly known, reasonably ascertainable, or specialized knowledge or experience related to the subject property or nearby properties? No			

related to the subject property or nearby properties?\_

Are you	aware of any contamin	nation on the subject property?	No	
Name:_	Ky Ngoc Nguyen		_ Date:_	01/26/2020
	(Please Print)	$\sim$		
Signatu	ire:	Mulik	_	







## **AERIAL PHOTOGRAPHS**

PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

 SCALE:
 DATE:

 NTS
 Jan. 2020

 DRAWN BY:
 APPROVED BY:

 BR
 RR

 PROJECT NO.:
 YEAR:

 3-419-1167
 1938







PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

 NTS
 Jan. 2020

 DRAWN BY:
 APPROVED BY:

 BR
 RR

 PROJECT NO.:
 YEAR:

 3-419-1167
 1953





## **AERIAL PHOTOGRAPHS**

PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

SCALE:	DATE:	
NTS	Jan. 2020	
DRAWN BY:	APPROVED BY:	
BR	RR	
PROJECT NO .:	YEAR:	
3-419-1167	1961	









PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

 BR
 RR

 PROJECT NO.:
 YEAR:

 3-419-1167
 1985




PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

 NTS
 Jan. 2020

 DRAWN BY:
 APPROVED BY:

 BR
 RR

 PROJECT NO.:
 YEAR:

 3-419-1167
 1989









PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

YEAR: PROJECT NO .: 3-419-1167 2002



SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE **BEAUMONT, CALIFORNIA** 

BR RR YEAR: PROJECT NO .: 3-419-1167 2006





PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

 NTS
 Jan. 2020

 DRAWN BY:
 APPROVED BY:

 BR
 RR

 PROJECT NO.:
 YEAR:

 3-419-1167
 2009







PROPOSED FUEL STATION, QSR, AND C-STORE SWC 8TH STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

 NTS
 Jan. 2020

 DRAWN BY:
 APPROVED BY:

 BR
 RR

 PROJECT NO.:
 YEAR:

 3-419-1167
 2016



APPENDIX





#### **Proposed Fuel Station**

SWC 8th Street & Highland Springs Avenue Beaumont, CA 92223

Inquiry Number: 5914075.5 December 27, 2019

# The EDR-City Directory Image Report



6 Armstrong Road Shelton, CT 06484 800.352.0050 www.edrnet.com

#### **TABLE OF CONTENTS**

#### **SECTION**

**Executive Summary** 

Findings

**City Directory Images** 

*Thank you for your business.* Please contact EDR at 1-800-352-0050 with any questions or comments.

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### **EXECUTIVE SUMMARY**

#### DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

#### **RECORD SOURCES**

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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#### **RESEARCH SUMMARY**

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2014	$\checkmark$		EDR Digital Archive
2010	$\checkmark$		EDR Digital Archive
2005	$\checkmark$		EDR Digital Archive
2000	$\checkmark$		EDR Digital Archive
1995	$\checkmark$		EDR Digital Archive
1992	$\checkmark$		EDR Digital Archive
1985	$\checkmark$		Haines Criss-Cross Directory
1981	$\checkmark$		Haines Criss-Cross Directory
1975	$\checkmark$		Haines Criss-Cross Directory
1971	$\checkmark$		Haines Criss-Cross Directory

#### **FINDINGS**

#### TARGET PROPERTY STREET

1985

1981

1975

1971

pg A22

pg A25

pg A26

pg A28

SWC 8th Street & Highland Springs Avenue Beaumont, CA 92223

<u>Year</u>	<u>CD Image</u>	Source					
<u>E 8TH ST</u>	8TH ST						
2014	pg A2	EDR Digital Archive					
2010	pg A6	EDR Digital Archive					
2005	pg A10	EDR Digital Archive					
2000	pg A13	EDR Digital Archive					
1995	pg A16	EDR Digital Archive					
1992	pg A19	EDR Digital Archive					
1985	pg A21	Haines Criss-Cross Directory					
1981	pg A23	Haines Criss-Cross Directory					
1981	pg A24	Haines Criss-Cross Directory					
1975	-	Haines Criss-Cross Directory	Street not listed in Source				
1971	pg A27	Haines Criss-Cross Directory					
HIGHLAN	D SPRINGS AVE						
2014	pg A5	EDR Digital Archive					
2010	pg A9	EDR Digital Archive					
2005	pg A12	EDR Digital Archive					
2000	pg A15	EDR Digital Archive					
1995	pg A18	EDR Digital Archive					
1992	pg A20	EDR Digital Archive					

Haines Criss-Cross Directory

Haines Criss-Cross Directory

Haines Criss-Cross Directory

Haines Criss-Cross Directory

### **FINDINGS**

#### **CROSS STREETS**

No Cross Streets Identified

**City Directory Images** 



-

Source EDR Digital Archive

125	BEAUMONT LIBRARY DISTRICT
225	ST STEPHENS EPISCOPAL
250	OCCUPANT UNKNOWN,
252	WALLER, PHILIP H
254	OCCUPANT UNKNOWN,
256	FINCH, JENNIFER
	MCNALLY, ALYCIA
454	OCCUPANT UNKNOWN.
544	GONZALEZ. TAMMY
548	GARNICA, CARLOS
555	HERRERA, ANTHONY
740	GONZALEZ, JOSE L
756	JOHN S MASONRY
	SHARP JOHN W
848	GARCIA
850	JOHNSON CHEYANE W
910	
920	BEI TRAN JB
949	RIVERA JOHN
969	
1051	
1104	
1122	
1126	HERNANDEZ MARIE C
1151	BOLTON DANIEL
1198	BALLAIN AMIANI FA
1100	FOSTER JACOB
	HERNANDEZ SAHIRA
	MARTINEZ ISRAEI
	MENDOZA ANTONIO M
1205	SANTAMARIA GUADALUPE
1200	KORBAS LINNEA
1215	LANTRY MISTY
1229	
1220	SAVAYA FRANKI
1233	MENENDEZ MANERED
1235	
1237	
1260	ARROYO GRACIELA
1262	
1274	KELIMWAY PARTNERS
1214	
1283	DEPAZ IRIS M
1285	
1200	OCCUPANT UNKNOWN
1310	
1316	
1320	IOHANSEN IAN
132/	RESENDEZ MARIA
1224	
1330	DAELA, DANIEL



-

# E 8TH ST 2014 (Cont'd)

1335	OCCUPANT UNKNOWN,
	RECORD, BRENDA N
1339	ALCALA, SAMUEL G
	OCCUPANT UNKNOWN,
1343	OCCUPANT UNKNOWN,
1351	ALCALA, JAVIER
1352	MARTINEZ, JUAN A
1355	DONATINI, EMILIE R
1357	BOWMAN, KIRSTEN
	RELI ON US HOME CARE SERVICE
1359	OCCUPANT UNKNOWN,
1365	GLOCK, WILLIAM A
1376	HUMBLE, SONDRA J
1377	PERISITS, HEATHER R
	QUINTERO, LEONOR
1380	OCCUPANT UNKNOWN,
1390	CUNNINGHAM, WILLARD J
1394	CONTRERAS, GEBRIT
1395	OCCUPANT UNKNOWN,
1396	SANCHEZ, PEDRO E
1398	CABRERA, FREDERICK
1399	OCCUPANT UNKNOWN,
1402	ROSSETTI, TONY
1408	ALVARADO, JANEL
	LUNA, LUCY
1418	HUNT, MARY
1419	TABEL, RAED
1422	WILSON, TONYA
1426	ROGERS, RHONDA
1429	OCCUPANT UNKNOWN,
1435	MYERS, SHERRI A
1438	CARRANZA, ANTHONY
1442	DUTOIT, DANETTE
1446	LABORD, KATHIE L
1447	BOWEN, WILLIAM R
1449	MCCULLY, L
1450	ARMENTA, DANIEL
1451	CASALI, TED
1454	MEJIA, GUSTAVO D
1460	OCCUPANT UNKNOWN,
1462	MORENO, ANDRES J
1474	COLVIN, EDDIE
1505	VIGNOLLE, VERNE A
1511	LOWE, CARRIE
1513	HOQUIST, DANIEL E
1515	GORDON, LARRY
	WHILE YOU WERE GONE
1517	LYONS, WILLIAM J
1519	BARNETT, SAMUEL E
1520	BEAUMONT UNITED SCHOOL DISTRIC



-

### E 8TH ST 2014 (Cont'd)

- PTA CALIFORNIA CONGRESS OF PAR 1520 1521 **B2 LANDSCAPE AND DESIGN** 1523 CABRERA, AMALIA 1543 PORTILLO, EMMANUEL J URIAS, RAYNALDO J 1547 1549 GRAY, ROBERT F 1551 OROZCO, SALOMON L 1553 KARIM, ROLAND A RODRIGUEZ, JESUS G RUEGER, ERIC
- 1665 BEAUMONT PALMS CARE CENTER DAVID-KLEIS II LLC LIPPA INSURANCE SERVICES



-

Source EDR Digital Archive

# HIGHLAND SPRINGS AVE 2014

81	MOGHADAM, MARIAM
195	HIGHWAY PATROL CALIFORNIA
217	HILAND SPRINGS IMAGING CENTER
501	BEAUMONT GAS MART INC
	CIRCLE K SHELL
	HIGHLAND SHELL
525	WENDYS INTERNATIONAL INC
635	OREILLY AUTOMOTIVE STORES INC
655	A1 COINS INC
	LABOUNTYS AUTOMOTIVE INC
	SPLASH CAR SPA
701	BEAUMONT CHIROPRACTIC
	BLACKFORD AMBER DC
	CHA, CRAIG A
	CHAMBERLAIN CRAIG A DDS MS
	CHAR LAWRENCE H DDS
	CHAR, LAWRENCE
	CHRISTIAN MOSES D MD
	CHRISTIAN, MOSES D
	CONNELL, BRIAN L
	DERMACULTURE
	HIGHLAND SPRINGS DENTAL
	INLANDPSYCH REDLANDS INC
	JACOB P PAI DDS
	JESSICA WAGNER SABO DDS INC
	LEE VALERIE DDS INC
	LUIB HEALTH SPECIALTY SVCS LLC
	NOMI LEE
	NOMI, LEE
	QUEST DIAGNOSTICS INCORPORATED
	VAN TIEM RENEE DC
	VANTIEM, RENEE
	WESCO MED SUPS & EQP CO INC



-

Source EDR Digital Archive

105	
120	
225	
248	
250	OCCUPANT UNKNOWN,
252	OCCUPANT UNKNOWN,
254	OCCUPANT UNKNOWN,
256	LILLARD, KENNETH M
454	BEAVER, DONNIE C
456	CRENSHAW, RANDY
544	ELLIOTT, RAY
548	ESPINOLUGO, LOT E
555	WOODLEY, FRANCES R
600	BEAUMONT EARLY HEAD START
740	GONZALEZ, JOSE L
756	JOHN S MASONRY
	SHARP, JOHN W
848	OCCUPANT UNKNOWN,
850	OCCUPANT UNKNOWN,
890	BROSTEK, WAYNE
	SEVENTH DAY ADVENTIST
910	SMITH, M
920	BELTRAN, JR
949	QUINTERO, VANIA
967	OCCUPANT UNKNOWN.
969	HOLIDAY, RICHARD
1030	MARTIN KARYI
1051	FRANCO DEAN R
1104	OCCUPANT UNKNOWN
1122	
1126	HERNANDEZ MARIE C
1151	MINYARD WAYNE
1101	
1108	ARMSTRONG DOROTHY
1150	IONES BIANCA
	WHATLEY D
1205	
1200	WOODS AARONI
1209	HERNANDEZ BONALD
1229	RERIVANDEZ, RONALD
1231	SAVATA, FRANK L
1200	
1200	
123/	
1200	
1202	
1274	BUSH J D
1001	
1281	OCCUPANT UNKNOWN,



-

# E 8TH ST 2010 (Cont'd)

1283	BLEACHER, J
1285	CASTILLO, S
	OCCUPANT UNKNOWN,
1291	WILLIAMS, MARION A
1320	COX, SERINA S
1324	RESENDEZ, MARIA
1330	OCCUPANT UNKNOWN,
1335	OCCUPANT UNKNOWN,
	RECORD, BRENDA N
1339	ALCALA, SAMUEL G
	OCCUPANT UNKNOWN,
1350	POTTERS HSE CHRSTN FLLWSHIP CH
1351	LANTRY, SUNNI
1352	MARTINEZ, JUAN A
1355	OCCUPANT UNKNOWN,
1357	BOOTH, JEFFREY
4050	RELI ON US HOME CARE SERVICE
1359	RUBALCAVA, SUSAN R
1365	
13/6	
13/7	HERNANDEZ, MELISSA K
1390	
1394	MEDINA, CLAUDIA
1395	
1390	
1398	
1399	
1402	
1400	ZUNIGA MATTHEW/
1/18	HARRIS SHIRI A
1410	CLARK TOMMY R
1413	HERNANDEZ GLORIA C
1426	ZAYAS MARTIN M
1429	OCCUPANT UNKNOWN
1435	MYERS SHERRI I
1438	SMITH MATTHEW
1442	DUTOIT, DANETTE
1446	MECARAL, ALAN Q
1447	BOWEN, WILLIAM R
1449	MCCULLY. L
1450	ARMENTA, DANIEL
1451	CASALI. TED
1454	NEWHOUSE, ROBERT
1460	MARTINEZ, DAVID A
1462	MORRIS, RANDY
1505	VIGNOLLE, VERNE A
1511	GOMEZ, MIGUEL G
1513	HOQUIST, DANIEL E
1515	GORDON, RICHARD D



-

# E 8TH ST 2010 (Cont'd)

1515	WHILE YOU WERE GONE
1517	LYONS, WILLIAM J
1519	BARNETT, SAMUEL E
1520	BEAUMONT UNIFIED SCHOOL DST
1523	CABRERA, AMALIA
1543	HERNANDEZ, JOE
1547	URIAS, RAYNALDO J
1549	GRAY, ROBERT F
1551	OROZCO, SALOMON L
1553	ALONSO, ALBERTO I
	FLORES, IGNACIO
	KARIM, ROLAND A
	RODRIGUEZ, JESUS G
1665	LIPPA INSURANCE SERVICES



### HIGHLAND SPRINGS AVE 2010

195 **HIGHWAY PATROL CALIFORNIA** 217 HILAND SPRINGS IMAGING CENTER 264 SCHWARTZ STANLEY MD 501 **CIRCLE K SHELL** PALM SPRINGS PETROLEUM VALERO 525 WENDYS INTERNATIONAL INC 635 **OREILLY AUTOMOTIVE INC** 655 LABOUNTYS AUTOMOTIVE INC 701 ARROWHEAD ORTHOPEDIC **BEAUMONT CHIROPRACTIC** BLACKFORD AMBER DC CHA, CRAIG A CHAMBERLAIN CRAIG A DDS MS CHAR LAWRENCE H DDS CHAR, LAWRENCE CHEATHAM-LOTT MARTA L MD CHRISTIAN MOSES D MD CHRISTIAN, MOSES D CONNELL, BRIAN L DERMACULTURE HEALTHLINE CLINICAL LABORATORY HIGHLAND SPRINGS DENTAL HYMAN CHARLES L MD INC INLANDPSYCH REDLANDS INC JACOB P PAI DDS JESSICA WAGNER SABO DDS INC LEE VALERIE DDS INC SABO, JESSICA VAN TIEM RENEE DC WESCO MED SUPS & EQP CO INC



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125	BEAUMONT LIBRARY DISTRICT
225	RECTOR WARDENS VESTRYMEN OF ST
	ST STEPHENS EPISCOPAL
248	MARTINEZ, DARLENE R
252	OCCUPANT UNKNOWN.
254	OCCUPANT UNKNOWN.
256	CLIEFORD DONYELI
454	BEAVER DONNIE C
456	CRENSHAW RANDY
544	CIPRIAN ESTELA
548	
555	WOODLEY FRANCES R
756	
010	
0 <del>4</del> 0 950	
000	
800	
890	
040	
910	UCCUPANT UNKNOWN,
920	
949	
967	OCCUPANT UNKNOWN,
969	MONTES, NUVIE
1030	
1051	FRANCO, DEAN R
	TRINA A FREGOZO
1104	HIGHTOWER, PAUL A
1122	RUVALCABA, JESUS E
1126	HERNANDEZ, MARIE C
1151	OCCUPANT UNKNOWN,
1198	DAHL, JESSICA
1205	OCCUPANT UNKNOWN,
1209	WOODS, AARON L
1215	OCCUPANT UNKNOWN,
1229	HERNANDEZ, RONALD
1231	SAVAYA, FRANK L
1233	PETTIFORD, HELEN
1235	TROUTMAN, NICHOLE C
1260	LARIOS, ALMA
1262	OCCUPANT UNKNOWN,
1274	BUSH, JOHN D
1281	WEBB, SHAWN D
1283	NAVARRO, JOSE J
1310	ROTH, JASON H
1320	SULLIVAN, SERINA S
1324	MURSCHEL, IVA
1330	BATES, CHARLES N
1335	OCCUPANT UNKNOWN,
	RECORD, BRENDA N
1339	ALCALA, SAMUEL G



Source EDR Digital Archive

# E 8TH ST

2005

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(Cont'd)

1351	ROMERO, FERNANDO
1352	MARTINEZ, JUAN A
1355	OCCUPANT UNKNOWN,
1357	OCCUPANT UNKNOWN,
1359	OCCUPANT UNKNOWN,
1365	GLOCK, WILLIAM A
1376	GRIMES, TERRA
1377	GLOCK, ROBERT M
1390	BAGG, JAMES B
1394	MEDINA, MARGARITA
1395	MILLIKEN, DANIEL L
1396	SANCHEZ, PEDRO
1398	OCCUPANT UNKNOWN,
1399	LOPEZ, JUAN
1402	ROSSETTI, TONY
1408	OCCUPANT UNKNOWN,
1422	OCCUPANT UNKNOWN,
1426	RILEY, NATHAN R
1435	MYERS, SHERRI L
1438	RIOS, DONALD L
1442	DUTOIT, DANETTE
1446	NETTLES, MIKE
1447	BOWEN, WILLIAM R
1449	MCCULLY, L
1450	ARMENTA, DANIEL
1451	CASALI, TED
1454	NEWHOUSE, BONNIE L
1460	MARTINEZ, DAVID
1462	GOMEZ, LUPE
1474	COLVIN, BETTY A
1505	VIGNOLLE, VERNE A
1513	HOQUIST, DANIEL E
1515	OCCUPANT UNKNOWN,
	WHILE YOU WERE GONE
1517	LYONS, WILLIAM J
1519	BARNETT, SAMUEL E
1521	SANCHEZ, MANUEL J
1543	HERNANDEZ, JOE
1547	URIAS, RAYNALDO J
1551	OROZCO, SALOMON L
1553	CHATIGNY, DAN C



### HIGHLAND SPRINGS AVE 2005

- 195 HIGHWAY PATROL CALIFORNIA DEPT
- 264 SCHWARTZ STANLEY MD
- 501 LOMA LINDA OIL COMPANY
- 635 CSK AUTO INC
- 655 OCCUPANT UNKNOWN,
- A D T NITE OWL SECURITY INC 701 ARROWHEAD ORTHOPEDIC BARRY S GRAMES MD FAAOS **BEAUMONT CHIROPRACTIC** BLACKFORD, AMBER CHAMBERLAIN CRAIG A DDS MS CHAR LAWRENCE H DDS CHAR, LAWRENCE CHRISTIAN MOSES D MD CLIFFORD MERKEL MD FAAOS CONNELL, BRIAN L DERMACULTURE HEALTHLINE CLINICAL LABORATORY HIGHLAND SPRINGS DENTAL JACOB P PAI DDS JESSICA WAGNER SABO DDS INC JOHN C STEINMANN DO FAOAO LOPER, STEVE T PAI, JACOB P PARTAIN RONALD E PHARMACY PASS PHYSICAL THERAPY RAZOR EDS RAZOR, E RONNY G GHAZAL MD FAAOS



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125	BEAUMONT LIBRARY DISTRICT
756	OCCUPANT UNKNOWN,
850	KIWANIS INTERNATIONAL INC
890	MISSINARY BPTST CHRCH BEAUMONT
920	OCCUPANT UNKNOWN.
949	DYSON RICHARD
967	OCCUPANT LINKNOWN
060	
1030	
1050	BARRON DERRE
110/	HIGHTOWER GEORGE
1104	
1122	
1120	VECT FDCAD
1205	
1231	
4000	
1233	
1260	
1262	ESCOBAR, MANUEL
1274	OCCUPANT UNKNOWN,
1281	OCCUPANT UNKNOWN,
1283	OCCUPANT UNKNOWN,
1285	
1291	OCCUPANT UNKNOWN,
1310	OCCUPANT UNKNOWN,
1316	ROTH, CANDACE R
1320	SULLIVAN, SERINA
1324	MURSCHEL, IVA
1330	OCCUPANT UNKNOWN,
1335	RECORD, BRENDA
1339	OCCUPANT UNKNOWN,
1341	SHAWLER, BILL
1343	OCCUPANT UNKNOWN,
1350	CHERRY VALLEY BRETHREN CHURCH
1351	OCCUPANT UNKNOWN,
1352	MARTINEZ, JUAN
1355	OCCUPANT UNKNOWN,
1357	PAGE, K L
1359	OCCUPANT UNKNOWN,
1365	GLOCK, WILLIAM A
1376	OCCUPANT UNKNOWN,
1380	OCCUPANT UNKNOWN,
1390	BAGG, JAMES B
1394	OCCUPANT UNKNOWN,
1395	OCCUPANT UNKNOWN,
1408	ZUNIGA, DAN
1418	HARRIS, SHIRLEY
1419	JR WELDING SERVICES
	WATKINS, JOSEPH R
1422	OCCUPANT UNKNOWN,



# E 8TH ST

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(Cont'd)

	E	8TH ST	2000	(C
1406				
1420	OCCUPANT UNKNOWN,			
1429				
1435	OCCUPANT UNKNOWN,			
1438	KAUFFMAN, KATHRYN M			
1442	OCCUPANT UNKNOWN,			
1446	OCCUPANT UNKNOWN,			
1447	BOWEN, WILLIE			
1450	OCCUPANT UNKNOWN,			
1451	MILLER, JEAN E			
1460	AVILA, H			
1462	MORENO, ANDREW			
1468	OCCUPANT UNKNOWN,			
1474	COLVIN, BETTY			
1513	KRAUCH, PAT			
1515	GORDON, RICHARD D			
1517	LYONS, WILLIAM J			
1519	OCCUPANT UNKNOWN,			
1521	OCCUPANT UNKNOWN,			
1523	CABRERA, RAMIRO			
1543	MARTINEZ, RUBEN R			
1547	OCCUPANT UNKNOWN,			
1549	OBERNOLTE, LYMAN E			
1551	OROZCO, SALOMON			
1553	CHATIGNY, DANIEL C			
1665	UNIFIED CARE SERVICES	S LLC		



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## HIGHLAND SPRINGS AVE 2000

- 195 HIGHWAY PATROL CALIFORNIA DEPT
- 201 WYLE LABORATORIES INC
- 501 LOMA LINDA OIL COMPANY
- 635 CSK AUTO INC
- 655 LABOUNTYS AUTOMOTIVE INC
- 701 ARROWHEAD ORTHOPEDIC CHAR LAWRENCE H DDS CHRISTIAN MOSES D MD DERMACULTURE GREGORY J DOWNS MD INC NATIONAL HEALTH LABORATORIES PARTAIN RONALD E PHARMACY PRIME CARE MED GROUP NETWRK QAZI MEDICAL GROUP INC



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125	BEAUMONT DISTRICT LIBRARY
225	ST STEPHENS EPISCOPAL
242	WALKER, CHARLES C
256	SCHWARTZ, MERWYN
352	SANTANA ERNESTO
151	BALL GRACES
451	
404	
544	GUSTUSON, SA
548	URIAS, ROBERTAL
756	DEAN, THOMAS W
848	GARCIA, GENARO R
850	MCLAUGHLIN, DONALD W
910	KIGER, JOHN
920	COOPER, ANDREW A
949	OCCUPANT UNKNOWNN
967	WINTERSTEIN, CRAIG
969	GUTIERREZ. E
1030	OCCUPANT UNKNOWNN
1051	OCCUPANT UNKNOWNN
1104	HIGHTOWER CONSTRUCTION
	OCCUPANT UNKNOWNN
	PASS REALTY
1122	
1126	
1151	
1108	
1200	
1200	
1015	
1210	
1229	
1233	
1235	
1237	
1260	STOREY, WINORA
1281	OCCUPANT UNKNOWNN
1283	OCCUPANT UNKNOWNN
1285	LYMAN, RALPH C
1316	NAYLOR, LANCE
1320	OCCUPANT UNKNOWNN
1324	MURSCHEL, IRENE I
1339	AARONSON, A
1341	SHAWLER, WILLIAM D
1343	WOODLAND, REGINA
1350	BANNING, LEAR I
1351	OCCUPANT UNKNOWNN
1355	GRIMES, PETER A II
1357	OCCUPANT UNKNOWNN
1365	GLOCK, WILLIAM A JR
1376	SLAUGHTER, JEREMY
1377	GLOCK, JEAN
	-



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(Cont'd)

1380	CUNNINGHAM, CHARLES B
1390	BAGG, JAMES B
1394	MORENO, ANGEL
1395	OCCUPANT UNKNOWNN
1396	MILES, D
1398	OCCUPANT UNKNOWNN
1399	THOMAS, WILLIAM B
1400	PAIN, CARL
1402	OCCUPANT UNKNOWNN
1418	HARRIS, L
1419	WATKINS, JOSEPH R
1422	HERNANDEZ, G O
1426	MILLER, SAUL
1429	KAMIN, A
1435	GALLUP, STEVEN
1438	OCCUPANT UNKNOWNN
1442	OCCUPANT UNKNOWNN
1446	CALDWELL, GORDON
1447	MATHERS, BETTY
1450	OCCUPANT UNKNOWNN
1451	MILLER, JEAN E
1460	AVILA, H
1462	OCCUPANT UNKNOWNN
1468	OCCUPANT UNKNOWNN
1474	COLVIN, PETE
1511	DOLBEE, JERRY
1513	KRAUCH, PAT
1517	DEYOUNG, P K
1519	BUXTON, WILLIAM L
1523	CABRERA, RAMIRO
1543	MARTINEZ, N S
1547	GUTIERREZ, STEVE
1549	OBERNOLTE, LYMAN E
1551	URUZCU, SALOMUN L
40331	
40379	UCCUPANT UNKNOWNN



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### HIGHLAND SPRINGS AVE 1995

- 501 LOMA LINDA OIL COMPANY
- 635 NORTHERN AUTOMOTIVE CORP
- 655 HIGHLAND SPRINGS CARWASH
- 701 CHRISTIAN MOSES D MD EVANS GEORGE G DDS HYMAN CHARLES L MD INC PARTAIN RONALD E PHARMACY



-

451	
	BAIL, GRACE S
544	GUSTUSON, S A
756	BAZE, THOMAS
848	HODGSON, GEORGE
850	MCLAUGHLIN, DONALD W
1104	HIGHTOWER CONSTRUCTION
1126	CORNER STONE MASONRY
1151	MOORE, HAROLD
1209	PETERSON, JEFF
1235	CASTRO, S
1260	STOREY, WINORA
1285	HAMBY, CLAUDE C
1291	WILLIAMS, CLEMENT
1320	HESTER, JOE B
1324	ARTS GARAGE
1352	DEAN, HELEN
1365	GLOCK, WILLIAM A JR
1376	DOBRATZ, JAMES
1377	GLOCK, JEAN
1380	CUNNINGHAM, CHARLES B
1394	MORENO, ANGEL
1399	THOMAS, WILLIAM B
1400	CARLS AUTO REPAIR SHOP
	PAIN, CARL
1418	HARRIS, LAURIE E
1422	AGLIPAY, MARIANO
1442	MEZA, PEDRO
1460	SKELTON, ROLAND B
1468	MCCALLUM, DOUGLAS
1474	COLVIN, PETE
1513	KRAUCH, PAT
1523	CABRERA, RAMIRO
1543	GUDMUNDSON, C M
1549	OBERNOLTE, LYMAN E
1553	LOVETTE, LEON
	LYMAN, RALPH C



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Source EDR Digital Archive

### HIGHLAND SPRINGS AVE 1992

- 635 NORTHERN AUTOMOTIVE CORP
- 655 HIGHLAND SPRINGS CARWASH

Target Street ✓ Cross Street

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Source

Haines Criss-Cross Directory

E 8TH	ST	1985
		1000

8TH	E 92223 BEAUN	IONT		
125	BEAUMNT DIST LIBRY	845-1357	0	
225	ST STEPHENS EPSCPL	845-1358	+5	
250	DUFFY JOYCE M	845-9351	+5	
252	XXXX	00		
451	RAIL G S	845-5360	8	
454	XXXX	00	-	
544	XXXX	00		
548	XXXX	00		
555	XXXX	00		
756	GRINDSTAFF IVAN	845-3556	1	
848	HODGSON GEO	845-6881	0	
850	MCLAUGHLIN DONALD W	845-2222	0	
890	XXXX	845-7630	+ 5	
949	ELMODE WANDA	845-7980	15	
969	YYYY	00	1.5	
1030	ESTEL GERRY	845-8766	3	
1051	XXXX	00		
1052	XXXX	00		
1104	HIGHTOWER GEORGE A	845-1281	1	
1122	DENZER E G	845-6695	9	
1126	MOSER L R	845-4597	0	
1151	MOORE HAROLD G	845-7558	1	
1198	ECHOLS JEANNIE	845-9320	+5	
	LEE JAS	845-4092	0	
	NORMAN TREASURE	845-6104	10	Ľ
1205	XXXX	00		
1209	MOORE MALCOLM	845-226A	+5	
1215	XXXX	00	-	
1229	CONNER MAXINE	845-4032	9	ſ
1231	BECKER ERNICE	845-3782	7	Ľ
1235	XXXX	00		1
1237	ERICSON WALTER H	845-1245		ſ
1260	LARA DENNIS	845-2461		Ľ
1262	JEFFHEY ELSIE J	845-1376	1	Ľ
1281	WILKINSON EDANK	845-1749	0	L
1283	FISCHER WANDA	845-4927	2	
1285	HAMBY CLAUDE C	845-3912		
1291	WILLIAMS CLEMENT	845-2532		
1310	XXXX	00		
1316	CAMPBELL INEZ R	845-2941	0	
	DAGE INEZ R	845-2941		
1320	HESTER JOE B	845-3675		
1324	ARTS GARAGE	845-2212		L
1330	NASH EARLE R	845-2215		
1335%	GREER ELLEN	845-2836	+5	
1339	XXXX	00		L
1343	IEHOVANE WITNEESEE	00		L
1352	DEAN HARRY	845-3095		L
1355	TEMPLEAH	845-4164		Ľ
1357	XXXX	00		L
1365	GLOCK WM A JR	845-5901	0	L
1376	XXXX	00	-	L
1377	GLOCK WM A	845-3414		L
1380	CUNNINGHAM CHAS	845-3252		
1390	XXXX	00		
1394	LOPEZ BETTY J	845-3560	+5	L
1395	XXXX	00		
1396	BERGAN WALTER J	845-4840		
1398	XXXX	BAE ATOT	~	ſ.
1395	DAIN C	845-2792	0	
1402	YYYY	040-1/63	0	
1408	MARTIN BUTCH	845-2811	+5	Ĺ
1410	XXXX	00	- 4	ſ
1418	HARRIS L E	845-4031	0	
1422	AGLIPAY MARIANO	845-3906	0	
1426	JONES BILL E	845-6298	1	
1434	WINTERS P	845-1312	+5	1
1438	KAUFFMANN SAM	845-1394		
1442	MORENO ANGEL	845-3053	7	
1446	HOCHA IDA	845-3275	8	1
1447	HOBERTSON FRANK	845-4551	+5	ſ
1450	****	00		1
1454	AAAA	00		
1460	SKELTON BOLLAND D	845-1417	4	1
1462	XXXX	00	0	
1474	COLVIN PETE	845-4347	R	
	XXXX	00	0	
1497		845-2860	7	
1497 1513	KAUFFMAN CRAIG	and the local division of the local division		1
1497 1513 1515	KAUFFMAN CRAIG XXXX	00		
1497 1513 1515 1517	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E	00 845-2217	2	1
1497 1513 1515 1517 1519	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX	00 845-2217 00	2	1
1497 1513 1515 1517 1519 1521	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX XXXX	00 845-2217 00 00	2	
1497 1513 1515 1517 1519 1521 1523	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX XXXX CHATIGNY ALBERT	00 845-2217 00 00 845-5783	2	
1497 1513 1515 1517 1519 1521 1523 1540	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX XXXX CHATIGNY ALBERT DYSART DELTON J	00 845-2217 00 00 845-5783 845-3877	2 20	
1497 1513 1515 1517 1519 1521 1523 1540 1543	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX XXXX CHATIGNY ALBERT DYSART DELTON J GUDMUNDSON CRANDALL	00 845-2217 00 845-5783 845-3877 845-1048	2 20	
1497 1513 1515 1517 1519 1521 1523 1540 1543 1547	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX CHATIGNY ALBERT DYSART DELTON J GUDMINDSON CRANDALL BUCHANAN HARRY	00 845-2217 00 845-5783 845-3877 845-1048 845-8610	2 20	
1497 1513 1515 1517 1519 1521 1523 1540 1543 1547 1549	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX CHATIGNY ALBERT DYSART DELTON J GUDMUNDSON CRANDALL BUCHANAN HARRY OBERNOLTE LYMAN E	00 845-2217 00 00 845-5783 845-3877 845-1048 845-8610 845-1878	2 20	
1497 1513 1515 1517 1519 1521 1523 1540 1543 1547 1549 1553	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX XXXX CHATIGNY ALBERT DYSART DELTON J GUDMUNDSON CRANDALL BUCHANAN HARRY OBERNOLTE LYMAN E KARNITZ JAS	00 845-2217 00 845-5783 845-3877 845-1048 845-8610 845-1878 845-1878	2 20	
1497 1513 1515 1517 1519 1521 1523 1540 1543 1547 1549 1553 1575	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX XXXX CHATIGNY ALBERT DYSART DELTON J GUDMINDSON CRANDALL BUCHANAN HARRY OBERNOLTE LYMAN E KARNITZ JAS XXXX	00 845-2217 00 845-5783 845-3877 845-1048 845-8610 845-1878 845-1878 845-4222 00	20	
1497 1513 1515 1517 1519 1521 1540 1543 1547 1549 1553 1575 1575 40331 40329	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX XXXX CHATIGNY ALBERT DYSART DELTON J GUDMUNDSON CRANDALL BUCHANAN HARRY OBERNOLTE LYMAN E KARNITZ JAS XXXX KAMIN ALEXANDER KNAPP MIC	00 845-2217 00 845-5783 845-3877 845-1048 845-1048 845-1878 845-1878 845-1878 845-1878	2 20 50 1	
1497 1513 1515 1517 1521 1523 1540 1543 1547 1549 1553 1575 40331 40379 40545	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX XXXX CHATIGNY ALBERT DYSART DELTON J GUDMUNDSON CRANDALL BUCHANAN HARRY OBERNOLTE LYMAN E KARNITZ JAS XXXX KAMIN ALEXANDER KNAPP MILO DAHLING FRED E	00 845-2217 00 845-5783 845-3877 845-1048 845-8610 845-1878 845-1878 845-1878 845-2053 845-2053	2 20 5 0 1 4 5	
1497 1513 1515 1517 1519 1521 1523 1543 1543 1547 1549 1553 1575 40331 40379 40545 40571	KAUFFMAN CRAIG XXXX CHILDRESS DEAN E XXXX CHATIGNY ALBERT DYSART DELTON J GUDMINDSON CRANDALL BUCHANAN HARRY OBERNOLTE LYMAN E KARNITZ JAS XXXX KARNITZ JAS XXXX KAMIN ALEXANDER KNAPP MILO DAHLING FRED F KYLE JAS	00 845-2217 00 845-5783 845-1048 845-877 845-1048 845-8610 845-8610 845-1878 845-4222 00 845-8434 845-2053 845-7858	2 20 501 45	

Target Street ✓ Cross Street

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Source Haines Criss-Cross Directory

HIGHLAND SPRINGS AVE 1985

	HIGH	LAND SPGS AV	92223
	635	KRAGEN AUTO SUPPLY	845-3186+5
PI	9980	URIAS ROBT JR	845-8962 4
	10050	XXXX	00
1	10600	HIGHLND SPGS RESORT	845-1151 2
21		PANETTA HUGO	845-8579 3
5	10800	STEVENSON RANDAL	845-8844 +5
	13070	BUILDING	-1
1		BROWN GORDON D MD	845-5417
		DESERT HEMATOLOGY	845-6837 4
1		DOCTORS AFTER HRS	845-1870+5
1		EVANS GEO G DDS	845-1712 0
5		GORTON ALFRED W DDS	845-2641
PI		HYMAN CHARLES L MD	845-2624 8
		KLEEN STEVEN R OD	845-2104 2
2		LOPER STEVE T DDS	845-4822 6
2		MAZLUMIAN JORGE MD	845-2624+5
		PASS LAB INC	845-4412
		PASS MEDICAL CENTER	845-4412
1		PAULUS JOHN L MD	845-2624
1		PAYTON ROBT C MD	845-2342
		PEDIATRIC MED GRP	795-3011 3
21		PEDIATRIC MEDCL GRP	845-2624 0
		PILAR GIDEON G MD	845-1622
		QAZI ASHAN MD	845-8856 4
		QAZI MEDICAL GROUP	845-8856
		QAZI NAWAZISH S MD	845-8589 4
		REDLANDS EYE MEDCL	845-2106+5
		REDLANDS EYE MEDCL	845-2104
1		REEVES HOBT M MD	845-3631+5
21		HONALD E P PHARMCST	845-1101 0
2		HUNS PHESNL PHAR	845-1101
		SHAH PHAFUL C MD	045-2024 +5
		SLANET JOHN D MD	845-2104
		YOO JELING CHOO DR	845-1603 0
1	12070	FOO JEONG CHOO DH	043-1005 0
5	13164	VVVV	00
1	13360	2222	00
	15401	ENTURA VALLEY FARMS	845-5600 3
"	10401	STOCKER JOHN	845-5600 1
5	NO #	DYSART DAVID A	845-1947 0
1	NO T	HIGHLAND SPGS OWNES	845-5768+5
	NOT	HIGHLIND SPOS COLF	845-3060 2
	NO #	LU O E JOB CORPS	845-6571 2
	NO #	LOCKHEED CORP	845-1500 2
		35 BUS 9 RES	8 NEW
		00000 01160	
Target Street Cross Street ✓

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# Source Haines Criss-Cross Directory

# E 8TH ST 1981

8TH	E 92223 BEAUM	ONT
125	PEALINANT DIST LIPPPY	845-1357 0
225	STSTEPHENS EPISCPL	845-1358 0
248	XXXX	00
250	XXXX	00
252	XXXX TARER LADONNA G	845-7648+1
355	PARKER H K	845-1508 0
367	XXXX	00
451	BAIL G S	845-5360 8
544	XXXX	00
548	CAHHAGHEH P E	845-2/4/ 3
756	GRINDSTAFF IVAN	845-3556 +1
848	HODGSON GEO	845-6881 0
850	MCLAUGHLIN DONALD W	845-2222 0
890	BEAUMNT MISSNRY CH	845-6889 0
949	XXXX	00
969	XXXX	00
1030	XXXX	00
1051	DAHLBERG WILLIAM C	845-4246 9
1051%	DAHLBERG VAL	845-1869 +1
1104	HIGHTOWER GEORGE A	845-1281+1
1122	DENZER E G	845-6695 9
1126	MOSER L R	845-4597 0
1151	MOORE HAROLD G	845-7558 +1
1198	LEE JAS	845-4092 8
	STEIN MORRIS	845-4471 0
1205	VACCARELLO PALI	845-6314 0
1209	MOORE MALCOLM	845-2268 6
1215	XXXX	00
1229	CONNER MAXINE	845-4032 9
1231	BECKER ERNICE	845-3782 7
1235	LANKFORD A E	845-4461 3
1237	EHICSON WALTER H	845-1245
1260	IEFEREV ELSIE	040-2401 D
1274	XXXX	00
1281	WILKINSON FRANK J	845-1749 0
1283	KALCHERT RICHARD	845-4374 +1
1285	HAMBY CLAUDE C	845-3912
1291	WILLIAMS CLEMENT	845-2532 5
1310	JONES DEBBIE D	845-7856 +1
1310	DAGE INEZ R	845-2941
1320	HESTER JOE B	845-3675 5
1324	ARTS GARAGE	845-2212
1330	NASH EARLE R	845-2215
1335%	QUITMAN CHAS C	845-1595 3
1339	YOUNG GASTON	845-5831 0
1341	XXXX	00
1343	IEHOVAHS WITNESSES	845-2790
1352	DEAN HARRY	845-3095 3
1355	TEMPLE A H	845-4164
1357	XXXX	00
	GLOCK WM & ID	
1365	OLOOK HIM A JH	845-5901 0
1365	XXXX	845-5901 0 00
1365 1376 1377	XXXX GLOCK WM A MORGAN LEWIS	845-5901 0 00 845-3414 845-7485 + 1
1365 1376 1377	XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS	845-5901 0 00 845-3414 845-7485 +1 845-3252
1365 1376 1377 1380 1390	CLOCK WM A GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES	845-5901 0 00 845-3414 845-7485 +1 845-3252 845-6792 9
1365 1376 1377 1380 1390 1394	XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX	845-5901 0 00 845-3414 845-7485 +1 845-3252 845-6792 9 00
1365 1376 1377 1380 1390 1394 1395	GLOCK WM A GH XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BEBOAN ANA A	845-5901 0 00 845-3414 845-7485 + 1 845-3252 845-6792 9 00 845-4455 0
1365 1376 1377 1380 1390 1394 1395 1396 1398	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J BERGAN WALTER J BEFYNOLO KWA	845-5901 0 00 845-3414 845-7485 +1 845-3252 845-6792 9 00 845-4455 0 845-4455 0
1365 1376 1377 1380 1390 1394 1395 1396 1398 1399	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B	845-5901 0 00 845-3414 845-7485 +1 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-5358 0 845-2792 0
1365 1376 1377 1380 1390 1394 1395 1396 1398 1399 1400	XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C	845-5901 0 00 845-3414 845-7485 + 1 845-3252 845-6792 9 00 845-4455 0 845-4840 845-5358 0 845-2792 0 845-1763 8
1365 1376 1377 1380 1390 1394 1395 1396 1398 1399 1400 1402	XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS	845-5901 0 00 845-3414 845-7485 +1 845-3252 90 845-455 0 845-455 0 845-4840 845-2792 0 845-2792 0 845-1763 8 845-4992 5
1365 1376 1377 1380 1390 1394 1395 1396 1398 1399 1400 1402 1408	XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH	845-5901 0 00 845-3414 845-7485+1 845-3252 845-6792 9 00 845-4840 845-4840 845-5358 0 845-2792 0 845-1763 8 845-2792 0 845-1763 8 845-292 10
1365 1376 1377 1380 1394 1395 1396 1396 1398 1399 1400 1402 1408 1410	XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX	845-5901 0 00 845-3414 845-7485+1 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-4840 845-3358 0 845-292 0 845-1763 8 845-2992 5 845-2811 0 00
1365 1376 1377 1380 1390 1394 1395 1396 1398 1399 1400 1402 1408 1410	AXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX HARRIS L E ACLEDATE DEVICE	845-5901 0 00 845-3414 845-7485+1 845-3252 845-6792 9 00 845-4455 0 845-5358 0 845-5358 0 845-5358 0 845-2792 0 00 845-2792 0 00
1365 1376 1377 1380 1394 1395 1396 1398 1399 1400 1402 1402 1402 1404 1410 1418 1422	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM PAIN C VARGA JOS WARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONEE BULL E	845-5901 0 00 845-3414 845-7485+11 845-3252 845-6792 9 00 845-4455 0 845-6792 0 845-4840 845-5788 0 845-2792 0 845-1763 8 845-2992 5 845-2811 0 00 845-2811 0 00 845-4031 0 845-8006 0
1365 1376 1377 1380 1390 1394 1395 1396 1398 1399 1400 1402 1408 1400 1418 1422 1426 1434	ACCOR WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX HARRIS L AGLIPAY MARIANO JONES BILL E ARCHER CURT	845-5301 0 00 845-3414 845-7465+1 845-7465+1 845-4455 0 845-4455 0 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 00 845-4031 0 845-306 0 845-306 0 845-298+1
1365 1376 1377 1380 1394 1395 1396 1398 1398 1398 1399 1400 1402 1408 1402 1408 1410 1418 1422 1426 1438	XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX HARRIS L AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM	845-5901 0 00 845-3414 845-7485+1 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 00 845-2792 0 845-2792 0 00 845-2792 0 845-2792 0 00 845-2792 0 00 845-2994 1 845-2995 1 945-2994 1 845-2995 1 945-2995 1 945-2955 1 945-29555 1 945-29555 1 945-29555 1 945-29555 1 945-295555
1365 1376 1377 1380 1390 1394 1395 1396 1398 1399 1398 1399 1400 1402 1408 1410 1418 1422 1426 1434 1434 1434	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM PAIN C VARGA JOS WARTIN BUTCH XXXX M HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL	845-5301 0 00 845-3414 845-7485+1 845-7485+1 845-7485+1 845-4455 0 845-4455 0 845-4455 0 845-4450 0 845-2310 0 845-2310 0 845-2306 0 845-2306 0 845-2398+1 845-1394 845-333 7
1365 1376 1377 1380 1390 1394 1395 1396 1398 1399 1400 1402 1408 1408 1418 1422 1434 1434 1434 1434 1434	XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX HARRIS L AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA	845-5301 0 00 845-3414 845-7485+1 845-7485+1 845-4455 0 845-4455 0 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-281 0 845-281 0 00 845-281 0 845-281 0 00 845-281 0 845-3053 7 845-3053 7 845-325 8 845-325 8
1365 1376 1380 1390 1394 1395 1396 1398 1398 1399 1400 1402 1408 1410 1418 1422 1426 1434 1438 1446 1450	AXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX	845-5901 0 00 845-3414 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2081 0 00 845-2081 0 845-2081 7 845-3053 7
1365 1376 1377 1380 1390 1394 1395 1396 1398 1398 1398 1398 1400 1402 1400 1402 1404 1410 1418 1426 1438 1442 1446 1450 1451	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM PAIN C VARGA JOS WARTIN BUTCH XXXX W HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASGINC MANOY	845-5901 0 00 845-3414 845-7485+11 845-252 845-6792 9 00 845-4455 0 845-5358 0 845-5358 0 845-2792 0 845-1763 8 845-2792 0 845-2792 0 00 845-2811 0 00 845-298+11 845-1965+1 845-1965+1 845-1965 7 845-2734 0 845-7234 0 845-72
1365 1376 1377 1380 1394 1395 1395 1395 1398 1399 1400 1402 1408 1410 1408 1410 1422 1426 1434 1434 1434 1451	GLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILL E AGLIPAY MARIANO JONES BILL E AGLIPAY MARIANO JONES BILL E AGLIPAY MARIANO JONES BILL E AGCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASSING NANCY SCHELB THOS S	845-5301 0 00 845-3414 845-7465+1 845-7465+1 845-7465+1 845-4455 0 845-4455 0 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-298+1 845-303 0 845-3050 7 845-3275 8 00 845-7234 0 845-7234 0 845-7254 0
1365 1376 1377 1380 1390 1394 1395 1396 1398 1398 1398 1398 1398 1400 1402 1402 1402 1402 1402 1402 1402	AXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B	845-5301 0 00 845-3414 845-7485+1 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-4558 0 845-2792 0 845-2792 0 845-2792 0 845-2981 0 00 845-2980 0 845-2981 0 845-2981 0 845-3053 7 845-3053 7 845-3053 7 845-3053 7 845-3755 9 845-5755 9 845-191 0 845-191 0 845-1
1365 1377 1380 1390 1394 1395 1396 1398 1399 1400 1402 1408 1402 1408 1402 1408 1426 1426 1450 1451 1450 1451	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX WARGA JOS MARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILLE ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B LATHOM F GEN ENGARG	845-5901 0 00 845-3414 845-7485+1 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2982 1 00 845-2982 +1 845-3053 7 845-3275 8 845-3275 9 845-5275 9 845-7275
1365 1377 1380 1394 1395 1395 1396 1398 1399 1400 1402 1408 1412 1408 1412 1422 1408 1418 1422 1424 1450 1451 1451	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX MARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B LATHOM FGEN	845-54901 0 00 845-3414 845-7465+1 845-7465+1 845-7465+1 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-2792 0 845-173 8 845-2811 0 00 845-4992 5 845-2811 0 00 845-4992 5 845-2811 0 00 845-4992 5 845-2811 0 00 845-3906 0 845-298 +1 845-1934 845-1934 8 845-1934 8 845-1934 8 845-1934 1 845-1934 1 845-1934 1 845-1934 1 845-1934 1 845-1934 1 845-1934 1 845-1934 1 845-1934 0 845-755 8 00 845-755 8 00 845-755 8 00 845-755 8 00 845-755 8 00 845-744 7 845-1934 0 845-1934 0
1365 1376 1377 1380 1390 1394 1395 1396 1398 1398 1398 1398 1398 1398 1398 1400 1402 1402 1402 1402 1402 1402 1402	SLOOK WIN A SH XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX HARRIS L AGLIPAY MARIANO JONES BILL E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX SCHELB THOS SCHELB THOS S SCHELB THOS S SCHELD THOS S SCHELD THOS S	845-5301 0 00 845-3414 845-7485+1 845-7485+1 845-6792 9 00 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2793 0 845-2811 0 845-2811 0 845-3053 7 845-275 9 845-275 9
1365 1376 1377 1380 1394 1395 1396 1398 1398 1398 1398 1398 1402 1402 1402 1402 1402 1402 1402 1402	SILVER AND SAN XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX VARGA JOS MARTIN BUTCH XXXX HARRIS LE AGLIPAY MARIANO JONES BILLE ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B LATHOM FAT	845-5301 0 00 845-3414 845-3454 845-3455 1 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-2792 0 845-3053 7 845-3053 7 845-3053 7 845-3053 7 845-3275 9 845-575 9 845-575 9 845-575 9 845-575 9 845-575 9 845-575 9 845-575 9 845-3275 0 845-7744 0 845-3275 0 845-7744 0 845-3275 0 845-7744 0 845-3275 0 845-7724 0 845-7724 0 845-7724 0 845-775 9 845-7724 0 845-775 9 845-7724 0 845-7724 0 8
1365 1377 1380 1397 1394 1395 1396 1396 1398 1398 1398 1398 1398 1398 1400 1402 1408 1410 1418 1422 1426 1424 1450 1455 1455 1455 1455 1455 1455 145	GLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS WARTIN BUTCH XXXX M HARRIS L E AGLIPAY MARIANO JONES BILLE ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B LATHOM T GEN ENGING COLVIN PETE XXXX KAUFFMAN CRAIG ALLEN JOHN XXXX	845-54901 0 00 845-3414 845-7465+1 845-7465+1 845-7465+1 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-2792 0 845-173 8 845-2811 0 00 845-4992 5 845-2811 0 00 845-4992 5 845-2811 0 00 845-298 +1 845-3906 0 845-3275 8 00 845-7234 0 845-7234 0 845-7234 0 845-7234 0 845-7234 0 845-7426 7 845-4417 9 845-44716 0 00 845-84716 0 0
1365 1376 1377 1380 1390 1394 1395 1396 1398 1398 1398 1398 1398 1400 1402 1402 1402 1402 1402 1402 1402	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS WARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KAUFFMANN GEN ROCHA IDA XXXX KAUFFMAND B SCHELB THOS S SCHELB THOS S SCHELD NOLAND B LATHOM T GEN ENGNRG COLVIN PETE XXXX KAUFFMAN CRAIG ALLEN JOHN XXXX	845-5301 0 00 845-3414 845-7485+1 845-7485+1 845-7485+1 845-4750 845-4455 0 845-4455 0 845-45358 0 845-2732 0 845-2732 0 845-2732 0 845-2811 0 00 045-4031 0 845-2811 0 845-3053 7 845-3053 7 845-375 9 845-375 9 845-375 9 845-375 9 845-375 9 845-375 9 845-374 0 845-375 9 845-375 9 845-375 9 845-376 9 845-377 8 00 845-376 9 845-377 8 00 845-376 9 845-377 8 00 845-377 8 00 845-377 8 00 845-377 8 00 845-377 8 00 845-377 8 00 845-376 9 845-347 6 00 845-347 7 845-347 7 9 845-347 7 8 845-347 7 9 845-347 7 8 8 8 8 9 8 8 8 8 8 8 8 8 8 8 8 8 8
1365 1377 1380 1390 1394 1395 1396 1398 1398 1398 1402 1402 1402 1402 1402 1402 1402 1402	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX VARGA JOS MARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILLE ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B LATHOM FAN CRAIG ALLEN JOHN XXXX XXXX XXXX	845-5301 0 00 845-3414 845-3454 845-3454 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2061 0 845-3063 7 845-3053 7 845-3054 7 845-3054 7 845-3057 9 845-3057 9 845-30
1365 1377 1380 1394 1394 1395 1396 1398 1399 1399 1399 1400 1402 1408 1410 1418 1422 1426 1424 1445 1445 1451 1454 1455 1455 1515 1517 1519 1523	SLOOK WIN S ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM PAIN C VARGA JOS WM THOMAS WM B PAIN C VARGA JOS WARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KAUFANN SAM MORENO ANGEL ROCHA IDA XXXX SKELTON ROLAND B LATHOM F GEN ENGING COLVIN PETE XXXX KAUFFMAN CRAIG ALLEN JOHN XXXX XXXX XXXX	845-5301 0 00 845-3414 845-7465+1 845-7465+1 845-7465+1 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-2792 0 845-173 8 845-2811 0 00 845-4992 5 845-2811 0 00 845-4992 5 845-2811 0 00 845-4992 5 845-2811 0 00 845-4992 5 845-2811 0 00 845-2811 0 00 845-4992 5 845-2811 0 00 845-3275 8 00 845-7234 0 845-7234 0 845-7234 0 845-7234 0 845-1491 0 845-1491 0 845-4347 6 00 845-4716 0 00 00 00 00
1365 1376 1377 1380 1394 1395 1396 1398 1398 1398 1398 1398 1399 1400 1402 1402 1402 1402 1402 1402 1402	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KAUFMANN SAM MORENO ANGEL ROCHA IDA XXXX SCHELB THOS S SCHELB THOS S SCHELB THOS S SKELTON ROLAND B LATHOM T GEN ENGNRG COLVIN PETE XXXX KAUFFMAN CRAIG ALLEN JOHN XXXX XXXX XXXX XXXX XXXX XXXX XXXX X	845-5301 0 00 845-3414 845-7485+1 845-7485+1 845-6792 9 00 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2811 0 845-2811 0 845-2801 0 845-2805 7 845-275 9 845-275 9 845-275 9 845-275 9 845-275 9 845-275 9 845-275 9 845-275 9 845-275 9 845-2445 0 845-2860 7 845-2860
1365 1377 1380 1390 1394 1395 1396 1398 1399 1402 1402 1402 1402 1402 1402 1402 1402	SUCON WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX MARTIN BUTCH XXXX BARTIN BUTCH XXXX HARRIS LE AGLIPAY MARIANO JONES BILLE ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B LATHOM FETE XXXX KAUFFMAN CRAIG ALLEN JOHN XXXX XXXX XXXX XXXX XXXX XXXX XXXX X	845-5301 0 00 845-3414 845-3454 845-3454 845-3455 1 845-3455 0 845-4850 0 845-4850 0 845-4850 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2081 0 00 845-3063 7 845-3053 7 845-3053 7 845-3053 7 845-3234 0 845-3234 0 845-3234 0 845-3255 9 845-57234 0 845-3257 8 845-327 0 845-3277 0 845-3877 0 845-3853 845-3853 845-3853 845-3853 845-3853 845-3853 845-
1365 1377 1380 1394 1395 1396 1398 1398 1398 1398 1398 1398 1400 1402 1408 1410 1418 1422 1426 1412 1426 1451 1454 1450 1455 1515 1515 1517 1519 1523 1540 1543 1547	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS WARTIN BUTCH XXXX B HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KAUFFMANN GANGEL ROCHA IDA XXXX SKEWD ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B LATHOM T GEN ENGING COLVIN PETE XXXX XXXX XXXX XXXX XXXX XXXX XXXX	845-5301 0 00 845-3414 845-7465+1 845-7465+1 845-7465+1 845-3252 845-6792 9 00 845-4840 845-4850 845-4850 845-2811 0 00 845-4992 5 845-2811 0 00 845-2811 0 00 845-3906 0 845-2811 0 00 845-3906 0 845-2811 0 00 845-3906 0 845-2877 8 945-4417 9 845-4417 9 845-4417 9 845-4417 0 845-1491 0 845-1491 0 845-3275 8 00 845-7234 0 845-7234 0 845-7234 0 845-7234 0 845-7234 0 845-737 0 845-737 0 845-3877 0 845-3877 0 845-3877 0 845-3877 0 845-3877 0 845-3877 0 845-3877 0
1365 1376 1377 1380 1390 1394 1395 1396 1398 1398 1398 1399 1400 1402 1402 1402 1402 1402 1402 1402	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS WARTIN BUTCH XXXX HARRIS L AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHAIDA XXXX KAUFMANN SAM MORENO ANGEL ROCHAIDA XXXX SCHELB THOS S SKELTON ROLAND B LATHOM T GEN ENGNRG COLVIN PETE XXXX KAUFFMAN CRAIG ALLEN JOHN XXXX XXXX XXXX XXXX XXXX XXXX XXXX X	845-5301 0 00 845-3414 845-7485+1 845-7485+1 845-6792 9 00 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2781 0 845-2781 0 845-2845 1 845-3053 7 845-2725 0 845-2725 0 845-2860 7 845-2860 7 845-2877 0 845-2877 0 845-2872 0
1365 1377 1380 1394 1395 1396 1395 1398 1399 1402 1402 1402 1402 1402 1402 1402 1402	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX MARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILLE ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B LATHOM FETE XXXX KAUFFMAN CRAIG ALLEN JOHN XXXX XXXX XXXX XXXX XXXX DYSART DELTON J GUDMUNDSON C BARNES TALMADE D MORTH AM VAN LINES OBERNOLTE LYMAN E XXXX	845-5301 0 00 845-3414 845-7485+1 845-3252 845-6792 9 00 845-4455 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-298+1 845-1965+1 845-3053 7 845-3053 7 845-3053 7 845-3053 7 845-3234 0 845-3234 0 845-7234 0 845-720 0
1365 1377 1380 1394 1395 1396 1398 1398 1398 1398 1398 1398 1398 1400 1402 1408 1410 1418 1422 1426 1412 1426 1451 1454 1455 1517 1519 1521 1543 1547 1549 1553	GLOOK WIN B ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS WARTIN BUTCH XXXX WALTER HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KAUFFMANN GANGEL ROCHA IDA XXXX SKELTON ROLAND B LATHOM FETE XXXX KAUFFMAN CRAIG ALLEN JOHN XXXX XXXX XXXX XXXX XXXX XXXX XXXX X	845-5301 0 00 845-3414 845-7465+1 845-7465+1 845-7465+1 845-3252 845-6792 9 00 845-4840 845-4850 845-4850 845-2811 0 00 845-4992 5 845-2811 0 00 845-2811 0 00 845-2811 0 00 845-3906 0 845-2811 0 00 845-3906 0 845-2811 0 045-4031 0 845-3037 0 845-7234 0 845-7237 0 845-7237 0 845-737 0 845-8377 0 845-3877 0 845-3877 0 845-3877 0 845-3877 0 845-1878 0 00
1365 1376 1377 1380 1394 1395 1396 1398 1398 1398 1398 1398 1398 1399 1400 1402 1402 1402 1402 1402 1402 1402	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS WARTIN BUTCH XXXX HARRIS L AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHAIDA XXXX KANGE CURT KAUFFMANN SAM MORENO ANGEL ROCHAIDA XXXX SCHELB THOS S SKELTON ROLAND B LATHOM T GEN ENGNRG COLVIN PETE XXXX KAUFFMAN CRAIG ALLEN JOHN XXXX XXXX XXXX XXXX XXXX XXXX XXXX X	845-5301 0 00 845-3414 845-7485+1 845-7485+1 845-7485+1 845-7485+2 845-7485+1 845-7485+0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2811 0 845-2811 0 845-2811 0 845-2828 1 845-2828 1 845-2828 1 845-2828 1 845-2860 7 845-2860 7 845-2860 7 845-2860 7 845-2860 7 845-2860 7 845-2860 7 845-2860 7 845-2860 7 845-287 0 845-287 0
1365 1376 1377 1380 1394 1395 1396 1398 1398 1399 1400 1402 1402 1402 1402 1402 1402 1402	SLOOK WIN BON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS MARTIN BUTCH XXXX MARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILLE ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KEMP ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B LATHOM FETE XXXX KAUFFMAN CRAIG ALLEN JOHN XXXX XXXX XXXX XXXX XXXX XXXX DYSART DELTON J GUDMUNDSON C BARNES TALMADED D MORTH AM VAN LINES OBERNOLTE LYMAN E XXXX KARTIZ JAMES CHILDRESS DEAN E	845-5301 0 00 845-3414 845-7485+1 845-3252 845-6792 9 00 845-4455 0 845-4358 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-298+1 845-1965+1 845-298+1 845-3053 7 845-27234 0 845-27234 0 845-2723 0 845-27234 0 845-27234 0 845-2723 0 845-272 0 845-222 1 0 00 00 00 00 00 00 00 00 00
1365 1377 1380 1397 1394 1395 1396 1398 1398 1398 1398 1398 1398 1398 1400 1402 1408 1410 1418 1422 1426 1422 1426 1451 1454 1450 1455 1517 1519 1521 1540 1543 1547 1549 1551 1553 1547	SLOOK WIN A ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS WARTIN BUTCH XXXX M HARRIS L E AGLIPAY MARIANO JONES BILL E ARCHER CURT KAUFFMANN SAM MORENO ANGEL ROCHA IDA XXXX KAUFFMANN GANGEL ROCHA IDA XXXX SKEWD ARTHUR A MASSING NANCY SCHELB THOS S SKELTON ROLAND B LATHOM T GEN ENGANG COLVIN PETE XXXX XXXX XXXX XXXX XXXX XXXX XXXX	845-5301 0 00 845-3414 845-7465+1 845-7465+1 845-7465+1 845-3252 845-6792 9 00 845-4840 845-4850 845-4850 845-2811 845-2811 845-2811 845-3906 0 845-2811 845-3906 0 845-2811 845-3906 0 845-2811 845-3906 0 845-2811 845-3037 0 845-7234 0 845-7237 0 845-7237 0 845-7237 0 845-7237 0 845-3877 0 845-3877 0 845-3877 0 845-3877 0 845-2872 0 00 845-3877 0 845-2872 0 00 845-2872 0 845-2872 0 00 845-2872 0 845-2872 0 00 845-2872 0 845-2872 0 845-28
1365 1376 1377 1380 1394 1395 1398 1398 1398 1398 1398 1398 1398 1400 1402 1402 1402 1402 1402 1402 1402	GLOOK WIN B ON XXXX GLOCK WM A MORGAN LEWIS CUNNINGHAM CHAS BAGG JAMES XXXX GRIIMES RITA A BERGAN WALTER J REYNOLDS WM THOMAS WM B PAIN C VARGA JOS WARTIN BUTCH XXXX HARRIS L E AGLIPAY MARIANO JONES BILL E AGCHA IDA XXXX KAUFFMAN CANGE ALLEN JOHN XXXX XXXX XXXX XXXX XXXX XXXX XXXX X	845-54901 0 00 845-3414 845-7485+1 845-6792 9 00 845-4455 0 845-4455 0 845-4455 0 845-2792 0 845-4455 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2792 0 845-2811 0 845-2812 0



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Target StreetCross Street

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<u>Source</u> Haines Criss-Cross Directory

#### HIGHLAND SPRINGS AVE 1981

HIGH	LAND SPGS AV	92223
BEAL	JMONT	JEEEO
675	HIGHLND SPGS REALTY	845-7343 0
695	HIGHLND SPGS MBL HM	845-1238 9
9980	CASTANON DAVID	845-1275+1
	CASTANON RICK	845-1275+1
	HIGHLND SPGS RESORT	845-1151 0
10050	XXXX	00
10600	COOPER & TRUST DEED	845-4666 0
	ROSIN HOWARD	845-4666 0
10800	MNOTECINOS JAIME L	845-4047 +1
13070	BUILDING	010 1011 11
	BROWN GORDON D MD	845-5417
	EVANS GEO G DDS	845-1712 0
	FISCHBACH JOHN E MD	845-5448
	GORTON ALFRED W DDS	845-2641
	HYMAN CHARLES L MD	845-2624 8
	KAY DAVID A	845-2104+1
	KELEN STEVEN R	845-2104+1
	LEE MOON MD	845-7225 0
	LOPER STEVE T DDS	845-4822 6
	PASS CLNCL LABAXRAY	845-4412
	PASS MEDICAL CENTER	845-4412 0
	PAULUS JOHN I MD	845-2624 3
	PAYTON BORT C MD	845-2342
	PEDIATRIC MED GROUP	845-2624 0
	PILAR GIDEON G MD	845-1622 5
	REDLAND EYE MED GRP	845-2104
	RONS PRESNL PHAR	845-1101 6
	SLANEY JOHN D MD	845-2104
	TARTER ROBERT C MD	845-2104
	WANG HARRY C MD	845-2624 9
	YOO JEUNG CHOO DR	845-1603 0
	YOUNG JOSEPH O MD	845-5317 0
13070		
13164	XXXX	00
13360	MONTGOMERY DONNIE	845-2300 +1
13366	CHEVRON STNDRD STNS	845-9073 6
	ONEALS CHVRN SRV CN	845-4624+1
	ONEALS TOWING SERVC	845-4060 0
13600	HARDY JUSTEEN	845-7104 0
	OCHOA RAY J	845-5434 +1
	POPE JOE MRS	845-7104 0
15401	FUTURA VALLEY FARMS	845-5600+1
	STOCKER JOHN	845-5600 + 1
NO #	DYSART DAVID A	845-1947 (
NO #	HIGHLND SPGS VLG	845-5768
NO #	LUCIA JOE DAIRY	845-1500 (
NO #	WESTENGARD JAS C	845-2438 :
NO #	ZILZ ROBT	845-3079 (
*	32 BUS 14 RES	10 NEW

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<u>Source</u> Haines Criss-Cross Directory

HIGHLAND SPRINGS AVE 1975

HIGHLAND	SPGS	AV	92223	BEAUM
9980*HIG	ILND S	PGS	RESORT	845-11
13070BL	JILDIN	IG		
*BROM	IN GOR	DON	D MD	845-54
12 *DERM	ATOLG	Y MD	CL GRP	845-26
*F150	HBACH	JUH	IN E ML	1845-54
* GILF	OKD H	UWAR	UMMU	845-20
*GUKI	UN AL	PREU	W UUS	845-20
12 +6011	LIEB	BERN	ARU ML	845-20
* HTMA	IN CHA	5 1	0	845-20
+JUH	SUN L	AM		842-20
12 + JUHA	IDMICK	DACE	TAMO	1045-20
+ HOC	CLIDE	OT D	MD	845-26
#DACC	GILDE	KI P	BEVDAY	045-26
*PASS	MEDI	CAL	CENTER	845-44
# DALL	US IO	LAL I	MD	845-24
*DAVI	ION PO	INT C	MD	845-22
*PED1	ATRIC	MOC	CPUID	845-25
*PIL A	P CIO	EON	C MD	845-16
#REDI	AND F	VE M	ED GRR	845-21
# SCHN	ITTTER	HAR	OLD MD	845-22
* SCH	ARTZ	LEON	E MD	845-26
*SLAN	EY JO	HN D	MD	845-21
*TART	ER RO	BERT	C MD	845-21
*WEST	J RO	BT M	D	845-26
8 *YOUN	IG JOS	EPH	O MD	845-53
13070				
13164 WILK	INS M	M		845-33
13366*STAN	DARD	STNS	INC	845-90
NO # DYSA	RT DA	VID	A	845-19
NO # HIGH	LAND	SPGS	VLG	845-31
NO # OCHO	A RAY	J		845-54
NO # WEST	ENGAR	D J	R	845-11
NO # WEST	ERGAR	D JA	SC	845-2.
NO # WEST	TPARKS	COF	RP	845-3
NO # ZIL	ROB1	Г		845-3
* 28	BUS	6	RES	10 NE
		9		

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# Source Haines Criss-Cross Directory

# E 8TH ST 1971

8TH E 92223 BEAUMONT	
125*BEAUMONT DIST LIBR	¥845-13
225*EPSCPL ST STEPHENS	845-13
256 RAINEY MARGARET	845-14
355 ROOT FRED T	845-39
451 THOMAS D	845-23
544 POSHEK CECILIA J	845-33
555 WOODLEY EARL	845-23
756 KESSLER WALTER T	845-35
850 MCLAUGHLIN DONALD	845-22
+VOGUE BEAUTY SALON	845-22
890*CHURCH OF CHRIST	845-14
967 DAWSON ROGER	845-5
1030 TRIPEPT GIUSEPPE	845-41
1052 FINE C E	845-33
1122 HARTER E L	845-2:
1126 MOSER L R	845-45
1209 MOTHERSOLE MARLE	845-22
1215 BECKETT JAS H	845-34
1237 ERICSON WALTER H	845-12
1260 CARPENTER CARL	845-48
1262 JEFFREY ELSIE J	845-13
1281 WILKINSON FRANK J	845-17
1283 LOCKWOOD GEO F	845-56
1285 HAMBY CLAUDE C	845-39
1291 BEMIS F M MRS	845-43
1310 CARTER HENRY D	845-23
1316 DAGE INEZ R	845-29
1320 CASEY CHAS	845-47
1324*ARTS GARAGE	845-22
1330 NASH EARLE R	845-22
1341 KIZER R C	845-14
1343 PRATHER JOHN F	845-17
1350*JEHOVAHS WITNESSES	845-27
1352 GRENIER PHILIP	845-33
1376 CROOK LEON E	845-13
1377 CROOK REX W	845-56
GLOCK WM A	845-34
1380 CUNNINGHAM CHAS	845-32
1390 LAYMAN B B	845-19
1395 GRIMES TOM	845-15
1396 BERGAN WALTER J	845-48
1399 THOMAS WM B	845-27
1400 DICKEY GLADYS H	845-17
1410*WEATHERS AUTOMOTIV	E845-14
WEATHERS F L	845-14
1418 HARRIS L E	845-40
1422 AGLIPAY MARIANO	845-24
ONKEN ARNOLD	845-27
1442 MESA ANDREW	845-52
MESA SYLVIA	845-52
1450 GRACE LUELLA	845-49
1451 KEMP ARTHUR	845-21
1460 SKELTON ROLAND B	845-14
1462 RAINS L S	845-25
1474 SCHATZ ARTHUR A	845-56
1515 ALLEN JOHN	845-4
1519 CROOK HOMER L	845-2
1521 SANCHEZ MANUEL J	845-2
1523 STOBART JOHN M	845-5
1540 MELTON EDW T	845-2
1547 ROY LOUIS	845-1
1549 OBERNOLTE LYMAN E	845-11
1551 REZAC KARL	845-4
1553 BAUMGARTEN SAML	845-1
40379 DODDER GREGORY	845-3
40901 FORSTER HELEN	845-4
*HY LOND CNVLSCT HO	\$845-3
* 9 BUS 73 RES	

Target Street

Cross Street

Source Haines Criss-Cross Directory

HIGHLAND SPRINGS AVE 1971 HIGHLAND SPGS AV 92223 BEAUMNT 13070 .. BUILDING \*BANNING DENTAL LAB 845-1019 \*BROWN GORDON D MD 845-5417 \*CARSON JOHN W JR MD845-2624 12 \*DERMATOLGY MDCL GRP845-2696 \*FISCHBACH JOHN E MD845-5448 \*GORTON ALFRED W DDS845-2641 12 \*GOTTLIEB BERNARD MD845-2696 12 \*JOHNSON LOWELL A MD845-2696 \*MCCORMICK ROBT A MD845-2624 \*MCKENZIE KENNETH MD845-1622 9 \*MOE GILBERT P MD 845-2665 \*PASS CLNCL LABEXRAY845-4412 \*PASS MEDICAL CENTER845-4412 \*PAULUS JOHN L MD 845-2624 \*PAYTON ROBT C MD 845-2342 \*PEDIATRIC MDCL GRUP845-2624 \*REDLAND EYE MED GRP845-2104 \*SLANEY JOHN D MD 845-2104 \*TARTER ROBERT C MD 845-2104 \*TERRACINA OPTICAL 845-2106 \*THOMPSON PRESL PHAR845-1601 \*WEGNER KENNETH J MD845-2696 \*WEST J ROBT MD 845-2696 \*WOODS JAS DDS 845-2641 8 \*YOUNG JOSEPH 0 MD 845-5317 13070 ... 13360\*ROMBERG SHELL SERV 845-3038 \*SHELL ROMBERG SERV 845-3038







Proposed Fuel Station SWC 8th Street/Highland Springs Avenue Beaumont, CA 92223

Inquiry Number: 5914075.3 December 20, 2019

# **Certified Sanborn® Map Report**



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

# Certified Sanborn® Map Report

# Site Name:

**Proposed Fuel Station** SWC 8th Street/Highland Sprin Beaumont, CA 92223 EDR Inquiry # 5914075.3

# Client Name:

Salem Engineering Group 4729 West Jacquelyn Ave Fresno, CA 93722 Contact: Reily Rivera



12/20/19

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Salem Engineering Group were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

### Certified Sanborn Results: Certification # AB9D-4A5E-B250 PO# NA 3-419-1167 Project

# UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results Certification #: AB9D-4A5E-B250

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

	Library of Congress	
_		

University Publications of America

EDR Private Collection

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APPENDIX



# **Proposed Fuel Station**

SWC 8th Street/Highland Springs Avenue Beaumont, CA 92223

Inquiry Number: 5914075.2s December 20, 2019

# The EDR Radius Map<sup>™</sup> Report with GeoCheck®



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

FORM-LBC-LMI

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# **GEOCHECK ADDENDUM**

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*Thank you for your business.* Please contact EDR at 1-800-352-0050 with any questions or comments.

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A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### TARGET PROPERTY INFORMATION

### ADDRESS

SWC 8TH STREET/HIGHLAND SPRINGS AVENUE BEAUMONT, CA 92223

### COORDINATES

Latitude (North):	33.9323170 - 33° 55' 56.34''
Longitude (West):	116.9476060 - 116° 56' 51.38"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	504842.4
UTM Y (Meters):	3754458.5
Elevation:	2605 ft. above sea level

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: Version Date: 5629739 BEAUMONT, CA 2012

### AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: Source:

20140530 USDA

# Target Property Address: SWC 8TH STREET/HIGHLAND SPRINGS AVENUE BEAUMONT, CA 92223

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	PASS SHELL SERVICE	507 HIGHLAND SPRINGS	EDR Hist Auto	Lower	121, 0.023, SE
A2	ULTRAMAR S S	501 HIGHLAND SPRINGS	LUST	Lower	129, 0.024, SE
A3	ULTRAMAR SERVICE STA	501 HIGHLAND SPRINGS	LUST, CHMIRS, CERS	Lower	129, 0.024, SE
A4	CHEVRON STATION #655	501 HIGHLAND SPRINGS	CERS HAZ WASTE, CERS TANKS, HAZNET, CERS	Lower	129, 0.024, SE
A5	LOMA LINDA OIL COMPA	501 HIGHLAND SPRINGS	EDR Hist Auto	Lower	129, 0.024, SE
A6	BEAUMONT GAS MART IN	501 HIGHLAND SPRINGS	RCRA NonGen / NLR	Lower	129, 0.024, SE
A7	ULTRAMAR/LOMA LINDA	501 HIGHLAND SPRINGS	UST	Lower	129, 0.024, SE
<b>B</b> 8	DEUTCH ELEMENTARY SC	8TH/ALLEGHENY	ENVIROSTOR, SCH	Higher	341, 0.065, West
9	SAN GORGONIO MEMORIA	600 NORTH HIGHLAND S	ENVIROSTOR	Lower	435, 0.082, ESE
C10	MOBIL 18-EWF	300 HIGHLAND SPRINGS	LUST	Lower	450, 0.085, SSE
C11	CHEVRON STATION #9-4	290 HIGHLAND SPRING	HIST CORTESE	Lower	465, 0.088, SSE
C12	HIGHLANDS SPRINGS EX	655 HIGHLAND SPRINGS	SWEEPS UST	Lower	558, 0.106, South
C13	HIGHLAND SPRINGS EXP	655 HIGHLAND SPRGS A	CERS HAZ WASTE, CERS TANKS, CERS	Lower	558, 0.106, South
C14	HIGH SAND INC DBA SP	655 HIGHLAND SPRINGS	RCRA NonGen / NLR	Lower	558, 0.106, South
C15	HIGHLAND SPRINGS EXP	655 HIGHLAND SPRGS A	AST	Lower	558, 0.106, South
B16	SUNDANCE ELEMENTARY	8TH STREET/XENA AVEN	ENVIROSTOR, SCH	Higher	566, 0.107, WNW
C17	CALIFORNIA HIGHWAY P	195 HIGHLAND SPRINGS	RCRA NonGen / NLR	Lower	603, 0.114, SSE
C18	CALIFORNIA HIGHWAY P	195 HIGHLAND SPRINGS	CERS HAZ WASTE, CERS TANKS, HAZNET, CERS	Lower	603, 0.114, SSE
C19	CALIF HWY PATROL/ SA	195 HIGHLAND SPRINGS	UST	Lower	603, 0.114, SSE
D20	LOMA LINDA UNIVERSIT	81 HIGHLAND SPRINGS	RCRA NonGen / NLR	Lower	734, 0.139, SSE
E21	EXPRESS LUBE AND CAR	1560 E 6TH ST	CERS HAZ WASTE, CERS TANKS, CERS	Lower	786, 0.149, SSW
E22	EXPRESS LUBE US INC	1560 E 6TH ST	RCRA NonGen / NLR	Lower	786, 0.149, SSW
E23	EXPRESS LUBE AND CAR	1560 E 6TH ST	AST	Lower	786, 0.149, SSW
D24	BEAUMONT GAS MART	1696 E 6TH ST	CERS HAZ WASTE, CERS TANKS, HAZNET, CERS	Lower	804, 0.152, South
D25	ARCO #5463	1696 6TH ST	LUST, HIST CORTESE	Lower	804, 0.152, South
D26	ARCO PRODUCTS COMPAN	1696 E 6TH ST	HIST UST, HAZNET	Lower	804, 0.152, South
D27	PRESTIGE STATIONS IN	1696 E 6TH ST	RCRA NonGen / NLR, FINDS, ECHO	Lower	804, 0.152, South
D28	TRAILSIDE GENERAL ST	1696 E 6TH ST	HIST UST	Lower	804, 0.152, South
D29	ARCO AM/PM MINI MARK	1696 E SIXTH ST	SWEEPS UST	Lower	804, 0.152, South
D30	ARCO #5463	1696 SIXTH ST	LUST, CERS	Lower	804, 0.152, South
D31	AM/PM MINI MARKET #5	1696 E 6TH ST	UST	Lower	804, 0.152, South
D32	CALIFORNIA HIGHWAY P	60 NO HIGHLAND SPRIN	SWEEPS UST, HIST UST	Lower	810, 0.153, SSE
D33	WALGREENS #5182	60 N HIGHLAND SPRING	RCRA-VSQG	Lower	810, 0.153, SSE
D34	WALGREENS #5182	60 N HIGHLAND SPRING	CERS HAZ WASTE, HAZNET, CERS	Lower	810, 0.153, SSE
D35	SAN GORGONIO MEMORIA	600 N HIGHLAND SPRIN	SWEEPS UST	Lower	892, 0.169, SSE
E36	BEAUMONT FOREST FIRE	1550 E 6TH ST	HIST UST	Lower	971, 0.184, SSW
E37	BEAUMONAT FOREST FIR	1550 E 6TH STREET	HIST UST	Lower	971, 0.184, SSW
E38	CDF-BEAUMONT FOREST	1550 E 6TH ST	AST	Lower	971, 0.184, SSW
E39	BEAUMONT FFS	1550 E 6TH ST	AST	Lower	971, 0.184, SSW

# Target Property Address: SWC 8TH STREET/HIGHLAND SPRINGS AVENUE BEAUMONT, CA 92223

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
E40	CDF/BEAUMONT FOREST	1550 E SIXTH ST	SWEEPS UST, HIST UST	Lower	971, 0.184, SSW
E41	BEAUMONT FOREST FIRE	1550 E 6TH ST	HIST UST, CERS TANKS, CERS	Lower	971, 0.184, SSW
F42	U.S.A. CLEANERS	1679 E 6TH ST	DRYCLEANERS	Lower	977, 0.185, South
F43	USA CLEANERS	1679 E 6TH ST	DRYCLEANERS	Lower	977, 0.185, South
G44	BEAVER MEDICAL GROUP	6109 W RAMSEY ST	RCRA NonGen / NLR	Lower	1304, 0.247, SE
G45	QUEST DIAGNOSTICS BA	6109 W RAMSEY ST	RCRA-SQG	Lower	1304, 0.247, SE
G46	BEAVER MEDICAL GROUP	6109 W RAMSEY ST	CERS HAZ WASTE, HAZNET, CERS	Lower	1304, 0.247, SE
47	POMA AUTOMATED FUELI	5840 FIFTH STREET	LUST, SWEEPS UST, HIST CORTESE, CERS	Lower	2180, 0.413, SE
H48	GOLD ZONE ENTERPRISE	5861 FIFTH STREET	LUST	Lower	2433, 0.461, SE
H49	GOLD ZONE ENTERPRISE	5861 5TH	HIST CORTESE	Lower	2433, 0.461, SE
H50	CAL D FUEL	5861 W FIFTH ST	LUST	Lower	2433, 0.461, SE
H51	BANNING TRUCK STOP	5861 W 5TH STREET	LUST, CERS	Lower	2433, 0.461, SE
52	DEUTCH ELEMENTARY SC	CHERRY AVENUE/10TH S	ENVIROSTOR, SCH	Higher	5034, 0.953, WNW

#### TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

### DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

#### STANDARD ENVIRONMENTAL RECORDS

#### Federal NPL site list

NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL LIENS	Federal Superfund Liens

### Federal Delisted NPL site list

Delisted NPL\_\_\_\_\_ National Priority List Deletions

### Federal CERCLIS list

FEDERAL FACILITY\_\_\_\_\_\_ Federal Facility Site Information listing SEMS\_\_\_\_\_\_ Superfund Enterprise Management System

### Federal CERCLIS NFRAP site list

SEMS-ARCHIVE...... Superfund Enterprise Management System Archive

# Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

### Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

#### Federal RCRA generators list

RCRA-LQG\_\_\_\_\_\_ RCRA - Large Quantity Generators

#### Federal institutional controls / engineering controls registries

LUCIS\_\_\_\_\_\_Land Use Control Information System US ENG CONTROLS\_\_\_\_\_\_Engineering Controls Sites List US INST CONTROL\_\_\_\_\_Sites with Institutional Controls

### Federal ERNS list

ERNS..... Emergency Response Notification System

### State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

# State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

# State and tribal leaking storage tank lists

INDIAN LUST...... Leaking Underground Storage Tanks on Indian Land CPS-SLIC...... Statewide SLIC Cases

### State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing INDIAN UST..... Underground Storage Tanks on Indian Land

# State and tribal voluntary cleanup sites

# State and tribal Brownfields sites

BROWNFIELDS\_\_\_\_\_ Considered Brownfieds Sites Listing

# ADDITIONAL ENVIRONMENTAL RECORDS

### Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

### Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT	Waste Management Unit Database
SWRCY	Recycler Database
HAULERS	Registered Waste Tire Haulers Listing
INDIAN ODI	Report on the Status of Open Dumps on Indian Lands
ODI	Open Dump Inventory
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS	Open Dumps on Indian Land

# Local Lists of Hazardous waste / Contaminated Sites

Delisted National Clandestine Laboratory Register
Historical Calsites Database
Clandestine Drug Labs
Toxic Pits Cleanup Act Sites
National Clandestine Laboratory Register
PFAS Contamination Site Location Listing

# Local Lists of Registered Storage Tanks

CA FID UST Facility Inventory Database

# Local Land Records

LIENS	<b>Environmental Liens Listing</b>
LIENS 2	CERCLA Lien Information
DEED	Deed Restriction Listing

# Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

# Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD.	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drvcleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS.	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS.	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide
	Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT.	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan

Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HWP	EnviroStor Permitted Facilities Listing
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing
PROC	Certified Processors Database
Notify 65	Proposition 65 Records
UIC	UIC Listing
UIC GEO	UIC GEO (GEOTRACKER)
WASTEWATER PITS	Oil Wastewater Pits Listing
WDS	Waste Discharge System
WIP	Well Investigation Program Case List
MILITARY PRIV SITES	MILITARY PRIV SITEŠ (GEOTRACKER)
PROJECT	PROJECT (GEOTRACKER)
WDR	Waste Discharge Requirements Listing
CIWQS	California Integrated Water Quality System
CERS	CERS
NON-CASE INFO	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)
MINES MRDS	Mineral Resources Data System

### EDR HIGH RISK HISTORICAL RECORDS

#### EDR Exclusive Records

EDR MGP.....EDR Proprietary Manufactured Gas Plants EDR Hist Cleaner.....EDR Exclusive Historical Cleaners

#### EDR RECOVERED GOVERNMENT ARCHIVES

### **Exclusive Recovered Govt. Archives**

RGA LF...... Recovered Government Archive Solid Waste Facilities List RGA LUST...... Recovered Government Archive Leaking Underground Storage Tank

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STANDARD ENVIRONMENTAL RECORDS

### Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/24/2019 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
QUEST DIAGNOSTICS BA	6109 W RAMSEY ST	SE 1/8 - 1/4 (0.247 mi.)	G45	115
EPA ID:: CAR000158725				

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 06/24/2019 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
WALGREENS #5182 EPA ID:: CAL000322908	60 N HIGHLAND SPRING	SSE 1/8 - 1/4 (0.153 mi.)	D33	94

#### State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 07/29/2019 has revealed that there are 4 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
DEUTCH ELEMENTARY SC	8TH/ALLEGHENY	W 0 - 1/8 (0.065 mi.)	B8	29

Status: No Further Action Facility Id: 33010032

SUNDANCE ELEMENTARY Status: No Further Action Facility Id: 33010093	8TH STREET/XENA AVEN	WNW 0 - 1/8 (0.107 mi.)	B16	44
<b>DEUTCH ELEMENTARY SC</b> Status: No Further Action Facility Id: 33010033	CHERRY AVENUE/10TH S	WNW 1/2 - 1 (0.953 mi.)	52	132
Lower Elevation	Address	Direction / Distance	Map ID	Page
SAN GORGONIO MEMORIA Status: No Action Required Facility Id: 33800001	600 NORTH HIGHLAND S	ESE 0 - 1/8 (0.082 mi.)	9	31

# State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 9 LUST sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ULTRAMAR S S Database: LUST REG 8, Date of Go Global ID: T0606500491 Facility Status: Case Closed	501 HIGHLAND SPRINGS vernment Version: 02/14/2005	SE 0 - 1/8 (0.024 mi.)	A2	8
ULTRAMAR SERVICE STA Database: LUST, Date of Governme Database: RIVERSIDE CO. LUST, D Status: Completed - Case Closed Facility Id: 970500 Global Id: T0606500491 Facility Status: 9	<b>501 HIGHLAND SPRINGS</b> ant Version: 09/09/2019 Date of Government Version: 10/17/20	<b>SE 0 - 1/8 (0.024 mi.)</b> 019	A3	9
MOBIL 18-EWF Database: LUST REG 7, Date of Go Status: 9 - Case Closed Global ID: T0606599276	300 HIGHLAND SPRINGS vernment Version: 02/26/2004	SSE 0 - 1/8 (0.085 mi.)	C10	32
ARCO #5463 Database: LUST REG 8, Date of Go Database: LUST, Date of Governme Global ID: T0606500368 Status: Completed - Case Closed Facility Status: Case Closed Global Id: T0606500368	<b>1696 6TH ST</b> vernment Version: 02/14/2005 int Version: 09/09/2019	S 1/8 - 1/4 (0.152 mi.)	D25	83
ARCO #5463 Database: RIVERSIDE CO. LUST, E Facility Id: 94069	<b>1696 SIXTH ST</b> Date of Government Version: 10/17/20	<b>S 1/8 - 1/4 (0.152 mi.)</b> 019	D30	91

Facility Status: 9

POMA AUTOMATED FUELI Database: LUST REG 7, Date of Governm Database: LUST, Date of Government Ver Status: Completed - Case Closed Status: 9 - Case Closed Global Id: T0606500737 Global ID: T0606500737	<b>5840 FIFTH STREET</b> tent Version: 02/26/2004 sion: 09/09/2019	SE 1/4 - 1/2 (0.413 mi.)	47	123
GOLD ZONE ENTERPRISE Database: LUST REG 7, Date of Governm Status: 9 - Case Closed Global ID: T0606500724	5861 FIFTH STREET ent Version: 02/26/2004	SE 1/4 - 1/2 (0.461 mi.)	H48	127
CAL D FUEL Database: RIVERSIDE CO. LUST, Date of Facility Id: 911032 Facility Id: 200420452 Facility Status: 9	5861 W FIFTH ST f Government Version: 10/17/201	SE 1/4 - 1/2 (0.461 mi.) 9	H50	127
BANNING TRUCK STOP Database: LUST, Date of Government Ver Status: Completed - Case Closed Global Id: T0606544903 Global Id: T0606500724	5861 W 5TH STREET sion: 09/09/2019	SE 1/4 - 1/2 (0.461 mi.)	H51	128

# State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 3 UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
ULTRAMAR/LOMA LINDA Database: RIVERSIDE CO. UST, Database: UST, Date of Governm Facility Id: FA0041733 Facility Id: 10328116 Facility Id: 798	501 HIGHLAND SPRINGS Date of Government Version: 07/10/2019 ent Version: 09/09/2019	SE 0 - 1/8 (0.024 mi.)	A7	28
CALIF HWY PATROL/ SA Database: RIVERSIDE CO. UST, Database: UST, Date of Governm Facility Id: 106812 Facility Id: 135	195 HIGHLAND SPRINGS Date of Government Version: 07/10/2019 ent Version: 09/09/2019	SSE 0 - 1/8 (0.114 mi.)	C19	61
AM/PM MINI MARKET #5 Database: RIVERSIDE CO. UST, Database: UST, Date of Governm Facility Id: 4	1696 E 6TH ST Date of Government Version: 07/10/2019 ent Version: 09/09/2019	S 1/8 - 1/4 (0.152 mi.)	D31	92

# AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there are 4 AST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page	
HIGHLAND SPRINGS EXP Database: AST, Date of Governme	655 HIGHLAND SPRGS A ent Version: 07/06/2016	S 0 - 1/8 (0.106 mi.)	C15	43	
EXPRESS LUBE AND CAR Database: AST, Date of Governme	1560 E 6TH ST ent Version: 07/06/2016	SSW 1/8 - 1/4 (0.149 mi.)	E23	74	
CDF-BEAUMONT FOREST Database: AST, Date of Governme	1550 E 6TH ST ent Version: 07/06/2016	SSW 1/8 - 1/4 (0.184 mi.)	E38	105	
BEAUMONT FFS Database: AST, Date of Governme	1550 E 6TH ST ent Version: 07/06/2016	SSW 1/8 - 1/4 (0.184 mi.)	E39	106	

### ADDITIONAL ENVIRONMENTAL RECORDS

### Local Lists of Hazardous waste / Contaminated Sites

SCH: This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category. depending on the level of threat to public health and safety or the. environment they pose.

A review of the SCH list, as provided by EDR, and dated 07/29/2019 has revealed that there are 2 SCH sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page 29	
DEUTCH ELEMENTARY SC Facility Id: 33010032 Status: No Further Action	8TH/ALLEGHENY	W 0 - 1/8 (0.065 mi.)	B8		
SUNDANCE ELEMENTARY Facility Id: 33010093 Status: No Further Action	8TH STREET/XENA AVEN	WNW 0 - 1/8 (0.107 mi.)	B16	44	

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 08/14/2019 has revealed that there are 7 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page	
CHEVRON STATION #655	501 HIGHLAND SPRINGS	SE 0 - 1/8 (0.024 mi.)	A4	13	
HIGHLAND SPRINGS EXP	655 HIGHLAND SPRGS A	S 0 - 1/8 (0.106 mi.)	C13	35	
CALIFORNIA HIGHWAY P	195 HIGHLAND SPRINGS	SSE 0 - 1/8 (0.114 mi.)	C18	48	
EXPRESS LUBE AND CAR	1560 E 6TH ST	SSW 1/8 - 1/4 (0.149 mi.)	E21	63	
BEAUMONT GAS MART	1696 E 6TH ST	S 1/8 - 1/4 (0.152 mi.)	D24	74	
WALGREENS #5182	60 N HIGHLAND SPRING	SSE 1/8 - 1/4 (0.153 mi.)	D34	97	
BEAVER MEDICAL GROUP	6109 W RAMSEY ST	SE 1/8 - 1/4 (0.247 mi.)	G46	117	

# Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 5 SWEEPS UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page	
HIGHLANDS SPRINGS EX Status: A Tank Status: A Comp Number: 1823	655 HIGHLAND SPRINGS	S 0 - 1/8 (0.106 mi.)	C12	33	
ARCO AM/PM MINI MARK Status: A Tank Status: A Comp Number: 67775	1696 E SIXTH ST	S 1/8 - 1/4 (0.152 mi.)	D29	90	
CALIFORNIA HIGHWAY P Status: A Tank Status: A Comp Number: 17994	60 NO HIGHLAND SPRIN	SSE 1/8 - 1/4 (0.153 mi.)	D32	93	
SAN GORGONIO MEMORIA Status: A Tank Status: A Comp Number: 1812	600 N HIGHLAND SPRIN	SSE 1/8 - 1/4 (0.169 mi.)	D35	103	
CDF/BEAUMONT FOREST Status: A Tank Status: A Comp Number: 19888	1550 E SIXTH ST	SSW 1/8 - 1/4 (0.184 mi.)	E40	107	

### HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 7 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	vation Address Direction / Distance		Map ID	Page	
ARCO PRODUCTS COMPAN TRAILSIDE GENERAL ST Facility Id: 00000067775	<b>1696 E 6TH ST</b> 1696 E 6TH ST	<b>S 1/8 - 1/4 (0.152 mi.)</b> S 1/8 - 1/4 (0.152 mi.)	<b>D26</b> D28	<b>85</b> 89	
CALIFORNIA HIGHWAY P Facility Id: 00000017994	60 NO HIGHLAND SPRIN	SSE 1/8 - 1/4 (0.153 mi.)	D32	93	
BEAUMONT FOREST FIRE Facility Id: 00000057501	1550 E 6TH ST	SSW 1/8 - 1/4 (0.184 mi.)	E36	103	
BEAUMONAT FOREST FIR Facility Id: 00000019888	1550 E 6TH STREET	SSW 1/8 - 1/4 (0.184 mi.)	E37	104	
CDF/BEAUMONT FOREST BEAUMONT FOREST FIRE	1550 E SIXTH ST 1550 E 6TH ST	SSW 1/8 - 1/4 (0.184 mi.) SSW 1/8 - 1/4 (0.184 mi.)	E40 E41	107 108	

Facility Id: 0000056520

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 08/14/2019 has revealed that there are 6 CERS TANKS sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page	
CHEVRON STATION #655	501 HIGHLAND SPRINGS	SE 0 - 1/8 (0.024 mi.)	A4	13	
HIGHLAND SPRINGS EXP	655 HIGHLAND SPRGS A	S 0 - 1/8 (0.106 mi.)	C13	35	
CALIFORNIA HIGHWAY P	195 HIGHLAND SPRINGS	SSE 0 - 1/8 (0.114 mi.)	C18	48	
EXPRESS LUBE AND CAR	1560 E 6TH ST	SSW 1/8 - 1/4 (0.149 mi.)	E21	63	
BEAUMONT GAS MART	1696 E 6TH ST	S 1/8 - 1/4 (0.152 mi.)	D24	74	
BEAUMONT FOREST FIRE	1550 E 6TH ST	SSW 1/8 - 1/4 (0.184 mi.)	E41	108	

### Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/24/2019 has revealed that there are 7 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page	
BEAUMONT GAS MART IN EPA ID:: CAL000393216	501 HIGHLAND SPRINGS	SE 0 - 1/8 (0.024 mi.)	A6	27	
HIGH SAND INC DBA SP EPA ID:: CAL000295136	655 HIGHLAND SPRINGS	S 0 - 1/8 (0.106 mi.)	C14	42	
CALIFORNIA HIGHWAY P EPA ID:: CAL000157663	195 HIGHLAND SPRINGS	SSE 0 - 1/8 (0.114 mi.)	C17	46	
LOMA LINDA UNIVERSIT EPA ID:: CAL000389114	81 HIGHLAND SPRINGS	SSE 1/8 - 1/4 (0.139 mi.)	D20	62	
EXPRESS LUBE US INC EPA ID:: CAL000342194	1560 E 6TH ST	SSW 1/8 - 1/4 (0.149 mi.)	E22	72	
PRESTIGE STATIONS IN EPA ID:: CAR000101980	1696 E 6TH ST	S 1/8 - 1/4 (0.152 mi.)	D27	87	
BEAVER MEDICAL GROUP EPA ID:: CAL000218713	6109 W RAMSEY ST	SE 1/8 - 1/4 (0.247 mi.)	G44	114	

DRYCLEANERS: A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaners' agents; linen supply; coin-operated laundries and cleaning; drycleaning plants except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

A review of the DRYCLEANERS list, as provided by EDR, has revealed that there are 2 DRYCLEANERS sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
U.S.A. CLEANERS	1679 E 6TH ST	S 1/8 - 1/4 (0.185 mi.)	F42	113
Database: DRYCLEAN SOUTH	COAST, Date of Government Versi	on: 09/27/2019		
USA CLEANERS	1679 E 6TH ST	S 1/8 - 1/4 (0.185 mi.)	F43	114
Database: DRYCLEANERS, Dat	e of Government Version: 09/06/20	019		
EPA ld: CAL000138429				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 4 HIST CORTESE sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page	
CHEVRON STATION #9-4 Reg Id: 7T2220018	290 HIGHLAND SPRING	SSE 0 - 1/8 (0.088 mi.)	C11	33	
<b>ARCO #5463</b> Reg ld: 083302431T	1696 6TH ST	S 1/8 - 1/4 (0.152 mi.)	D25	83	
POMA AUTOMATED FUELI Reg Id: 7T2220024	5840 FIFTH STREET	SE 1/4 - 1/2 (0.413 mi.)	47	123	
GOLD ZONE ENTERPRISE Reg ld: 7T2220010	5861 5TH	SE 1/4 - 1/2 (0.461 mi.)	H49	127	

### EDR HIGH RISK HISTORICAL RECORDS

### EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 2 EDR Hist Auto

sites within approximately 0.125 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page	
PASS SHELL SERVICE	507 HIGHLAND SPRINGS	SE 0 - 1/8 (0.023 mi.)	A1	8	
LOMA LINDA OIL COMPA	501 HIGHLAND SPRINGS	SE 0 - 1/8 (0.024 mi.)	A5	26	

There were no unmapped sites in this report.

**OVERVIEW MAP - 5914075.2S** 



SITE NAME: Proposed Fuel Station	CLIENT: Salem Engineering Group
ADDRESS: SWC 8th Street/Highland Springs Avenue	CONTACT: Reily Rivera
Beaumont CA 92223	INQUIRY #: 5914075.2s
LAT/LONG: 33.932317/116.947606	DATE: December 20, 2019 6:58 pm



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Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMEN	ITAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0
Federal Delisted NPL si	ite list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	AP site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	CTS facilities li	ist						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-COF	RRACTS TSD <del>I</del>	acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generato	ors list							
RCRA-LQG RCRA-SQG RCRA-VSQG	0.250 0.250 0.250		0 0 0	0 1 1	NR NR NR	NR NR NR	NR NR NR	0 1 1
Federal institutional con engineering controls re	ntrols / gistries							
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equiv	alent NPL							
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equiv	alent CERCLIS	S						
ENVIROSTOR	1.000		3	0	0	1	NR	4
State and tribal landfill a solid waste disposal sit	and/or te lists							
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking	storage tank l	lists						
LUST	0.500		3	2	4	NR	NR	9

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST CPS-SLIC	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal registere	d storage tar	nk lists						
FEMA UST UST AST INDIAN UST	0.250 0.250 0.250 0.250		0 2 1 0	0 1 3 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	0 3 4 0
State and tribal voluntary	/ cleanup site	es						
VCP INDIAN VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal Brownfie	lds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	TAL RECORD	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	olid							
WMUDS/SWAT SWRCY HAULERS INDIAN ODI ODI DEBRIS REGION 9 IHS OPEN DUMPS	0.500 0.500 0.500 0.500 0.500 0.500 0.500		0 0 0 0 0 0	0 0 NR 0 0 0 0	0 0 NR 0 0 0 0	NR NR NR NR NR NR	NR NR NR NR NR NR	0 0 0 0 0 0
Local Lists of Hazardous Contaminated Sites	s waste /							
US HIST CDL HIST Cal-Sites SCH CDL Toxic Pits CERS HAZ WASTE US CDL PFAS	0.001 1.000 0.250 0.001 1.000 0.250 0.001 0.500		0 0 2 0 0 3 0 0	NR 0 NR 0 4 NR 0	NR 0 NR 0 NR NR 0	NR 0 NR 0 NR NR NR	NR NR NR NR NR NR NR	0 0 2 0 7 0 0
Local Lists of Registered	l Storage Tar	ıks						
SWEEPS UST HIST UST CERS TANKS CA FID UST	0.250 0.250 0.250 0.250		1 0 3 0	4 7 3 0	NR NR NR NR	NR NR NR NR	NR NR NR NR	5 7 6 0
Local Land Records	Local Land Records							
LIENS	0.001		0	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency H	Release Repo	orts						
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR	0.250		3	4	NR	NR	NR	7
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0					0
	0.001		0					0
5515 POD	1.000		0					0
RMP	0.001		0					0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		Ő	NR	NR	NR	NR	ŏ
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
	1.000		0	0	0	0		0
	1.000		0	0	0			0
	0.500		0					0
	0.001		0					0
	0.001		0		NR	NR	NR	0
	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	Ő
DOCKET HWC	0.001		Õ	NR	NR	NR	NR	õ
UXO	1.000		Õ	0	0	0	NR	õ
ECHO	0.001		Õ	NR	NR	NR	NR	Õ
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	2	NR	NR	NR	2
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		1	1	2	NR	NR	4
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		0	NR	NR	NR	NR	0
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		Ō	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		Ō	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	Ō
EDR HIGH RISK HISTORICA			-					-
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		2	NR	NR	NR	NR	2
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERN		VES						
Exclusive Recovered Go	wt Archives							
Exclusive Necovered Go	VI. AICIIIVES							
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals		0	24	33	6	1	0	64

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID Direction	МА	P FINDINGS			
Elevation	Site	Database(s)	EDR ID Number EPA ID Number		
A1 SE < 1/8 0.023 mi.	PASS SHELL SERVICE 507 HIGHLAND SPRINGS BEAUMONT, CA 92223		EDR Hist Auto	1021335795 N/A	
Relative:	EDR Hist Auto				
Actual: 2600 ft.	Year: Name: 1974 PASS SHELL SERVICE 1975 PASS SHELL SERVICE	Type: Gasoline Service Stations Gasoline Service Stations			
A2 SE < 1/8 0.024 mi. 129 ft	ULTRAMAR S S 501 HIGHLAND SPRINGS AVE BEAUMONT, CA 92220 Site 2 of 7 in cluster A		LUST	S103249153 N/A	
Relative: Lower Actual: 2600 ft.	LUST REG 8: Name: Address: City: Regional Board: Facility Status: Case Number: Local Case Num: Case Type: Substance: Qty Leaked: Abate Method: Cross Street: Enf Type: Funding: How Discovered: How Stopped: Leak Cause: Leak Source: Global ID: How Stopped Date: Enter Date: Date Confirmation of Leak Began: Date Sopped Date: Enter Date: Date Preliminary Assessment Began: Discover Date: Enforcement Date: Close Date: Date Preliminary Assessment Began: Date Preliminary Assessment Began: Date Preliminary Assessment Began: Date Preliminary Assessment Began: Date Preliminary Assessment Workplan Submitted: Date Prelim Assessment Workplan Submitted: Date Post Remedial Action Underway: Date Post Remedial Action Monitoring: Enter Date: GW Qualifies: Soil Qualifies: Operator: Facility Contact: Interim:	ULTRAMAR S S 501 HIGHLAND SPRINGS AVE BEAUMONT 8 Riverside Santa Ana Region Case Closed 083303001T 970500 Soil only Gasoline Not reported Not reported Not reported Tok Closure Not reported Not reported Not reported Not reported Not reported 10606500491 5/12/1997 5/12/1997 5/12/1997 5/12/1997 Not reported 10/29/1997 Not reported 10/29/1997 Not reported Not report			

33.929407

Latitude:

Database(s)

EDR ID Number **EPA ID Number** 

S103249153

Longitude: MTBE Date: Max MTBE GW: MTBE Concentration: Max MTBE Soil: MTBE Fuel: MTBE Tested: MTBE Class: Staff: Staff Initials: Lead Agency: Local Agency: Hydr Basin #: Beneficial: Priority: Cleanup Fund Id: Work Suspended: Summary: DIESEL ALSO

-116.9471428 Not reported Not reported 2 680 1 MTBE Detected. Site tested for MTBE & MTBE detected RS UNK Local Agency 33000L UPPER SANTA ANA VALL Not reported Not reported Not reported Not reported

A3 SE < 1/8 0.024 mi.	ULTRAMAR SERVICE STATION 501 HIGHLAND SPRINGS AVE BEAUMONT, CA 92220		LUST CHMIRS CERS	S110420165 N/A
129 ft.	Site 3 of 7 in cluster A			
< 1/8 0.024 mi. 129 ft. Relative: Lower Actual: 2600 ft.	BEADMONT, CA 92220 Site 3 of 7 in cluster A LUST: Name: Address: City,State,Zip: Lead Agency: Case Type: Geo Track: Global Id: Latitude: Longitude: Status: Status: Status Date: Case Worker: RB Case Number: Local Agency: File Location: Local Case Number: Potential Media Affect: Potential Media Affect: Potential Contaminants of Cond Site History: LUST: Global Id: Contact Type: Contact Type: Contact Name: Organization Name: Address: City: Email: Phone Number:	ULTRAMAR SERVICE STATION 501 HIGHLAND SPRINGS AVE BEAUMONT, CA 92220 RIVERSIDE COUNTY LOP LUST Cleanup Site http://geotracker.waterboards.ca.gov/profile_re T0606500491 33.9276051345641 -116.947105249074 Completed - Case Closed 10/29/1997 RIV 083303001T RIVERSIDE COUNTY LOP Local Agency Warehouse 970500 Soil Sern: Gasoline Not reported T0606500491 Regional Board Caseworker ROSE SCOTT SANTA ANA RWQCB (REGION 8) 3737 MAIN STREET, SUITE 500 RIVERSIDE rose.scott@waterboards.ca.gov 9513206375	eport.asp?global_id=	T0606500491
	Global Id: Contact Type:	T0606500491 Local Agency Caseworker		

TC5914075.2s Page 9
Database(s)

EDR ID Number **EPA ID Number** 

#### **ULTRAMAR SERVICE STATION (Continued)**

Address:

Action Type:

City:

LUST: Global Id:

Email:

Date:

Date:

Date: Action:

Date:

Date:

Action:

Date: Action:

Date:

LUST: Global Id:

Action:

Status:

Status:

Status Date: Global Id:

Status Date:

Status Date:

Global Id:

Status:

Global Id:

Global Id: Action Type:

Action Type:

Action:

Global Id:

Action Type:

Action:

Global Id:

Global Id:

Action Type:

Action Type:

Action:

Global Id:

Action Type:

Contact Name: **Riverside County LOP** RIVERSIDE COUNTY LOP Organization Name: 3880 LEMON ST SUITE 200 RIVERSIDE Not reported 9519558980 Phone Number: T0606500491 ENFORCEMENT 12/17/2008 File review - #RCDEH Upload Site File 11/30/2015 T0606500491 Other 05/12/1997 Leak Discovery T0606500491 Other 05/12/1997 Leak Stopped T0606500491 REMEDIATION 06/08/1997 Not reported T0606500491 ENFORCEMENT 10/29/1997 Closure/No Further Action Letter T0606500491 Other 06/09/1997 Leak Reported T0606500491 ENFORCEMENT 12/18/2008 Closure/No Further Action Letter - #Site Closure T0606500491 Open - Case Begin Date 05/12/1997 T0606500491 **Open - Site Assessment** 05/12/1997 T0606500491

**Open - Site Assessment** 06/05/1997

Database(s)

EDR ID Number EPA ID Number

### **ULTRAMAR SERVICE STATION (Continued)**

Global Id:	T0606500491
Status:	Completed - Case Closed
Status Date:	10/29/1997

### RIVERSIDE CO. LUST:

Nome	
Name.	ULIRAWAR SERVICE STATION
Address:	501 HIGHLAND SPRINGS AVE
City,State,Zip:	BEAUMONT, CA
Region:	RIVERSIDE
Facility ID:	970500
Employee:	Brown
Site Closed:	Yes
Case Type:	Soil only
Facility Status:	closed/action completed
Casetype Decode:	Soil only is impacted
Fstatus Decode:	Closed/Action completed

### CHMIRS

HMIRS:	
Name:	Not reported
Address: 5	501 HIGHLAND SPRINGS
City,State,Zip:	BEAUMONT, CA
OES Incident Number:	08-8235
OES notification:	11/15/2008
OES Date:	Not reported
OES Time:	Not reported
Date Completed:	Not reported
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
More Than Two Substances Involv	ed?: Not reported
Resp Agncy Personel # Of Deconta	aminated: Not reported
Responding Agency Personel # Of	Injuries: Not reported
Responding Agency Personel # Of	Fatalities: Not reported
Others Number Of Decontaminated	d: Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA DOT PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Yes
Waterway:	storm drain to Temescal Canyon
Spill Site:	Service Station
Cleanup By:	Reporting Party
Containment:	Not reported

Database(s)

EDR ID Number EPA ID Number

### ULTRA

LTRAMAR SERVICE STATION (Conti	nued)
What Happened: Type: Measure: Other: Date/Time: Year: Agency: Incident Date: Admin Agency: Amount: Contained: Site Type: E Date: Substance: Quantity Released: Unknown: Substance #2: Substance #3: Evacuations: Number of Injuries: Number of Fatalities: #1 Pipeline: #2 Pipeline: #3 Pipeline: #3 Pipeline: #1 Vessel >= 300 Tons: #2 Vessel >= 300 Tons: Evacs: Injuries: Fatals: Comments: Description:	Not reported Not reported Gal(s) Not reported 1800 2008 Riverside County Environmental Health 11/15/2008 Riverside County Environmental Health Not reported Yes storm drain to Temescal Canyon Not reported gasoline 170 Not reported Not reported RP States: While filling a work truck the vehicle was overfilled and the driver drove off.
CERS: Name: Address: City,State,Zip: Site ID: CERS ID: CERS Description: Affiliation: Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation Address: Affiliation City: Affiliation State: Affiliation State: Affiliation Zip: Affiliation Zip: Affiliation Phone: Affiliation Type Desc: Entity Name:	ULTRAMAR SERVICE STATION 501 HIGHLAND SPRINGS AVE BEAUMONT, CA 92220 252752 T0606500491 Leaking Underground Storage Tank Cleanup Site Local Agency Caseworker Riverside County LOP - RIVERSIDE COUNTY LOP Not reported 3880 LEMON ST SUITE 200 RIVERSIDE CA Not reported Not reported 9519558980 Regional Board Caseworker ROSE SCOTT - SANTA ANA RWQCB (REGION 8)
Entity Title: Affiliation Address:	Not reported 3737 MAIN STREET, SUITE 500

Database(s)

	ULTRAMAR SERVICE S	TATION (Continued)	S110420165
	Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:	RIVERSIDE CA Not reported Not reported 9513206375	
A4 SE < 1/8 0.024 mi. 129 ft	CHEVRON STATION #65 501 HIGHLAND SPRING BEAUMONT, CA 92223 Site 4 of 7 in cluster A	55056 PATY FIERRO CERS HAZ WAS S AVE CERS TAN HAZNI CEF	TE S113457553 (S N/A ET (S
12911.			
Relative: Lower Actual: 2600 ft.	CERS HAZ WASTE: Name: Address: City,State,Zip: Site ID: CERS ID: CERS Description:	BEAUMONT GAS MART INC. 501 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223 387673 10328116 Hazardous Waste Generator	
	CERS TANKS: Name: Address: City,State,Zip: Site ID: CERS ID: CERS Description:	BEAUMONT GAS MART INC. 501 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223 387673 10328116 Underground Storage Tank	
	HAZNET: Name: Address: City,State,Zip: Year: GEPAID: Contact: Telephone: Mailing Name: Mailing Address: Mailing Address: Mailing City,St,Zip: Gen County: TSD EPA ID: TSD County: TSD EPA ID: TSD County: Tons: CA Waste Code: Method: Facility County:	CHEVRON STATION #655056 PATY FIERRO 501 HIGHLAND SPRINGS AVE BEAUMONT, CA 922232541 2010 CAC002188247 PATY FIERRO 9518457735 Not reported 501 HIGHLAND SPRINGS AVE BEAUMONT, CA 922232541 Riverside CAD008364432 Los Angeles 0.2 352-Other organic solids H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatment/Reovery (H010-H129) Or (H131-H135) Riverside	
	CERS: Name: Address: City,State,Zip: Site ID: CERS ID: CERS Description:	BEAUMONT GAS MART INC. 501 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223 387673 10328116 Chemical Storage Facilities	

Database(s) EPA II

EDR ID Number EPA ID Number

# CHEVRON STATION #655056 PATY FIERRO (Continued)

Violations:	
Site ID:	387673
Site Name:	Beaumont Gas Mart Inc.
Violation Date:	04-06-2017
Citation:	HSC 6 95 25505(a)(4) - California Health and Safety Code. Chapter
Chalon.	6.05 Section(a) $25505(a)(4)$
Malatian Description	
violation Description:	Failure to provide initial and annual training to all employees in
	safety procedures in the event of a release or threatened release of a
	hazardous material or failure to document and maintain training
	records for a minimum of three years.
Violation Notes:	Returned to compliance on 04/12/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program	HMBRP
Violation Source:	CEPS
violation Source.	CENS
Site ID:	387673
Site Name:	Beaumont Gas Mart Inc.
Violation Date:	04-06-2017
Citation:	22 CCR 12 66262 34(d) - California Code of Regulations. Title 22
Shallon.	Chapter 12, Section(a) $66262, 24/d$
Violation Descriptions	Chapter 12, Section(S) 00202.34(u)
violation Description:	Failure to send nazardous waste offsite for treatment, storage, or
	disposal within 180 days (or 270 days if waste is transported over 200
	miles) for a generator who generates less than 1000 kilogram per month
	if all of the following conditions are met: (1) The quantity of
	hazardous waste accumulated onsite never exceeds 6,000 kilograms. (2)
	The generator complies with the requirements of 40 Code of Federal
	Regulations section 262.34(d), (e) and (f). (3) The generator does not
	hold acutely hazardous waste or extremely hazardous waste in an amount
	greater than one kilogram for more than 90 days
Violation Notes:	Returned to compliance on $0/12/2017$
Violation Division	Retarried to compliance on 64/12/2011.
Violation Division.	
Violation Program:	HW
Violation Source:	CERS
Site ID:	387673
Site Name:	Beaumont Gas Mart Inc.
Violation Date:	04-06-2018
Citation:	23 CCP 16 2712 - California Code of Regulations, Title 23, Chapter 16
Citation.	Soction (a) 2712 - California Code of Regulations, The 23, Chapter 10,
Malatian Description	Section(s) 2712
violation Description:	Failure to comply with any of the applicable requirements of the
	permit issued for the operation of the UST system.
Violation Notes:	Returned to compliance on 05/30/2018.
Violation Division:	Riverside County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	207672
	307073 Beausaid Ose Mart las
Site Name:	Beaumont Gas Mart Inc.
Violation Date:	04-10-2014
Citation:	HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter
	6.7, Section(s) Multiple Sections
Violation Description:	UST Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 03/05/2015.
Violation Division:	Riverside County Department of Env Health
Violation Program	UST
Violation Source	CERS
	OERO

EDR ID Number Database(s) EPA ID Number

### CHEVRON STATION #655056 PATY FIERRO (Continued)

Site ID:	387673
Site Name:	Beaumont Gas Mart Inc.
Violation Date:	04-10-2014
Citation:	19 CCR 4 2729.2(a)(3) - California Code of Regulations, Title 19,
	Chapter 4, Section(s) 2729.2(a)(3)
Violation Description:	Failure to complete and/or submit an annotated site map if required by
	CUPA.
Violation Notes:	Returned to compliance on 04/06/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	387673
Site Name:	Beaumont Gas Mart Inc.
Violation Date:	04-06-2018
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code,
	Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of
	Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 05/30/2018.
Violation Division:	Riverside County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	387673
Site Name:	Beaumont Gas Mart Inc.
Violation Date:	04-06-2017
Citation:	23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter
	16, Section(s) 2715(f)
Violation Description:	Failure to have at least one employee present during operating hours
	that has been trained in the proper operation and maintenance of the
	UST system by a designated operator (DO).
Violation Notes:	Returned to compliance on 04/12/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program:	USI
Violation Source:	CERS
Sito ID:	207672
Site ID.	Solutions
Violation Data:	
Citation:	USC 6 5 25142 10 California Haalth and Safaty Cada Chapter 6 5
Citation.	Soction(c) 25142.10 - California Fleatur and Salety Code, Chapter 0.5,
Violation Description:	Eailure of any person who recycles more than 100 kilograms per month
Violation Description.	of recyclable material under a claim that the material qualifies for
	or recyclable material under a claim that the material qualities for
Violation Notes:	Returned to compliance on $01/12/2017$
Violation Division:	Returned to compliance on 04/12/2011.
Violation Program:	HW
Violation Source:	CERS
violation Source.	CERG
Site ID:	387673
Site Name:	Beaumont Gas Mart Inc.
Violation Date:	04-08-2019
Citation:	HSC 6.7 25284, 25286 - California Health and Safety Code. Chapter 6.7.
-	Section(s) 25284, 25286
Violation Description:	Failure to submit a complete and accurate application for a permit to
-	

EDR ID Number Database(s) EPA ID Number

#### CHEVRON STATION #655056 PATY FIERRO (Continued) S113457553 operate a UST, or for renewal of the permit. Returned to compliance on 05/23/2019. OBSERVATION: Observed UST tank Violation Notes: information pages for all three tanks submitted in CERS to be inaccurate and/or missing information. All tank information pages indicate vent/vapor piping is double-walled however at time of inspection it was found vent/vapor piping on site is single-walled. All three tank information pages indicate audible/visual alarm in the overfill section. Facility does not have an outside annunciator for audible/visual alarm. The 91 product tank information page should indicate Riser Pipe Primary Containment to be "Steel" and Riser Pipe Secondary Containment to be "Fiberglass". The Diesel product Tank Information page should indicate "Diesel" for Tank Contents and "None" for Vapor Recovery Primary and Secondary Containment. CORRECTIVE ACTION: Owner/operator shall make the corrections noted above to the UST /tank information pages and re-submit updated forms in CERS. Violation Division: Riverside County Department of Env Health Violation Program: UST Violation Source: CERS 387673 Site ID: Site Name: Beaumont Gas Mart Inc. Violation Date: 04-10-2014 HSC 6.7 Multiple Sections - California Health and Safety Code, Chapter Citation: 6.7, Section(s) Multiple Sections UST Program - Operations/Maintenance - General Violation Description: Returned to compliance on 03/05/2015. Violation Notes: Violation Division: Riverside County Department of Env Health Violation Program: UST Violation Source: CERS Site ID: 387673 Site Name: Beaumont Gas Mart Inc. Violation Date: 04-06-2017 Citation: 23 CCR 16 2712(b) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b) Failure to maintain records of repairs, lining, and upgrades on site, Violation Description: or off site if approved by the CUPA, for the life of the UST. Violation Notes: Returned to compliance on 04/12/2017. Violation Division: Riverside County Department of Env Health Violation Program: UST Violation Source: CERS Site ID: 387673 Beaumont Gas Mart Inc. Site Name: 04-08-2019 Violation Date: Citation: 23 CCR 16 2716(a) through (e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(a) through (e) Violation Description: For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements: Be performed by an ICC certified DO. Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy. Inspect for the presence of liquid/debris in spill containers. Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly. Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit. Check that all testing and maintenance has been completed and

EDR ID Number Database(s) EPA ID Number

RON STATION #655056 PA	TY FIERRO (Continued)	S113457
	documented. Verify that all facility employees have been trained accordance with 23 CCR 2715(c). For designated operator (DC inspections conducted on and after October 1, 2018, failure to o the designated UST operator visual inspection at least once evo days.	d in )) 30 day conduct ery 30
Violation Notes:	days. Returned to compliance on 05/23/2019. OBSERVATION: The of operator failed to document all the alarms from the attached ala history on the 5/31/18 designated operator monthly inspection report(s) and failed to check that they were responded to appropriately. The missing alarms include: L-4 on 4/18/18. Duri monthly inspection, the designated operator shall review the ala history for the previous month, check that each alarm was docu and responded to appropriately, and attach a copy of the alarm with documentation taken in response to any alarms to the mor report. In addition, the DO has incorrectly stated on DO reports 10/2018 that the Overfill Prevention Inspection had been compl the last monitoring cert on 4/6/18. This new inspection has not I completed as of today's date. CORRECTIVE ACTION: Owner/of ensure that designated operators performing monthly inspection this facility are including all of the required information on the reports.	designated arm ng the arm umented history hthly since eted at been operator shall ns at
Violation Division:	Riverside County Department of Env Health	
Violation Program: Violation Source:	UST CERS	
Site ID:	387673	
Site Name:	Beaumont Gas Mart Inc.	
Violation Date:	03-05-2015	
	23 CCR 16 2636(f) - California Code of Regulations, Title 23, C 16, Section(s) 2636(f)	hapter
Violation Description:	Failure to continuously monitor the interstitial space of the tank, piping and/or sumps sump such that the leak detection activate audible/visual alarm when a leak is detected.	s an
Violation Notes:	Returned to compliance on 03/05/2015.	
Violation Division:	Riverside County Department of Env Health	
Violation Program:	UST	
Violation Source:	CERS	
Site ID:	387673	
Site Name:	Beaumont Gas Mart Inc.	
Citation:	23 CCR 16 2638(d) - California Code of Regulations, Title 23, C 16. Section(s) 2638(d)	Chapter
Violation Description:	Failure to submit the Annual Monitoring System Certification Fo the UPA within 30 days of completion of the test.	orm to
Violation Notes:	Returned to compliance on 04/06/2018.	
Violation Division:	Riverside County Department of Env Health	
Violation Program:	UST	
Violation Source:	CERS	
Site ID:	387673	
Site Name:	Beaumont Gas Mart Inc.	
Violation Date:	04-10-2014	* C OF
	HSC 6.95 Multiple - California Health and Safety Code, Chapte Section(s) Multiple	r 6.95,
Violation Description:	Business Plan Program - Administration/Documentation - Gene	eral
deletter Neter	Deturned to compliance on 01/00/0017	

Riverside County Department of Env Health

EDR ID Number Database(s) EPA ID Number

Violation Program: HMRRP CERS Violation Source: Site ID: 387673 Beaumont Gas Mart Inc. Site Name: Violation Date: 04-06-2017 Citation: HSC 6.5 25123.3(h)(1)(c) - California Health and Safety Code, Chapter 6.5, Section(s) 25123.3(h)(1)(c) Violation Description: Failure to send hazardous waste offsite for treatment, storage, or disposal of acute/extremely hazardous waste after the first 1-kilogram threshold amount was accumulated within a 90 day period. Violation Notes: Returned to compliance on 04/12/2017. Violation Division: Riverside County Department of Env Health Violation Program: HW Violation Source: CERS Site ID: 387673 Site Name: Beaumont Gas Mart Inc. Violation Date: 04-06-2017 HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter Citation: 6.95, Section(s) 25508(a)(1) Violation Description: Failure to establish and electronically submit an adequate training program in safety procedures in the event of a release or threatened release of a hazardous material. Violation Notes: Returned to compliance on 04/12/2017. Violation Division: Riverside County Department of Env Health Violation Program: HMRRP Violation Source: CERS Site ID: 387673 Site Name: Beaumont Gas Mart Inc. Violation Date: 04-08-2019 Citation: 23 CCR 16 2712(b)(1) and (2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1) and (2) Failure to maintain monitoring records for release detection and/or Violation Description: maintain records of appropriate follow-up actions. Violation Notes: Returned to compliance on 05/23/2019. OBSERVATION: Observed an alarm occurance on 2/14/19 (L-2). Records of alarms and/or records of appropriate follow-up action indicating how alarm conditions were cleared were not available for review. CORRECTIVE ACTION: Owner/operator shall ensure records of appropriate follow-up action for alarm conditions are documented and maintained on site readily available for review. Violation Division: Riverside County Department of Env Health Violation Program: UST Violation Source: CERS 387673 Site ID: Beaumont Gas Mart Inc. Site Name: Violation Date: 04-10-2014 Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34 Violation Description: Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance. Returned to compliance on 03/05/2015. Violation Notes: Violation Division: Riverside County Department of Env Health

### CHEVRON STATION #655056 PATY FIERRO (Continued)

Violation Division:

Database(s)

EDR ID Number EPA ID Number

## CHEVRON STATION #655056 PATY FIERRO (Continued)

VICON STATION #033030 FA		311343
Violation Program:	UST	
Violation Source:	CERS	
	007070	
Site ID:	387673	
Site Name:	Beaumont Gas Mart Inc.	
Violation Date:		<b>a</b> 1
Citation:	23 CCR 16 2632(c)(2)(B), 2634(d)(1)(a), 2636(f)(1) - California of Regulations, Title 23, Chapter 16, Section(s) 2632(c)(2)(B),	Code
	2634(d)(1)(a), 2636(f)(1)	
Violation Description:	Failure of the leak detection equipment to have an audible and alarm as required.	visual
Violation Notes:	Returned to compliance on 04/08/2019. OBSERVATION: Obse annular sensor failed to activate an audible and visual alarm an shutdown the turbine when tested. CORRECTIVE ACTION: Ov shall repair/replace inoperable 91 annular sensor and certify tha sensor will activate an audible visual alarm when a leak is deter Technician on site replaced the sensor and functions normally. Violation corrected on site.	rved the 91 d vner/operator at cted.
Violation Division:	Riverside County Department of Env Health	
Violation Program:	UST	
Violation Source:	CERS	
Site ID:	387673	
Site Name	Beaumont Gas Mart Inc	
Violation Date:	04-06-2017	
Citation:	23 CCP 16 2622 2624 2712/b) California Code of Pogulation	ac Titlo
Citation.	23 CGR 10 2032, 2034, 27 12(b) - California Coue of Regulation 23 Chapter 16 Section(a) 2622, 2624, 2712(b)	is, riue
Violation Departmention:	25, Chapter 10, Section(s) 2052, 2054, 2712(b)	
violation Description:	logs) and/or maintain records of appropriate follow-up actions.	larm
Violation Notes:	Returned to compliance on 04/12/2017.	
Violation Division:	Riverside County Department of Env Health	
Violation Program:	UST	
Violation Source:	CERS	
Site ID:	387673	
Site Name:	Beaumont Gas Mart Inc.	
Violation Date:	04-10-2014	
Citation:	23 CCR 16 2712(i) - California Code of Regulations. Title 23. C	hapter
	16. Section(s) 2712(i)	
Violation Description:	Failure to submit, obtain approval, or maintain a complete/accu	rate
Violation Notes:	Returned to compliance on 03/05/2015	
Violation Division:	Riverside County Department of Env Health	
Violation Program:		
Violation Source:	CERS	
Site ID <sup>.</sup>	387673	
Site Name:	Beaumont Gas Mart Inc	
Violation Date:	0/_08_2010	
Citation:	$v_{T}$ - $v_{T$	- <u>-</u>
Citation:	23  GeV 16 $27 12(0)(1)(G) - Galifornia Gode of Regulations, 110$	≠ ∠3,
	Chapter 16, Section(s) 2/12(b)(1)(G)	
Violation Description:	Failure to comply with one or more of the following overfill	
	prevention equipment requirements: Alert the transfer operator	when
	the tank is 90 percent full by restricting the flow into the tank or	
	triggering an audible and visual alarm; or Restrict delivery of flo	W
	to the tank at least 30 minutes before the tank overfills, provide	d
	the restriction occurs when the tank is filled to no more than 95	

EDR ID Number Database(s) EPA ID Number

### CHEVRON STATION #655056 PATY FIERRO (Continued)

	percent of capacity; and activate an audible alarm at least five
	minutes before the tank overfills; or Provide positive shut-off of
	flow to the tank when the tank is filled to no more than 95 percent of
	capacity; or Provide positive shut-off of flow to the tank so that
	none of the fittings located on the top of the tank are exposed to
	product due to overfilling. Install/retrofit overfill prevention
	equipment that does not use flow restrictors on vent piping to meet
	everfill provention equipment requirements when the everfill
	provention equipment is installed, repaired, or replaced on and offer
	Optober 1, 20019, For USTs installed before Optober 1, 2019, perform on
	becoder 1, 2018. For USTS installed before October 1, 2018, performan
	Inspection by October 13, 2018 and every 36 months thereafter. For
	USTs installed on and after October?1,?2018, perform an inspection at
	installation and every 36 months thereafter. Inspected within 30 days
	after a repair to the overfill prevention equipment. Inspected using
	an applicable manufacturer guidelines, industry codes, engineering
	standards, or a method approved by a professional engineer. Inspected
	by a certified UST service technician. Maintain records of overfill
	prevention equipment inspection for 36 months.
Violation Notes:	Returned to compliance on 05/23/2019. OBSERVATION: An overfill
	equipment inspection was not completed by the October 13, 2018
	deadline. CORRECTIVE ACTION: Owner/operator shall immediately schedule
	and complete an overfill equipment inspection providing the required
	48 hour notification prior to conducting the inspection. Inspection
	results and all supporting documentation (inspection procedures used
	tank charts, printouts, etc.) must be submitted to this Department
	within 30 days upon completion of the inspection
Violation Division:	Riverside County Department of Env Health
Violation Program:	
Violation Source:	
Violation Source.	GERG
Site ID.	387673
Site ID:	387673 Requirement Cas Mart Inc.
Site ID: Site Name:	387673 Beaumont Gas Mart Inc.
Site ID: Site Name: Violation Date:	387673 Beaumont Gas Mart Inc. 04-10-2014 22 000 42 00000 24(f) Colifernia Code of Demulations Title 20
Site ID: Site Name: Violation Date: Citation:	387673 Beaumont Gas Mart Inc. 04-10-2014 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22,
Site ID: Site Name: Violation Date: Citation:	387673 Beaumont Gas Mart Inc. 04-10-2014 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Site ID: Site Name: Violation Date: Citation: Violation Description:	387673 Beaumont Gas Mart Inc. 04-10-2014 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f) Failure to properly label hazardous waste accumulation containers with
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Site ID: Site Name: Violation Date: Citation: Violation Description:	387673 Beaumont Gas Mart Inc. 04-10-2014 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f) Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous
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Violation Source. Site ID: Site Name: Violation Date: Citation: Violation Description: Violation Notes: Violation Division:	387673 Beaumont Gas Mart Inc. 04-10-2014 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f) Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date. Returned to compliance on 04/12/2017. Riverside County Department of Env Health
Violation Source. Site ID: Site Name: Violation Date: Citation: Violation Description: Violation Notes: Violation Notes: Violation Division: Violation Program:	387673 Beaumont Gas Mart Inc. 04-10-2014 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f) Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date. Returned to compliance on 04/12/2017. Riverside County Department of Env Health HW
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Site ID: Site Name: Violation Date: Citation: Violation Description: Violation Notes: Violation Notes: Violation Division: Violation Program: Violation Source: Site ID: Site Name:	387673 Beaumont Gas Mart Inc. 04-10-2014 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f) Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date. Returned to compliance on 04/12/2017. Riverside County Department of Env Health HW CERS 387673 Beaumont Gas Mart Inc.
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Site ID: Site Name: Violation Date: Citation: Violation Description: Violation Description: Violation Notes: Violation Division: Violation Program: Violation Program: Violation Source: Site ID: Site Name: Violation Date: Citation:	387673 Beaumont Gas Mart Inc. 04-10-2014 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f) Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date. Returned to compliance on 04/12/2017. Riverside County Department of Env Health HW CERS 387673 Beaumont Gas Mart Inc. 04-10-2014 19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.5
Site ID:         Site Name:         Violation Date:         Citation:         Violation Description:         Violation Notes:         Violation Division:         Violation Program:         Violation Source:         Site ID:         Site Name:         Violation Description:	387673 Beaumont Gas Mart Inc. 04-10-2014 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f) Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date. Returned to compliance on 04/12/2017. Riverside County Department of Env Health HW CERS 387673 Beaumont Gas Mart Inc. 04-10-2014 19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.5 Failure to submit inventory reports (Activities, Owner/Operator,
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Site ID: Site Name: Violation Date: Citation: Violation Description: Violation Description: Violation Notes: Violation Division: Violation Program: Violation Program: Violation Source: Site ID: Site Name: Violation Date: Citation: Violation Description:	<ul> <li>387673</li> <li>Beaumont Gas Mart Inc.</li> <li>04-10-2014</li> <li>22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)</li> <li>Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous</li> <li>Waste, and starting accumulation date.</li> <li>Returned to compliance on 04/12/2017.</li> <li>Riverside County Department of Env Health</li> <li>HW</li> <li>CERS</li> <li>387673</li> <li>Beaumont Gas Mart Inc.</li> <li>04-10-2014</li> <li>19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.5</li> <li>Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required.</li> <li>Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1</li> </ul>
Site ID: Site Name: Violation Date: Citation: Violation Description: Violation Description: Violation Notes: Violation Program: Violation Program: Violation Program: Violation Source: Site ID: Site Name: Violation Date: Citation: Violation Description:	<ul> <li>387673</li> <li>Beaumont Gas Mart Inc.</li> <li>04-10-2014</li> <li>22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)</li> <li>Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous</li> <li>Waste, and starting accumulation date.</li> <li>Returned to compliance on 04/12/2017.</li> <li>Riverside County Department of Env Health</li> <li>HW</li> <li>CERS</li> <li>387673</li> <li>Beaumont Gas Mart Inc.</li> <li>04-10-2014</li> <li>19 CCR 4 2729.5 - California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.5</li> <li>Failure to submit inventory reports (Activities, Owner/Operator, Hazardous Materials Descriptions and Map pages, if required.</li> <li>Documentation must be resubmitted (for facilities which exceed EPCRA thresholds) or re-certified (for facilities which do not exceed EPCRA thresholds) by March 1.</li> </ul>
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Database(s)

EDR ID Number EPA ID Number

### CHEVRON STATION #655056 PATY FIERRO (Continued)

Violation Source:

CERS

Evaluation: Eval General Type: Eval Date: Violations Found: Eval Type: Eval Notes: Eval Division: Eval Program: Eval Source:	Compliance Evaluation Inspection 03-05-2015 Yes Routine done by local agency Not reported Riverside County Department of Env Health UST CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-05-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-06-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-06-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-06-2017
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-06-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	UST
Eval Source:	CERS

Database(s)

EDR ID Number **EPA ID Number** 

S113457553

CHEVRON STATION #655056 PATY FIERRO (Continued) Eval General Type: **Compliance Evaluation Inspection** 04-08-2019 Eval Date: Violations Found: Yes Routine done by local agency Eval Type: Eval Notes: Not reported Eval Division: Riverside County Department of Env Health Eval Program: UST Eval Source: CERS Eval General Type: **Compliance Evaluation Inspection** Eval Date: 04-10-2014 Violations Found: Yes Eval Type: Routine done by local agency Eval Notes: Not reported Eval Division: Riverside County Department of Env Health Eval Program: HMRRP Eval Source: CERS Eval General Type: **Compliance Evaluation Inspection** 04-10-2014 Eval Date: Violations Found: Yes Eval Type: Routine done by local agency Eval Notes: Not reported Eval Division: Riverside County Department of Env Health Eval Program: HW Eval Source: CERS Eval General Type: **Compliance Evaluation Inspection** Eval Date: 04-10-2014 Violations Found: Yes Eval Type: Routine done by local agency Eval Notes: Not reported Eval Division: Riverside County Department of Env Health Eval Program: UST CERS Eval Source: Eval General Type: Other/Unknown Eval Date: 04-12-2017 Violations Found: No Eval Type: Other, not routine, done by local agency Eval Notes: Not reported Eval Division: Riverside County Department of Env Health Eval Program: HMRRP CERS Eval Source: Other/Unknown Eval General Type: Eval Date: 04-12-2017 Violations Found: No Eval Type: Other, not routine, done by local agency Eval Notes: Not reported Eval Division: Riverside County Department of Env Health Eval Program: HW CERS Eval Source: Eval General Type: Other/Unknown Eval Date: 04-12-2017 Violations Found: No

Database(s)

EDR ID Number EPA ID Number

Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	USI CERS
Eval Source.	GERS
Eval General Type:	Other/Unknown
Eval Date:	05-23-2019
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes.	Not reported Biverside County Department of Env Health
Eval Program:	LIST
Eval Source:	CERS
Enforcement Action:	007070
Site ID: Site Name:	38/0/3 Resument Cas Mort Ins
Site Address:	
Site City:	BEALMONT
Site Zip:	92223
Enf Action Date:	03-05-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Riverside County Department of Env Health
Enf Action Program:	UST
Enf Action Source:	CERS
Site ID:	387673
Site Name:	Beaumont Gas Mart Inc.
Site Address:	501 HIGHLAND SPRINGS AVE
Site City:	BEAUMONT
Site Zip:	92223
Enf Action Type:	04-10-2014 Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation (offined Frogram)
Enf Action Notes:	Not reported
Enf Action Division:	Riverside County Department of Env Health
Enf Action Program:	HMRRP
Enf Action Source:	CERS
Site ID:	387673
Site Name:	Beaumont Gas Mart Inc.
Site Address:	501 HIGHLAND SPRINGS AVE
Site City:	BEAUMONT
Site Zip:	92223
Enf Action Date:	04-10-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of violation issued by the inspector at the Time of inspection
Enf Action Division:	Riverside County Department of Env Health
Enf Action Program:	HW
Enf Action Source:	CERS
Site ID <sup>.</sup>	387673
Site Name:	Beaumont Gas Mart Inc.
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### СН

Database(s) EPA ID Nu

EDR ID Number EPA ID Number

#### CHEVRON STATION #655056 PATY FIERRO (Continued) S113457553 501 HIGHLAND SPRINGS AVE Site Address: BEAUMONT Site City: Site Zip: 92223 Enf Action Date: 04-10-2014 Enf Action Type: Notice of Violation (Unified Program) Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection Enf Action Notes: Not reported Enf Action Division: Riverside County Department of Env Health Enf Action Program: UST Enf Action Source: CERS Affiliation: **Environmental Contact** Affiliation Type Desc: Entity Name: Ebrahim Akhavan Entity Title: Not reported Affiliation Address: 501 Highland Springs Ave Affiliation City: Beaumont Affiliation State: CA Affiliation Country: Not reported Affiliation Zip: 92223 Affiliation Phone: Not reported Affiliation Type Desc: Identification Signer Entity Name: EBRAHIM AKHAVAN Entity Title: OWNER Affiliation Address: Not reported Affiliation Citv: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported Property Owner Affiliation Type Desc: Entity Name: Simon Cohen Entity Title: Not reported Affiliation Address: 501 Highland Springs Ave Affiliation City: Beaumont Affiliation State: CA United States Affiliation Country: Affiliation Zip: 92223 Affiliation Phone: (951) 845-7735 Affiliation Type Desc: UST Tank Owner Entity Name: Simon Cohan Entity Title: Not reported Affiliation Address: 501 Highland Springs Ave Affiliation City: Beaumont Affiliation State: CA United States Affiliation Country: Affiliation Zip: 92223 Affiliation Phone: (951) 845-7735 Affiliation Type Desc: Document Preparer Entity Name: Ebrahim Akhavan Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported

Database(s)

EDR ID Number EPA ID Number

S113457553

#### CHEVRON STATION #655056 PATY FIERRO (Continued)

Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone: Affiliation Type Desc: Entity Name:

Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Not reported Not reported Not reported Not reported Operator

Ebrahim Akhavan Not reported Not reported Not reported Not reported Not reported Not reported (951) 845-7735

CUPA District Riverside Cnty Env Health Not reported 4065 County Circle Drive, Room 104 Riverside CA Not reported 92503 (951) 358-5055

Parent Corporation Mission Service and Parts Inc. Not reported Not reported Not reported Not reported Not reported Not reported Not reported

UST Tank Operator Ebrahim Akhavan Not reported 501 Highland Springs Ave Beaumont CA United States 92223 (951) 845-7735

Facility Mailing Address Mailing Address Not reported 501 Highland Springs Ave Beaumont CA Not reported 92223 Not reported

Legal Owner Simon Cohan

TC5914075.2s Page 25

Database(s)

EDR ID Number EPA ID Number

#### CHEVRON STATION #655056 PATY FIERRO (Continued)

Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

### Not reported 501 Highland Springs Ave Beaumont CA United States 92223 (951) 845-7735

**UST Permit Applicant** Ebrahim Akhavan Operator Not reported Not reported Not reported Not reported Not reported (951) 845-7735 UST Property Owner Name Simon Cohan Not reported 501 Highland Springs Ave Beaumont CA United States

92223

(951) 845-7735

#### A5 LOMA LINDA OIL COMPANY SE 501 HIGHLAND SPRINGS AVE < 1/8 BEAUMONT, CA 92223

# 0.024 mi.

### 129 ft. Site 5 of 7 in cluster A

Relative: EDR Hist Auto Lower

Lower		
Actual:	Year:	Name:
2600 ft.	1995	LOMA LINDA OIL COMPANY
	1996	LOMA LINDA OIL COMPANY
	1997	LOMA LINDA OIL COMPANY
	1998	LOMA LINDA OIL COMPANY
	1999	LOMA LINDA OIL COMPANY
	2000	LOMA LINDA OIL COMPANY
	2001	LOMA LINDA OIL COMPANY
	2002	LOMA LINDA OIL COMPANY
	2002	LOMA LINDA OIL COMPANY
	2003	LOMA LINDA OIL COMPANY
	2003	LOMA LINDA OIL COMPANY
	2004	LOMA LINDA OIL COMPANY
	2004	LOMA LINDA OIL COMPANY
	2005	LOMA LINDA OIL COMPANY
	2005	LOMA LINDA OIL COMPANY
	2006	LOMA LINDA OIL COMPANY
	2006	LOMA LINDA OIL COMPANY
	2007	VALERO
	2007	VALERO
	2008	VALERO

#### Type:

Gasoline Service Stations, NEC **Convenience Stores** Gasoline Service Stations, NEC Gasoline Service Stations, NEC **Convenience Stores Convenience Stores** Gasoline Service Stations, NEC Gasoline Service Stations, NEC **Convenience Stores Convenience Stores** Gasoline Service Stations, NEC **Convenience Stores** Gasoline Service Stations, NEC Gasoline Service Stations, NEC

EDR Hist Auto	1021141022
	N/A

A6 SE

< 1/8

0.024 mi.

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

1021141022

### LOMA LINDA OIL COMPANY (Continued)

**BEAUMONT GAS MART INC** 

BEAUMONT, CA 92223

**501 HIGHLAND SPRINGS AVE** 

2008	VALERO
2009	VALERO
2009	VALERO
2010	VALERO
2010	PALM SPRINGS PETROLEUM
2011	PALM SPRINGS PETROLEUM
2014	BEAUMONT GAS MART INC

#### **Convenience Stores** Gasoline Service Stations, NEC **Convenience Stores Convenience Stores** Gasoline Service Stations

**Gasoline Service Stations** Gasoline Service Stations, NEC

RCRA NonGen / NLR 1024842588

CAL000393216

129 ft.	Site 6 of 7 in cluster A	
Relative:	RCRA NonGen / NLR:	
Lower	Date form received by agency	: 2014-01-17 00:00:00.0
Actual:	Facility name:	BEAUMONT GAS MART INC
2600 ft.	Facility address:	501 HIGHLAND SPRINGS AVE
		BEAUMONT, CA 92223
	EPA ID:	CAL000393216
	Contact:	EBRAHIM AKHAVAN
	Contact address:	501 HIGHLAND SPRINGS AVE
		BEAUMONT, CA 92223
	Contact country:	Not reported
	Contact telephone:	951-845-7735
	Contact email:	BEAUMONTSHELL@GMAIL.COM
	EPA Region:	09
	Classification:	Non-Generator
	Description:	Handler: Non-Generators do not presently generate hazardous waste
	Owner/Operator Summary:	
	Owner/operator name:	BEAUMONT GAS MART INC
	Owner/operator address:	501 HIGHLAND SPRINGS AVE
		BEAUMONT, CA 92223
	Owner/operator country:	Not reported
	Owner/operator telephone:	951-845-7735
	Owner/operator email:	Not reported
	Owner/operator fax:	Not reported
	Owner/operator extension:	Not reported
	Legal status:	Other
	Owner/Operator Type:	Owner
	Owner/Op start date:	Not reported
	Owner/Op end date:	Not reported
	Owner/operator name:	
	Owner/operator address:	BEAUMONT, CA 92223
	Owner/operator country:	Not reported
	Owner/operator telephone:	951-845-7735
	Owner/operator email:	Not reported
	Owner/operator fax:	Not reported
	Owner/operator extension:	Not reported
	Legal status:	Other
	Owner/Operator Type:	Operator
	Owner/Op start date:	Not reported
	Owner/Op end date:	Not reported

		MAP FINDINGS		
Site			Database(s)	EDR ID Number EPA ID Number
BEAUMONT GAS MAI	RT INC (Continu	ed)		1024842588
Handler Activities Su U.S. importer of h Mixed waste (haz Recycler of hazar Transporter of haz Treater, storer or Underground injee On-site burner ex Furnace exemptio Used oil fuel burn Used oil fuel burn Used oil processo User oil refiner: Used oil fuel mark Used oil fuel mark Used oil specifica Used oil transfer f	ummary: nazardous waste: .: and radioactive) dous waste: zardous waste: disposer of HW: ction activity: emption: on: er: or: keter to burner: ation marketer: facility: ter:	No No Yes No No No No No No No No No No		
Violation Status:	Nov	violations found		
ULTRAMAR/LOMA LII 501 HIGHLAND SPRIN BEAUMONT, CA 9222 Site 7 of 7 in cluster A	NDA OIL NGS AVE 23		UST	U003096280 N/A
RIVERSIDE CO. US Name: Address: City,State,Zip: Region: Total Tanks:	ST: BEAUMONT GA 501 HIGHLAND BEAUMONT, CA RIVERSIDE 3	S MART, INC SPRINGS AVE \ 92223		
UST: Name: Address: City,State,Zip: Facility ID: Permitting Agency Latitude: Longitude: Name: Address: City,State,Zip: Facility ID: Permitting Agency Latitude: Longitude: Name: Address: City,State,Zip: Facility ID: Permitting Agency Latitude:	BEA 501 BEA FA0 FA0 92 Rive 501 BEA 501 BEA 103 92 Rive 33.9 -116 501 BEA 798 92 RIV 33.9 -117 501 BEA 798 92 -118 -116 -116 -116 -116 -116 -116 -116	AUMONT GAS MART INC. HIGHLAND SPRINGS AVE AUMONT, CA 92223 041733 erside County Department of Environmental Heal 0237 5.9477 AUMONT GAS MART INC. HIGHLAND SPRINGS AVE AUMONT, CA 92223 28116 erside County Department of Environme 0237 5.9477 RAMAR/LOMA LINDA OIL HIGHLAND SPRINGS AVE AUMONT, CA 92223 ERSIDE COUNTY 0289829	th	
	Site BEAUMONT GAS MA Handler Activities St U.S. importer of M Mixed waste (haz Recycler of hazar Transporter of ha Treater, storer or Underground inje On-site burner ex Furnace exemption Used oil fuel burn Used oil fuel burn Used oil fuel burn Used oil fuel mart Used oil fuel burn Used oil fuel burn Used oil fuel mart Used oil transfer Used oil transfer Other State City, State, Zip: Facility ID: Permitting Agenc Latitude: Longitude: Name: Address: City, State, Zip: Facility ID: Permitting Agenc Latitude: Longitude: Longitude: Name: Addresse City, State, Zip: Facility ID: Permitting Agenc Latitude: Longitude: Longitude: Differ Diffe	Site  BEAUMONT GAS MART INC (Continue Handler Activities Summary: U.S. importer of hazardous waste: Mixed waste (haz. and radioactive) Recycler of hazardous waste: Transporter of hazardous waste: Treater, storer or disposer of HW: Underground injection activity: On-site burner exemption: Furnace exemption: Used oil fuel burner: Used oil fuel burner: Used oil fuel burner: Used oil fuel marketer to burner: Used oil fuel marketer to burner: Used oil fuel marketer to burner: Used oil fuel specification marketer: Used oil fuel burner: Used oil fuel specification marketer: Used oil transporter: Violation Status: No v ULTRAMAR/LOMA LINDA OIL 501 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223 Site 7 of 7 in cluster A RIVERSIDE CO. UST: Name: BEAUMONT GA Address: 501 HIGHLAND City,State,Zip: BEAUMONT, CA Region: RIVERSIDE Total Tanks: 3 UST: Name: BEAUMONT, CA Address: 501 City,State,Zip: BEAUMONT, CA Address: 501 City,State,Zip: BEA Facility ID: 1033 Permitting Agency: Rive Latitude: 33.9 Longitude: -116 Name: ULT Address: 501 City,State,Zip: BEA Facility ID: 798 Permitting Agency: Rive Latitude: 33.9 Longitude: -116 Name: ULT Address: 501 City,State,Zip: BEA	Site         BEAUMONT GAS MART INC (Continued)         Landler Activities Summary:         U.S. importer of hazardous wastie: No         Mixed vaste (haz. and radioactive): No         Recycler of hazardous wastie: No         Transporter of hazardous wastie: Yes         Transporter of adapardous wastie: No         On-site burne recemption:         No         Underground lipetion activity:         No         Used oil processor:         No         Used oil processor:         No         Used oil fuel burner:         No         Used oil fuel marketer to burner:         No         Used oil fuel marketer to burner:         No         Used oil transfer facility:         No         Used oil transfer facility:         No         Violation Status:         No         Violation Status:         No         Violation Status:         No         Violation Status:         No         USE         Oth HighLAND SPRINGS AVE         BeauMONT, CA 92223         Site 7 of 7 in cluster A         Rity,State,Zip:	Site     Database(s)       Start     Database(s)       Start     Start       Star

Database(s)

B8 West < 1/8 0.065 mi.	DEUTCH ELEMENTARY SCH 8TH/ALLEGHENY BEAUMONT, CA 92223	OOL NO. 1	ENVIROSTOR SCH	S107736218 N/A
341 IL.	Site 1 of 2 in cluster B			
0.065 mi. 341 ft. Relative: Higher Actual: 2610 ft.	Site 1 of 2 in cluster B ENVIROSTOR: Name: Address: City,State,Zip: Facility ID: Status: Status Date: Site Code: Site Type: Site Type: Site Type Detailed: Acres: NPL: Regulatory Agencies: Lead Agency: Program Manager: Supervisor: Division Branch: Assembly: Senate: Special Program: Restricted Use: Site Mgmt Req: Funding: Latitude: Longitude: APN: Past Use: Potential COC:	DEUTCH ELEMENTARY SCHOOL NO. 1 8TH/ALLEGHENY BEAUMONT, CA 92223 33010032 No Further Action 12/18/2001 404188 School Investigation School 12.5 NO SMBRP SMBRP Not reported Javier Hinojosa Southern California Schools & Brownfields Outreach 42 23 Not reported NO NONE SPECIFIED School District 33.933 -116.95 NONE SPECIFIED AGRICULTURAL - ROW CROPS Arsenic Chlordane DDD DDE DDT		
	Confirmed COC:	30001-NO 30004-NO 30006-NO 30007-NO 30008-NO		
	Potential Description:	SOIL		
	Alias Name: Alias Type: Alias Name:	BEAUMONT UNIFIED SCHOOL DISTRICT Alternate Name BEAUMONT USD-DEUTSCH 1 PROPOSED ELE SCH		
	Alias Type:	Alternate Name		
	Allas Name: Alias Type: Alias Name: Alias Type:	Alternate Name 404188 Project Code (Site Code)		
	Alias Name:	33010032		
	Alias Type:	Envirostor ID Number		
	Completed Info: Completed Area Name: Completed Sub Area Nar Completed Document Ty Completed Date: Comments:	PROJECT WIDE ne: Not reported De: Preliminary Endangerment Assessment Report 12/18/2001 DTSC approved the PEA Report with a no further action	determination.	
	Completed Area Name: Completed Sub Area Nar Completed Document Ty Completed Date: Comments:	PROJECT WIDE ne: Not reported be: Preliminary Endangerment Assessment Workplan 06/06/2001 Not reported		

Database(s)

EDR ID Number EPA ID Number

### DEUTCH ELEMENTARY SCHOOL NO. 1 (Continued)

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Other Report
Completed Date:	12/02/2000
Comments:	Phase 1
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	03/06/2002
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported
SCH:	
Name: Address: City,State,Zip: Facility ID: Site Type: Site Type Detail: Site Mgmt. Req.: Acres: National Priorities List: Cleanup Oversight Agencies: Lead Agency: Lead Agency: Lead Agency: Lead Agency: Division Branch: Supervisor: Division Branch: Site Code: Assembly: Senate: Special Program Status: Status: Status Date: Restricted Use: Funding: Latitude: Longitude: APN: Past Use: Potential COC: Confirmed COC: Potential Description: Alias Name:	DEUTCH ELEMENTARY SCHOOL NO. 1 8TH/ALLEGHENY BEAUMONT, CA 92223 33010032 School Investigation School NONE SPECIFIED 12.5 NO SMBRP DTSC - Site Cleanup Program Not reported Javier Hinojosa Southern California Schools & Brownfields Outreach 404188 42 23 Not reported No Further Action 12/18/2001 NO School District 33.933 -116.95 NONE SPECIFIED AGRICULTURAL - ROW CROPS Arsenic, Chlordane, DDD, DDE, DDT 30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO SOIL BEAUMONT UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	BEAUMONT USD-DEUTSCH 1 PROPOSED ELE SCH

### MAP FINDINGS

DEUTCH ELEMENTARY SCHOOL NO. 1 (Continued)

Database(s)

	Alias Type: Alias Name: Alias Type: Alias Name: Alias Type: Alias Name: Alias Type:	Alternate Name DEUTCH ELEMENTARY NO. 1 (PROPOSED) Alternate Name 404188 Project Code (Site Code) 33010032 Envirostor ID Number	
	Completed Info: Completed Area Name: Completed Sub Area Name Completed Document Type Completed Date: Comments:	PROJECT WIDE e: Not reported e: Preliminary Endangerment Assessment Report 12/18/2001 DTSC approved the PEA Report with a no further action determination.	
	Completed Area Name: Completed Sub Area Name Completed Document Type Completed Date: Comments:	PROJECT WIDE e: Not reported e: Preliminary Endangerment Assessment Workplan 06/06/2001 Not reported	
	Completed Area Name: Completed Sub Area Name Completed Document Type Completed Date: Comments:	PROJECT WIDE e: Not reported e: Other Report 12/02/2000 Phase 1	
	Completed Area Name: Completed Sub Area Name Completed Document Type Completed Date: Comments:	PROJECT WIDE e: Not reported e: Cost Recovery Closeout Memo 03/06/2002 Not reported	
	Future Area Name: Future Sub Area Name: Future Document Type: Future Due Date: Schedule Area Name: Schedule Sub Area Name: Schedule Document Type: Schedule Due Date: Schedule Revised Date:	Not reported Not reported Not reported Not reported Not reported Not reported Not reported Not reported Not reported	
9 ESE < 1/8 0.082 mi. 435 ft.	SAN GORGONIO MEMORIAL H 600 NORTH HIGHLAND SPRIN BANNING, CA 92220	HOSPITAL ENVIROSTOR GS AVENUE	S118756744 N/A
Relative: Lower Actual: 2598 ft.	ENVIROSTOR: Name: S Address: 6 City,State,Zip: E Facility ID: 3 Status: N Status Date: 0 Site Code: 4 Site Type: 0	SAN GORGONIO MEMORIAL HOSPITAL 500 NORTH HIGHLAND SPRINGS AVENUE 3ANNING, CA 92220 33800001 No Action Required 33/27/1995 100528 Calmortgage	

Database(s)

EDR ID Number EPA ID Number

AN GORGONIO MEMORIAL	HOSPITAL (Continued)
Site Type Detailed: Acres: NPL: Regulatory Agencies: Lead Agency: Program Manager: Supervisor: Division Branch: Assembly: Senate: Special Program: Restricted Use: Site Mgmt Req: Funding: Latitude: Longitude: APN: Past Use: Potential COC: Confirmed COC: Potential Description: Alias Name: Alias Type: Alias Type:	Calmortgage 0.25 NO SMBRP SMBRP Sandra Karinen William Beckman Cleanup Sacramento 42 23 Not reported NO NONE SPECIFIED CalMortgage 33.93183 -116.9456 NONE SPECIFIED NONE NONE SPECIFIED NONE NONE SPECIFIED No Contaminants found NONE NONE SPECIFIED No Contaminants found NONE NONE SPECIFIED No Contaminants found NONE NONE NONE SPECIFIED No Contaminants found NMA 400528 Project Code (Site Code) 33800001 Envirostor ID Number
Completed Info: Completed Area Name: Completed Sub Area Nar Completed Document Typ Completed Date: Comments: Future Area Name: Future Sub Area Name: Future Document Type: Future Due Date:	PROJECT WIDE he: Not reported be: Phase 1 03/27/1995 Pursuant to the MOU, DTSC has prepared a Phase I Environmental Assessment for the San Gorgonio Hospital. The property contains an acute care hospital and medical office buildings. A Phase I Report was prepared by DTSC and concluded that no action was needed for this property; there is no contamination on the property. Not reported Not reported Not reported Not reported Not reported
Schedule Area Name: Schedule Sub Area Name Schedule Document Type Schedule Due Date: Schedule Revised Date:	Not reported Not reported Not reported Not reported Not reported

### C10 SSE < 1/8 0.085 mi.

450 ft.

# Site 1 of 9 in cluster C

**300 HIGHLAND SPRINGS** 

MOBIL 18-EWF

**BANNING, CA** 

Relative:	LUST REG 7:	
Lower	Region:	7
Actual:	Status:	9 - Case Closed
2595 ft.	Case Num:	7T2220027
	Substance:	Gasoline - Automotive

LUST S106152950 N/A

Database(s)

	MOBIL 18-EWF (Continued	1)		S106152950
	ID: 953 Global ID: T060 Lead Agency: Loca Case Worker: YO	6599276 I Agency		
C11 SSE < 1/8 0.088 mi. 465 ft	CHEVRON STATION #9-488 290 HIGHLAND SPRING BANNING, CA 92220 Site 2 of 9 in cluster C	36	HIST CORTESE	S105022666 N/A
Relative: Lower Actual: 2595 ft.	HIST CORTESE: edr_fname: edr_fadd1: City,State,Zip: Region: Facility County Code: Reg By: Reg Id:	CHEVRON STATION #9-4886 290 HIGHLAND SPRING BANNING, CA 92220 CORTESE 33 LTNKA 7T2220018		
C12 South < 1/8 0.106 mi. 558 ft.	HIGHLANDS SPRINGS EXE 655 HIGHLAND SPRINGS E BEAUMONT, CA 92220 Site 3 of 9 in cluster C	PRESS LUBE DR	SWEEPS UST	S106927285 N/A
Relative:	SWEEPS UST:			
Actual: 2596 ft.	Address: City: Status: Comp Number: Number: Board Of Equalization: Referral Date: Action Date: Created Date: Owner Tank Id: SWRCB Tank Id: Tank Status: Capacity: Active Date: Tank Use: STG: Content: Number Of Tanks:	HIGHLANDS SPRINGS EXPRESS LUBE 655 HIGHLAND SPRINGS DR BEAUMONT Active 1823 3 Not reported 09-12-91 09-12-91 09-12-91 1 33-000-001823-000001 A 500 09-12-91 0IL P MOTOR OIL 4		
	Name: Address: City: Status: Comp Number: Number: Board Of Equalization: Referral Date: Action Date:	HIGHLANDS SPRINGS EXPRESS LUBE 655 HIGHLAND SPRINGS DR BEAUMONT Active 1823 3 Not reported 09-12-91 09-12-91		

Database(s)

EDR ID Number EPA ID Number

### HIGHLANDS SPRINGS EXPRESS LUBE (Continued)

Created Date:	09-12-91
Owner Tank Id:	2
SWRCB Tank Id:	33-000-001823-000002
Tank Status:	A
Capacity:	500
Active Date:	09-12-91
Tank Use:	OIL
STG:	Р
Content:	MOTOR OIL
Number Of Tanks:	Not reported
Name:	HIGHLANDS SPRINGS EXPRESS LUBE
Address:	655 HIGHLAND SPRINGS DR
City:	BEAUMONT
Status:	Active
Comp Number:	1823
Number:	3
Board Of Equalization:	Not reported
Referral Date:	09-12-91
Action Date:	09-12-91
Created Date:	09-12-91
Owner Tank Id:	3
SWRCB Tank Id:	33-000-001823-000003
Tank Status:	A
Capacity:	250
Active Date:	09-12-91
Tank Use:	OIL
STG:	Р
Content:	MOTOR OIL
Number Of Tanks:	Not reported
Name:	HIGHLANDS SPRINGS EXPRESS LUBE
Address:	655 HIGHLAND SPRINGS DR
City:	BEAUMONT
Status:	Active
Comp Number:	1823
Number:	3
Board Of Equalization:	Not reported
Referral Date:	09-12-91
Action Date:	09-12-91
Created Date:	09-12-91
Owner Tank Id:	4
SWRCB Tank Id:	33-000-001823-000004
Tank Status:	A
Capacity:	250
Active Date:	09-12-91
Tank Use:	OIL
STG:	P
Content:	MOTOR OIL
Number Of Tanks:	Not reported

Database(s)

C13 South < 1/8 0.106 mi. 558 ft.	HIGHLAND SPRINGS EXPRESS LUBE 655 HIGHLAND SPRGS AVE #B BEAUMONT, CA 92223 Site 4 of 9 in cluster C	CE	RS HAZ WASTE CERS TANKS CERS	S123513178 N/A
Relative: Lower Actual: 2596 ft.	CERS HAZ WASTE: Name: Address: City,State,Zip: Site ID: CERS ID: CERS ID: CERS Description:	HIGHLAND SPRINGS EXPRESS LUBE 655 HIGHLAND SPRGS AVE #B BEAUMONT, CA 92223 36446 10317169 Hazardous Waste Generator		
	CERS TANKS: Name: Address: City,State,Zip: Site ID: CERS ID: CERS ID: CERS Description:	HIGHLAND SPRINGS EXPRESS LUBE 655 HIGHLAND SPRGS AVE #B BEAUMONT, CA 92223 36446 10317169 Aboveground Petroleum Storage		
	CERS: Name: Address: City,State,Zip: Site ID: CERS ID: CERS Description:	HIGHLAND SPRINGS EXPRESS LUBE 655 HIGHLAND SPRGS AVE #B BEAUMONT, CA 92223 36446 10317169 Chemical Storage Facilities		
	Violations: Site ID: Site Name: Violation Date: Citation: Violation Description: Violation Notes: Violation Division: Violation Program: Violation Source:	36446 Highland Springs Express Lube 06-08-2016 HSC 6.67 25270.6(a)(1), 25270.6(a)(2) - Californi Code, Chapter 6.67, Section(s) 25270.6(a)(1), 25 Failure to submit a tank facility statement on or be annually unless a current Business Plan has been Returned to compliance on 09/06/2016. Riverside County Department of Env Health APSA CERS	ia Health and Safet i270.6(a)(2) efore January 1 n submitted.	y
	Site ID: Site Name: Violation Date: Citation: Violation Description: Violation Notes: Violation Division: Violation Division: Violation Program: Violation Source:	36446 Highland Springs Express Lube 06-08-2016 40 CFR 1 265.201(c)(5) - U.S. Code of Federal R Chapter 1, Section(s) 265.201(c)(5) Failure to inspect hazardous waste tanks for the f present: 4) The construction materials of the tank detect corrosion or leaking of fixtures or seams. 5 materials of, and the area immediately surroundir confinement structures (e.g., dikes) at least week or obvious signs of leakage (e.g., wet spots or de Returned to compliance on 07/20/2016. Riverside County Department of Env Health HW CERS	Regulations, Title 40 following, when at least weekly to b) The construction ng, discharge dy to detect erosion ad vegetation).	Ι,

EDR ID Number Database(s) EPA ID Number

# HIGHLAND SPRINGS EXPRESS LUBE (Continued)

Site ID:	36446
Site Name:	Highland Springs Express Lube
Violation Data:	
Citation:	HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter
	6.95, Section(s) 25505(a)(4)
Violation Description:	Failure to provide initial and annual training to all employees in
	safety procedures in the event of a release or threatened release of a
	salely procedules in the event of a release of threatened release of a
	hazardous material or failure to document and maintain training
	records for a minimum of three years.
Violation Notes:	Returned to compliance on 07/20/2016.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	26446
Site ID:	36446
Site Name:	Highland Springs Express Lube
Violation Date:	06-27-2019
Citation:	HSC 6 95 25505(a)(4) - California Health and Safety Code, Chapter
Onation.	6.05 Section(a) $25505(a)(4)$
	0.95, Section(5) 25505(a)(4)
Violation Description:	Failure to provide initial and annual training to all employees in
	safety procedures in the event of a release or threatened release of a
	hazardous material or failure to document and maintain training
	records for a minimum of three years
Violation Notes:	OBSERVATION: Jason Watkins and Samuel Saldana, and car wash crew have
	not gone through training. CORRECTIVE ACTION: Owner/operator shall
	provide training to all employees who handle. Documentation shall be
	retained and be made available for inspection for a minimum period of
	2 users from the date of the training. Conice of training records con
	3 years from the date of the training. Copies of training records can
	be sent to rsgarcia@rivco.org or fax: 951-791-1778.
Violation Division:	Riverside County Department of Env Health
Violation Program	HMRRP
Violation Source:	CERS
Site ID:	36446
Site Name:	Highland Springs Express Lube
Violation Date:	06-08-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter
	6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material
	inventory information for all reportable bazardous materials on site
	at or above reportable quantities.
Violation Notes:	Returned to compliance on 09/08/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program	HMRRP
Violation Fourses	CERC
violation Source.	CERS .
Site ID:	36446
Site Name:	Highland Springs Express Lube
	ngnand Spings Express Lube
Violation Date:	06-08-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter
	6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a business plan when
ristatori Bosonpilon.	ataring/handling a hazardaya matarial at ar abaya reportable
	storing/nandling a nazardous material at or above reportable
	quantities.
Violation Notes:	Returned to compliance on 09/08/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMPPD
violation i rogram.	

Database(s) EPA I

EDR ID Number EPA ID Number

# HIGHLAND SPRINGS EXPRESS LUBE (Continued)

Violation Source:	CERS
Site ID:	36446
Site Name:	Highland Springs Express Lube
Violation Date:	06-27-2019
Citation:	HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description:	Failure to provide the following training to all oil-handling personnel: 1. Operation and maintenance of equipment to prevent discharges. 2. Discharge procedure protocols. 3. Applicable pollution control laws, rules, and regulations. 4. General facility operations. 5. Contents of the SPCC Plan.
Violation Notes:	Not reported
Violation Division:	Riverside County Department of Env Health
Violation Program:	APSA
Violation Source:	CERS
Site ID:	36446
Site Name:	Highland Springs Express Lube
Violation Date:	06-08-2016
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the
•	business plan is complete and accurate on or before the annual due
Violation Natao	date.
Violation Notes:	Returned to compliance on 09/08/2017.
Violation Program:	
Violation Source:	CERS
Violation Source.	GENG
Site ID:	36446
Site Name:	Highland Springs Express Lube
Violation Date:	06-08-2016
Citation:	40 CFR 1 265.174 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.174
Violation Description:	Failure to inspect hazardous waste storage areas at least weekly and look for leaking and deteriorating containers.
Violation Notes:	Returned to compliance on 07/20/2016.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	36446
Site Name:	Highland Springs Express Lube
Violation Date:	06-08-2016
Citation:	40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter 1. Section(s) 265.31
Violation Description:	Failure to maintain and operate the facility to minimize the
	possibility of a fire, explosion, or any unplanned sudden or
	non-sudden release of hazardous waste or hazardous waste constituents
	to air, soil, or surface water which could threaten human health or
	the environment.
Violation Notes:	Returned to compliance on 07/20/2016.
Violation Division:	Riverside County Department of Env Health
Violation Program:	
violation Source.	OLING

EDR ID Number Database(s) EPA ID Number

# HIGHLAND SPRINGS EXPRESS LUBE (Continued)

Site ID:	36446
Site Name:	Highland Springs Express Lube
Violation Date:	06-08-2016
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95,
	Section(s) Multiple
Violation Description:	Business Plan Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 07/20/2016.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	36446
Site Name:	Highland Springs Express Lube
Violation Date:	07-05-2017
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95,
	Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the
	business plan is complete and accurate on or before the annual due
	date.
Violation Notes:	Returned to compliance on 09/08/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	36446
Site Name:	Highland Springs Express Lube
Violation Date:	06-08-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter
	6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate training
	program in safety procedures in the event of a release or threatened
	release of a hazardous material.
Violation Notes:	Returned to compliance on 07/20/2016.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Cite ID:	20440
	30440
Site Name:	Highland Springs Express Lube
Violation Date:	
Citation:	40 CFR 1 265.201(c)(3) - U.S. Code of Federal Regulations, Title 40,
Malatian Description	Chapter 1, Section(s) 265.201(c)(3)
Violation Description:	Failure to inspect hazardous waste tanks at least once each operating
	day for the following, when present: (1) Discharge control equipment
	(e.g., waste feed cutoff systems, by-pass systems, and drainage
	systems) to ensure that it is in good working order; (2) Data gathered
	from monitoring equipment (e.g., pressure and temperature gauges) to
	ensure that the tank is being operated according to its design; (3)
	The level of waste in the tank.
Violation Notes:	Returned to compliance on 07/20/2016.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	36446
Site ID. Site Name:	JU440 Highland Springs Evances Luba
Violation Data:	A A 2016
	00-00-2010

EDR ID Number Database(s) EPA ID Number

IGHLAND SPRINGS EXPRESS LUBE	(Continued)	5123513178
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)	
Violation Description:	Failure to complete and electronically submit a site map with all required content.	
Violation Notes:	Returned to compliance on 09/08/2017.	
Violation Division:	Riverside County Department of Env Health	
Violation Program:	HMRRP	
Violation Source:	CERS	
Evaluation:		
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	06-08-2016	
Violations Found:	Yes	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:	Riverside County Department of Env Health	
Eval Program:	APSA	
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	06-08-2016	
Violations Found:	Yes	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:	Riverside County Department of Env Health	
Eval Program:		
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	06-08-2016	
Violations Found:	Yes	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:	Riverside County Department of Env Health	
Eval Program:	HW	
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	06-27-2019	
Violations Found:	Yes Deutine data hada adama a	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:		
Eval Program:	APSA OFRO	
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	06-27-2019	
Violations Found:	Yes	
Eval Type:	Routine done by local agency	
Eval Notes:	Facility provides automotive and car wash services. At next annual	
	submittal A.P.S.A. section will be required to include Facility	
	Information portion. Currently, Emergency Response and Training P	lans
	section is not submitted.	
Eval Division:	Riverside County Department of Env Health	
Eval Program:		
Eval Source:	CERS	

Database(s)

EDR ID Number EPA ID Number

### HIGHL

GHLAND SPRINGS EXPRESS LUBE	(Continued)
Eval General Type:	Other/Unknown
Eval Date:	07-05-2017
Violations Found:	Yes
	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval oburce.	GERG
Eval General Type:	Other/Unknown
Eval Date:	07-20-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	07-30-2019
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Affiliation: Affiliation Type Desc:	Operator Ali Harb
Entity Name.	All Halb
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zin:	Not reported
Affiliation Phone:	(000) 214-3333
Anniauon i none.	(909) 214-3333
Affiliation Type Desc:	CUPA District
Entity Name:	Riverside Cnty Env Health
Entity Title:	Not reported
Affiliation Address:	4065 County Circle Drive, Room 104
Affiliation City:	Riverside
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92503
Affiliation Phone:	(951) 358-5055
Affiliation Type Desc	Environmental Contact
Entity Name	John Holmes
Entity Title	Not reported
Affiliation Address:	
Affiliation City:	Beaumont
Affiliation State	
Affiliation Country	Not reported
Affiliation Zin:	02223
Affiliation Phone:	Not reported
	Not reported

Database(s)

EDR ID Number EPA ID Number

#### HIGHLAND SPRINGS EXPRESS LUBE (Continued)

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone: Facility Mailing Address Mailing Address Not reported 655 Highland Springs Ave Beaumont CA Not reported 92223 Not reported Document Preparer

John Holmes Not reported Not reported Not reported Not reported Not reported Not reported Not reported

Identification Signer John Holmes manager Not reported Not reported Not reported Not reported Not reported Not reported

Legal Owner High Sand Inc. Not reported 655 Highland Springs Ave Beaumont CA United States 92223 (951) 769-1187

Parent Corporation Highland Springs Express Lube Not reported Not reported

Database(s)

C14 South < 1/8	HIGH SAND INC DBA SPLASH CA 655 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223	AR SPA	RCRA NonGen / NLR	1024811444 CAL000295136
0.106 ml. 558 ft.	Site 5 of 9 in cluster C			
Relative: Lower Actual:	RCRA NonGen / NLR: Date form received by agency Facility name:	: 2005-06-14 00:00:00.0 HIGH SAND INC DBA SPLASH CAR SPA		
2596 ft.	Facility address:	655 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223-2540		
	EPA ID:	CAL000295136		
	Contact:	JOHN HOLMES/MANAGER		
	Contact address:	655 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223		
	Contact country:	Not reported		
	Contact telephone:	951-769-1187		
	Contact email:	CHOPSUEYNINJA03@LIVE.COM		
	EPA Region:	09		
	Classification:	Non-Generator		
	Description:	Handler: Non-Generators do not presently ge	nerate hazardous waste	
	Owner/Operator Summary:			
	Owner/operator name:	HIGH SAND INC DBA SPLASH CAR SPA		
	Owner/operator address:	5225 CANYON CREST DR STE 71-297 RIVERSIDE, CA 92507		
	Owner/operator country:	Not reported		
	Owner/operator telephone:	909-214-3333		
	Owner/operator email:	Not reported		
	Owner/operator fax:	Not reported		
	Owner/operator extension:	Not reported		
	Legal status:	Other		
	Owner/Operator Type:	Owner		
	Owner/Op start date:	Not reported		
	Owner/Op end date:	Not reported		
	Owner/operator name:	JOHN HOLMES/MANAGER		
	Owner/operator address:	655 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223		
	Owner/operator country:	Not reported		
	Owner/operator telephone:	951-769-1187		
	Owner/operator email:	Not reported		
	Owner/operator fax:	Not reported		
	Owner/operator extension:	Not reported		
	Legal status:	Other		
	Owner/Operator Type:	Operator		
	Owner/Op start date:	Not reported		
	Owner/Op end date:	Not reported		
	Handler Activities Summary:			
	U.S. importer of hazardous wa	aste: No		
	Mixed waste (haz. and radioad	ctive): No		
	Recycler of hazardous waste:	No		
	Transporter of hazardous was	te: Yes		
	Treater, storer or disposer of H	łW: No		
	Underground injection activity:	No		
	On-site burner exemption:	No		
	Furnace exemption:	No		

Map ID Direction		MAP FINDINGS		
Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
	HIGH SAND INC DBA SPLASH CAR SP	A (Continued)		1024811444
	Used oil fuel burner:	No		
	Used oil processor:	No		
	User oil refiner:	No		
	Used oil fuel marketer to burner:	No		
	Used oil Specification marketer:	No		
	Used oil transfer facility:	No		
	Used oil transporter:	No		
	Violation Status: No vi	olations found		
C15 South < 1/8 0 106 mi	HIGHLAND SPRINGS EXPRESS LUBE 655 HIGHLAND SPRGS AVE #B BEAUMONT, CA 92223		AST	A100420786 N/A
558 ft.	Site 6 of 9 in cluster C			
Relative:	AST:			
Lower	Name:	HIGHLAND SPRINGS EXPRESS LUBE		
Actual:	Address:	655 HIGHLAND SPRGS AVE #B		
2596 ft.	City/Zip:	BEAUMONT,92223		
	Certified Unified Program Agencies:	Not reported		
	Owner:	High Sand Inc.		
	Total Gallons:	Not reported		
	CERSID:	10317169		
	Facility ID:	FA0016028		
	Business Name:	Highland Springs Express Lube		
	Phone:	(951) 769-1187		
	Fax:	Not reported		
	Mailing Address:	655 Highland Springs Ave		
	Mailing Address City:	Beaumont		
	Mailing Address State:	CA		
	Mailing Address Zip Code:	92223		
	Operator Name:	Not reported		
	Operator Phone:			
	Owner Mail Address:	(931) 709-1107 655 Highland Springs Ave		
	Owner State:			
	Owner Zin Code:	92223		
	Owner Country	United States		
	Property Owner Name	Not reported		
	Property Owner Phone:	Not reported		
	Property Owner Mailing Address	Not reported		
	Property Owner City:	Not reported		
	Property Owner Stat :	Not reported		
	Property Owner Zip Code:	Not reported		
	Property Owner Country:	Not reported		
	EPAID:	Not reported		

Database(s)

B16 WNW < 1/8 0.107 mi. 566 ft.	SUNDANCE ELEMENTARY SCHOOL 8TH STREET/XENA AVENUE BEAUMONT, CA 92223 Site 2 of 2 in cluster B		ENVIROSTOR SCH	S106568101 N/A
WNW < 1/8 0.107 mi. 566 ft. Relative: Higher Actual: 2614 ft.	8TH STREET/XENA AVENUE BEAUMONT, CA 92223 Site 2 of 2 in cluster B ENVIROSTOR: Name: Address: City,State,Zip: Facility ID: Status: Status Date: Site Code: Site Type: Site Type Detailed: Acres: NPL: Regulatory Agencies: Lead Agency: Program Manager: Supervisor: Division Branch: Assembly: Senate: Special Program: Restricted Use: Site Mgmt Req: Funding: Latitude: Longitude: APN: Past Use: Potential COC: Confirmed COC: Potential Description: Alias Name: Alias Type: Alias Name: Alias Ty	SUNDANCE ELEMENTARY SCHOOL 8TH STREET/XENA AVENUE BEAUMONT, CA 92223 33010093 No Further Action 08/05/2004 404560 School Investigation School 12 NO SMBRP Not reported Yolanda Garza Southern California Schools & Brownfields Outreach 42 23 Not reported NO NONE SPECIFIED School District 33.933 -116.95 NONE SPECIFIED School District 33.933 -116.95 NONE SPECIFIED AGRICULTURAL - ROW CROPS Arsenic Chlordane DDD DDE DDT 30001-NO 30004-NO 30006-NO 30007-NO 30008-NO SOIL BEAUMONT UNIFIED SCHOOL DISTRICT Alternate Name BEAUMONT USD-SUNDANCE SCHOOL Alternate Name SUNDANCE ELEMENTARY SCHOOL Alternate Name 404560 Project Code (Site Code) 33010093 Envirostor ID Number PROJECT WIDE ne: Not reported	SCH	N/A
	Completed Sub Area Nar Completed Document Ty Completed Date: Comments:	ne: Not reported pe: Preliminary Endangerment Assessment Report 10/19/2004 Not reported		
	Completed Area Name: Completed Sub Area Nar Completed Document Ty Completed Date: Comments:	PROJECT WIDE ne: Not reported pe: Technical Report 08/01/2005 informal approved		

Database(s)

EDR ID Number EPA ID Number

### SUNDANCE ELEMENTARY SCHOOL (Continued)

	Completed Area Name: Completed Sub Area Name: Completed Document Type: Completed Date: Comments:	PROJECT WIDE Not reported Cost Recovery Closeout Memo 11/03/2004 Not reported
	Completed Area Name: Completed Sub Area Name: Completed Document Type: Completed Date: Comments:	PROJECT WIDE Not reported Site Inspections/Visit (Non LUR) 07/22/2004 Not reported
	Future Area Name: Future Sub Area Name: Future Document Type: Future Due Date: Schedule Area Name: Schedule Sub Area Name: Schedule Document Type: Schedule Due Date: Schedule Revised Date:	Not reported Not reported Not reported Not reported Not reported Not reported Not reported Not reported Not reported
S	CH:	
	Name: Address: City,State,Zip: Facility ID: Site Type: Site Type Detail: Site Mgmt. Req.: Acres: National Priorities List: Cleanup Oversight Agencies: Lead Agency: Lead Agency: Project Manager:	SUNDANCE ELEMENTARY SCHOOL 8TH STREET/XENA AVENUE BEAUMONT, CA 92223 33010093 School Investigation School NONE SPECIFIED 12 NO SMBRP SMBRP DTSC - Site Cleanup Program Not reported
	Supervisor: Division Branch: Site Code: Assembly: Senate: Special Program Status: Status: Status Date: Restricted Use: Funding: Latitude: Longitude: APN: Past Use:	Yolanda Garza Southern California Schools & Brownfields Outreach 404560 42 23 Not reported No Further Action 08/05/2004 NO School District 33.933 -116.95 NONE SPECIFIED AGRICULTURAL - ROW CROPS
	Potential COC: Confirmed COC: Potential Description: Alias Name: Alias Type: Alias Name:	Arsenic, Chlordane, DDD, DDE, DDT 30001-NO, 30004-NO, 30006-NO, 30007-NO, 30008-NO SOIL BEAUMONT UNIFIED SCHOOL DISTRICT Alternate Name BEAUMONT USD-SUNDANCE SCHOOL
Database(s)

EDR ID Number EPA ID Number

## SUNDANCE ELEMENTARY SCHOOL (Continued)

Alias Type:	Alternate Name
Alias Name:	SUNDANCE ELEMENTARY SCHOOL
Alias Type:	Alternate Name
Alias Name:	404560
Alias Type:	Project Code (Site Code)
Alias Name:	33010093
Alias Type:	Envirostor ID Number
Completed Info: Completed Area Name: Completed Sub Area Name: Completed Document Type: Completed Date: Comments:	PROJECT WIDE Not reported Preliminary Endangerment Assessment Report 10/19/2004 Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	08/01/2005
Comments:	informal approved
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	11/03/2004
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	07/22/2004
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

# C17CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASSSSE195 HIGHLAND SPRINGS AVE< 1/8</td>BEAUMONT, CA 922230.114 mi.

RCRA NonGen / NLR 1024794959 CAL000157663

603 ft.	Site 7 of 9 in cluster C	
Relative:	RCRA NonGen / NLR:	2000cv/ 1996-07-02 00:00:00 0
Actual: 2593 ft.	Facility address:	CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS 195 HIGHLAND SPRINGS AVE BEALMONT, CA 02223 2001
	EPA ID: Mailing address:	CAL000157663 PO BOX 942898 601 N 7TH ST SACRAMENTO, CA 94298-0001

Database(s)

EDR ID Number EPA ID Number

CALIFORNIA HIGHWAY PATROL	#655	SAN GORGONIO PASS (Continued)
Contact:	BET⊦	I DEPAOLA
Contact address:	PO B	OX 942898 601 N 7TH ST
	SACF	RAMENTO, CA 94298-0001
Contact country:	Not re	eported
Contact telephone:	916-8	43-3817
Contact email:	EDEF	AOLA@CHP.CA.GOV
EPA Region:	09	
	Non-(	Jenerator
Description:	Hand	er: Non-Generators do not presently generate nazardous waste
Owner/Operator Summary:		
Owner/operator name:	BETH	I DEPAOLA
Owner/operator address:	PO B	OX 942898 601 N 7TH ST
	SACF	RAMENTO, CA 94298
Owner/operator country:	Not re	eported
Owner/operator telephone:	916-8	43-3817
Owner/operator email:	Not re	eported
Owner/operator fax:	Not re	eported
Owner/operator extension:	Not re	eported
Legal status:	Other	
Owner/Operator Type:	Opera	ator
Owner/Op start date:	Not re	eported
Owner/Op end date:	NOT re	ерогтеа
Owner/operator name:	CALI	FORNIA HIGHWAY PATROL
Owner/operator address:	PO B	OX 942898 601 N 7TH ST
	SACF	RAMENTO, CA 94298
Owner/operator country:	Not re	eported
Owner/operator telephone:	916-8	43-3800
Owner/operator email:	Not re	eported
Owner/operator fax:	Not re	eported
Owner/operator extension:	Not re	eported
Legal status:	Other	
Owner/Operator Type:	Owne	er i i i i i i i i i i i i i i i i i i i
Owner/Op start date:	Not re	eported
Owner/Op end date:	Not re	eported
Handler Activities Summary:		
U.S. importer of hazardous wa	iste:	No
Mixed waste (haz. and radioad	ctive):	No
Recycler of hazardous waste:		No
Transporter of hazardous was	te:	Yes
Treater, storer or disposer of H	IW:	No
Underground injection activity:		No
On-site burner exemption:		No
Furnace exemption:		NO NE
Used oil fuel burner:		NO
Used oil processor:		NO No
User oll retiner:	. <b>.</b> .	
Used oil Specification marketer	er: .r.	
Used oil transfer facility	H.	
Used oil transportor:		No

Violation Status:

No violations found

# 1024794959

Map ID		MAP FINDINGS		
Direction Distance Elevation	Site	۲ <u>ــــــ</u>	Database(s)	EDR ID Number EPA ID Number
C18 SSE < 1/8 0 114 mi	CALIFORNIA HIGHWAY I 195 HIGHLAND SPRINGS BEAUMONT, CA 92223	PATROL #655 SAN GORGONIO PASS 3 AVE	CERS HAZ WASTE CERS TANKS HAZNET CERS	S113084250 N/A
603 ft.	Site 8 of 9 in cluster C		OERO	
Relative: Lower Actual: 2593 ft.	CERS HAZ WASTE: Name: Address: City,State,Zip: Site ID: CERS ID: CERS Description:	CALIF HWY PATROL/ SAN GORGONIO PA 195 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223 15157 10320100 Hazardous Waste Generator	ASS	
	CERS TANKS: Name: Address: City,State,Zip: Site ID: CERS ID: CERS Description:	CALIF HWY PATROL/ SAN GORGONIO PA 195 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223 15157 10320100 Underground Storage Tank	ASS	
	HAZNET: Name: Address: City,State,Zip: Year: GEPAID: Contact: Telephone: Mailing Name: Mailing Address: Mailing City,St,Zip: Gen County: TSD EPA ID: TSD COunty: TSD EPA ID: TSD County: Tons: CA Waste Code: Method: Facility County:	CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO I 195 HIGHLAND SPRINGS AVE BEAUMONT, CA 922233091 2011 CAL000157663 Beth DePaola 9168433817 Not reported PO BOX 942898 SACRAMENTO, CA 942980001 Riverside CAD982444481 San Bernardino 0.76 221-Waste oil and mixed oil H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatm (H010-H129) Or (H131-H135) Riverside	PASS hent/Reovery	
	Name: Address: City,State,Zip: Year: GEPAID: Contact: Telephone: Mailing Name: Mailing Address: Mailing City,St,Zip: Gen County: TSD EPA ID: TSD EPA ID: TSD County: Tons: CA Waste Code: Method:	CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO I 195 HIGHLAND SPRINGS AVE BEAUMONT, CA 922233091 2010 CAL000157663 Beth DePaola 9168433817 Not reported PO BOX 942898 SACRAMENTO, CA 942980001 Riverside CAD982444481 San Bernardino 0.912 221-Waste oil and mixed oil H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatm	PASS	

Database(s)

EDR ID Number EPA ID Number

(H010-H129) Or (H131-H135)    Facility County:  Riverside    Name:  CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS    Address:  195 HIGHLAND SPRINGS AVE    City, State,Zip:  BEAUMONT, CA 922233091    Year:  2009    GEPAID:  CALU00157663    Contact:  Beth DePola    Telephone:  9168433817    Mailing ChysL2:Dp. SACRAMENTO, CA 92280001    Gen County:  Riverside    TSD EPAID:  CAB2444481    TSD DOLO:  OBX2444481    TSD DOLO:  0.912    CAWaste Code:  221-Waste oil and mixed oil    CAWaste Code:  221-Waste oil and mixed oil    Method:  H141-Storage, Bulking, AndOr Transfer Off SiteNo Treatment/Reovery (H010-H129) Or (H131-H138)    Facility County:  Riverside    Name:  CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS    Address:  195 HOLLAND SPRINGS AVE    City, State,Zip:  BEAUMONT, CA 92223091    Year:  2006    GEPAID:  CALO00157663    Contact:  Beth DePola    Telephone:  9168433817    Mailing Address:	CAL	IFORNIA HIGHWAY	PATROL #655 SAN GORGONIO PASS (Continued)	S113084250
Name:CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASSAddress:195 HIGHLAND SPRINGS AVECity.State.Zip:BEAUMONT, CA 92233091Year:2009GEPAID:CALO0157663Contact:Beth DePaolaTelephone:9168433817Mailing Address:PO BOX 942980001Gen Courty:RiversideTO EDD Courty:SACRAMENTO, CA 942980001Gen Courty:San BernardinoTons:CAJ982444481TSD EO LUTY:San BernardinoTons:CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASSAddress:195 HIGHLAND SPRINCS AVECity.State.Zip:BEAUMONT, CA 922233091Year:2008GEPAID:CALUO0157663Contact:Beth UMONT, CA 922233091Year:2008GEPAID:CALU00157663Contact:Beth DePaolaTelephone:9168433817Maling Address:PO BOX 942898Maling Address:PO BOX 942898Maling Address:PO BOX 942898Maling Address:PO BOX 942898Maling Address:PO BOX 94289Maling Address:PO BOX 942898Maling Address:PO BOX 942898Maling Address:PO BOX 942898Maling Address:PO BOX 942898Maling Chy,SLZD:SACRAMENTO, CA 942980001Gen County:RiversideTors:0.912CA Waste Code:221-Waste oil and mixed oilMethod:H141-Storage, Bulking, And/OT Transfer Off SiteNo Treatment/Reovery (H010-H129		Facility County:	(H010-H129) Or (H131-H135) Riverside	
City, State,Zip:EEAUMONT, CA 92223091Year:2009GEPAID:CAL000157663Contact:Beth DePaolaTatephone:9168433817Mailing Address:PO BOX 942896Mailing Address:PO BOX 942896001Gen County:RiversideTSD EPA ID:CAD982444481TSD EPA ID:CAD982444481TSD County:Sa BernardinoTons:0.912CA Waste Code:221-Waste oil and mixed oilMethod:H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatment/Reovery (H010-H129) Or (H131-H135)Facility County:Sa BernardinoTons:0.912CA Waste Code:221-Waste oil and mixed oilMethod:H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatment/Reovery (H010-H129) Or (H131-H135)Facility County:RiversideName:CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS Address:Address:195 HIGHLAND SPRINGS AVECity, State,Zip:BEAUMONT, CA 92283091Year:2008GEPAID:CAL000157663Contact:Beth DePaolaTalephone:9168433817Mailing Name:Not reportedMailing Name:Not reportedMailing Name:Not reportedMailing Name:Not reportedMailing Address:PO BOX 942896Mailing Address:PO BOX 942896Mailing Address:196 BURN, CA 92233091Year:2007GEPAID:CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS<		Name: Address:	CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS 195 HIGHLAND SPRINGS AVE	
Year:2009GEPAID:CAL000157663Contact:Beth DePaolaTelephone:9168433817Mailing Address:PO BOX 942988Mailing Address:PO BOX 942989Mailing City, St.Zir:SCRAMENTO, CA 942980001Gen County:RiversideTSD EPA ID:CAD89244481TSD County:San BernardinoTons:0.912CA Waste Code:221-Waste oil and mixed oilMethod:H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatment/Reovery (H101-H129) Or (H131-H135)Facility County:RiversideName:CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS Address:Address:195 HIGHLAND SPRINGS AVE City, State Zip:Get PAID:CALUOT57663Contact:Beth DePaolaTelephone:9168433817Mailing Address:PO EOX 942988Mailing Address:PO EOX 942988Mailing Address:PO EOX 942988Mailing Address:PO EOX 942989Mailing Address:PO EOX 942980Mailing Address:PO EOX 942980Mailing Address:PO EOX 942980Mailing Address:195 EPAID:CAL982444481TSD County:TSD EPAID:CAD982444481TSD County:San BernardinoTons:Coll 21-Waste oil and mixed oilMethod:H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatment/Reovery (H010-H129) Or (H131-H135)Facility County:RiversideName:CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS Addres		City.State.Zip:	BEAUMONT. CA 922233091	
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Site **EPA ID Number** Database(s) CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS (Continued) S113084250 (H010-H129) Or (H131-H135) Facility County: Riverside Click this hyperlink while viewing on your computer to access 1 additional CA\_HAZNET: record(s) in the EDR Site Report. CERS: CALIF HWY PATROL/ SAN GORGONIO PASS Name: Address: 195 HIGHLAND SPRINGS AVE City,State,Zip: BEAUMONT, CA 92223 Site ID: 15157 10320100 CERS ID: **CERS** Description: **Chemical Storage Facilities** Violations: Site ID: 15157 Site Name: Calif Hwy Patrol/ San Gorgonio Pass Violation Date: 09-09-2014 Citation: HSC 6.7 25286(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25286(a) Violation Description: Failure to submit an complete and accurate application for a permit to operate an underground storage tank, or for renewal of the permit. Returned to compliance on 02/11/2015. Violation Notes: Violation Division: Riverside County Department of Env Health Violation Program: UST Violation Source: CERS Site ID: 15157 Site Name: Calif Hwy Patrol/ San Gorgonio Pass Violation Date: 09-09-2014 23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter Citation: 16, Section(s) 2715(f) Violation Description: Failure to comply with one or more of the following: provide training to facility employee(s) responsible for proper operation and maintenance every 12 months and/or train new employee(s) who are responsible for proper operation and maintenance within 30-days of hire and/or to have at least one employee present during operating hours that has been trained in the proper operation and maintenance of the UST system. Violation Notes: Returned to compliance on 02/11/2015. Violation Division: Riverside County Department of Env Health Violation Program: UST Violation Source: CERS Site ID: 15157 Site Name: Calif Hwy Patrol/ San Gorgonio Pass Violation Date: 09-09-2014 Citation: 23 CCR 16 2711(a)(8) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2711(a)(8) Failure to submit, obtain approval, or maintain a complete/accurate Violation Description: plot plan. Violation Notes: Returned to compliance on 02/11/2015. Violation Division: Riverside County Department of Env Health Violation Program: UST Violation Source: CERS Site ID: 15157

EDR ID Number

EDR ID Number Database(s) EPA ID Number

CAL	CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS (Continued) S113084250		
	Site Name:	Calif Hwy Patrol/ San Gorgonio Pass	
	Violation Date:	09-12-2013	
	Citation:	22 CCR 12 66262.34(a) - California Code of Regulations, Title 22,	
		Chapter 12, Section(s) 66262.34(a)	
	Violation Description:	Failure to obtain a permit or grant of interim status to accumulate	
		hazardous waste longer than 90 days.	
	Violation Notes:	Returned to compliance on 10/01/2013.	
	Violation Division	Riverside County Department of Env Health	
	Violation Program:	HW	
	Violation Source:	CERS	
	Site ID:	15157	
	Site Name:	Calif Hwy Patrol/ San Gorgonio Pass	
	Violation Date:	09-11-2015	
	Citation	23 CCR 16 2632, 2634, 2636, 2666 - California Code of Regulation	S.
		Title 23 Chapter 16 Section(s) 2632 2634 2636 2666	,
	Violation Description:	Failure of the leak detection equipment to have an audible and visu:	al
	Violation Description.	alarm as required	
	Violation Notes:	Returned to compliance on 00/11/2015	
	Violation Division:	Returned to compliance on 09/11/2013.	
	Violation Drogram		
	Violation Program.		
	Violation Source.	CERS	
	Site ID:	15157	
	Site Name:	Calif Hwy Patrol/ San Gorgonio Pass	
	Violation Date:	09-12-2013	
	Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22,	
		Chapter 12, Section(s) 66262.34(f)	
	Violation Description:	Failure to properly label hazardous waste accumulation containers v	vith
		the following requirements: "Hazardous Waste", name and address	of the
		generator, physical and chemical characteristics of the Hazardous	
		Waste, and starting accumulation date.	
	Violation Notes:	Returned to compliance on 10/01/2013.	
	Violation Division:	Riverside County Department of Env Health	
	Violation Program:	HW	
	Violation Source	CERS	
	Site ID:	15157	
	Site Name:	Calif Hwy Patrol/ San Gorgonio Pass	
	Violation Date:	09-23-2016	
	Citation:	23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapt	er
		16, Section(s) 2715(i)	
	Violation Description:	Failure to have a properly qualified service technician test leak	
		detection equipment as required every 12 months (vapor, pressure,	
		hydrostatic (VPH) system, sensors, line-leak detectors (LLD),	
		automatic tank gauge (ATG), etc.).	
	Violation Notes:	Returned to compliance on 09/23/2016.	
	Violation Division:	Riverside County Department of Env Health	
	Violation Program:	UST	
	Violation Source:	CERS	
	Site ID:	15157	
	Site Name:	Calif Hwy Patrol/ San Gorgonio Pass	
	Violation Date:	11-29-2016	
	Citation	19 CCR 6.95 25508(a)(1) - California Code of Regulations Title 19	
		Chapter 6.95. Section(s) 25508(a)(1)	
	Violation Description:	Failure to complete and electronically submit the Rusiness Activities	
		- and to complete and electromodity submit the Edomode Adivities	

EDR ID Number Database(s) EPA ID Number

## CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS (Continued)

Violation Notes: Violation Division: Violation Program: Violation Source:	Page and/or Business Owner Operator Identification Page. Returned to compliance on 03/07/2017. Riverside County Department of Env Health HMRRP CERS
Site ID: Site Name: Violation Date: Citation:	15157 Calif Hwy Patrol/ San Gorgonio Pass 09-23-2016 23 CCR 6.7 25284, 25286 - California Code of Regulations, Title 23, Chapter 6.7, Section(s) 25284, 25286
Violation Description:	Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.
Violation Notes: Violation Division: Violation Program: Violation Source:	Returned to compliance on 01/20/2017. Riverside County Department of Env Health UST CERS
Site ID:	15157 Colif Hum Patrol/ San Carappia Paga
Violation Data:	Call Hwy Patrol/ San Gorgonio Pass
Citation:	23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(F)
Violation Description: Violation Notes:	"Failure to conduct secondary containment testing, or one or more of the following requirements: Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter. Perform the test of a secondary containment component within 30 days of a repair or discontinuing vacuum, pressure or hydrostatic monitoring. Use a procedure that demonstrates the system works as well as at installation. Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval. Performed by a certified service technician. Maintain records of secondary containment testing for 36 months." OBSERVATION: Owner/operator failed to conduct required secondary containment testing every 36 months. Secondary containment testing last conducted on September 11th, 2015 and is past due. CORRECTIVE ACTION: Owner/operator conducted required secondary containment testing today, November 30th, 2018. Anniversary date does not change due to late testing and will be required to be completed by the 11th of September of every year. This is a Class 1 violation and an Administrative Enforcement Hearing will be scheduled. Piverside County Department of Env Health
Violation Division:	Riverside County Department of Env Health
Violation Program: Violation Source:	CERS
Site ID:	15157
Site Name:	Calif Hwy Patrol/ San Gorgonio Pass
Citation:	23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description:	Failure to submit, obtain approval, or maintain a complete/accurate response plan.
Violation Notes:	Returned to compliance on 02/11/2015.
Violation Division:	Riverside County Department of Env Health
Violation Program:	UST
Violation Source:	CERS

EDR ID Number Database(s) EPA ID Number

#### CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS (Continued)

Site ID: Site Name: Violation Date: Citation: Violation Description: Violation Notes: Violation Notes: Violation Program: Violation Source:	15157 Calif Hwy Patrol/ San Gorgonio Pass 09-23-2016 23 CCR 16 2712 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712 Failure to comply with any of the applicable requirements of the permit issued for the operation of the UST system. Returned to compliance on 01/20/2017. Riverside County Department of Env Health UST CERS
Site ID: Site Name: Violation Date: Citation: Violation Description: Violation Notes: Violation Division: Violation Program: Violation Source:	15157 Calif Hwy Patrol/ San Gorgonio Pass 09-09-2014 23 CCR 16 2715(a) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(a) Failure to submit statement of UST compliance and/or Designated Operator certification. Returned to compliance on 02/11/2015. Riverside County Department of Env Health UST CERS
Site ID: Site Name: Violation Date: Citation:	15157 Calif Hwy Patrol/ San Gorgonio Pass 11-30-2018 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23,
Violation Description:	Chapter 16, Section(s) 2712(b)(1)(G) Failure to comply with one or more of the following overfill prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1,?2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October?1,?2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill prevention equipment inspection for 36 months.
Violation Notes:	Returned to compliance on 01/03/2019. See supplemental documents left on site.
Violation Division: Violation Program:	Riverside County Department of Env Health UST

Database(s)

EDR ID Number EPA ID Number

#### CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS (Continued)

Violation Source:	CERS
Site ID:	15157
Site Name:	Calif Hwy Patrol/ San Gorgonio Pass
Violation Date:	09-23-2016
Citation:	23 CCR 16 2632(d)(1)(C), 2641(h), 2711(a)(8) - California Code of
	Regulations, Title 23, Chapter 16, Section(s) 2632(d)(1)(C), 2641(h),
	2711(a)(8)
Violation Description:	Failure to submit or update a plot plan.
Violation Notes:	Returned to compliance on 01/20/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	15157
Site Name:	Calif Hwy Patrol/ San Gorgonio Pass
Violation Date:	09-23-2016
Citation:	23 CCR 16 2637 - California Code of Regulations, Title 23, Chapter 16, Section(s) 2637
Violation Description:	Failure to conduct secondary containment testing, or one or more of
	the following requirements: Perform the test within six months of
	installation and every 36 months thereafter. Use a procedure that
	demonstrates the system works as well as at installation.Use
	applicable manufacturer guidelines, industry codes, engineering
	standard, or professional engineer approval.Performed by a certified
	service technician or a licensed tank tester.
Violation Notes:	Returned to compliance on 09/23/2016.
Violation Division:	Riverside County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	15157
Site Name:	Calif Hwy Patrol/ San Gorgonio Pass
Violation Date:	09-09-2014
Citation:	23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter
	16, Section(s) 2712(i)
Violation Description:	Failure to maintain on site an approved monitoring plan.
Violation Notes:	Returned to compliance on 02/11/2015.
Violation Division:	Riverside County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID:	15157
Site Name:	Calif Hwy Patrol/ San Gorgonio Pass
Violation Date:	11-30-2018
Citation:	23 CCR 16 2715(f) - California Code of Regulations, Title 23, Chapter
	16, Section(s) 2715(f)
Violation Description:	Failure to have a properly qualified service technician test leak
	detection equipment as required every 12 months (vapor, pressure,
	hydrostatic (VPH) system, sensors, line-leak detectors (LLD),
	automatic tank gauge (ATG), etc.).
Violation Notes:	OBSERVATION: A monitoring system certification was conducted on today,
	November 30th, 2018, approximately two months late. CORRECTIVE ACTION:
	Owner/operator shall test all leak detection equipment every 12
	months. According to the records on file monitoring certifications
	shall be done on or before the 21st of September of every year. This
	is a Class 1 violation and an Administrative Enforcement Hearing will

CALIFORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS (Continued) S113084250 be scheduled. Violation Division: Riverside County Department of Env Health Violation Program: UST Violation Source: CERS Site ID: 15157 Site Name: Calif Hwy Patrol/ San Gorgonio Pass Violation Date: 11-02-2017 23 CCR 16 2715(i) - California Code of Regulations, Title 23, Chapter Citation: 16, Section(s) 2715(i) Violation Description: Failure to have a properly qualified service technician test leak detection equipment as required every 12 months (vapor, pressure, hydrostatic (VPH) system, sensors, line-leak detectors (LLD), automatic tank gauge (ATG), etc.). Violation Notes: Returned to compliance on 11/02/2017. Violation Division: Riverside County Department of Env Health UST Violation Program: CERS Violation Source: Site ID: 15157 Site Name: Calif Hwy Patrol/ San Gorgonio Pass Violation Date: 11-29-2016 HSC 6.95 25508.1(a)-(f) - California Health and Safety Code, Chapter Citation: 6.95, Section(s) 25508.1(a)-(f) Violation Description: Failure to electronically update business plan within 30 days of any one of the following events: A 100 percent or more increase in the quantity of a previously disclosed material. Any handling of a previously undisclosed hazardous materials at or above reportable quantities. A change of business address, business ownership, or business name. A substantial change in the handler's operations that requires modification to any portion of the business plan. Violation Notes: Returned to compliance on 03/07/2017. Violation Division: Riverside County Department of Env Health Violation Program: HMRRP CERS Violation Source: Site ID: 15157 Site Name: Calif Hwy Patrol/ San Gorgonio Pass Violation Date: 11-29-2016 HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter Citation: 6.95, Section(s) 25508(a)(1) Failure to complete and electronically submit hazardous material Violation Description: inventory information for all reportable hazardous materials on site at or above reportable quantities. Violation Notes: Returned to compliance on 03/07/2017. Violation Division: Riverside County Department of Env Health Violation Program: HMRRP Violation Source: CERS Site ID: 15157 Site Name: Calif Hwy Patrol/ San Gorgonio Pass Violation Date: 11-29-2016 Citation: **Un-Specified** Violation Description: Business Plan Program - Operations/Maintenance - General Local Ordinance Violation Notes: Not reported Violation Division: Riverside County Department of Env Health

EDR ID Number

**EPA ID Number** 

Database(s)

Database(s)

EDR ID Number EPA ID Number

S113084250

	Violation Dragram		
	Violation Program:		
	violation Source:	CERS	
	Site ID:	15157	
	Site Name	Calif Hwy Patrol/ San Gorgonio Pass	
	Violation Date:	09-23-2016	
	Citation:	23 CCR 16 2712(i) - California Code of Regulations Title 23 Chapt	er
	Challon.	16 Section(s) 2712(i)	0.
	Violation Description:	Failure to have a LIST Monitoring Plan available on site	
	Violation Notes:	Returned to compliance on 01/20/2017	
	Violation Division:	Riverside County Department of Env Health	
	Violation Program:	LIST	
	Violation Source:	CERS	
I	Evaluation:		
	Eval General Type:	Other/Unknown	
	Eval Date:	01-03-2019	
	Violations Found:	No	
	Eval Type:	Other, not routine, done by local agency	
	Eval Notes:	Not reported	
	Eval Division:	Riverside County Department of Env Health	
	Eval Program:	UST	
	Eval Source:	CERS	
	Eval General Type:	Other/Unknown	
	Eval Date:	01-10-2019	
	Violations Found:	No	
	Eval Type:	Other, not routine, done by local agency	
	Eval Notes:	Reviewing submitted overfill prevention equipment inspection (pass	ed).
	Eval Division:	Riverside County Department of Env Health	
	Eval Program:	UST	
	Eval Source:	CERS	
	Eval General Type:	Other/Unknown	
	Eval Date:	02-01-2019	
	Violations Found:	No	
	Eval Type:	Other, not routine, done by local agency	
	Eval Notes:	Not reported	
	Eval Division:	Riverside County Department of Env Health	
	Eval Program:	UST	
	Eval Source:	CERS	
	Eval General Type:	Compliance Evaluation Inspection	
	Eval Date:	09-09-2014	
	Violations Found:	Yes	
	Eval Type:	Routine done by local agency	
	Eval Notes:	Not reported	
	Eval Division:	Riverside County Department of Env Health	
	Eval Program:	UST	
	Eval Source:	CERS	
	Eval General Type:	Compliance Evaluation Inspection	
	Eval Date:	09-11-2015	
	Violations Found:	Yes	
	Eval Type:	Routine done by local agency	
	Eval Notes:	Not reported	
	Eval Division:	Riverside County Department of Env Health	

# С

TC5914075.2s Page 56

Database(s)

EDR ID Number EPA ID Number

FORNIA HIGHWAY PATROL #655 SAN GORGONIO PASS (Continued)		
Eval Program:	UST	
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	09-12-2013	
Violations Found:	No	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:	Riverside County Department of Env Health	
Eval Program:	HMRRP	
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	09-12-2013	
Violations Found:	No	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:	Riverside County Department of Env Health	
Eval Program:	UST	
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	09-12-2013	
Violations Found:	Yes	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:	Riverside County Department of Env Health	
Eval Program:	HW	
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	09-23-2016	
Violations Found:	Yes	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:	Riverside County Department of Env Health	
Eval Program:	UST	
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	11-02-2017	
Violations Found:	Yes	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:	Riverside County Department of Env Health	
Eval Program:	UST	
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	11-29-2016	
Violations Found:	No	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:	Riverside County Department of Env Health	
Eval Program:	HW	
Eval Source:	CERS	

## CALI

Database(s)

EDR ID Number EPA ID Number

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-29-2016
/iolations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-30-2018
/iolations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
val Division:	Riverside County Department of Env Health
val Program:	UST
val Source:	CERS
arcement Action.	
Site ID:	15157
Site Name	Calif Hwy Patrol/ San Gorgonio Pass
Site Address:	195 HIGHI AND SPRINGS AVE
Site City:	BEAUMONT
site Zin:	92223
inf Action Date:	01-29-2019
nf Action Type:	AFO - Unified Program
Inf Action Description:	Administrative Enforcement Order Based on the Unified Program Statute
Inf Action Notes:	Not reported
In Action Division:	Riverside County Department of Env Health
Inf Action Program:	LIST
nf Action Source:	CERS
Site ID:	15157
ite Name:	Calif Hwy Patrol/ San Gorgonio Pass
Site Address:	195 HIGHLAND SPRINGS AVE
ite Citv:	BEAUMONT
ite Zip:	92223
nf Action Date:	09-09-2014
nf Action Type:	Notice of Violation (Unified Program)
nf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
nf Action Notes:	Not reported
nf Action Division:	Riverside County Department of Env Health
Enf Action Program:	UST
Enf Action Source:	CERS
Site ID:	15157
Site Name:	Calif Hwy Patrol/ San Gorgonio Pass
Site Address:	195 HIGHLAND SPRINGS AVE
Site City:	BEAUMONT
Site Zip:	92223
Enf Action Date:	09-11-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
inf Action Notes:	Not reported
Inf Action Division:	Riverside County Department of Env Health
inf Action Program:	UST

Map ID Direction		_	MAP FINDINGS		
Distance Elevation	Site			Database(s)	EDR ID Number EPA ID Number
	CALIFORNIA HIGHWAY PA	FROL #655 SAM	N GORGONIO PASS (Continued)		S113084250
	Site ID:	15	157		
	Site Name:	Ca	lif Hwy Patrol/ San Gorgonio Pass		
	Site Address:	19: BE	5 HIGHLAND SPRINGS AVE		
	Site Zin:	92 <sup>.</sup>	223		
	Enf Action Date:	09	-12-2013		
	Enf Action Type:	No	tice of Violation (Unified Program)		
	Enf Action Description:	No	tice of Violation Issued by the Inspector a	t the Time of Inspection	
	Enf Action Notes:	No	t reported		
	Enf Action Division:	Riv	verside County Department of Env Health		
	Enf Action Program:	HV	V		
	Enf Action Source:	CE	RS		
	Coordinates:				
	Site ID:	15	157		
	Facility Name:	Ca	lif Hwy Patrol/ San Gorgonio Pass		
	Env Int Type Code:	HV	VG		
	Program ID:	10	320100		
	Coord Name:	No	t reported		
	Ref Point Type Desc:	Ce	enter of a facility or station.		
	Latitude:	33	.922900		
	Longitude:	-11	16.947650		
	Affiliation:				
	Affiliation Type Desc:	lde	entification Signer		
	Entity Name:	Ka	ren Mejia		
	Entity Title:	AB	MA, Facilities Section		
	Affiliation Address:	No	treported		
	Affiliation City:	NO No	t reported		
	Affiliation Country:	No	t reported		
	Affiliation Zin:	No	t reported		
	Affiliation Phone:	No	t reported		
	Affiliation Type Desc:	US	ST Permit Applicant		
	Entity Name:	Mit	tchell Smalley		
	Entity Title:	Au	to-Tech II		
	Affiliation Address:	No	t reported		
	Affiliation City:	No	t reported		
	Affiliation State:	No	t reported		
	Affiliation Country:	No	t reported		
	Affiliation ZIP:	NO (95	51) 769-2000		
	Affiliation Type Desc.				
	Entity Name	00 Ca	lifornia Highway Patrol		
	Entity Title:	No	t reported		
	Affiliation Address:	P.(	D. Box 942898		
	Affiliation City:	Sa	cramento		
	Affiliation State:	CA	A Contraction of the second seco		
	Affiliation Country:	Un	ited States		
	Affiliation Zip:	94	298		
	Affiliation Phone:	(91	16) 843-3800		
	Affiliation Type Desc:	En	vironmental Contact		
	Entity Name:	Ka	ren Mejia		

#### Map ID Direction Distance Elevation Site

# MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

CALIFORNIA HIGHWAY PATROL #655	SAN GORGONIO PASS (Continued)
Entity Title:	Not reported
Affiliation Address:	PO Box 942898
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94298-0001
Affiliation Phone	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Department of California Highway Patrol
Entity Title:	Not reported
Affiliation Address:	PO Box 942898
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94298-0001
Affiliation Phone:	(916) 843-3800
Affiliation Type Desc:	UST Tank Owner
Entity Name:	California Highway Patrol
Entity Title:	Not reported
Affiliation Address:	P. O Box 942898
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94298
Affiliation Phone:	(916) 843-3800
Affiliation Type Desc:	CUPA District
Entity Name:	Riverside Cnty Env Health
Entity Title:	Not reported
Affiliation Address:	4065 County Circle Drive, Room 104
Affiliation City:	Riverside
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92503
Affiliation Phone:	(951) 358-5055
Affiliation Type Desc:	Document Preparer
Entity Name:	Karen Mejia
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	195 Highland Springs Avenue
Affiliation City:	Beaumont
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92223
Affiliation Phone	Not reported

Map ID Direction		MAP FINDINGS
Elevation	Site	
	CALIFORNIA HIGHWAY PATRO	L #655 SAN GORGONIO PASS (Continued)
	Affiliation Type Desc:	Operator
	Entity Name:	Mike Alvarez, Captain #655 San Gorgonio Pass
	Entity Title:	Not reported
	Affiliation Address:	Not reported
	Affiliation City:	Not reported
	Affiliation State:	Not reported

EDR ID Number EPA ID Number Database(s)

S113084250

Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(951) 769-2000
Affiliation Type Desc:	Parent Corporation
Entity Name:	Department of California Highway Patrol
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	UST Tank Operator
Entity Name:	California Highway Patrol
Entity Title:	Not reported
Affiliation Address:	195 Highland Springs Ave.
Affiliation City:	Beaumont
Affiliation State:	Са
Affiliation Country:	United States
Affiliation Zip:	92223
Affiliation Phone:	(951) 769-2000

#### C19 CALIF HWY PATROL/ SAN GORGONIO PASS SSE **195 HIGHLAND SPRINGS AVE**

#### < 1/8 BEAUMONT, CA 92223

0.114 mi. 603 ft.

Site 9 of 9 in cluster C

RIVERSIDE CO. US	ST:
Name:	CALIF HWY PATROL/SAN GORGONIO PASS
Address:	195 HIGHLAND SPRINGS AVE
City,State,Zip:	BEAUMONT, CA 92223
Region:	RIVERSIDE
Total Tanks:	1
	RIVERSIDE CO. US Name: Address: City,State,Zip: Region: Total Tanks:

### UST:

Name:	CALIF HWY PATROL/ SAN GORGONIO PASS
Address:	195 HIGHLAND SPRINGS AVE
City,State,Zip:	BEAUMONT, CA 92223
Facility ID:	106812
Permitting Agency:	Riverside County Department of Environmental Health
Latitude:	33.9229
Longitude:	-116.94765
Name:	CALIFORNIA HIGHWAY PATROL
Address:	195 HIGHLAND SPRINGS AVE
City,State,Zip:	BEAUMONT, CA 92223
Facility ID:	135

UST U003765790 N/A

Database(s)  EDR IC    Database(s)  EPA IC    CALIF HWY PATROL/SAN GORGONIO PASS (Continued)  U0037    Permitting Agency:  RIVERSIDE COUNTY    Latitude:  33.924254    Longitude:  -116.946296    Contact INDA UNIVERSITY HIGHLAND SPRINGS MEDICAL PLA  RCRA NonGen / NLR  10248c    BEAUMONT, CA 92223  Site 1 of 13 in cluster D  CALIO    Min.  Site 1 of 13 in cluster D  EDA LINDA UNIVERSITY HIGHLAND SPRINGS AVE  CALIO    It is actility name:  LONA LINDA UNIVERSITY HIGHLAND SPRINGS MEDICAL PLAZA  CALIO    At inglandrame and the second by agency: 2013-08-29 00:00:00.0  3  3    It is actility name:  LONA LINDA UNIVERSITY HIGHLAND SPRINGS MEDICAL PLAZA  CALIO    It is actility name:  LONA LINDA UNIVERSITY HIGHLAND SPRINGS MEDICAL PLAZA  3    It is actility name:  CALIONON CA 9223:3:170  3  3    EPA ID:  CALIONOS BLVD STE 15:00  SAN BERNARDINO, CA 92408:3710  3  3    Contact  MIHRAY SHARIP  Contact enail:  MIHRAY SHARIP  3  3  3  3  3  3  3  3  3  3  3		
CALIF HWY PATROL/SAN GORGONIO PASS (Continued)  U0037    Permitting Agency:  RIVERSIDE COUNTY    Latitude:  33.324254    Longitude:	Site	EDR ID Numbe EPA ID Numbe
CALIF HWY PATROL/ SAN GORGONIO PASS (Continued)  U0037.    Permitting Agency:  RIVERSIDE COUNTY    Latituda:  33.94254    Longitude:  -116.946296		
Permitting Agency: RIVERSIDE COUNTY Latitude: 33.924254 Longitude: -116.946296 	CALIF HWY PATROL/ SAN	U003765790
LOMA LINDA UNIVERSITY HIGHLAND SPRINGS MEDICAL PLA 81 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223 3 ml. t. Site 1 of 13 in cluster D tive: RCRA NonGen / NLR: PT Date form received by agency: 2013-08-29 00:00:00.0 al: Facility name: LOMA LINDA UNIVERSITY HIGHLAND SPRINGS MEDICAL PLAZA Facility address: 81 HIGHLAND SPRINGS AVE BEAUMONT, CA 92223-3170 EPA ID: CAL000389114 Mailing address: 101 E REDLANDS BLVD STE 1500 SAN BERNARDINO, CA 922408-3710 Contact: MIHRAY SHARIP Contact address: ENVIRONMENTAL HEALTH & SAFETY 101 E. REDLANDS BLVD SAN BERNARDINO, CA 92408 Contact telephone: 909-651-4018 Contact telephone: 909-651-4018 Contact telephone: 09 Classification: Non-Generator Description: Handler: Non-Generator do not presently generate hazardous waste Owner/Operator Summary: Owner/Operator country: Not reported Owner/Operator rame: LOMA LINDA UNIVERSITY MEDICAL CENTE Owner/Operator rame: LOMA LINDA UNIVERSITY MEDICAL CENTE Owner/Operator feating: Not reported Owner/Operator feating: Not reported	Permitting Agency: Latitude: Longitude:	
Site 1 of 13 in cluster D    re:  RCRA NonGen / NLR:    Date form received by agency:2013-08-29 00:00:00.0    :  Facility name:    LOMA LINDA UNIVERSITY HIGHLAND SPRINGS MEDICAL PLAZA    :  Facility address:    :  14 HigHLAND SPRINGS AVE    :  BEAUMONT, CA 92223-3170    :  EPA ID:    :  CAL000389114    Mailing address:  101 E REDLANDS BLVD STE 1500    :  SAN BERNARDINO, CA 92408-3710    :  Contact:    :  MIHRAY SHARIP    :  Contact:    :  Not reported    :  Contact ddress:    :  SAN BERNARDINO, CA 92408    :  Contact idelphone:    :  909-651-4018    :  Contact email:    :  MSHARIP@LLU.EDU    :  EPA Region:    :  Owner/Operator Summary:    :  Owner/Operator Summary:    :  Owner/Operator address:    :  1234 ANDERSON ST    :  LOMA LINDA, CA 92354    :  Owner/operator remail:<	LOMA LINDA UNIVERSITY I 81 HIGHLAND SPRINGS AV BEAUMONT, CA 92223	1024840413 CAL000389114
BCRA NonGen / NLR:    Date form received by agency: 2013-08-29 00:00:00.0    Facility name:  LOMA LINDA UNIVERSITY HIGHLAND SPRINGS MEDICAL PLAZA    Facility address:  81 HIGHLAND SPRINGS AVE    BEAUMONT, CA 92223-3170  EPA ID:    CAL000389114  Mailing address:    Mailing address:  101 E REDLANDS BLVD STE 1500    SAN BERNARDINO, CA 92408-3710    Contact:  MIHRAY SHARIP    Contact address:  ENVIRONMENTAL HEALTH & SAFETY 101 E. REDLANDS BLVD    SAN BERNARDINO, CA 92408  Contact country:    Not reported  SAN BERNARDINO, CA 92408    Contact country:  Not reported    Contact country:  Not reported    Contact telephone:  909-651-4018    Contact telephone:  09    Classification:  Non-Generator    Description:  Handler: Non-Generators do not presently generate hazardous waste    Owner/Operator Summary:  Owner/Operator address:    Owner/Operator address:  11234 ANDERSON ST    LOMA LINDA, CA 92354  Owner/operator extension:    Owner/operator relephone:  90-651-4019    Owner/operator fax:  Not reported    Owner/operat	Site 1 of 13 in cluster D	
Contact country:Not reportedContact telephone:909-651-4018Contact email:MSHARIP@LLU.EDUEPA Region:09Classification:Non-GeneratorDescription:Handler: Non-Generators do not presently generate hazardous wasteOwner/Operator Summary:Owner/Operator name:LOMA LINDA UNIVERSITY MEDICAL CENTEOwner/operator address:11234 ANDERSON STLOMA LINDA, CA 92354Owner/operator telephone:909-651-4019Owner/operator fax:Not reportedOwner/operator fax:Not reportedOwner/Operator Type:OtherOwner/Operator Type:OwnerOwner/Operator telephone:Not reportedOwner/Operator fax:Not reportedOwner/Operator fax:Not reportedOwner/Operator type:OtherOwner/Operator type:OtherOwner/Operator type:Not reportedOwner/Operator type:OtherOwner/Operator type:OtherOwner/Operator type:OtherOwner/Operator type:OtherOwner/Operator type:OtherOwner/Operator type:OtherOwner/Operator type:OwnerOwner/Operator type:OwnerOwner/Operator type:OwnerOwner/Operator type:OwnerOwner/Operator type:OwnerOwner/Operator type:OwnerOwner/Operator type:OwnerOwner/Operator type:OwnerOwner/Operator type:OwnerOwner/Operator type: <td< td=""><td>EPA ID: Mailing address: Contact: Contact address:</td><td></td></td<>	EPA ID: Mailing address: Contact: Contact address:	
Owner/Operator Summary:LOMA LINDA UNIVERSITY MEDICAL CENTEOwner/operator address:11234 ANDERSON ST LOMA LINDA, CA 92354Owner/operator country:Not reportedOwner/operator telephone:909-651-4019Owner/operator fax:Not reportedOwner/operator email:Not reportedOwner/operator fax:Not reportedOwner/operator extension:Not reportedOwner/operator Type:OtherOwner/Operator Type:OwnerOwner/Operator Type:OwnerOwner/Op start date:Not reportedOwner/Op end date:Not reported	Contact country: Contact telephone: Contact email: EPA Region: Classification: Description:	
Owner/operator name:  MIHRAY SHARIP    Owner/operator address:  ENVIRONMENTAL HEALTH & SAFETY 101 E. REDLANDS BLVD    SAN BERNARDINO, CA 92408    Owner/operator country:  Not reported    Owner/operator telephone:  909-651-4018    Owner/operator fax:  Not reported    Owner/operator extension:  Not reported	Owner/Operator Summary Owner/operator name: Owner/operator address Owner/operator country Owner/operator telepho Owner/operator email: Owner/operator fax: Owner/Operator Type: Owner/Operator Type: Owner/Operator tate: Owner/Operator name: Owner/Operator name: Owner/operator country Owner/operator country Owner/operator telepho Owner/operator fax: Owner/operator fax:	
Legal status:  Other    Owner/Operator Type:  Operator    Owner/Op start date:  Not reported    Owner/Op end date:  Not reported    Handler Activities Summary:  Handler Activities Summary:	Legal status: Owner/Operator Type: Owner/Op start date: Owner/Op end date: Handler Activities Summar	

Map ID Direction		MAP FINDINGS	]	
Distance Elevation	Site		Database(s)	EDR ID Number EPA ID Number
	LOMA LINDA UNIVERSITY HIGHLAND	SPRINGS MEDICAL PLAZA (Continued)		1024840413
	Mixed waste (haz, and radioactive)	· No		
	Recycler of hazardous waste:	No		
	Transporter of hazardous waste:	Yes		
	Treater, storer or disposer of HW:	No		
	Underground injection activity:	No		
	On-site burner exemption:	No		
	Furnace exemption:	NO		
	Used oil processor:	No		
	User oil refiner	No		
	Used oil fuel marketer to burner:	No		
	Used oil Specification marketer:	No		
	Used oil transfer facility:	No		
	Used oil transporter:	No		
	Violation Status: No v	violations found		
				• · · · · · · · · -
E21 SSW 1/8-1/4	EXPRESS LUBE AND CAR WASH 1560 E 6TH ST BEAUMONT, CA 92223		CERS HAZ WASTE CERS TANKS CERS	N/A
0.149 mi. 786 ft.	Site 1 of 9 in cluster E			
Relative:	CERS HAZ WASTE:			
Lower	Name:	EXPRESS LUBE AND CAR WASH		
Actual:	Address:	1560 E 6TH ST		
2597 ft.	City,State,Zip:	BEAUMONT, CA 92223		
	Site ID:	115399		
	CERS ID: CERS Description:	10326589 Hazardous Waste Generator		
	CERS TANKS:			
	Name:	EXPRESS LUBE AND CAR WASH		
	Address:	1560 E 6TH ST		
	City,State,Zip:	BEAUMONT, CA 92223		
	Site ID:	115399		
	CERS ID: CERS Description:	10326589 Aboveground Petroloum Storage		
	CERS Description.	Aboveground Felloleum Storage		
	CERS:			
	Name:	EXPRESS LUBE AND CAR WASH		
	Address:	1560 E 6TH ST		
	City,State,Zip:	BEAUMONT, CA 92223		
	Site ID:	115399		
	CERS ID:	10326589		
	CERS Description:	Chemical Storage Facilities		
	Violations:			
	Site ID:	115399		
	Site Name:	Express Lube and Car Wash		
	Citation:	HSC 6.67 25270.6(b) - California Health and Section(s) 25270.6(b)	d Safety Code, Chapter	6.67,
	Violation Description:	Failure to pay the APSA Program fee.		
	Violation Notes:	Returned to compliance on 10/08/2014.		
	Violation Division:	Riverside County Department of Env Health	1	
	Violation Program:	APSA		
	Violation Source:	CERS		

EDR ID Number Database(s) EPA ID Number

#### EXPRESS LUBE AND CAR WASH (Continued)

	,
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	05-25-2018
Citation:	HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description:	Failure to promptly correct visible discharges and promptly remove any accumulations of oil in diked areas.
Violation Notes:	Returned to compliance on 05/25/2018.
Violation Division:	Riverside County Department of Env Health
Violation Program:	APSA
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	40 CFR 1 265.172 - U.S. Code of Federal Regulations, Title 40, Chapter 1, Section(s) 265.172
Violation Description:	Failure to accumulate or store hazardous waste in a lined/compatible container.
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description:	Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable

Database(s)

EDR ID Number EPA ID Number

## EXPRESS LUBE AND CAR WASH (Continued)

Violation Notes: Violation Division: Violation Program: Violation Source:	quantities. Returned to compliance on 10/08/2014. Riverside County Department of Env Health HMRRP CERS
Site ID: Site Name: Violation Date: Citation:	115399 Express Lube and Car Wash 08-13-2014 HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Description:	Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training
Violation Notes:	Returned to compliance on 10/08/2014
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(a) 66262.34(f)
Violation Description:	Failure to properly label bazardous waste accumulation containers with
Violation Description.	the following requirements: "Hazardous Waste" name and address of the
	generator, physical and chemical characteristics of the Hazardous
Violation Notos:	Paturnad to compliance on 10/08/2014
Violation Division	Riverside County Department of Env Health
Violation Program:	HW
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Description:	Failure to prepare and implement a Spill Prevention Control and Countermeasure (SPCC) Plan
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	APSA
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter
Violation Description:	0.07, Section(s) 25270.4.5(a) Eailure to discuss conformance with SECC requirements within the SECC
	plan.
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	APSA
Violation Source:	CERS

EDR ID Number Database(s) EPA ID Number

#### EXPRESS LUBE AND CAR WASH (Continued)

Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	07-05-2017
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95,
	Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the
·	business plan is complete and accurate on or before the annual due
	date.
Violation Notes:	Returned to compliance on 11/09/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-09-2017
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95,
	Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the
·	business plan is complete and accurate on or before the annual due
	date.
Violation Notes:	Returned to compliance on 08/28/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	05-25-2018
Citation:	Un-Specified
Violation Description:	Business Plan Program - Operations/Maintenance - General Local
	Ordinance
Violation Notes:	Returned to compliance on 06/21/2018. OBSERVATION: Observed Nitrogen
	and Compressed Air tanks freestanding. CORRECTIVE ACTION:
	Owner/operator shall store all hazardous materials in a manner which
	will prevent unauthorized fire, explosion, or release. Securing tanks
	by use of a cart, strapping to adjacent wall, or through similar means
	would be acceptable.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95,
	Section(s) Multiple
Violation Description:	Business Plan Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 10/08/2014. [LOCAL ORDINANCE VIOLATION 104B]
	Emergency phone numbers have been posted appropriately.
Violation Division	Riverside County Department of Env Health
Violation Program	HMRRP
Violation Source	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014

EDR ID Number Database(s) EPA ID Number

#### EXPRESS LUBE AND CAR WASH (Continued)

Citation:	HSC 6.67 25270.6(a)(2) - California Health and Safety Code, Chapter
Violation Description:	Failure to submit a Tank Facility Statement or Business Plan.
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	APSA
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	ASC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	HSC 6.11 25404.1 - California Health and Safety Code, Chapter 6.11, Section(s) 25404.1
Violation Description:	Failure to maintain a valid permit.
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	APSA
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	Section(s) Multiple
Violation Description:	APSA Program - Administration/Documentation - General
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	APSA
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	U8-13-2014
Citation.	Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the business plan is complete, accurate, and up-to-date.
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Violation Bate.	

EDR ID Number Database(s) EPA ID Number

## EXPRESS LUBE AND CAR WASH (Continued)

Citation:	19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.
Violation Notes:	Returned to compliance on 10/08/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	05-25-2018
Citation:	22 CCR 15 66265.31 - California Code of Regulations, Title 22, Chapter
	15, Section(s) 66265.31
Violation Description:	Failure to maintain and operate the facility to minimize the
	possibility of a fire, explosion, or any unplanned sudden or
	non-sudden release of hazardous waste or hazardous waste constituents
	to air soil or surface water which could threaten human health or
	the environment
Violation Notes:	Returned to compliance on 05/25/2018
Violation Division	Retarried to compliance on 05/25/2010.
Violation Division.	
Violation Program.	
violation Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Violation Date:	08-13-2014
Citation:	40 CFR 1 265.31 - U.S. Code of Federal Regulations, Title 40, Chapter
	1, Section(s) 265.31
Violation Description:	Failure to maintain and operate the facility to minimize the
	possibility of a fire, explosion, or any unplanned sudden or
	non-sudden release of hazardous waste or hazardous waste constituents
	to the air, soil, or surface water which could threaten human health
	or the environment
Violation Notes:	Returned to compliance on 10/08/2014
Violation Division:	Retarried to compliance on 10/00/2014.
Violation Dregram	
Violation Program.	
violation Source:	CERS
Evaluation	
Eval Conoral Type:	Compliance Evaluation Inspection
Eval Deter	
Eval Date.	05-25-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-25-2018
Violations Found	Yes
Eval Type	Routine done by local agency
Eval Notes:	Not reported
Eval Noles.	Nucreide County Department of Envillenth
Eval Division.	
Eval Program:	
Eval Source:	CERS

Database(s)

EDR ID Number EPA ID Number

## EXPRESS LUBE AND CAR WASH (Continued)

RESS LUBE AND CAR WASH (Con	itinued)
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-25-2018
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	07-05-2017
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	08-09-2017
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-13-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-13-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	08-13-2014
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	10-08-2014
Violations Found:	No

Database(s) EP

EDR ID Number EPA ID Number

## EXPRESS LUBE AND CAR WASH (Continued)

Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	10-08-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	10-08-2014
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Enforcement Action:	
Site ID:	115399
Site Name:	Express Lube and Car Wash
Site Address:	1560 E 6TH ST
Site City:	BEAUMONT
Site Zip:	92223
Enf Action Date:	08-13-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Riverside County Department of Env Health
Enf Action Program:	APSA
Enf Action Source:	CERS
Site ID:	115399
Site Name:	Express Lube and Car Wash
Site Address:	1560 E 6TH ST
Site City:	BEAUMONT
Site Zip:	92223
Enf Action Date:	08-13-2014
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Riverside County Department of Env Health
Enf Action Program:	HMRRP
Enf Action Source:	CERS
Site ID:	115399
Site Name	Express Lube and Car Wash
One Marine.	
Site Address:	1560 E 6TH ST
Site Address: Site City:	1560 E 6TH ST BEAUMONT
Site Address: Site City: Site Zip:	1560 E 6TH ST BEAUMONT 92223

EDR ID Number Database(s) EPA ID Number

#### EXPRESS LUBE AND CAR WASH (Continued)

#### S113136617

Notice of Violation (Unified Program) Notice of Violation Issued by the Inspector at the Time of Inspection Not reported Riverside County Department of Env Health HW CERS

#### Coordinates:

Site ID: Facility Name: Env Int Type Code: Program ID: Coord Name: Ref Point Type Desc: Latitude: Longitude:

Enf Action Type:

Enf Action Notes:

Enf Action Division:

Enf Action Program:

Enf Action Source:

Enf Action Description:

#### Affiliation:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

#### Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: 115399 Express Lube and Car Wash HWG 10326589 Not reported Center of a facility or station. 33.929870 -116.948920

CUPA District Riverside Cnty Env Health Not reported 4065 County Circle Drive, Room 104 Riverside CA Not reported 92503 (951) 358-5055

Facility Mailing Address Mailing Address Not reported 1560 E 6th St Beaumont CA Not reported 92223 Not reported

Identification Signer Sanjay Aggarwal Owner Not reported Not reported Not reported Not reported Not reported Not reported Not reported

Operator EXPRESS LUBES US INC Not reported Not reported Not reported Not reported Not reported Not reported

Database(s)

EDR ID Number EPA ID Number

#### EXPRESS LUBE AND CAR WASH (Continued)

Affiliation Phone:	(951) 922-8900
Affiliation Type Desc:	Document Preparer
Entity Name:	SANJAY AGGARWAL
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Parent Corporation
Entity Name:	Express Lube and Car Wash
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	MARSHALL HENSON
Entity Title:	Not reported
Affiliation Address:	1560 E 6TH STREET
Affiliation City:	BEAUMONT
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	92223
Affiliation Phone:	Not reported
Affiliation Type Desc:	Legal Owner
Entity Name:	Sanjay Aggarwal
Entity Title:	Not reported
Affiliation Address:	1560 E 6TH ST
Affiliation City:	BEAUMONT
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	92223
Affiliation Phone:	(951) 756-5457

EXPRESS LUBE US INC

BEAUMONT, CA 92223-2508

CAL000342194 SANJAY AGGARWAL

1560 E 6TH STREET

BEAUMONT, CA 92223

#### S113136617

E22 SSW 1/8-1/4 0.149 mi. 786 ft.	EXPRESS LUBE US INC 1560 E 6TH ST BEAUMONT, CA 92223 Site 2 of 9 in cluster E	
Relative: Lower Actual: 2597 ft.	RCRA NonGen / NLR: Date form received by Facility name: Facility address:	agency: 2009-04-13 00:00:00.0 EXPRESS LUBE US IN 1560 E 6TH ST

EPA ID: Contact: Contact address: RCRA NonGen / NLR 1024822919 CAL000342194

Database(s)

EDR ID Number EPA ID Number

## EXPRESS LUBE US INC (Continued)

#### 1024822919

Contact country: Contact telephone: Contact email: EPA Region: Classification: Description:	Not reported 951-922-8900 SANJAY3580@SBCGLOBAL.NET 09 Non-Generator Handler: Non-Generators do not presently generate hazardous waste
Owner/Operator Summary:	
Owner/operator name:	EXPRESS LUBE US INC
Owner/operator address:	1560E 6TH STREET
	BEAUMONT, CA 92333
Owner/operator country:	Not reported
Owner/operator telephone:	951-756-5457
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	SANJAY AGGARWAL
Owner/operator address:	1560 E 6TH STREET
	BEAUMONT, CA 92223
Owner/operator country:	Not reported
Owner/operator telephone:	951-922-8900
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Other
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Handler Activities Summary:	
U.S. importer of hazardous wa	aste: No
Mixed waste (haz. and radioad	ctive): No
Recycler of hazardous waste:	No
Transporter of hazardous was	te: Yes
Treater, storer or disposer of H	HW: No
Underground injection activity:	: No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burne	er: No
Used oil Specification markete	Pr: NO
Used oil transfer facility:	NO Na
Used on transporter:	INU
Violation Status:	No violations found

Database(s)

EDR ID Number EPA ID Number

23 SW /8-1/4	EXPRESS LUBE AND CAR WASH 1560 E 6TH ST BEAUMONT, CA 92223		AST	A100419835 N/A
.149 ml. 86 ft.	Site 3 of 9 in cluster E			
786 ft. Relative: Lower Actual: 2597 ft.	Site 3 of 9 in cluster E AST: Name: Address: City/Zip: Certified Unified Program Agencies: Owner: Total Gallons: CERSID: Facility ID: Business Name: Phone: Fax: Mailing Address: Mailing Address City: Mailing Address State: Mailing Address State: Mailing Address Zip Code: Operator Name: Operator Phone: Owner Phone: Owner Phone: Owner Mail Address: Owner State: Owner State: Owner Zip Code: Owner Country: Property Owner Name: Property Owner Mailing Address: Property Owner City: Property Owner City: Property Owner City: Property Owner Zip Code: Property Owner Zip Code: Property Owner Country: State: Property Owner Country: Property Owner Country:	EXPRESS LUBE AND CAR WASH 1560 E 6TH ST BEAUMONT,92223 Not reported Sanjay Aggarwal Not reported 10326589 Not reported Express Lube and Car Wash 9517565457 Not reported 1560 E 6th St Beaumont CA 92223 Sanjay Aggarwal 9519228900 9517565457 1560 E 6th St Not reported Not reported		
D24 South 1/8-1/4 D.152 mi. 304 ft. Relative: Lower Actual: 2592 ft.	BEAUMONT GAS MART 1696 E 6TH ST BEAUMONT, CA 92223 Site 2 of 13 in cluster D CERS HAZ WASTE: Name: Address: City,State,Zip: Site ID: CERS ID: CERS Description: CERS TANKS: Name: Address: City,State,Zip: Site ID: CERS ID:	BEAUMONT GAS MART 1696 E 6TH ST BEAUMONT, CA 92223 11450 10316767 Hazardous Waste Generator BEAUMONT GAS MART 1696 E 6TH ST BEAUMONT, CA 92223 11450 10316767 Underground Storage Tank	CERS HAZ WASTE CERS TANKS HAZNET CERS	S113141654 N/A

Database(s)

EDR ID Number EPA ID Number

## **BEAUMONT GAS MART (Continued)**

HAZNET:	
Name:	BEAUMONT GAS MART
Address:	1696 E 6TH ST
City,State,Zip:	BEAUMONT, CA 92223
Year:	2017
GEPAID:	CAL000304746
Contact:	SUNIL PATEL MANAGER
Telephone:	9518455221
Mailing Name:	Not reported
Mailing Address:	1696 EAST 6TH ST
Mailing City,St,Zip:	BEAUMONT, CA 922232510
Gen County:	Riverside
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Tons:	0.252
CA Waste Code:	135-Unspecified aqueous solution
Method:	H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatment/Reovery
	(H010-H129) Or (H131-H135)
Facility County:	Riverside
Name:	BEAUMONT GAS MART
Address:	1696 F 6TH ST
City.State.Zip:	BEAUMONT. CA 92223
Year:	2017
GEPAID:	CAL000304746
Contact:	SUNIL PATEL MANAGER
Telephone:	9518455221
Mailing Name:	Not reported
Mailing Address:	1696 EAST 6TH ST
Mailing City,St,Zip:	BEAUMONT, CA 922232510
Gen County:	Riverside
TSD EPA ID:	CAD982444481
TSD County:	San Bernardino
Tons:	0.22935
CA Waste Code:	223-Unspecified oil-containing waste
Method:	H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatment/Reovery
	(H010-H129) Or (H131-H135)
Facility County:	Riverside
Name:	REALIMONT GAS MART
Address.	
City State Zin:	
Vear	2011
GEPAID.	CAL000304746
Contact:	MIKE PATEL MANAGER
Telephone:	9518455221
Mailing Name:	Not reported
Mailing Address:	1696 EAST 6TH ST
Mailing City,St,Zip:	BEAUMONT, CA 922232510
Gen County:	Riverside
TSD EPA ID:	CAD028409019
TSD County:	Los Angeles
Tons:	1.14675
CA Waste Code:	241-Tank bottom waste
Method:	H135-Discharge To Sewer/Potw Or Npdes(With Prior StorageWith Or
	Without Treatment)
Facility County:	Riverside

CERS:

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

S113141654

#### BEAUMONT GAS MART (Continued)

Name: BEAUMONT GAS MART Address: 1696 E 6TH ST City,State,Zip: BEAUMONT, CA 92223 Year: 2009 GEPAID: CAL000304746 Contact: MIKE PATEL MANAGER Telephone: 9518455221 Mailing Name: Not reported Mailing Address: 1696 EAST 6TH ST Mailing City, St, Zip: BEAUMONT, CA 922232510 Gen County: Riverside CAD028409019 TSD EPA ID: TSD County: Los Angeles Tons: 0.22935 CA Waste Code: 241-Tank bottom waste Method: H135-Discharge To Sewer/Potw Or Npdes(With Prior Storage--With Or Without Treatment) Facility County: Riverside BEAUMONT GAS MART Name: Address: 1696 E 6TH ST City,State,Zip: BEAUMONT, CA 92223 2008 Year: GEPAID: CAL000304746 Contact: MIKE PATEL MANAGER 9518455221 Telephone: Mailing Name: Not reported Mailing Address: 1696 EAST 6TH ST Mailing City, St, Zip: BEAUMONT, CA 922232510 Gen County: Riverside TSD EPA ID: CAD028409019 TSD County: Los Angeles 0.125 Tons: CA Waste Code: 352-Other organic solids H141-Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery Method: (H010-H129) Or (H131-H135) Facility County: Riverside

<u>Click this hyperlink</u> while viewing on your computer to access 1 additional CA\_HAZNET: record(s) in the EDR Site Report.

Name:	BEAUMONT GAS MART
Address:	1696 E 6TH ST
City,State,Zip:	BEAUMONT, CA 92223
Site ID:	11450
CERS ID:	10316767
CERS Description:	Chemical Storage Facilities
Violations:	
Site ID:	11450
Site Name:	Beaumont Gas Mart
Violation Date:	03-27-2019
Citation:	23 CCR 16 2641(a) - California Code of Regulations, Title 23, Chapter
	16, Section(s) 2641(a)
Violation Description:	Failure of leak detection equipment to be located such that equipment is capable of detecting a leak at the earliest possible opportunity.

EDR ID Number Database(s) EPA ID Number

BEAUMONT GAS MART (Continued)	S11314
Violation Notes:	Returned to compliance on 04/19/2019. Observed 208 sensor at 87 slave fill sump to not be secured/bracketed properly upright. Sensor was at a tilted angle roughly 50 degrees due to the way the bent metal hanging element was attached to sump piping. Sump was dry and sensor was functional when tested. Spoke to lead J. Gates at time of inspection regarding violation category. Facility shall provide the sensor maintained upright to ensure sensor functions properly in the event of a release. All other sensors had tube fittings to ensure sensors were maintained upright at the proper location. Modification was requested. Owner/operator shall provide work order.
Violation Division:	Riverside County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
Site ID <sup>.</sup>	11450
Site Name:	Beaumont Gas Mart
Violation Date:	04-05-2019
Citation:	23 CCR 16 2712(b)(1)(G) - California Code of Regulations Title 23
Chalon.	Chapter 16 Section(s) $2712(b)(1)(G)$
Violation Description:	Failure to comply with one or more of the following overfill
Violation Description:	Failure to comply with one or more of the following overfill prevention equipment requirements: Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling. Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1,?2018. For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter. For USTs installed on and after October?1,?2018, perform an inspection at installation and every 36 months thereafter. Inspected within 30 days after a repair to the overfill prevention equipment. Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer. Inspected by a certified UST service technician. Maintain records of overfill
	prevention equipment inspection for 36 months.
Violation Notes:	Not reported
Violation Division:	Riverside County Department of Env Health
Violation Program:	UST
Violation Source:	CERS
	14.150
	11450 Deserves of Oce Mart
Site Name:	Beaumont Gas Mart
Violation Date:	03-27-2019
Citation:	23 CCR 16 2715(c)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2715(c)(2)
Violation Description	Failure to have at least one facility employee present during
	operating hours that has been trained in the proper operation and maintenance of the UST system by a designated operator (DO).
Violation Notes:	Returned to compliance on 04/19/2019.

#### 6113141654

Database(s)

EDR ID Number EPA ID Number

#### **BEAUMONT GAS MART (Continued)**

Violation Division: Riverside County Department of Env Health UST Violation Program: Violation Source: CERS Evaluation: Other/Unknown Eval General Type: 03-10-2015 Eval Date: Violations Found: No Eval Type: Other, not routine, done by local agency Eval Notes: **Delivered NOV** Eval Division: Riverside County Department of Env Health Eval Program: UST Eval Source: CERS Eval General Type: Other/Unknown Eval Date: 03-10-2015 Violations Found: No Other, not routine, done by local agency Eval Type: **Eval Notes:** Wrote NOV for leak Eval Division: Riverside County Department of Env Health Eval Program: UST **Eval Source:** CERS Eval General Type: **Compliance Evaluation Inspection** Eval Date: 03-22-2018 Violations Found: No Routine done by local agency Eval Type: **Eval Notes:** Not reported Eval Division: Riverside County Department of Env Health HMRRP Eval Program: Eval Source: CERS Eval General Type: **Compliance Evaluation Inspection** 03-22-2018 Eval Date: Violations Found: No Eval Type: Routine done by local agency **Eval Notes:** Not reported Eval Division: Riverside County Department of Env Health Eval Program: HW CERS Eval Source: Eval General Type: **Compliance Evaluation Inspection** Eval Date: 03-22-2018 Violations Found: No Eval Type: Routine done by local agency Eval Notes: Not reported Eval Division: Riverside County Department of Env Health UST Eval Program: CERS Eval Source: Eval General Type: **Compliance Evaluation Inspection** Eval Date: 03-23-2016 Violations Found: No Eval Type: Routine done by local agency Eval Notes: Not reported Eval Division: Riverside County Department of Env Health Eval Program: UST

Database(s)

EDR ID Number EPA ID Number

#### **BEAUMONT GAS MART (Continued)**

**Eval Source:** CERS Eval General Type: **Compliance Evaluation Inspection** Eval Date: 03-26-2014 Violations Found: No Eval Type: Routine done by local agency Not reported Eval Notes: Eval Division: Riverside County Department of Env Health Eval Program: HMRRP Eval Source: CERS Eval General Type: **Compliance Evaluation Inspection** 03-26-2014 Eval Date: Violations Found: No Eval Type: Routine done by local agency Not reported Eval Notes: Eval Division: Riverside County Department of Env Health Eval Program: HW Eval Source: CERS Eval General Type: **Compliance Evaluation Inspection** 03-26-2014 Eval Date: Violations Found: No Eval Type: Routine done by local agency Eval Notes: Not reported Eval Division: Riverside County Department of Env Health Eval Program: UST Eval Source: CERS Eval General Type: **Compliance Evaluation Inspection** Eval Date: 03-27-2019 Violations Found: Yes Eval Type: Routine done by local agency Eval Notes: Not reported Eval Division: Riverside County Department of Env Health Eval Program: UST Eval Source: CERS Eval General Type: **Compliance Evaluation Inspection** 03-28-2017 Eval Date: Violations Found: No Eval Type: Routine done by local agency Eval Notes: Not reported Riverside County Department of Env Health Eval Division: Eval Program: UST Eval Source: CERS Eval General Type: Other/Unknown Eval Date: 04-05-2019 Violations Found: Yes Eval Type: Other, not routine, done by local agency Eval Notes: Not reported Riverside County Department of Env Health Eval Division: Eval Program: UST **Eval Source:** CERS Eval General Type: **Compliance Evaluation Inspection** 

#### S113141654

TC5914075.2s Page 79

Database(s)

EDR ID Number EPA ID Number

#### BEA

EAUMONT GAS MART (Continued)	
Eval Date:	04-09-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-09-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HW
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	04-09-2015
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	05-03-2019
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	UST
Eval Source:	CERS
Coordinates: Site ID: Facility Name: Env Int Type Code: Program ID: Coord Name: Ref Point Type Desc: Latitude: Longitude:	11450 Beaumont Gas Mart HWG 10316767 Not reported Unknown 33.929726 -116.947250
Affiliation: Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:	CUPA District Riverside Cnty Env Health Not reported 4065 County Circle Drive, Room 104 Riverside CA Not reported 92503 (951) 358-5055

Database(s)

EDR ID Number EPA ID Number

#### **BEAUMONT GAS MART (Continued)**

Affiliation Type Desc: **Document Preparer** Patrick Kanchy Entity Name: Entity Title: Not reported Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported Affiliation Type Desc: Facility Mailing Address Entity Name: Mailing Address Entity Title: Not reported Affiliation Address: 1696 E 6th St Affiliation City: Beaumont Affiliation State: CA Affiliation Country: Not reported Affiliation Zip: 92223 Affiliation Phone: Not reported Affiliation Type Desc: Operator SUNIL PATEL Entity Name: Entity Title: Not reported Affiliation Address: Not reported Not reported Affiliation City: Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported (909) 709-2876 Affiliation Phone: UST Tank Operator Affiliation Type Desc: Entity Name: Andy Patel Entity Title: Not reported Affiliation Address: 1696 E. 6th Street Affiliation City: Beaumont Affiliation State: CA Affiliation Country: United States Affiliation Zip: 92223 (951) 845-5221 Affiliation Phone: Affiliation Type Desc: Legal Owner Entity Name: Jasmine Holdings, Inc Entity Title: Not reported Affiliation Address: 1696 E 6th St Affiliation City: Beaumont Affiliation State: CA Affiliation Country: United States Affiliation Zip: 92223 (909) 709-2876 Affiliation Phone: **UST** Permit Applicant Affiliation Type Desc: Entity Name: Sunil Patel Entity Title: Partner Affiliation Address: Not reported Affiliation City: Not reported Affiliation State: Not reported Affiliation Country: Not reported
Database(s)

EDR ID Number EPA ID Number

#### **BEAUMONT GAS MART (Continued)**

Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone: Not reported (909) 709-2876

UST Tank Owner SUNIL PATEL Not reported 1696 E. 6th Street Beaumont CA United States 92223 (909) 709-2876

Environmental Contact Patel Sunil Not reported 1696 E 6th St Beaumont CA Not reported 92223 Not reported

UST Property Owner Name sunil patel Not reported 1696 E. 6th Street Beaumont CA United States 92223 (909) 709-2876

Identification Signer SUNIL PATEL PARTNER Not reported Not reported Not reported Not reported Not reported Not reported Not reported

Parent Corporation Beaumont Gas Mart Not reported Not reported Not reported Not reported Not reported Not reported Not reported

Database(s)

D25 South 1/8-1/4 0.152 mi. 804 ft.	ARCO #5463 1696 6TH ST BEAUMONT, CA 92223 Site 3 of 13 in cluster D	LUST S105022735 HIST CORTESE N/A	;
0.152 mi. 804 ft. Relative: Lower Actual: 2592 ft.	Site 3 of 13 in cluster D LUST REG 8: Name: Address: City: Region: County: Regional Board: Facility Status: Case Number: Local Case Num: Case Type: Substance: Qty Leaked: Abate Method: Cross Street: Enf Type: Funding: How Discovered: How Stopped: Leak Cause: Leak Source: Global ID: How Stopped Date: Enter Date: Date Confirmation of Leak Began: Date Preliminary Assessment Began: Discover Date: Enforcement Date: Close Date: Date Prelim Assessment Workplan Submitted: Date Preliminary Assessment Began: Discover Date: Close Date: Date Prelim Assessment Workplan Submitted: Date Prelim Assessment Workplan Submitted: Date Prelim Assessment Workplan Submitted: Date Remedial Action Underway: Date Post Remedial Action Monitoring: Enter Date: GW Qualifies: Soil Qualifies: Soil Qualifies: Operator: Facility Contact: Interim: Oversite Program: Latitude: Longitude: MTBE Date: Max MTBE GW: MTBE Concentration: Max MTBE Soil:	ARCO #5463 1696 6TH ST BEAUMONT 8 Riverside Santa Ana Region Case Closed 083302431T Not reported Soil only Gasoline Not reported Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming) HIGHLAND SPRINGS Not reported Tank Closure Not reported UNK Tank T0606500368 Not reported 4/13/1994 Not reported Not rep	
	MTBE Fuel: MTBE Tested: MTBE Class: Staff: Staff Initials:	1 Site NOT Tested for MTBE.Includes Unknown and Not Analyzed. * VJJ UNK	

Database(s)

EDR ID Number EPA ID Number

S105022735

#### ARCO #5463 (Continued)

Lead Agency: Local Agency 33000L Local Agency: Hydr Basin #: UPPER SANTA ANA VALL Beneficial: Not reported Priority: Not reported Cleanup Fund Id: Not reported Work Suspended: Not reported Summary: Not reported LUST: ARCO #5463 Name: Address: 1696 SIXTH ST BEAUMONT, CA 92223 City,State,Zip: Lead Agency: RIVERSIDE COUNTY LOP Case Type: LUST Cleanup Site Geo Track: http://geotracker.waterboards.ca.gov/profile\_report.asp?global\_id=T0606500368 Global Id: T0606500368 Latitude: 33.9297949454426 Longitude: -116.947478381605 Status: Completed - Case Closed 09/07/1994 Status Date: Case Worker: RIV **RB** Case Number: 083302431T RIVERSIDE COUNTY LOP Local Agency: File Location: Local Agency Warehouse Local Case Number: 94069 Potential Media Affect: Soil Potential Contaminants of Concern: Gasoline Site History: Not reported LUST: Global Id: T0606500368 Contact Type: Local Agency Caseworker Contact Name: **Riverside County LOP RIVERSIDE COUNTY LOP** Organization Name: Address: 3880 LEMON ST SUITE 200 City: RIVERSIDE Email: Not reported Phone Number: 9519558980 T0606500368 Global Id: Contact Type: Regional Board Caseworker Contact Name: VALERIE JAHN-BULL Organization Name: SANTA ANA RWQCB (REGION 8) Address: 3737 MAIN STREET, SUITE 500 RIVERSIDE City: Email: valerie.jahn-bull@waterboards.ca.gov Phone Number: 9517824903 LUST: Global Id: T0606500368 Action Type: ENFORCEMENT Date: 12/14/2008 Other Report - #UST Sample Analytical Report 1/21/2005 Action: Global Id: T0606500368 Action Type: Other

D26

South

1/8-1/4 0.152 mi. 804 ft.

Relative: Lower Actual: 2592 ft.

Owner Name:

Owner Address:

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

#### S105022735

ARCO #5463 (Continued)		
Date:	01/27/1994	
Action:	Leak Reported	
Global Id:	T0606500368	
Action Type:		
Date:	12/15/2008	
Action:	Closure/No Further Action Letter - #Site Closure	
Global Id:	T0606500368	
Action Type:	ENFORCEMENT	
Date:	12/14/2008	
Action:	File review - #RCDEH Upload Site File 8/7/2015	
Global Id:	T0606500368	
Action Type:	ENFORCEMENT	
Date:	12/14/2008	
Action:	Other Report - #UST Sample Analytical Report 11/30/2015	
LUST:	T000050000	
Global Id:	10606500368	
Status:	Open - Case Begin Date	
Status Date:	01/27/1994	
Global Id:	T0606500368	
Status:	Completed - Case Closed	
Status Date:	09/07/1994	
HIST CORTESE: edr_fname: edr_fadd1: City,State,Zip: Region: Facility County Code: Reg By: Reg Id:	ARCO #5463 1696 06TH BEAUMONT, CA CORTESE 33 LTNKA 083302431T	
ARCO PRODUCTS COMPANY 1696 E 6TH ST BEAUMONT, CA 92223	HIST U HAZN	JST NET
HIST UST:		
Address	1696 FAST 6TH STREET	
City State Zin	BEAUMONT CA 92223	
File Number:	0001FB1F	
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001FB1F.pd	lf
Region:	Not reported	
Facility ID:	Not reported	
Facility Type:	Not reported	
Other Type:	Not reported	
Contact Name:	Not reported	
Telephone:	Not reported	

. Not reported

Not reported

S113034160

N/A

Database(s)

EDR ID Number **EPA ID Number** 

#### **ARCO PRODUCTS COMPANY (Continued)**

Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

#### Click here for Geo Tracker PDF: HAZNET: ARCO PRODUCTS COMPANY Name: Address: 1696 E 6TH ST City,State,Zip: BEAUMONT, CA 922230000 Year: 2000 GEPAID: CAL000032639 CARLOS RODRIGUEZ/ENV COMPL ADM Contact: Telephone: 7146705402 Mailing Name: Not reported PO BOX 6038 Mailing Address: Mailing City, St, Zip: ARTESIA, CA 907026038 Gen County: Riverside TSD EPA ID: CAT080013352 TSD County: Los Angeles Tons: 0.336 CA Waste Code: 134-Aqueous solution with total organic residues less than 10 percent R01-Recycler Method: Facility County: Riverside ARCO PRODUCTS COMPANY Name: Address: 1696 E 6TH ST City,State,Zip: BEAUMONT, CA 922230000 Year: 1996 GEPAID: CAL000032639 CARLOS RODRIGUEZ/ENV COMPL ADM Contact: 7146705402 Telephone: Mailing Name: Not reported Mailing Address: PO BOX 6038 Mailing City, St, Zip: ARTESIA, CA 907026038 Gen County: Riverside TSD EPA ID: CAT080013352 TSD County: Los Angeles Tons: 0.189 CA Waste Code: 134-Aqueous solution with total organic residues less than 10 percent R01-Recycler Method: Facility County: Riverside

Name: ARCO PRODUCTS COMPANY Address: 1696 E 6TH ST BEAUMONT, CA 922230000 City,State,Zip: Year: 1995 GEPAID: CAL000032639 CARLOS RODRIGUEZ/ENV COMPL ADM Contact:

Database(s)

EDR ID Number EPA ID Number

#### ARCO PRODUCTS COMPANY (Continued)

Telephone: 7146705402 Mailing Name: Not reported Mailing Address: PO BOX 6038 Mailing City, St, Zip: ARTESIA, CA 907026038 Gen County: Riverside TSD EPA ID: CAT080013352 TSD County: Los Angeles Tons: 0.084 CA Waste Code: 134-Aqueous solution with total organic residues less than 10 percent Method: R01-Recycler Facility County: Riverside ARCO PRODUCTS COMPANY Name: Address: 1696 E 6TH ST BEAUMONT, CA 922230000 City,State,Zip: Year: 1993 GEPAID: CAL000032639 CARLOS RODRIGUEZ/ENV COMPL ADM Contact: Telephone: 7146705402 Mailing Name: Not reported Mailing Address: PO BOX 6038 Mailing City, St, Zip: ARTESIA, CA 907026038 Gen County: Riverside TSD EPA ID: CAT080013352 TSD County: Los Angeles Tons: 0.0417 CA Waste Code: 213-Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.) Method: R01-Recycler Facility County: Riverside

## D27 PRESTIGE STATIONS INC NO 5193 South 1696 E 6TH ST 1/8-1/4 BEAUMONT, CA 92223 0.152 mi. 1/2

RCRA NonGen / NLR:

804 ft. Site 5 of 13 in cluster D

Relative: Lower

Actual: 2592 ft.

Date form received by agency	/: 2002-07-19 00:00:00.0
Facility name:	PRESTIGE STATIONS INC NO 5193
Facility address:	1696 E 6TH ST
	BEAUMONT, CA 92223
EPA ID:	CAR000101980
Mailing address:	P O BOX 6038
	ARTESIA, CA 90702-6038
Contact:	SHARON ZUNIGA
Contact address:	25422 TRABUCO RD NO 105
	LAKE FOREST, CA 92630-2797
Contact country:	US
Contact telephone:	949-450-1010
Contact email:	Not reported
EPA Region:	09
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary: Owner/operator name: Owner/operator address:

ARCO PRODUCTS COMPANY P O BOX 6038

RCRA NonGen / NLR	1004677828
FINDS	CAR000101980
ECHO	

Database(s)

EDR ID Number EPA ID Number

ARTESIA, CA 90702
Not reported
714-670-5402
Not reported
Not reported
Not reported
Private
Owner
Not reported
Not reported

Handler Activities Summary:

No
No

Hazardous Waste Summary:

•	Waste code: Waste name:	D000 Not Defined
•	Waste code: Waste name:	D018 BENZENE

Violation Status:

FINDS:

Registry ID: 110057121564

#### Environmental Interest/Information System STATE MASTER

Registry ID:

```
110012189808
```

No violations found

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. 1004677828

EDR ID Number Database(s) EPA ID Number

	PRESTIGE STATIONS INC NO 5193 (Continued)		1004677828	
	Click this hyperlin additional FINDS	k while viewing on your computer to access detail in the EDR Site Report.		
	ECHO: Envid: Registry ID: DFR URL:	1004677828 110012189808 http://echo.epa.gov/detailed-facility-report?fid=110	0012189808	
D28 South 1/8-1/4 0.152 mi.	TRAILSIDE GENERAL STORE 1696 E 6TH ST BEAUMONT, CA 92223		HIST UST	U001573594 N/A
804 ft.	Site 6 of 13 in cluster D			
Relative: Lower Actual: 2592 ft.	HIST UST: Name: Address: City,State,Zip: File Number: URL: Region: Facility ID: Facility Type: Other Type: Other Type: Contact Name: Telephone: Owner Name: Owner Address: Owner City,St,Zip: Total Tanks: Tank Num: Container Num: Year Installed: Tank Capacity: Tank Used for: Type of Fuel: Container Construction Thickness: Leak Detection:	TRAILSIDE GENERAL STORE 1696 E 6TH ST BEAUMONT, CA 92223 Not reported Not reported STATE 00000067775 Other CONVENIENCE STORE Not reported 7148456590 WYOMING ALASKA LEASING COMPANY 506 SOUTH MAIN BOUNTIFUL, UT 84010 0004 001 1 1 1976 00012000 WASTE 1 X Visual, Stock Inventor		
	Tank Num: Container Num: Year Installed: Tank Capacity: Tank Used for: Type of Fuel: Container Construction Thickness: Leak Detection: Tank Num: Container Num: Year Installed: Tank Capacity: Tank Used for: Type of Fuel: Container Construction Thickness:	002 2 1976 00012000 PRODUCT REGULAR Not reported Visual, Stock Inventor 003 3 1976 00010000 PRODUCT DIESEL Not reported		

Database(s)

	TRAILSIDE GENERAL STORE (Continued)			U001573594	
	Leak Detection:		Visual, Stock Inventor		
	Tank Num: Container Num: Year Installed: Tank Capacity: Tank Used for: Type of Fuel: Container Construction Leak Detection:	Thickness:	004 4 1976 00010000 PRODUCT PREMIUM Not reported Visual, Stock Inventor		
D29 South 1/8-1/4 0.152 mi. 804 ft.	ARCO AM/PM MINI MARKE 1696 E SIXTH ST BEAUMONT, CA 92223 Site 7 of 13 in cluster D	ET		SWEEPS UST	S106922788 N/A
Polativo					
Lower	Name:	ARCO AM/F	PM MINI MARKET		
Actual:	Address:	1696 E SIX	TH ST		
2592 ft.	City:	BEAUMON	Г		
	Status:	Active			
	Comp Number:	67775			
	Number:	1			
	Board Of Equalization:	44-000506			
	Referral Date:	05-13-93	05-13-93 05-13-93		
	Action Date:	02-20-88			
	Created Date:	02-29-88			
	SWPCB Tank Id:	22 000 067	775 000001		
	Tank Status	Δ	775-000001		
	Capacity:	10000			
	Active Date:	05-13-93			
	Tank Use:	M.V. FUEL			
	STG:	Р			
	Content:	REG UNLE	ADED		
	Number Of Tanks:	4			
	Name:	ARCO AM/F	PM MINI MARKET		
	Address:	1696 E SIX	TH ST		
	City:	BEAUMON	I		
	Status:	Active			
	Number:	0///5			
	Board Of Equalization:	44-000506			
	Referral Date:	05-13-93			
	Action Date:	05-13-93			
	Created Date:	02-29-88			
	Owner Tank Id:	001054			
	SWRCB Tank Id:	33-000-067	775-000002		
	Tank Status:	А			
	Capacity:	10000			
	Active Date:	05-13-93			
	Tank Use:	M.V. FUEL			
	STG:	P			
	Content:	REG UNLE	ADED		
	Number Of Tanks:	Not reported	d diama d		

Database(s)

EDR ID Number EPA ID Number

Name: Address: City: Status: Comp Number: Number: Board Of Equalization: Referral Date: Action Date: Created Date: Owner Tank Id: SWRCB Tank Id: Tank Status: Capacity: Active Date: Tank Use:	ARCO AM/PM MINI MARKET 1696 E SIXTH ST BEAUMONT Active 67775 1 44-000506 05-13-93 02-29-88 001054 33-000-067775-000004 A 6000 05-13-93 M.V. FUEL
STG:	Р
Content:	REG UNLEADED
Number Of Tanks:	Not reported
Name: Address: City: Status: Comp Number: Number: Board Of Equalization: Referral Date: Action Date: Created Date: Owner Tank Id: SWRCB Tank Id: Tank Status: Capacity: Active Date: Tank Use: STC:	ARCO AM/PM MINI MARKET 1696 E SIXTH ST BEAUMONT Active 67775 1 44-000506 05-13-93 05-13-93 02-29-88 001054 33-000-067775-000005 A 12000 05-13-93 M.V. FUEL B
Content:	PRM UNLEADED
Number Of Tanks	Not reported

## D30 ARCO #5463

230			
South	1696 SIXTH ST		
1/8-1/4	/4 BEAUMONT, CA 92223		
0.152 mi.			
804 ft.	Site 8 of 13 in cluster D		
Relative:	RIVERSIDE CO. LUST:		
Lower	Name:		
Actual:	Address:		
2592 ft.	City,State,Zip:		
	Region:		
	Facility ID:		
	Employee:		
	Site Closed:		
	Case Type:		
	Facility Status:		
	Casetype Decode:		

Fstatus Decode:

ARCO #5463 1696 SIXTH ST BEAUMONT, CA RIVERSIDE 94069 Brown Yes Undefined closed/action completed Undefined Closed/Action completed LUST S104970820 CERS N/A

Database(s)

EDR ID Number EPA ID Number

## ARCO #5463 (Continued)

### S104970820

CERS:	
Name:	ARCO #5463
Address:	1696 SIXTH ST
City,State,Zip:	BEAUMONT, CA 92223
Site ID:	196021
CERS ID:	T0606500368
CERS Description:	Leaking Underground Storage Tank Cleanup Site
Affiliation:	
Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	VALERIE JAHN-BULL - SANTA ANA RWQCB (REGION 8)
Entity Title:	Not reported
Affiliation Address:	3737 MAIN STREET, SUITE 500
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9517824903
Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	Riverside County LOP - RIVERSIDE COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	3880 LEMON ST SUITE 200
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9519558980

# D31 AM/PM MINI MARKET #5193/ARCO #5463 South 1696 E 6TH ST 1/8-1/4 BEAUMONT, CA 92223 0.152 mi.

## Site 9 of 13 in cluster D

Relative:	RIVERSIDE CO. U	ST:
Lower	Name:	BEAUMONT GAS MART
Actual:	Address:	1696 E 6TH ST
2592 ft.	City,State,Zip:	BEAUMONT, CA 92223
	Region:	RIVERSIDE
	Total Tanks:	4

UST:

804 ft.

Name:	BEAUMONT GAS MART
Address:	1696 E 6TH ST
City,State,Zip:	BEAUMONT, CA 92223
Facility ID:	Not reported
Permitting Agency:	Riverside County Department of Environmental Health
Latitude:	33.9299
Longitude:	-116.9473
Name:	AM/PM MINI MARKET #5193/ARCO #5463
Address:	1696 E 6TH ST
City,State,Zip:	BEAUMONT, CA 92223
Facility ID:	4
Permitting Agency:	RIVERSIDE COUNTY

UST U003986042 N/A

Database(s)

Database(s)

EDR ID Number EPA ID Number

U001573530

1975
00012000
PRODUCT
UNLEADED
Not reported
Visual, Stock Inventor

Click here for Geo Tracker PDF:

D33 SSE 1/8-1/4 0 153 mi	WALGREENS #5182 60 N HIGHLAND SPRINGS AVE BANNING, CA 92220	RCRA-VSQG	1019322432 CAL000322908
810 ft.	Site 11 of 13 in cluster D		
Relative: Lower Actual: 2590 ft.	RCRA-VSQG: Date form received by agency Facility name: Facility address: EPA ID: Mailing address: Contact: Contact address: Contact country: Contact telephone: Contact telephone: Contact email: EPA Region: Classification: Description:	r: 2016-04-06 00:00:00.0 WALGREENS #5182 60 N HIGHLAND SPRINGS AVE BANNING, CA 92220 CAL000322908 GREYHAWK CT SUITE 200 CARLSBAD, CA 92010 KARINA ROMERO GREYHAWK CT SUITE 200 CARLSBAD, CA 92010 US 760-602-8700 REGULATORY@3ECOMPANY.COM 09 Conditionally Exempt Small Quantity Generator Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of acutely hazardous waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste	
	Owner/Operator Summary: Owner/operator name: Owner/operator address: Owner/operator country: Owner/operator telephone: Owner/operator email: Owner/operator fax: Owner/operator extension: Legal status:	WALGREEN CO. Not reported Not reported Not reported Not reported Not reported Not reported Private	

Database(s)

EDR ID Number EPA ID Number

## WALGREENS #5182 (Continued)

Owner/Operator Type: Owner/Op start date:	Operator 2000-08-04 00:00:00.0
Owner/Op end date:	Not reported
Owner/operator name:	KEITH W VOLK
Owner/operator address:	HERMOSA PL PALM SPRINGS, CA 92262
Owner/operator country:	US
Owner/operator telephone:	909-797-1160
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	2000-07-17 00:00:00.0
Owner/Op end date:	Not reported
Handler Activities Summary: U.S. importer of hazardous wa Mixed waste (haz. and radioa Recycler of hazardous waste: Transporter of hazardous was Treater, storer or disposer of I Underground injection activity On-site burner exemption: Furnace exemption: Used oil fuel burner: Used oil fuel burner: Used oil processor: User oil refiner: Used oil fuel marketer to burn Used oil fuel marketer to burn Used oil Specification markete Used oil transfer facility: Used oil transporter:	aste: No ctive): No No ste: No HW: No : No No No No er: No er: No er: No No No No No No No No No No
Hazardous Waste Summary:	
. Waste code:	122
. Waste name:	Alkaline solution without metals ( $pH > 12.5$ )
. Waste code:	131
. Waste name:	Aqueous solution $(2 < pH < 12.5)$ containing

•	Waste code: Waste name:	131 Aqueous solution (2 < pH < 12.5) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite,
		perchlorate, and sulfide anions)
	Waste code:	181
•	Waste name:	Other inorganic solid waste
	Waste code:	214
•	Waste name:	Unspecified solvent mixture
	Waste code:	311
•	Waste name:	Pharmaceutical waste
	Waste code:	D001
	Waste name:	IGNITABLE WASTE

## 1019322432

Database(s)

WALGREENS #5182 (Continued)	1019322432
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D007
. Waste name:	CHROMIUM
. Waste code:	D009
. Waste name:	MERCURY
. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D024
. Waste name:	M-CRESOL
. Waste code:	P001
. Waste name:	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%
. Waste code:	P075
. Waste name:	NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS
Biennial Reports:	
Last Biennial Reporting Year: 207	17
Annual Waste Handled	
Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs):	282
Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs):	387
Waste code:	D007
Waste name:	CHROMIUM
Amount (LDS):	29
Waste code:	D009
Waste name:	MERCURY
Amount (LDS):	2
Waste code:	D010

Database(s)

	WALGREENS #5182 (Co	ntinued)		1019322432
	Waste name:	SELENILIM		
	Amount (Lbs)	29		
		20		
	Waste code:	D024		
	Waste name:	M-CRESOL		
	Amount (Lbs):	9		
		<b>D</b> 004		
	Waste code:			2 21122
	Waste name.	WHEN PRESENT AT CONCENTRATIONS GREATER T	HAN 0.3%	-, α SAL13,
	Amount (Lbs):	16		
	Waste code:	P075		
	Waste name:	NICOTINE, & SALTS		
	Amount (Lbs):	14		
	Violation Status:	No violations found		
D34 SSE 1/8-1/4 0.153 mi.	WALGREENS #5182 60 N HIGHLAND SPRING BANNING, CA 92220	S AVE CER:	S HAZ WASTE HAZNET CERS	S113148895 N/A
810 ft.	Site 12 of 13 in cluster D			
Relative:	CERS HAZ WASTE:			
Lower	Name:	WALGREENS #5182		
Actual:	Address:	60 N HIGHLAND SPRINGS AVE		
2590 ft.	City,State,Zip:	BANNING, CA 92220		
	Site ID:	84249		
	CERS ID:	10316884		
	CERS Description:	Hazardous waste Generator		
	HAZNET			
	Name:	WALGREENS #5182		
	Address:	60 N HIGHLAND SPRINGS AVE		
	City.State.Zip:	BANNING. CA 92220		
	Year:	2017		
	GEPAID:	CAL000322908		
	Contact:	KARINA ROMERO		
	Telephone:	7606028700		
	Mailing Name:	Not reported		
	Mailing Address:	3207 GREY HAWK CT., SUITE 200		
	Mailing City,St,Zip:	CARLSBAD, CA 920100000		
	Gen County:	Riverside		
	TSD EPA ID:	CAD008364432		
	TSD County:			
	Tons:	0.0865		
	CA Waste Code:	Waste Code: 331-Ott-specification, aged or surplus organics		
	Method.	(H010-H129) Or (H131-H135)	JUVELY	
	Facility County:	Riverside		
	Name <sup>.</sup>	WAI GREENS #5182		
	Address	60 N HIGHLAND SPRINGS AVE		
	City.State.Zip:	BANNING. CA 92220		
	Year:	2017		
	GEPAID:	CAL000322908		

Database(s)

EDR ID Number EPA ID Number

## WALGREENS #5182 (Continued)

Contact: Telephone: Mailing Name: Mailing Address: Mailing City,St,Zip: Gen County: TSD EPA ID: TSD County: TSD County: Tons: CA Waste Code: Method:	KARINA ROMERO 7606028700 Not reported 3207 GREY HAWK CT., SUITE 200 CARLSBAD, CA 920100000 Riverside CAD008364432 Los Angeles 0.0315 311-Pharmaceutical waste H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Riverside
Name: Address: City,State,Zip: Year: GEPAID: Contact: Telephone: Mailing Name: Mailing Address: Mailing Address: Mailing City,St,Zip: Gen County: TSD EPA ID: TSD County: TSD County: Tons: CA Waste Code: Method:	WALGREENS #5182 60  N HIGHLAND SPRINGS AVE BANNING, CA 92220 2017 CAL000322908 KARINA ROMERO 7606028700 Not reported 3207 GREY HAWK CT., SUITE 200 CARLSBAD, CA 920100000 Riverside CAD008364432 Los Angeles 0.0115 131-Aqueous solution (2 < pH < 12.5) containing reactive anions H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Riverside
Name: Address: City,State,Zip: Year: GEPAID: Contact: Telephone: Mailing Name: Mailing Address: Mailing Address: Mailing City,St,Zip: Gen County: TSD EPA ID: TSD County: TSD County: Tons: CA Waste Code: Method: Facility County: Name:	WALGREENS #5182 60 N HIGHLAND SPRINGS AVE BANNING, CA 92220 2016 CAL000322908 REBECCA LEE-GALE 7606028700 Not reported 3207 GREY HAWK CT., SUITE 200 CARLSBAD, CA 920100000 Riverside CAD008364432 Los Angeles 0.002 214-Unspecified solvent mixture H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatment/Reovery (H010-H129) Or (H131-H135) Riverside WALGREENS #5182
Address: City,State,Zip: Year: GEPAID:	60 N HIGHLAND SPRINGS AVE BANNING, CA 92220 2016 CAL000322908

Database(s)

EDR ID Number EPA ID Number

## WALGREENS #5182 (Continued)

Contact: Telephone: Mailing Name: Mailing Address: Mailing City,St,Zip: Gen County: TSD EPA ID: TSD County: Tons: CA Waste Code: Method: Facility County:	REBECCA LEI 7606028700 Not reported 3207 GREY H/ CARLSBAD, C Riverside CAD00836443 Los Angeles 0.0045 131-Aqueous s H141-Storage, (H010-H129) C Riverside	E-GALE AWK CT., SUITE 200 CA 920100000 22 solution (2 < pH < 12.5) containing reactive anions Bulking, And/Or Transfer Off SiteNo Treatment/Reovery Dr (H131-H135)
CI 63	ick this hyperlin additional CA_	k while viewing on your computer to access HAZNET: record(s) in the EDR Site Report.
CERS		
Name:		WALGREENS #5182
Address:		60 N HIGHLAND SPRINGS AVE
City,State,Zip:		BANNING, CA 92220
Site ID:		84249
CERS ID:		10316884
CERS Description:		Chemical Storage Facilities
Violations:		
Site ID:		84249
Site Name:		Walgreens #5182
Violation Date:		08-22-2014
Citation:		HSC 6.5 25187(a)(1) - California Health and Safety Code, Chapter 6.5, Section(s) 25187(a)(1)
Violation Description	:	Failure to conduct monitoring, testing, analysis, and reporting with
		respect to the facility or site which the authorized unified program
		agency deems reasonable to ascertain the nature and extent of the
		hazard.
Violation Notes:		Returned to compliance on 10/22/2014.
Violation Division:		Riverside County Department of Env Health
Violation Program:		HW
Violation Source:		CERS
Site ID:		84249
Site Name:		Walgreens #5182
Violation Date:		08-22-2014
Citation:		22 CCR 12 66262.40(c) - California Code of Regulations, Title 22,
		Chapter 12, Section(s) 66262.40(c)
Violation Description	:	Failure to determine if the waste generated is a hazardous waste and to maintain analysis results for three years.
Violation Notes:		Returned to compliance on 10/22/2014.
Violation Division:		Riverside County Department of Env Health
Violation Program:		HW
Violation Source:		CERS
Sito ID:		84240
Site ID.		Walaroons #5182
Violation Data		08-22-2014
Citation		HSC 6 95 25505(a)(4) - California Health and Safety Code, Chapter
Citation.		6.95, Section(s) 25505(a)(4)

EDR ID Number Database(s) EPA ID Number

#### WALGREENS #5182 (Continued)

Violation Description:

Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years. Returned to compliance on 10/22/2014. Riverside County Department of Env Health HMRRP CERS

Evaluation: Eval General Type: Eval Date:

Violation Notes:

Violation Division:

Violation Program:

Violation Source:

Eval Date: Violations Found: Eval Type: Eval Notes: Eval Division: Eval Program: Eval Source: Eval General Type: Eval Date: Violations Found: Eval Type: **Eval Notes:** Eval Division: Eval Program: Eval Source: Eval General Type: Eval Date: Violations Found: Eval Type: **Eval Notes:** Eval Division: Eval Program: Eval Source: Eval General Type: Eval Date: Violations Found: Eval Type: Eval Notes: Eval Division: Eval Program: Eval Source: Eval General Type: Eval Date: Violations Found: Eval Type: Eval Notes: Eval Division: Eval Program: Eval Source: Eval General Type: Eval Date:

08-16-2017 No Routine done by local agency Disclosure inspection Riverside County Department of Env Health HMRRP CERS Compliance Evaluation Inspection 08-16-2017

**Compliance Evaluation Inspection** 

No Routine done by local agency Generator inspection Riverside County Department of Env Health HW CERS

Compliance Evaluation Inspection 08-22-2014 Yes Routine done by local agency Not reported Riverside County Department of Env Health HMRRP CERS

Compliance Evaluation Inspection 08-22-2014 Yes Routine done by local agency Not reported Riverside County Department of Env Health HW CERS

Other/Unknown 10-22-2014 No Other, not routine, done by local agency Not reported Riverside County Department of Env Health HMRRP CERS

Other/Unknown 10-22-2014

No

Database(s)

EDR ID Number EPA ID Number

#### WALGREENS #5182 (Continued)

Violations Found:

Eval Type:

Eval Notes:

Eval Division:

Eval Program:

Enforcement Action: Site ID:

Site Name:

Site Zip:

Site ID:

Site Name:

Site City: Site Zip:

Coordinates: Site ID:

> Facility Name: Env Int Type Code:

Program ID:

Latitude:

Affiliation:

Longitude:

Entity Name:

Affiliation City: Affiliation State:

Affiliation Zip:

Entity Title:

Coord Name:

Ref Point Type Desc:

Affiliation Type Desc:

Affiliation Address:

Affiliation Country:

Affiliation Phone:

Site Address:

Enf Action Date:

Enf Action Type:

Enf Action Notes:

Enf Action Division:

Enf Action Program:

Enf Action Source:

Enf Action Description:

Site Address: Site City:

Enf Action Date:

Enf Action Type:

Enf Action Notes:

Enf Action Division:

Enf Action Program:

Enf Action Source:

Enf Action Description:

Eval Source:

#### S113148895

Other, not routine, done by local agency Not reported Riverside County Department of Env Health HW CERS 84249 Walgreens #5182 60 N HIGHLAND SPRINGS AVE BANNING 92220 08-22-2014 Notice of Violation (Unified Program) Notice of Violation Issued by the Inspector at the Time of Inspection Not reported Riverside County Department of Env Health HMRRP CERS

84249 Walgreens #5182 60 N HIGHLAND SPRINGS AVE BANNING 92220 08-22-2014 Notice of Violation (Unified Program) Notice of Violation Issued by the Inspector at the Time of Inspection Not reported Riverside County Department of Env Health HW CERS

84249 Walgreens #5182 HWG 10316884 Not reported Center of a facility or station. 33.929730 -116.946200

Document Preparer Erin Baltazar, on behalf of Walgreen Co. Not reported Not reported Not reported Not reported Not reported Not reported Not reported

Affiliation Type Desc:

**Environmental Contact** 

Database(s)

EDR ID Number **EPA ID Number** 

#### WALGREENS #5182 (Continued)

#### S113148895

Entity Name: Verisk 3E, Regulatory Department/Walgreen Co. Entity Title: Not reported Affiliation Address: 3207 Grey Hawk Court, Suite 200 Affiliation City: Carlsbad Affiliation State: CA Affiliation Country: Not reported Affiliation Zip: 92010 Affiliation Phone: Not reported Affiliation Type Desc: Facility Mailing Address Entity Name: Mailing Address Entity Title: Not reported Verisk 3E, Regulatory Dept/Walgreen Co., 3207 Grey Hawk Ct, Ste 200 Affiliation Address: Affiliation City: Carlsbad Affiliation State: CA Not reported Affiliation Country: Affiliation Zip: 92010 Affiliation Phone: Not reported Affiliation Type Desc: **CUPA** District Entity Name: **Riverside Cnty Env Health** Entity Title: Not reported Affiliation Address: 4065 County Circle Drive, Room 104 Affiliation City: Riverside Affiliation State: CA Affiliation Country: Not reported Affiliation Zip: 92503 Affiliation Phone: (951) 358-5055 Affiliation Type Desc: Identification Signer Entity Name: Erin Baltazar, on behalf of Walgreen Co. Entity Title: Regulatory Compliance Specialist, Verisk 3E Affiliation Address: Not reported Affiliation City: Not reported Not reported Affiliation State: Affiliation Country: Not reported Not reported Affiliation Zip: Affiliation Phone: Not reported Affiliation Type Desc: Parent Corporation Entity Name: Walgreens Entity Title: Not reported Affiliation Address: Not reported Not reported Affiliation City: Affiliation State: Not reported Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: Not reported Affiliation Type Desc: Legal Owner Entity Name: Walgreen Co. Entity Title: Not reported 200 Wilmot Road Affiliation Address: Affiliation City: Deerfield Affiliation State: IL Affiliation Country: United States Affiliation Zip: 60015

D35

SSE

MAP FINDINGS

EDR ID Number

S113148895

Database(s)

EPA ID Number

## WALGREENS #5182 (Continued)

SAN GORGONIO MEMORIAL HOSPITAL

600 N HIGHLAND SPRINGS AVE

Affiliation Phone:	(847) 914-2264
Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:	Operator Walgreen Co. Not reported Not reported Not reported Not reported Not reported Not reported (847) 914-2264

SWEEPS UST S100571375 N/A

1/8-1/4 0.169 mi.	BANNING, CA 92220	
892 ft.	Site 13 of 13 in cluster D	
Relative: Lower Actual: 2590 ft.	SWEEPS UST: Name: Address: City: Status: Comp Number:	SAN GORGONIO MEMORIAL HOSPITAL 600 N HIGHLAND SPRINGS AVE BANNING Active 1812
	Number: Board Of Equalization: Referral Date: Action Date: Created Date: Owner Tank Id: SWRCB Tank Id: Tank Status: Capacity: Active Date: Tank Use:	1 Not reported 11-18-92 11-18-92 08-22-91 Not reported 33-000-001812-000001 A 12000 11-18-92 M.V. FUEL
	STG: Content: Number Of Tanks:	P DIESEL 1

E36 SSW 1/8-1/4 0.184 mi. 971 ft.	BEAUMONT FOREST FIRE STATION 1550 E 6TH ST BEAUMONT, CA 92223 Site 4 of 9 in cluster E		HIST UST	U001573560 N/A
Relative: Lower Actual: 2597 ft.	HIST UST: Name: Address: City,State,Zip: File Number: URL: Region: Facility ID: Facility Type: Other Type:	BEAUMONT FOREST FIRE STATION 1550 E 6TH ST BEAUMONT, CA 92223 Not reported Not reported STATE 00000057501 Other FIRE STATION		

Database(s)

EDR ID Number EPA ID Number

## **BEAUMONT FOREST FIRE STATION (Continued)**

Contact Name:	F.C.RANDY WILSON
Telephone:	7148452791
Owner Name:	CALIFORNIA DEPT OF FORESTRY
Owner Address:	210 W SAN JACINTO
Owner City,St,Zip:	PERRIS, CA 92370
Total Tanks:	0001
Tank Num:	001
Container Num:	1
Year Installed:	1979
Tank Capacity:	00001200
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	1/4
Leak Detection:	None

## E37BEAUMONAT FOREST FIRE STATIONSSW1550 E 6TH STREET1/8-1/4BEAUMONT, CA 922230.184 mi.

#### Site 5 of 9 in cluster E

971 ft.

Relative:	HIST UST:	
Lower	Name:	BUAUMONT FOREST FIRST STATION
Actual:	Address:	1550 E 6TH STREET
2597 ft.	City,State,Zip:	BEAUMONT, CA 92223
	File Number:	0001F5C9
	URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001F5C9.pdf
	Region:	STATE
	Facility ID:	0000019888
	Facility Type:	Other
	Other Type:	STATE GOVERNMENT
	Contact Name:	BILL FARNHAM
	Telephone:	7148452791
	Owner Name:	CALIFORNIA DEPARTMENT OF FORES
	Owner Address:	1416 NINTH STREET
	Owner City,St,Zip:	SACRAMENTO, CA 95814
	Total Tanks:	0003
	Tank Num:	001
	Container Num:	6100-T01
	Year Installed:	1979
	Tank Capacity:	00001000
	Tank Used for:	PRODUCT
	Type of Fuel:	UNLEADED
	Container Construction Thickness:	Not reported
	Leak Detection:	Visual, Stock Inventor, 10
	Tank Num:	001
	Container Num:	6100-T01
	Year Installed:	1979
	Tank Capacity:	00001000
	Tank Used for:	PRODUCT
	Type of Fuel:	UNLEADED
	Container Construction Thickness:	Not reported
	Leak Detection:	Visual, Stock Inventor, 10
	Tank Num:	002

### U001573560

HIST UST U001573559 N/A

Database(s)

EDR ID Number EPA ID Number

## BEAUMONAT FOREST FIRE STATION (Continued)

Container Num:	6100-T02
Year Installed:	1979
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Visual, Stock Inventor
Tank Num:	002
Container Num:	6100-T02
Year Installed:	1979
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Visual, Stock Inventor
Tank Num:	003
Container Num:	6100-T03
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	003
Container Num:	6100-T03
Year Installed:	Not reported
Tank Capacity:	00001000
Tank Used for:	WASTE
Type of Fuel:	WASTE OIL
Container Construction Thickness:	Not reported
Leak Detection:	Visual

Click here for Geo Tracker PDF:

E38 SSW 1/8-1/4 0.184 mi. 971 ft.	CDF-BEAUMONT FOREST FIRE STATIO 1550 E 6TH ST BEAUMONT, CA 92223 Site 6 of 9 in cluster E	DN #20	AST	A100418570 N/A
Relative:	AST:			
Lower	Name:	CDF-BEAUMONT FOREST FIRE STATION #20		
Actual:	Address:	1550 E 6TH ST		
2597 ft.	City/Zip:	BEAUMONT,92223		
	Certified Unified Program Agencies:	Not reported		
	Owner:	County of Riverside/CDF		
	Total Gallons:	Not reported		
	CERSID:	10316905		
	Facility ID:	Not reported		
	Business Name:	CDF-Beaumont Forest Fire Station #20		
	Phone:	9518452791		
	Fax:	Not reported		
	Mailing Address:	210 W San Jacinto		
	Mailing Address City:	Perris		
	Mailing Address State:	CA		

U001573559

County of Riverside/CDF

Database(s)

EDR ID Number EPA ID Number

#### CDF-BEAUMONT FOREST FIRE STATION #20 (Continued)

Mailing Address Zip Code: **Operator Name:** Operator Phone: Owner Phone: **Owner Mail Address: Owner State:** Owner Zip Code: Owner Country: Property Owner Name: Property Owner Phone: Property Owner Mailing Address: Property Owner City: Property Owner Stat : Property Owner Zip Code: Property Owner Country: EPAID:

## 92570 United States ame: Not reported hone: Not reported ailing Address: Not reported ity: Not reported tat : Not reported p Code: Not reported ountry: Not reported Not reported

92570

CA

9518452791

9098452791

210 W San Jacinto

#### E39 SSW

1/8-1/4 0.184 mi.

#### Site 7 of 9 in cluster E

**BEAUMONT FFS** 

**BEAUMONT, CA** 

1550 E 6TH ST

Relative: Lower

Actual:

2597 ft.

971 ft.

AST: Name: **BEAUMONT FFS** Address: 1550 E 6TH ST City/Zip: BEAUMONT, Certified Unified Program Agencies: Riverside CA. DEPT. OF FORESTRY AND FIRE Owner: Total Gallons: 3,000 CERSID: Not reported Facility ID: Not reported Business Name: Not reported Not reported Phone: Fax: Not reported Mailing Address: Not reported Mailing Address City: Not reported Mailing Address State: Not reported Not reported Mailing Address Zip Code: Operator Name: Not reported **Operator Phone:** Not reported Owner Phone: Not reported **Owner Mail Address:** Not reported Owner State: Not reported Owner Zip Code: Not reported **Owner Country:** Not reported Not reported Property Owner Name: Not reported Property Owner Phone: Not reported Property Owner Mailing Address: Not reported Property Owner City: Property Owner Stat : Not reported Not reported Property Owner Zip Code: Property Owner Country: Not reported EPAID: Not reported

## A100418570

AST A100225730 N/A

Database(s)

E40 SSW 1/8-1/4	CDF/BEAUMONT FOREST 1550 E SIXTH ST BEAUMONT, CA 92223	IRE STAT	SWEEPS UST HIST UST	S106924110 N/A
0.184 ml. 971 ft.	Site 8 of 9 in cluster E			
Relative: Lower	SWEEPS UST: Name:	CDF/BEAUMONT FOREST FIRE STAT		
Lower Actual: 2597 ft.	Name: Address: City: Status: Comp Number: Number: Board Of Equalization: Referral Date: Action Date: Created Date: Owner Tank Id: SWRCB Tank Id: Tank Status: Capacity: Active Date: Tank Use: STG: Content: Number Of Tanks: Name: Address: City: Status: Comp Number: Number: Board Of Equalization: Referral Date: Action Date: Created Date: Owner Tank Id: SWRCB Tank Id: SWRCB Tank Id: Tank Status: Capacity: Active Date: Tank Use:	CDF/BEAUMONT FOREST FIRE STAT 1550 E SIXTH ST BEAUMONT Active 19888 6 Not reported 10-27-92 10-27-92 02-29-88 000175 33-000-019888-000001 A 1000 10-27-92 M.V. FUEL P REG UNLEADED 2 CDF/BEAUMONT FOREST FIRE STAT 1550 E SIXTH ST BEAUMONT Active 19888 6 Not reported 10-27-92 10-27-92 02-29-88 000175 33-000-019888-000002 A 1000 10-27-92 M.V. FUEL		
	STG: Content: Number Of Tanks:	P DIESEL Not reported		
	HIST UST: Name: Address: City,State,Zip: File Number: URL: Region: Facility ID: Facility Type: Other Type: Contact Name: Telephone:	Not reported 1550 E SIXTH ST BEAUMONT, CA 92223 0001F487 http://geotracker.waterboards.ca.go Not reported Not reported Not reported Not reported Not reported Not reported Not reported	ov/ustpdfs/pdf/0001F487.pdf	

Database(s)

EDR ID Number EPA ID Number

## CDF/BEAUMONT FOREST FIRE STAT (Continued)

Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

E41 SSW 1/8-1/4 0.184 mi.	BEAUMONT FOREST FIRE STATION 1550 E 6TH ST BEAUMONT, CA 92223	
971 ft.	Site 9 of 9 in cluster E	
Relative: Lower Actual: 2597 ft.	HIST UST: Name: Address: City,State,Zip: File Number: URL: Region: Facility ID: Facility Type: Other Type: Contact Name: Telephone: Owner Name: Owner Address: Owner City,St,Zip: Total Tanks:	BEAUMONT FOREST FIRE STATION 1550 E 6TH ST BEAUMONT, CA 92223 Not reported Not reported STATE 00000056520 Other STATE GOVERNMENT BILL FARNHAM 7148452791 DEPARTMENT OF FORESTRY 1416 NINTH STREET SACRAMENTO, CA 95814 0003
	Tank Num: Container Num: Year Installed: Tank Capacity: Tank Used for: Type of Fuel: Container Construction Thickness: Leak Detection: Tank Num: Container Num: Year Installed: Tank Capacity: Tank Used for: Type of Fuel: Container Construction Thickness: Leak Detection:	001 1 1979 00001000 PRODUCT UNLEADED Not reported Visual, Stock Inventor 002 2 1979 00001000 PRODUCT DIESEL Not reported Visual, Stock Inventor
	Tank Num:	003

## S106924110

HIST UST U001573558 CERS TANKS N/A CERS

Database(s)

EDR ID Number EPA ID Number

#### **BEAUMONT FOREST FIRE STATION (Continued)** U001573558 Container Num: 3 Not reported Year Installed: Tank Capacity: 00001000 Tank Used for: WASTE Type of Fuel: WASTE OIL **Container Construction Thickness:** Not reported Leak Detection: Visual CERS TANKS: CDF-BEAUMONT FOREST FIRE STATION #20 Name: 1550 E 6TH ST Address: City,State,Zip: BEAUMONT, CA 92223 Site ID: 17335 CERS ID: 10316905 CERS Description: Aboveground Petroleum Storage CERS: Name: CDF-BEAUMONT FOREST FIRE STATION #20 Address: 1550 E 6TH ST City,State,Zip: BEAUMONT, CA 92223 Site ID: 17335 CERS ID: 10316905 **CERS** Description: **Chemical Storage Facilities** Violations: Site ID: 17335 Site Name: CDF-Beaumont Forest Fire Station #20 Violation Date: 09-25-2015 Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4) Failure to provide initial and annual training to all employees in Violation Description: safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years. Returned to compliance on 09/28/2017. Violation Notes: Violation Division: Riverside County Department of Env Health Violation Program: HMRRP CERS Violation Source: Site ID: 17335 Site Name: CDF-Beaumont Forest Fire Station #20 Violation Date: 07-19-2018 Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2 Failure to annually review and electronically certify that the Violation Description: business plan is complete and accurate on or before the annual due date. Returned to compliance on 01/31/2019. Violation Notes: Violation Division: Riverside County Department of Env Health Violation Program: HMRRP Violation Source: CERS Site ID: 17335 CDF-Beaumont Forest Fire Station #20 Site Name: Violation Date: 10-11-2017 Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2

EDR ID Number Database(s) EPA ID Number

## **BEAUMONT FOREST FIRE STATION (Continued)**

### U001573558

Violation Description:	Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.
Violation Notes:	Returned to compliance on 08/17/2018.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	17335
Site Name:	CDF-Beaumont Forest Fire Station #20
Violation Date:	07-05-2017
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95,
	Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the
•	business plan is complete and accurate on or before the annual due
	date.
Violation Notes:	Returned to compliance on 09/28/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	17335
Site Name:	CDF-Beaumont Forest Fire Station #20
Violation Date:	08-09-2017
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95,
	Section(s) 25508.2
Violation Description:	Failure to annually review and electronically certify that the
	business plan is complete and accurate on or before the annual due
	date.
Violation Notes:	Returned to compliance on 09/28/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Evaluation:	
Eval General Type:	Other/Unknown
Eval Date:	07-05-2017
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/Unknown
Eval Date:	07-19-2018
Violations Found:	Yes
Eval Type:	Other, not routine, done by local agency
Eval Notes:	Not reported
Eval Division:	Riverside County Department of Env Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval General Type:	Other/I Inknown
Eval Date:	
Violations Found	Yes
Eval Type	Other not routine, done by local agency

Database(s)

EDR ID Number EPA ID Number

## **BEAUMONT FOREST FIRE STATION (Continued)**

U001573558

	Eval Notes:	Not reported
	Eval Division:	Riverside County Department of Env Health
	Eval Program:	HMRRP
	Eval Source:	CERS
	Eval General Type:	Compliance Evaluation Inspection
	Eval Date:	09-25-2015
	Violations Found:	Yes
	Eval Type:	Routine done by local agency
	Eval Notes:	Not reported
	Eval Division:	Riverside County Department of Env Health
	Eval Program:	HMRRP
	Eval Source:	CERS
	Eval General Type:	Other/Unknown
	Eval Date:	09-28-2017
	Violations Found:	No
	Eval Type:	Other, not routine, done by local agency
	Eval Notes:	Not reported
	Eval Division	Riverside County Department of Env Health
	Eval Program:	HMRRP
	Eval Source:	CERS
	Eval Source.	CERC
	Eval General Type:	Other/Unknown
	Eval Date:	10-11-2017
	Violations Found:	Yes
	Eval Type:	Other, not routine, done by local agency
	Eval Notes:	Not reported
	Eval Division:	Riverside County Department of Env Health
	Eval Program	HMRRP
	Eval Source:	CERS
F	inforcement Action	
	Site ID <sup>.</sup>	17335
	Site Name	CDF-Beaumont Forest Fire Station #20
	Site Address:	1550 E 6TH ST
	Site City:	
	Site Zin:	02223
	Enf Action Date:	92223
	Enf Action Type:	Notice of Violation (Unified Brogram)
	Enf Action Description:	Notice of Violation (Office Flografit)
	Eni Action Description.	Notice of violation issued by the inspector at the time of inspection
	Eni Action Notes.	Not reported
	Eni Action Division:	
	Eni Action Program.	
	Enf Action Source:	UERS .
	Site ID:	17335
	Site Name:	CDF-Beaumont Forest Fire Station #20
	Site Address:	1550 E 6TH ST
	Site City:	BEAUMONT
	Site Zin <sup>-</sup>	92223
	Enf Action Date	10-11-2017
	Enf Action Type	AEO - Unified Program
	Enf Action Description:	Administrative Enforcement Order Record on the Unified Program Statute
	Enf Action Notes	Not reported
	Enf Action Division	Riverside County Department of Env Health
	Ent Action Drogram	
	Eni Action Frogram.	

Database(s)

EDR ID Number EPA ID Number

U001573558

Enf Action Source:	CERS
Coordinates: Site ID: Facility Name: Env Int Type Code: Program ID: Coord Name: Ref Point Type Desc:	17335 CDF-Beaumont Forest Fire Station #20 HMBP 10316905 Not reported Center of a facility or station. 33 929490
Longitude:	-116.949730
Affiliation:	his stiff as the Olympic
Affiliation Type Desc:	Identification Signer
	Evan Bernardo
Entity Litie:	Fire Captain
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	CAL Fire / RRU
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State	Not reported
Affiliation Country:	Not reported
Affiliation Zin:	Not reported
Affiliation Phone:	
Anniation i none.	(331) 340-0300
Affiliation Type Desc:	Parent Corporation
Entity Name:	CDF-Beaumont Forest Fire Station #20
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	CUPA District
Entity Name:	Riverside Cnty Env Health
Entity Title:	Not reported
Affiliation Address:	4065 County Circle Drive, Room 104
Affiliation City:	Riverside
Affiliation State:	CA
Affiliation Country	Not reported
Affiliation Zip:	92503
Affiliation Phone:	(951) 358-5055
Affiliation Type Desc:	Environmental Contact
Entity Name:	Riverside County Fire Dept. Haz.Mat
Entity Title:	Not reported

#### **BEAUMONT FOREST FIRE STATION (Continued)**

#### MAP FINDINGS

Database(s)

EDR ID Number **EPA ID Number** 

#### **BEAUMONT FOREST FIRE STATION (Continued)**

Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

BCAT Number:

CCAT Number:

UTM East:

UTM North:

**BCAT Description:** 

CCAT Description:

#### 1550 E. 6th Street Beaumont CA Not reported 92223 Not reported

Facility Mailing Address Mailing Address Not reported 210 W San Jacinto Perris CA Not reported 92570 Not reported

Legal Owner County of Riverside/CDF Not reported 210 W San Jacinto Perris CA United States 92570 (909) 845-2791

F42 South 1/8-1/4 0.185 mi. 977 ft.	U.S.A. CLEANERS 1679 E 6TH ST BEAUMONT, CA 92223 Site 1 of 2 in cluster F		DRYC
Relative:	DRYCLEAN SOUTH COAST:		
Lower	Name:	U.S.A. CLEANERS	
Actual:	Address:	1679 E 6TH ST	
2592 ft.	City,State,Zip:	BEAUMONT, CA 92223	
	Facility ID:	105661	
	Application Number:	305590	
	Permit Number:	D93080	
	Status:	0	
	Representative Name:	JOHN CHUN	
	Representative Telephone:	909 7978388	
	Permit Status:	INACTIVE	

000601

504.85101318

3754.1240234

04

DRY CLEANING, DRY-TO-DRY NON-VENT, PERC

VAPOR RECOVERY UNIT COMPRESS & CONDENSE

## N/A

U001573558

CLEANERS S121693643

Database(s)

F43 South 1/8-1/4 0.185 mi.	USA CLEANERS 1679 E 6TH ST BEAUMONT, CA 92223	DRYCLEANERS	S105030852 N/A
977 ft.	Site 2 of 2 in cluster F		
Relative: Lower Actual: 2592 ft.	Site 2 of 2 in cluster PDRYCLEANERS: Name: Address: City,State,Zip: EPA Id: NAICS Code: NAICS Description: SIC Code: SIC Description: Create Date: Facility Active: Inactive Date: Facility Addr2: Owner Name: Owner Address: Owner Address 2: Owner Telephone: Contact Address 2: Contact Address 2: Contact Address 1: Mailing Address 1: Mailing Address 2: Mailing State: Mailing State: Mailing Zip: Owner Fax: Region Code:	USA CLEANERS 1679 E 6TH ST BEAUMONT, CA 922230000 CAL000138429 81232 Drycleaning and Laundry Services (except Coin-Operated) 7211 Power Laundries, Family and Commercial 08/02/1995 No 06/30/2001 Not reported WAN SOO CHUN 1679 E 6TH ST Not reported 9097691197 WAN SOO CHUN 1679 E 6TH ST Not reported 9097691197 Not reported 1679 E 6TH ST Not reported 1679 E 6TH ST Not reported 1679 E 6TH ST Not reported 8EAUMONT CA 922232509 Not reported 4	
G44 SE 1/8-1/4 0.247 mi. 1304 ft. Relative: Lower Actual: 2582 ft.	BEAVER MEDICAL GROUP LP 6109 W RAMSEY ST BANNING, CA 92220 Site 1 of 3 in cluster G RCRA NonGen / NLR: Date form received by agence Facility name: Facility address: EPA ID: Mailing address:	y: 2000-09-29 00:00:00.0 BEAVER MEDICAL GROUP LP 6109 W RAMSEY ST BANNING, CA 92220-3051 CAL000218713 1615 ORANGE TREE LANE	1024800197 CAL000218713
	Contact: Contact address: Contact country: Contact telephone: Contact email: EPA Region: Classification: Description:	REDLANDS, CA 92374-0000 BRANDT BAHLING 1615 ORANGE TREE LANE REDLANDS, CA 92374 Not reported 909-786-0718 BBAHLING@EPICLP.COM 09 Non-Generator Handler: Non-Generators do not presently generate hazardous waste	

Database(s)

EDR ID Number EPA ID Number

#### **BEAVER MEDICAL GROUP LP (Continued)**

Owner/Operator Summary: **BRANDT BAHLING** Owner/operator name: Owner/operator address: 1615 ORANGE TREE LANE REDLANDS, CA 92374 Owner/operator country: Not reported 909-786-0718 Owner/operator telephone: Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Other Owner/Operator Type: Operator Not reported Owner/Op start date: Owner/Op end date: Not reported Owner/operator name: BEAVER MEDICAL GROUP LP Owner/operator address: 2 W FERN AVE REDLANDS, CA 92373 Owner/operator country: Not reported Owner/operator telephone: 909-793-3311 Owner/operator email: Not reported Not reported Owner/operator fax: Owner/operator extension: Not reported Legal status: Other Owner/Operator Type: Owner Owner/Op start date: Not reported Owner/Op end date: Not reported Handler Activities Summary: U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: Yes Treater, storer or disposer of HW: No Underground injection activity: No

On-site burner exemption: Furnace exemption:		No	
		No	
	Used oil fuel burner:	No	
	Used oil processor:	No	
User oil refiner: Used oil fuel marketer to burner: Used oil Specification marketer: Used oil transfer facility:		No	
		: No	
		No	
		No	
	Used oil transporter:	No	
	Violation Status:	lo violations found	
G45 SE 1/8-1/4 0 247 mi	QUEST DIAGNOSTICS BANNING R 6109 W RAMSEY ST BANNING, CA 92220	RL	RCRA-SQG
1304 ft.	Site 2 of 3 in cluster G		
Relative: Lower	RCRA-SQG: Date form received by agency:2	2004-11-24 00:00:00.0	
Actual:	Facility name: C	QUEST DIAGNOSTICS BANNING RRL	
2302 II.	Facility address.	SANNING CA 92220	
	EPA ID: C	CAR000158725	

1007879261 CAR000158725

Database(s)

EDR ID Number EPA ID Number

1007879261

#### QUEST DIAGNOSTICS BANNING RRL (Continued) Mailing address: 18408 OXNARD ST TARZANA, CA 91356 FRED C TORRES Contact: 18408 OXNARD ST Contact address: TARZANA, CA 91356 Contact country: US Contact telephone: 909-260-9606 Contact email: Not reported EPA Region: 09 Classification: Small Small Quantity Generator Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time **Owner/Operator Summary:** Owner/operator name: QUEST DIAGNOSTICS Owner/operator address: Not reported Not reported Owner/operator country: US Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Operator Owner/Op start date: 2004-01-01 00:00:00.0 Owner/Op end date: Not reported Owner/operator name: QUEST DIAGNOSTICS Owner/operator address: Not reported Not reported Owner/operator country: US Owner/operator telephone: Not reported Owner/operator email: Not reported Not reported Owner/operator fax: Owner/operator extension: Not reported Private Legal status: Owner/Operator Type: Owner 2004-01-01 00:00:00.0 Owner/Op start date: Owner/Op end date: Not reported Handler Activities Summary: U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No

Map ID Direction		MAP FINDINGS		
Elevation	Site		Database(s)	EPA ID Number
	QUEST DIAGNOSTICS E		1007879261	
	Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No			
	Hazardous Waste Sum	mary:		
	. Waste code: . Waste name:	D001 IGNITABLE WASTE		
	Violation Status:	No violations found		
G46 SE 1/8-1/4 0.247 mi.	BEAVER MEDICAL GROUP/SPECIALTY CARE CLINIC 6109 W RAMSEY ST 4 BANNING, CA 92220		CERS HAZ WASTE HAZNET CERS	S113177707 N/A
1304 ft.	Site 3 of 3 in cluster G			
Relative: Lower Actual: 2582 ft.	CERS HAZ WASTE: Name: Address: City,State,Zip: Site ID: CERS ID: CERS Description:	BEAVER MEDICAL GROUP/SPECIALTY C/ 6109 W RAMSEY ST BANNING, CA 92220 11464 10325653 Hazardous Waste Generator	ARE CLINIC	
	HAZNET: Name: Address: City,State,Zip: Year: GEPAID: Contact: Telephone: Mailing Name: Mailing Address: Mailing City,St,Zip: Gen County: TSD EPA ID: TSD County: TSD EPA ID: TSD County: Tons: CA Waste Code: Method: Facility County: Name: Address: City,State,Zip: Year: GEPAID: Contact: Telephone: Mailing Name: Mailing Address: Mailing Address: Mailing Address: Mailing Address: Mailing Address: Mailing Address: Mailing Address: Mailing City,St,Zip: Gen County: TSD EPA ID: TSD EPA ID: TSD County:	QUEST DIAGNOSTICS INC. 6109 W RAMSEY ST BANNING, CA 922200000 2009 CAR000158725 AILEEN GENER/EHS MANAGER, CA 8187376037 Not reported 8401 FALLBROOK AVE WEST HILLS, CA 913040000 Riverside CAD980884183 Sacramento 0.017 343-Unspecified organic liquid mixture H141-Storage, Bulking, And/Or Transfer Off SiteNo Treatm (H010-H129) Or (H131-H135) Riverside QUEST DIAGNOSTICS INC. 6109 W RAMSEY ST BANNING, CA 922200000 2008 CAR000158725 AILEEN GENER/EHS MANAGER, CA 8187376037 Not reported 8401 FALLBROOK AVE WEST HILLS, CA 913040000 Riverside CAD008252405 Los Angeles	nent/Reovery	
Database(s)

EDR ID Number EPA ID Number

Tons:	0.018	
CA Waste Code:	214-Unspecified solvent mixture	
Method:	H061-Fuel Blending Prior To Energy Recovery At Another Site	
Facility County:	Riverside	
Name:	QUEST DIAGNOSTICS INC.	
Address:	6109 W RAMSEY ST	
City,State,Zip:	BANNING, CA 922200000	
Year:	2007	
GEPAID:		
Contact:	AILEEN GENER/EHS MANAGER, CA	
Mailing Name:	Not reported	
Mailing Address	8401 FALLBROOK AV/F	
Mailing City.St.Zip:	WEST HILLS. CA 913040000	
Gen County:	Riverside	
TSD EPA ID:	CAD008364432	
TSD County:	Los Angeles	
Tons:	0.005	
CA Waste Code:	133-Aqueous solution with total organic residues 10 percent or more	
Method:	H061-Fuel Blending Prior To Energy Recovery At Another Site	
Facility County.	Riverside	
CERS:		
Name:	BEAVER MEDICAL GROUP/SPECIALTY CARE CLINIC	
Address:	6109 W RAMSEY ST	
City,State,Zip:	BANNING, CA 92220	
Site ID:	11464	
CERS ID:	10325653	
CERS Description:	Chemical Storage Facilities	
Violations:		
Site ID:	11464	
Site Name:	Beaver Medical Group/Specialty Care Clinic	
Citation:	12-03-2014 HSC 6 05 25508 1/f) California Health and Safety Code, Chapter 6 (	05
Citation.	Section(s) 25508.1(f) - California Health and Salety Code, Chapter 0.3	95,
Violation Description	Failure to electronically update the business plan within 30 days of a	
	substantial change.	
Violation Notes:	Returned to compliance on 12/31/2014.	
Violation Division:	Riverside County Department of Env Health	
Violation Program:	HMRRP	
Violation Source:	CERS	
Site ID:	11464	
Site Name:	Beaver Medical Group/Specialty Care Clinic	
Violation Date:	07-26-2017	
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)	
Violation Description	Failure to complete and electronically submit a business plan when	
	storing/handling a hazardous material at or above reportable	
Violation Notoe	quantities. Returned to compliance on 00/08/2017	
Violation Division	Riverside County Department of Env Health	
Violation Program:	HMRRP	
Violation Source:	CERS	

EDR ID Number Database(s) EPA ID Number

# BEAVER MEDICAL GROUP/SPECIALTY CARE CLINIC (Continued)

	· · · · · · · · · · · · · · · · · · ·
Site ID:	11464
Site Name:	Beaver Medical Group/Specialty Care Clinic
Violation Date:	12-05-2014
Citation:	HSC 6 95 25508(a)(1) - California Health and Safety Code. Chapter
	6.95 Section(s) $25508(a)(1)$
Violation Description:	Eailure to complete and electronically submit bazardous material
Violation Description.	inventory information for all reportable bezordays materials on aits
	at or above reportable quantities.
Violation Notes:	Returned to compliance on 12/31/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	11464
Site Name:	Beaver Medical Group/Specialty Care Clinic
Violation Date:	12-05-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter
	6.95. Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate training
	program in safety procedures in the event of a release or threatened
	release of a bazardous material
Violation Notos:	Peturned to compliance on 12/21/2014
Violation Division	Returned to compliance on 12/31/2014.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	11464
Site ID.	1 1404 Requer Medical Crown/Chastielty Care Clinic
Sile Marie.	
Violation Date:	07-26-2017
Citation:	Un-Specified
Violation Description:	Business Plan Program - Operations/Maintenance - General Local
	Ordinance
Violation Notes:	Returned to compliance on 09/08/2017.
Violation Division:	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
Site ID:	11464
Site Name:	Beaver Medical Group/Specialty Care Clinic
Violation Date:	12-05-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter
	6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate emergency
	response plan and procedures for a release or threatened release of a
	hazardous material.
Violation Notes:	Returned to compliance on 12/31/2014.
Violation Division	Riverside County Department of Env Health
Violation Program:	HMRRP
Violation Source:	CERS
violation oource.	
Site ID:	11464
Site Name:	Beaver Medical Group/Specialty Care Clinic
Violation Date:	12-05-2014
Citation:	HSC 6 95 25508(a)(1) - California Health and Safety Code. Chapter
	6.95 Section(s) 25508(a)(1) - California Fleatur and Salety Code, Chapter
Violation Description:	Failure to complete and electronically submit a site man with all
	ramine to complete and electronically submit a site map with all

EDR ID Number Database(s) EPA ID Number

BEAVER MEDICAL GROUP/SPECIAL	TY CARE CLINIC (Continued)	S113177707
Violation Notes:	Returned to compliance on 12/31/2014.	
Violation Division:	Riverside County Department of Env Health	
Violation Program:	HMRRP	
Violation Source:	CERS	
Site ID:	11464	
Site ID.	1 1404 Boover Medical Group/Specialty Care Clinic	
Violation Data:		
Citation	UI-20-2017	
Citation.	6.95, Section(s) 25508(a)(1)	
Violation Description:	Failure to establish and electronically submit an adequate emergence response plan and procedures for a release or threatened release or bazardous material	cy fa
Violation Notes:	Returned to compliance on 09/08/2017	
Violation Division:	Retained to compliance on 09/00/2017.	
Violation Brogram		
Violation Sources		
violation Source:	CERS	
Site ID:	11464	
Site Name:	Beaver Medical Group/Specialty Care Clinic	
Violation Date:	07-26-2017	
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter	
	6.95, Section(s) 25508(a)(1)	
Violation Description:	Failure to complete and electronically submit hazardous material	
	inventory information for all reportable hazardous materials on site	
	at or above reportable quantities.	
Violation Notes:	Returned to compliance on 09/08/2017.	
Violation Division:	Riverside County Department of Env Health	
Violation Program:	HMRRP	
Violation Source:	CERS	
Site ID:	11464	
Site Name:	Beaver Medical Group/Specialty Care Clinic	
Violation Date:	12-05-2014	
Citation:	HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.	95.
	Section(s) 25508(d)	
Violation Description:	Failure to complete and/or electronically submit a business plan whe	en
, , , , , , , , , , , , , , , , , , ,	storing/handling a hazardous material at or above reportable	
Violation Notos:	Qualities. Returned to compliance on 12/21/2014	
Violation Division	Returned to compliance on 12/31/2014.	
Violation Drogram		
Violation Program.		
violation Source.	CERS	
Site ID:	11464	
Site Name:	Beaver Medical Group/Specialty Care Clinic	
Violation Date:	12-05-2014	
Citation:	19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19,	
	Chapter 6.95, Section(s) 25508(a)(1)	
Violation Description:	Failure to complete and electronically submit the Business Activities	
·	Page and/or Business Owner Operator Identification Page.	
Violation Notes:	Returned to compliance on 12/31/2014.	
Violation Division:	Riverside County Department of Env Health	
Violation Program	HMRRP	
Violation Source:	CERS	
Site ID:	11464	

EDR ID Number Database(s) EPA ID Number

Site Name:	Beaver Medical Group/Specialty Care Clinic	
Violation Date:	12-05-2014	
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chap Section(s) Multiple	iter 6.95,
Violation Description:	Business Plan Program - Administration/Documentation - Ge	neral
Violation Notes:	Returned to compliance on 12/31/2014. [LOCAL ORDINANC	E VIOLATION 101C]
	Approved HMBP accessible on site and available for review.	· · · · ·
Violation Division:	Riverside County Department of Env Health	
Violation Program:	HMRRP	
Violation Source:	CERS	
Site ID:	11464	
Site Name:	Beaver Medical Group/Specialty Care Clinic	
Violation Date:	12-05-2014	
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chap Section(c) 25508.2	oter 6.95,
Violation Description:	Failure to annually review and electronically certify that the	
	business plan is complete, accurate, and up-to-date.	
Violation Notes:	Returned to compliance on 12/31/2014.	
Violation Division:	Riverside County Department of Env Health	
Violation Program:	HMRRP	
Violation Source:	CERS	
valuation.		
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	07-26-2017	
Violations Found:	Yes	
Eval Type:	Routine done by local agency	
Eval Notes:	Handler inspection	
Eval Division:	Riverside County Department of Env Health	
Eval Program:	HMRRP	
Eval Source:	CERS	
Eval General Type:	Other/Unknown	
Eval Date:	09-08-2017	
Violations Found:	No	
Eval Type:	Other, not routine, done by local agency	
Eval Notes:	Follow up inspection Riverside County Department of Env Health	
Eval Division.		
Eval Source:	CERS	
Eval General Type:	Compliance Evaluation Inspection	
Eval Date:	12-05-2014	
Violations Found:	Yes	
Eval Type:	Routine done by local agency	
Eval Notes:	Not reported	
Eval Division:	Riverside County Department of Env Health	
Eval Program:	HMRRP	
Eval Source:	CERS	
nforcement Action:		
Site ID:	11464	
Site Name:	Beaver Medical Group/Specialty Care Clinic	
O'the Andelson en		
Site Address:	0109 W RAWSET ST	

Map ID Direction Distance Elevation Site

# MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

Site Zip:	92220	
Enf Action Date:	12-05-2014	
Enf Action Type:	Nation of Violation (Unified Brogram)	
Enr Action Type:	Notice of Violation (Unified Program)	
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection	
Enf Action Notes:	Not reported	
Enf Action Division:	Riverside County Department of Env Health	
Enf Action Program:	HMRRP	
Enf Action Source:	CERS	
Coordinates:		
Site ID:	11464	
Facility Name:	Beaver Medical Group/Specialty Care Clinic	
Env Int Type Code:	HWG	
Program ID:	10325653	
Coord Name:	Not reported	
Def Deint Type Deee	Conter of a facility or station	
Rei Point Type Desc.		
	33.930010	
Longitude:	-116.943810	
Affiliation:		
Affiliation Type Desc:	Document Preparer	
Entity Name:	BRANDT BAHLING	
Entity Title:	Not reported	
Affiliation Address:	Not reported	
Affiliation City:	Not reported	
Affiliation State	Not reported	
Affiliation Country:	Not reported	
Affiliation Zin:	Not reported	
Affiliation Phone:	Not reported	
Affiliation Type Desc:	Facility Mailing Address	
Entity Name	Mailing Address	
Entity Title:	Not reported	
Affiliation Address:	6100 W. Romony St	
Affiliation Address:	o Tug w. Ramsey St	
Affiliation City:	Banning	
Affiliation State:	CA	
Affiliation Country:	Not reported	
Affiliation Zip:	92220	
Affiliation Phone:	Not reported	
Affiliation Type Desc:	Operator	
Entity Name:	Nancy Parrish	
Entity Title:	Not reported	
Affiliation Address:	Not reported	
Affiliation City:	Not reported	
Affiliation State:	Not reported	
Affiliation Country:	Not reported	
Affiliation Zip:	Not reported	
Affiliation Phone:	(951) 663-1609	
Affiliation Type Desc:	Parent Corporation	
Entity Name:	Beaver Medical Group/Specialty Care Clinic	
Entity Title:	Not reported	
Affiliation Address:	Not reported	
Affiliation City	Not reported	
Affiliation State:	Not reported	

Database(s)

EDR ID Number **EPA ID Number** 

### BEAVER MEDICAL GROUP/SPECIALTY CARE CLINIC (Continued)

S113177707

Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Affiliation Type Desc: Entity Name: Entity Title: Affiliation Address: Affiliation City: Affiliation State: Affiliation Country: Affiliation Zip: Affiliation Phone:

Not reported Not reported Not reported

**CUPA** District **Riverside Cnty Env Health** Not reported 4065 County Circle Drive, Room 104 Riverside CA Not reported 92503 (951) 358-5055

Legal Owner Beaver Medical Group, L.P. Not reported 1615 Orange Tree Lane Redlands CA United States 92374 (909) 793-3311

**Environmental Contact** Nancy Parrish Not reported 6109 W Ramsey St Banning CA Not reported 92220 Not reported

Identification Signer Brandt Bahling Director of Risk Management Not reported Not reported Not reported Not reported Not reported Not reported

#### POMA AUTOMATED FUELING 47 SE **5840 FIFTH STREET** 1/4-1/2 **BANNING, CA 92220**

0.413 mi. 2180 ft.

**Relative:** LUST REG 7: Lower Region: 7 9 - Case Closed Status: Actual: Case Num: 7T2220024 2568 ft. Diesel fuel oil and additives Substance: 1082 ID: Global ID: T0606500737

S105022677 LUST SWEEPS UST N/A HIST CORTESE CERS

Database(s)

EDR ID Number EPA ID Number

S105022677

#### POMA AUTOMATED FUELING (Continued)

Lead Agency: Local Agency Case Worker: YO LUST: Name: POMA AUTOMATED FUELING Address: 5840 FIFTH STREET BANNING, CA 92220 City,State,Zip: COLORADO RIVER BASIN RWQCB (REGION 7) Lead Agency: Case Type: LUST Cleanup Site Geo Track: http://geotracker.waterboards.ca.gov/profile\_report.asp?global\_id=T0606500737 T0606500737 Global Id: Latitude: 33.927511 Longitude: -116.9409585 Completed - Case Closed Status: Status Date: 04/04/2000 Case Worker: PL 7T2220024 **RB** Case Number: Local Agency: RIVERSIDE COUNTY LOP File Location: Not reported Local Case Number: Not reported Potential Media Affect: Soil Potential Contaminants of Concern: Diesel Site History: Not reported LUST: Global Id: T0606500737 Contact Type: Regional Board Caseworker Contact Name: Phan Le COLORADO RIVER BASIN RWQCB (REGION 7) Organization Name: 73720 FRED WARING DRIVE SUITE #100 Address: City: PALM DESERT Email: phan.le@waterboards.ca.gov Phone Number: 7607768974 T0606500737 Global Id: Contact Type: Local Agency Caseworker Contact Name: Riverside County LOP Organization Name: RIVERSIDE COUNTY LOP 3880 LEMON ST SUITE 200 Address: City: RIVERSIDE Email: Not reported Phone Number: 9519558980 LUST: T0606500737 Global Id: Action Type: Other Date: 01/25/1999 Leak Discovery Action: T0606500737 Global Id: Action Type: Other Date: 06/18/1999 Action: Leak Reported LUST: Global Id: T0606500737

Database(s)

EDR ID Number EPA ID Number

Status: Status Date:	Open - Case Begin Date 01/25/1999
Global Id:	T0606500737
Status:	Open - Site Assessment
Status Date:	06/18/1999
Olaldo Dalo.	00,10,1000
Global Id:	T0606500737
Status:	Completed - Case Closed
Status Date:	04/04/2000
SWEEPS UST:	
Name:	POMA AUTOMATED FUELING INC
Address:	5840 FIFTH ST
City:	BANNING
Status:	Active
Comp Number:	21546
Number:	1
Board Of Equalization:	Not reported
Referral Date:	03-07-92
Action Date:	03-07-92
Created Date:	04-25-90
Owner Lank Id:	Not reported
SWRCB Lank Id:	33-000-021546-000001
Tank Status:	A 10000
	12000
Active Date.	03-07-92 M V ELEI
STC:	
Content:	
Number Of Tanks:	3
Name:	POMA AUTOMATED FUELING INC
Address:	5840 FIFTH ST
Citv:	BANNING
Status:	Active
Comp Number:	21546
Number:	1
Board Of Equalization:	Not reported
Referral Date:	03-07-92
Action Date:	03-07-92
Created Date:	04-25-90
Owner Tank Id:	Not reported
SWRCB Tank Id:	33-000-021546-000002
Tank Status:	A
Capacity:	12000
Active Date:	03-07-92
Tank Use:	M.V. FUEL
SIG: Contonti	
Content:	DIEGEL Not reported
NUMBER OF TARKS:	ποι τεροπεα
Name:	POMA AUTOMATED FUELING INC
Address:	5840 FIFTH ST
City:	BANNING
Status:	Active

Database(s)

EDR ID Number EPA ID Number

#### POMA AUTOMATED FUELING (Continued)

Comp Number: 21546 Number: 1 Board Of Equalization: Not reported Referral Date: 03-07-92 Action Date: 03-07-92 04-25-90 Created Date: Not reported Owner Tank Id: SWRCB Tank Id: 33-000-021546-000003 Tank Status: А Capacity: 6000 03-07-92 Active Date: M.V. FUEL Tank Use: STG: Ρ Content: DIESEL Number Of Tanks: Not reported HIST CORTESE: edr\_fname: POMA AUTOMATED FUELING edr\_fadd1: 5840 5TH BANNING, CA 92220 City,State,Zip: CORTESE Region: Facility County Code: 33 Reg By: **LTNKA** 7T2220024 Reg Id: CERS: Name: POMA AUTOMATED FUELING Address: 5840 FIFTH STREET BANNING, CA 92220 City,State,Zip: Site ID: 207131 CERS ID: T0606500737 **CERS** Description: Leaking Underground Storage Tank Cleanup Site Affiliation: Affiliation Type Desc: **Regional Board Caseworker** Entity Name: Phan Le - COLORADO RIVER BASIN RWQCB (REGION 7) Not reported Entity Title: 73720 FRED WARING DRIVE SUITE #100 Affiliation Address: PALM DESERT Affiliation City: Affiliation State: CA Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: 7607768974 Affiliation Type Desc: Local Agency Caseworker Entity Name: Riverside County LOP - RIVERSIDE COUNTY LOP Entity Title: Not reported Affiliation Address: 3880 LEMON ST SUITE 200 Affiliation City: RIVERSIDE Affiliation State: CA Affiliation Country: Not reported Affiliation Zip: Not reported Affiliation Phone: 9519558980

	[		1	
		MAP FINDINGS		
Site			Database(s)	EDR ID Number
GOLD ZONE ENTER 5861 FIFTH STREET BANNING, CA	RISES (CAL D FUEL)		LUST	S106152917 N/A
Site 1 of 4 in cluster				
LUST REG 7: Region: Status: Case Num: Substance: ID: Global ID: Lead Agency: Case Worker:	7 9 - Case Closed 7T2220010 Diesel fuel oil and additiv 800 T0606500724 Local Agency RT	ves		
GOLD ZONE ENTER 5861 5TH BANNING, CA 9222	RISES		HIST CORTESE	S105022678 N/A
Site 2 of 4 in cluster				
HIST CORTESE: edr_fname: edr_fadd1: City,State,Zip: Region: Facility County ( Reg By: Reg Id:	GOLD ZON 5861 5TH BANNING, CORTESE de: 33 LTNKA 7T2220010	E ENTERPRISES CA 92220		
CAL D FUEL 5861 W FIFTH ST BANNING, CA			LUST	S106410431 N/A
Site 3 of 4 in cluster				
RIVERSIDE CO. L Name: Address: City,State,Zip: Region: Facility ID: Employee: Site Closed: Case Type: Facility Status: Casetype Decoor Fstatus Decode	ST: CAL D FUE 5861 W FIF BANNING, RIVERSIDE 911032 Brown Yes Soil only closed/actic Soil only is Closed/Actic	L TH ST CA E on completed impacted on completed		
Name: Address: City,State,Zip: Region: Facility ID: Employee: Site Closed: Case Type:	BANNING T 5861 W FIF BANNING, RIVERSIDE 200420452 Shurlow-LO Yes Soil only	FRUCK STOP TH ST CA E		

Map ID Direction		MAP FINDINGS		
Elevation	Site		Database(s)	EPA ID Number
	CAL D FUEL (Continued)			S106410431
	Facility Status: Casetype Decode: Fstatus Decode:	closed/action completed Soil only is impacted Closed/Action completed		
H51 SE 1/4-1/2 0.461 mi.	BANNING TRUCK STOP 5861 W 5TH STREET BANNING, CA 92220		LUST CERS	S106447509 N/A
2433 ft.	Site 4 of 4 in cluster H			
Relative: Lower Actual: 2564 ft.	LUST: Name: Address: City,State,Zip: Lead Agency: Case Type: Geo Track: Global Id: Latitude: Longitude:	BANNING TRUCK STOP 5861 W 5TH STREET BANNING, CA 92220 RIVERSIDE COUNTY LOP LUST Cleanup Site http://geotracker.waterboards.ca.gov/profile_r T0606544903 33.927621 -116.941289 Completed_Coool Cleaned	report.asp?global_id=⊺	Г0606544903
	Status: Status Date: Case Worker: RB Case Number: Local Agency: File Location: Local Case Number: Potential Media Affect:	Completed - Case Closed 07/06/2004 Not reported Not reported Local Agency Warehouse 200420452 Soil		
	Potential Contaminants Site History	of Concern: Diesel Not reported		
	Global Id:	T0606544903		
	Contact Type:	Regional Board Caseworker		
	Contact Name:	Phan Le	7)	
	Organization Name:	73720 ERED WARING DRIVE SUITE #100	7)	
	City:	PALM DESERT		
	Email: Phone Number:	phan.le@waterboards.ca.gov 7607768974		
	LUST:	T0606544002		
	Action Type:	ENFORCEMENT		
	Date:	07/05/2004		
	Action:	Technical Correspondence / Assistance / Other		
	Global Id: Action Type: Date: Action:	T0606544903 Other 04/01/2004 Leak Discovery		
	Global Id.	T0606544903		
	Action Type:	Other		
	Date:	01/29/2004		
	Action:	Leak Stopped		
	Global Id:	T0606544903		

L.

Database(s)

EDR ID Number EPA ID Number

# **BANNING TRUCK STOP (Continued)**

Action Type:	RESPONSE
Date:	06/30/2004
Action:	Request for Closure
	T0000544000
Global Id:	
Action Type:	
Date:	04/01/2004 Other (Lise Description Field)
Action.	Other (Ose Description Field)
Global Id:	T0606544903
Action Type:	Other
Date:	04/01/2004
Action:	Leak Reported
	T00000 44000
Global Id:	
Date:	
Action:	Closure/No Further Action Letter - #Riv Co Closure
/ lotion.	
Global Id:	T0606544903
Action Type:	ENFORCEMENT
Date:	07/05/2004
Action:	File review - #RCDEH Upload Site File 4/8/2010
LUST:	T0000511000
Global Id:	10606544903
Status:	Open - Case Begin Date
Status Date.	01/29/2004
Global Id:	T0606544903
Status:	Open - Site Assessment
Status Date:	04/01/2004
Clobal Id:	T0606544002
Status:	Completed - Case Closed
Status Date <sup>-</sup>	07/06/2004
Name:	
Address:	5861 W 5TH STREET
City,State,Zip:	BANNING, CA 92220
Case Type:	
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0606500724
Global Id:	T0606500724
Latitude:	33.928972
Longitude:	-116.9374934
Status:	Completed - Case Closed
Status Date:	06/22/2004
Case Worker:	RIV
RB Case Number:	7T2220010
Local Agency:	RIVERSIDE COUNTY LOP
File Location:	Local Agency Warehouse
Local Case Number:	911032 Soil
Potential Media Affect:	JUII Desel
Site History	Not reported
Onto Filotory.	

Database(s)

EDR ID Number EPA ID Number

# BANNING TRUCK STOP (Continued)

LUST: Global Id: Contact Type: Contact Name: Organization Name: Address: City: Email: Phone Number:	T0606500724 Regional Board Caseworker Phan Le COLORADO RIVER BASIN RWQCB (REGION 7) 73720 FRED WARING DRIVE SUITE #100 PALM DESERT phan.le@waterboards.ca.gov 7607768974
Global Id:	T0606500724
Contact Type:	Local Agency Caseworker
Contact Name:	Riverside County LOP
Organization Name:	RIVERSIDE COUNTY LOP
Address:	3880 LEMON ST SUITE 200
City:	RIVERSIDE
Email:	Not reported
Phone Number:	9519558980
LUST: Global Id: Action Type: Date: Action:	T0606500724 ENFORCEMENT 11/30/2005 Technical Correspondence / Assistance / Other
Global Id:	T0606500724
Action Type:	RESPONSE
Date:	06/30/2004
Action:	Request for Closure
Global Id:	T0606500724
Action Type:	Other
Date:	02/14/1991
Action:	Leak Reported
Global Id:	T0606500724
Action Type:	ENFORCEMENT
Date:	02/17/2009
Action:	Closure/No Further Action Letter - #Site Closue
Global Id:	T0606500724
Action Type:	ENFORCEMENT
Date:	02/16/2009
Action:	File review - #RCDEH Upload Site File 4/19/2010
LUST: Global Id: Status: Status Date:	T0606500724 Open - Case Begin Date 02/14/1991
Global Id:	T0606500724
Status:	Open - Site Assessment
Status Date:	11/05/1991
Global Id:	T0606500724
Status:	Open - Site Assessment

Database(s)

EDR ID Number EPA ID Number

BANNING TRUCK STOP (Conti	nued)
Status Date:	08/07/1992
Global Id:	T0606500724
Status:	Open - Remediation
Status Date:	10/01/1992
Global Id:	T0606500724
Status:	Completed - Case Closed
Status Date:	06/22/2004
CERS:	
Name:	CAL D FUEL
Address:	5861 W 5TH STREET
Citv.State.Zip:	BANNING. CA 92220
Site ID:	207561
CERS ID:	T0606500724
CERS Description:	Leaking Underground Storage Tank Cleanup Site
Affiliation:	
Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	Phan Le - COLORADO RIVER BASIN RWQCB (REGION 7)
Entity Title:	Not reported
Affiliation Address:	73720 FRED WARING DRIVE SUITE #100
Affiliation City:	PALM DESERT
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7607768974
Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	Riverside County LOP - RIVERSIDE COUNTY LOP
Entity Title:	Not reported
Affiliation Address:	3880 LEMON ST SUITE 200
Affiliation City:	RIVERSIDE
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	9519558980
Name:	BANNING TRUCK STOP
Address:	5861 W 5TH STREET
City,State,Zip:	BANNING, CA 92220
Site ID:	233187
CERS ID:	T0606544903
CERS Description:	Leaking Underground Storage Tank Cleanup Site
Affiliation:	
Affiliation Type Desc:	Regional Board Caseworker
Entity Name:	Phan Le - COLORADO RIVER BASIN RWQCB (REGION 7)
Entity Title:	Not reported
Affiliation Address:	73720 FRED WARING DRIVE SUITE #100
Affiliation City:	PALM DESERT
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	7607768974

Database(s)

EDR ID Number EPA ID Number

52 WNW 1/2-1 0.953 mi. 5034 ft.	DEUTCH ELEMENTARY SCHO CHERRY AVENUE/10TH STRE BEAUMONT, CA 92223	DOL NO. 2 EET	ENVIROSTOR SCH	S107736219 N/A
1/2-1 0.953 mi. 5034 ft. Relative: Higher Actual: 2633 ft.	BEAUMONT, CA 92223 ENVIROSTOR: Name: Address: City,State,Zip: Facility ID: Status: Status Date: Site Code: Site Type: Site Type Detailed: Acres: NPL: Regulatory Agencies: Lead Agency: Program Manager: Supervisor: Division Branch: Assembly: Senate: Special Program: Restricted Use: Site Mgmt Req: Funding: Latitude: Longitude: APN: Past Use: Potential COC: Confirmed COC: Potential Description: Alias Name: Alias Type: Alias Name: Alias Type: Completed Info: Completed Area Name: Completed Area Name:	DEUTCH ELEMENTARY SCHOOL NO. 2 CHERRY AVENUE/10TH STREET BEAUMONT, CA 92223 33010033 No Further Action 12/18/2001 404215 School Investigation School 12 NO DTSC DTSC DTSC DTSC Not reported Javier Hinojosa Southern California Schools & Brownfields Outreach 42 23 Not reported NO NONE SPECIFIED School District 33.9356 -116.9644 NONE SPECIFIED School District 33.9356 -116.9644 NONE SPECIFIED AGRICULTURAL - ROW CROPS Arsenic Chromium III Copper and compounds Lead Mercury ar Nickel Total Chromium (1:6 ratio Cr VI:Cr III DDD DDE DDT 30001-NO 30005-NO 30006-NO 30007-NO 30008-NO 30013-I 30152-NO 30156-NO 30407-NO SOIL BEAUMONT UNIFIED SCHOOL DISTRICT Alternate Name BEAUMONT UNIFIED SCHOOL DISTRICT Alternate Name BEAUMONT UNIFIED SCHOOL DISTRICT Alternate Name DEUTCH ELEMENTARY NO. 2 (PROPOSED) Alternate Name 404215 Project Code (Site Code) 33010033 Envirostor ID Number PROJECT WIDE he: Not reported	nd compounds NO 30357-NO	
	Completed Sub Alea Nan Completed Document Typ Completed Date: Comments:	<ul> <li>Preliminary Endangerment Assessment Report 12/18/2001</li> <li>Not reported</li> </ul>		
	Completed Area Name: Completed Sub Area Nam Completed Document Typ Completed Date:	PROJECT WIDE ne: Not reported ne: * Workplan 08/21/2001		

EDR ID Number Database(s)

S107736219

**EPA ID Number** 

#### **DEUTCH ELEMENTARY SCHOOL NO. 2 (Continued)**

Comments: Field work completed 8/21/01, Project then moved to PEA. PEA comments issued 10/15/01. Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Other Report Completed Date: 03/09/2001 Comments: Phase 1 Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: **Environmental Oversight Agreement** Completed Date: 03/21/2001 Comments: Not reported Completed Area Name: PROJECT WIDE Completed Sub Area Name: Not reported Completed Document Type: Cost Recovery Closeout Memo Completed Date: 02/07/2002 Comments: Not reported Future Area Name: Not reported Not reported Future Sub Area Name: Future Document Type: Not reported Future Due Date: Not reported Schedule Area Name: Not reported Schedule Sub Area Name: Not reported Schedule Document Type: Not reported Schedule Due Date: Not reported Schedule Revised Date: Not reported SCH: **DEUTCH ELEMENTARY SCHOOL NO. 2** Name: CHERRY AVENUE/10TH STREET Address: BEAUMONT, CA 92223 City,State,Zip: Facility ID: 33010033 Site Type: School Investigation Site Type Detail: School NONE SPECIFIED Site Mgmt. Req.: Acres: 12 National Priorities List: NO Cleanup Oversight Agencies: DTSC Lead Agency: DTSC Lead Agency Description: \* DTSC Project Manager: Not reported Supervisor: Javier Hinojosa **Division Branch:** Southern California Schools & Brownfields Outreach 404215 Site Code: Assembly: 42 23 Senate: Special Program Status: Not reported Status: No Further Action 12/18/2001 Status Date: **Restricted Use:** NO Funding: School District Latitude: 33.9356

EDR ID Number Database(s) EPA ID Number

# DEUTCH ELEMENTARY SCHOOL NO. 2 (Continued)

	Longitude:	-116.9644
	APN:	NONE SPECIFIED
	Past Use:	AGRICULTURAL - ROW CROPS
	Potential COC:	Arsenic, Chromium III, Copper and compounds, Lead, Mercury and
		compounds, Nickel, Total Chromium (1:6 ratio Cr VI:Cr III, DDD, DDE,
		DDT
	Confirmed COC:	30001-NO, 30005-NO, 30006-NO, 30007-NO, 30008-NO, 30013-NO,
		30357-NO, 30152-NO, 30156-NO, 30407-NO
	Potential Description:	SOIL
	Alias Name:	BEAUMONT UNIFIED SCHOOL DISTRICT
	Alias Type:	Alternate Name
	Alias Name:	BEAUMONT USD-PROPOSED DEUTCH NO. 2
	Alias Type:	Alternate Name
	Alias Name:	DEUTCH ELEMENTARY NO. 2 (PROPOSED)
	Alias Type:	Alternate Name
	Alias Name:	404215
	Alias Type:	Project Code (Site Code)
	Alias Name:	33010033
	Alias Type:	Envirostor ID Number
C	ompleted Info	
0	Completed Into.	
	Completed Area Name.	Not reported
	Completed Sub Area Name.	Proliminary Endangerment Assessment Pepert
	Completed Document Type.	
	Comports:	Not reported
	Comments.	Not reported
	Completed Area Name	
	Completed Sub Area Name:	Not reported
	Completed Document Type:	* Workplan
	Completed Decament Type.	08/21/2001
	Comments:	Field work completed 8/21/01 Project then moved to PEA PEA comments
	Comments.	issued 10/15/01
	Completed Area Name	PRO JECT WIDE
	Completed Sub Area Name:	Not reported
	Completed Document Type:	Other Report
	Completed Date:	03/09/2001
	Comments:	Phase 1
	Completed Area Name:	PROJECT WIDE
	Completed Sub Area Name:	Not reported
	Completed Document Type:	Environmental Oversight Agreement
	Completed Date:	03/21/2001
	Comments:	Not reported
	Completed Area Name:	PROJECT WIDE
	Completed Sub Area Name:	Not reported
	Completed Document Type:	Cost Recovery Closeout Memo
	Completed Date:	02/07/2002
	Comments:	Not reported
		•
	Future Area Name:	Not reported
	Future Sub Area Name:	Not reported
	Future Document Type:	Not reported
	Future Due Date:	Not reported
	Schedule Area Name:	Not reported
	Schedule Sub Area Name:	Not reported

EDR ID Number Database(s) EPA ID Number

# DEUTCH ELEMENTARY SCHOOL NO. 2 (Continued)

Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Count: 0 records.

ORPHAN SUMMARY

 City
 EDR ID
 Site Name
 Site Address

NO SITES FOUND

Database(s)

Zip

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

# STANDARD ENVIRONMENTAL RECORDS

### Federal NPL site list

#### NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/20/2019 Number of Days to Update: 13 Source: EPA Telephone: N/A Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Quarterly

**NPL Site Boundaries** 

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC) Telephone: 202-564-7333

EPA Region 1 Telephone 617-918-1143

EPA Region 3 Telephone 215-814-5418

EPA Region 4 Telephone 404-562-8033

EPA Region 5 Telephone 312-886-6686

EPA Region 10 Telephone 206-553-8665 EPA Region 6 Telephone: 214-655-6659

EPA Region 7 Telephone: 913-551-7247

EPA Region 8 Telephone: 303-312-6774

EPA Region 9 Telephone: 415-947-4246

### Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/20/2019 Number of Days to Update: 13 Source: EPA Telephone: N/A Last EDR Contact: 12/09/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994 Number of Days to Update: 56 Source: EPA Telephone: 202-564-4267 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

# Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/20/2019 Number of Days to Update: 13 Source: EPA Telephone: N/A Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Quarterly

# Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019 Date Data Arrived at EDR: 04/05/2019 Date Made Active in Reports: 05/14/2019 Number of Days to Update: 39 Source: Environmental Protection Agency Telephone: 703-603-8704 Last EDR Contact: 10/04/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Varies

### SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/21/2019 Number of Days to Update: 14 Source: EPA Telephone: 800-424-9346 Last EDR Contact: 12/09/2019 Next Scheduled EDR Contact: 01/27/2020 Data Release Frequency: Quarterly

#### Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/21/2019 Number of Days to Update: 14 Source: EPA Telephone: 800-424-9346 Last EDR Contact: 12/09/2019 Next Scheduled EDR Contact: 01/27/2020 Data Release Frequency: Quarterly

# Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/24/2019	Source: EPA
Date Data Arrived at EDR: 06/26/2019	Telephone: 800-424-9346
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 12/16/2019
Number of Days to Update: 113	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

# Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 113 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 12/16/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Quarterly

#### Federal RCRA generators list

# RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 113 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 12/16/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Quarterly

#### RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 113 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 12/16/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators) RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 113

Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 12/16/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Quarterly

### Federal institutional controls / engineering controls registries

### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/13/2019Source: Department of the NavyDate Data Arrived at EDR: 08/20/2019Telephone: 843-820-7326Date Made Active in Reports: 08/26/2019Last EDR Contact: 11/07/2019Number of Days to Update: 6Next Scheduled EDR Contact: 02/24/2020Data Release Frequency: Varies

# US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/19/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/20/2019	Telephone: 703-603-0695
Date Made Active in Reports: 08/26/2019	Last EDR Contact: 11/22/2019
Number of Days to Update: 6	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

# US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/19/2019SDate Data Arrived at EDR: 08/20/2019DDate Made Active in Reports: 08/26/2019DNumber of Days to Update: 6M

Source: Environmental Protection Agency Telephone: 703-603-0695 Last EDR Contact: 11/22/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: Varies

### Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 09/23/2019 Number of Days to Update: 14 Source: National Response Center, United States Coast Guard Telephone: 202-267-2180 Last EDR Contact: 12/19/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Quarterly

# State- and tribal - equivalent NPL

### **RESPONSE:** State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 07/29/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 07/31/2019	Telephone: 916-323-3400
Date Made Active in Reports: 10/08/2019	Last EDR Contact: 10/29/2019
Number of Days to Update: 69	Next Scheduled EDR Contact: 02/10/2020
	Data Release Frequency: Quarterly

### State- and tribal - equivalent CERCLIS

#### ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 07/29/2019 Date Data Arrived at EDR: 07/31/2019 Date Made Active in Reports: 10/08/2019 Number of Days to Update: 69 Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 10/29/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Quarterly

### State and tribal landfill and/or solid waste disposal site lists

#### SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/12/2019 Date Data Arrived at EDR: 08/13/2019 Date Made Active in Reports: 10/09/2019 Number of Days to Update: 57 Source: Department of Resources Recycling and Recovery Telephone: 916-341-6320 Last EDR Contact: 11/12/2019 Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: Quarterly

#### State and tribal leaking storage tank lists

L	JST: Leaking Underground Fuel Tank Report (GEOTRACKER) Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.		
	Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 10/31/2019 Number of Days to Update: 52	Source: State Water Resources Control Board Telephone: see region list Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Quarterly	
L	LUST REG 9: Leaking Underground Storage Tank Report Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.		
	Date of Government Version: 03/01/2001 Date Data Arrived at EDR: 04/23/2001 Date Made Active in Reports: 05/21/2001 Number of Days to Update: 28	Source: California Regional Water Quality Control Board San Diego Region (9) Telephone: 858-637-5595 Last EDR Contact: 09/26/2011 Next Scheduled EDR Contact: 01/09/2012 Data Release Frequency: No Update Planned	
LUST REG 8: Leaking Underground Storage Tanks California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.			
	Date of Government Version: 02/14/2005 Date Data Arrived at EDR: 02/15/2005 Date Made Active in Reports: 03/28/2005 Number of Days to Update: 41	Source: California Regional Water Quality Control Board Santa Ana Region (8) Telephone: 909-782-4496 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned	
LUST REG 7: Leaking Underground Storage Tank Case Listing Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.		Case Listing . Imperial, Riverside, San Diego, Santa Barbara counties.	
	Date of Government Version: 02/26/2004 Date Data Arrived at EDR: 02/26/2004 Date Made Active in Reports: 03/24/2004 Number of Days to Update: 27	Source: California Regional Water Quality Control Board Colorado River Basin Region (7) Telephone: 760-776-8943 Last EDR Contact: 08/01/2011 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned	
LUST REG 5: Leaking Underground Storage Tank Database Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.		Database J. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El assen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, tanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.	
	Date of Government Version: 07/01/2008 Date Data Arrived at EDR: 07/22/2008 Date Made Active in Reports: 07/31/2008 Number of Days to Update: 9	Source: California Regional Water Quality Control Board Central Valley Region (5) Telephone: 916-464-4834 Last EDR Contact: 07/01/2011 Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: No Update Planned	
L	LUST REG 4: Underground Storage Tank Leak List Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.		
	Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004 Number of Days to Update: 35	Source: California Regional Water Quality Control Board Los Angeles Region (4) Telephone: 213-576-6710 Last EDR Contact: 09/06/2011 Next Scheduled EDR Contact: 12/19/2011 Data Release Frequency: No Update Planned	

LUST REG 3: Leaking Underground Storage Tank Database Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.			
Date of Government Version: 05/19/2003SDate Data Arrived at EDR: 05/19/2003TDate Made Active in Reports: 06/02/2003LNumber of Days to Update: 14N	Source: California Regional Water Quality Control Board Central Coast Region (3) Felephone: 805-542-4786 Last EDR Contact: 07/18/2011 Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: No Update Planned		
LUST REG 2: Fuel Leak List Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.			
Date of Government Version: 09/30/2004SDate Data Arrived at EDR: 10/20/2004TDate Made Active in Reports: 11/19/2004LNumber of Days to Update: 30N	Source: California Regional Water Quality Control Board San Francisco Bay Region (2) Telephone: 510-622-2433 Last EDR Contact: 09/19/2011 Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: No Update Planned		
LUST REG 1: Active Toxic Site Investigation Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.			
Date of Government Version: 02/01/2001SDate Data Arrived at EDR: 02/28/2001TDate Made Active in Reports: 03/29/2001LNumber of Days to Update: 29NCC	Source: California Regional Water Quality Control Board North Coast (1) Felephone: 707-570-3769 Last EDR Contact: 08/01/2011 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned		
LUST REG 6V: Leaking Underground Storage Tank C Leaking Underground Storage Tank locations. In	case Listing iyo, Kern, Los Angeles, Mono, San Bernardino counties.		
Date of Government Version: 06/07/2005SDate Data Arrived at EDR: 06/07/2005TDate Made Active in Reports: 06/29/2005LNumber of Days to Update: 22NCC	Source: California Regional Water Quality Control Board Victorville Branch Office (6) Felephone: 760-241-7365 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned		
LUST REG 6L: Leaking Underground Storage Tank Case Listing For more current information, please refer to the State Water Resources Control Board's LUST database.			
Date of Government Version: 09/09/2003SDate Data Arrived at EDR: 09/10/2003TDate Made Active in Reports: 10/07/2003LNumber of Days to Update: 27NCC	Source: California Regional Water Quality Control Board Lahontan Region (6) Felephone: 530-542-5572 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned		
INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada			
Date of Government Version: 04/08/2019SDate Data Arrived at EDR: 07/29/2019TDate Made Active in Reports: 10/17/2019LNumber of Days to Update: 80N	Source: Environmental Protection Agency Felephone: 415-972-3372 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies		
INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.			
Date of Government Version: 05/01/2019SDate Data Arrived at EDR: 07/29/2019TDate Made Active in Reports: 10/17/2019LNumber of Days to Update: 80N	Source: EPA Region 6 Felephone: 214-665-6597 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies		

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.			
	Date of Government Version: 04/16/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDI	NDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska		
	Date of Government Version: 07/02/2019 Date Data Arrived at EDR: 10/16/2019 Date Made Active in Reports: 10/24/2019 Number of Days to Update: 8	Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 12/16/2020 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.			
	Date of Government Version: 04/12/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 12/03/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDI	AN LUST R5: Leaking Underground Storage Ta Leaking underground storage tanks located on	anks on Indian Land Indian Land in Michigan, Minnesota and Wisconsin.	
	Date of Government Version: 04/08/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 79	Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.			
	Date of Government Version: 05/02/2019 Date Data Arrived at EDR: 10/22/2019 Date Made Active in Reports: 11/11/2019 Number of Days to Update: 20	Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDI	INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land A listing of leaking underground storage tank locations on Indian Land.		
	Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
CPS	CPS-SLIC: Statewide SLIC Cases (GEOTRACKER) Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigation and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water guality in California, with emphasis on groundwater.		
	Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/06/2019 Number of Days to Update: 58	Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020	

Data Release Frequency: Varies

IC REG 1: Active Toxic Site Investigations The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 04/03/2003 Date Data Arrived at EDR: 04/07/2003 Date Made Active in Reports: 04/25/2003 Number of Days to Update: 18	Source: California Regional Water Quality Control Board, North Coast Region (1) Telephone: 707-576-2220 Last EDR Contact: 08/01/2011 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned	
SLIC REG 2: Spills, Leaks, Investigation & Cleanup The SLIC (Spills, Leaks, Investigations and Cle from spills, leaks, and similar discharges.	Cost Recovery Listing eanup) program is designed to protect and restore water quality	
Date of Government Version: 09/30/2004 Date Data Arrived at EDR: 10/20/2004 Date Made Active in Reports: 11/19/2004 Number of Days to Update: 30	Source: Regional Water Quality Control Board San Francisco Bay Region (2) Telephone: 510-286-0457 Last EDR Contact: 09/19/2011 Next Scheduled EDR Contact: 01/02/2012 Data Release Frequency: No Update Planned	
SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 05/18/2006 Date Data Arrived at EDR: 05/18/2006 Date Made Active in Reports: 06/15/2006 Number of Days to Update: 28	Source: California Regional Water Quality Control Board Central Coast Region (3) Telephone: 805-549-3147 Last EDR Contact: 07/18/2011 Next Scheduled EDR Contact: 10/31/2011 Data Release Frequency: No Update Planned	
SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 11/17/2004 Date Data Arrived at EDR: 11/18/2004 Date Made Active in Reports: 01/04/2005 Number of Days to Update: 47	Source: Region Water Quality Control Board Los Angeles Region (4) Telephone: 213-576-6600 Last EDR Contact: 07/01/2011 Next Scheduled EDR Contact: 10/17/2011 Data Release Frequency: No Update Planned	
SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 04/01/2005 Date Data Arrived at EDR: 04/05/2005 Date Made Active in Reports: 04/21/2005 Number of Days to Update: 16	Source: Regional Water Quality Control Board Central Valley Region (5) Telephone: 916-464-3291 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned	
SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 05/24/2005 Date Data Arrived at EDR: 05/25/2005 Date Made Active in Reports: 06/16/2005 Number of Days to Update: 22	Source: Regional Water Quality Control Board, Victorville Branch Telephone: 619-241-6583 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned	

SLIC REG 6L: SLIC Sites The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 09/07/2004 Date Data Arrived at EDR: 09/07/2004 Date Made Active in Reports: 10/12/2004 Number of Days to Update: 35	Source: California Regional Water Quality Control Board, Lahontan Region Telephone: 530-542-5574 Last EDR Contact: 08/15/2011 Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned	
SLIC REG 7: SLIC List The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 11/24/2004 Date Data Arrived at EDR: 11/29/2004 Date Made Active in Reports: 01/04/2005 Number of Days to Update: 36	Source: California Regional Quality Control Board, Colorado River Basin Region Telephone: 760-346-7491 Last EDR Contact: 08/01/2011 Next Scheduled EDR Contact: 11/14/2011 Data Release Frequency: No Update Planned	
SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 04/03/2008 Date Data Arrived at EDR: 04/03/2008 Date Made Active in Reports: 04/14/2008 Number of Days to Update: 11	Source: California Region Water Quality Control Board Santa Ana Region (8) Telephone: 951-782-3298 Last EDR Contact: 09/12/2011 Next Scheduled EDR Contact: 12/26/2011 Data Release Frequency: No Update Planned	
SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.		
Date of Government Version: 09/10/2007 Date Data Arrived at EDR: 09/11/2007 Date Made Active in Reports: 09/28/2007 Number of Days to Update: 17	Source: California Regional Water Quality Control Board San Diego Region (9) Telephone: 858-467-2980 Last EDR Contact: 08/08/2011 Next Scheduled EDR Contact: 11/21/2011 Data Release Frequency: No Update Planned	
State and tribal registered storage tank lists		
FEMA UST: Underground Storage Tank Listing A listing of all FEMA owned underground storage tanks.		
Date of Government Version: 08/27/2019 Date Data Arrived at EDR: 08/28/2019 Date Made Active in Reports: 11/11/2019 Number of Days to Update: 75	Source: FEMA Telephone: 202-646-5797 Last EDR Contact: 10/11/2019 Next Scheduled EDR Contact: 01/20/2020	

Data Release Frequency: Varies

# UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 09/09/2019	Source: SWRCB
Date Data Arrived at EDR: 09/09/2019	Telephone: 916-341-5851
Date Made Active in Reports: 10/31/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Semi-Annually

UST	ST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approve Orders.		
	Date of Government Version: 09/06/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 10/31/2019 Number of Days to Update: 52	Source: State Water Resources Control Board Telephone: 916-327-7844 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Varies	
MILI	MILITARY UST SITES: Military UST Sites (GEOTRACKER) Military ust sites		
	Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/01/2019 Number of Days to Update: 53	Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Varies	
AST	AST: Aboveground Petroleum Storage Tank Facilities A listing of aboveground storage tank petroleum storage tank locations.		
	Date of Government Version: 07/06/2016 Date Data Arrived at EDR: 07/12/2016 Date Made Active in Reports: 09/19/2016 Number of Days to Update: 69	Source: California Environmental Protection Agency Telephone: 916-327-5092 Last EDR Contact: 12/11/2019 Next Scheduled EDR Contact: 03/30/2020 Data Release Frequency: Varies	
INDIAN UST R9: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).			
	Date of Government Version: 04/08/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDI	NDIAN UST R8: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian Iand in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).		
	Date of Government Version: 05/02/2019 Date Data Arrived at EDR: 10/22/2019 Date Made Active in Reports: 11/11/2019 Number of Days to Update: 20	Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDI	AN UST R6: Underground Storage Tanks on In The Indian Underground Storage Tank (UST) o Iand in EPA Region 6 (Louisiana, Arkansas, Ol	dian Land latabase provides information about underground storage tanks on Indian klahoma, New Mexico, Texas and 65 Tribes).	
	Date of Government Version: 05/01/2019 Date Data Arrived at EDR: 07/29/2019	Source: EPA Region 6 Telephone: 214-665-7591	

Date of Government Version: 05/01/2019	Source: EPA Region 6
Date Data Arrived at EDR: 07/29/2019	Telephone: 214-665-7591
Date Made Active in Reports: 10/17/2019	Last EDR Contact: 12/04/2019
Number of Days to Update: 80	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Varies

INDI	NDIAN UST R5: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian Iand in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).		
	Date of Government Version: 04/08/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDI	AN UST R4: Underground Storage Tanks on Ind The Indian Underground Storage Tank (UST) d Iand in EPA Region 4 (Alabama, Florida, Georg and Tribal Nations)	dian Land latabase provides information about underground storage tanks on Indian jia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee	
	Date of Government Version: 04/12/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 12/03/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDIAN UST R7: Underground Storage Tanks on Indian Land The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).			
	Date of Government Version: 05/02/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 80	Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDI	AN UST R1: Underground Storage Tanks on In The Indian Underground Storage Tank (UST) d Iand in EPA Region 1 (Connecticut, Maine, Mas Nations).	dian Land latabase provides information about underground storage tanks on Indian ssachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal	
	Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 79	Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies	
INDI	AN UST R10: Underground Storage Tanks on In The Indian Underground Storage Tank (UST) d Iand in EPA Region 10 (Alaska, Idaho, Oregon,	ndian Land atabase provides information about underground storage tanks on Indian Washington, and Tribal Nations).	
	Date of Government Version: 04/16/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 10/17/2019	Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 12/04/2019	

# State and tribal voluntary cleanup sites

Number of Days to Update: 79

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

Date of Government Version: 07/29/2019 Date Data Arrived at EDR: 07/31/2019 Date Made Active in Reports: 10/08/2019 Number of Days to Update: 69	Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 10/29/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Quarterly
INDIAN VCP R1: Voluntary Cleanup Priority Listing A listing of voluntary cleanup priority sites locate	ed on Indian Land located in Region 1.
Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016 Number of Days to Update: 142	Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 12/17/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Varies
INDIAN VCP R7: Voluntary Cleanup Priority Lisitng A listing of voluntary cleanup priority sites locate	ed on Indian Land located in Region 7.
Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008 Number of Days to Update: 27	Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009 Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

### State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 09/23/2019 Date Data Arrived at EDR: 09/24/2019 Date Made Active in Reports: 11/06/2019 Number of Days to Update: 43 Source: State Water Resources Control Board Telephone: 916-323-7905 Last EDR Contact: 12/19/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Quarterly

### ADDITIONAL ENVIRONMENTAL RECORDS

#### Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/03/2019 Date Data Arrived at EDR: 06/04/2019 Date Made Active in Reports: 08/26/2019 Number of Days to Update: 83 Source: Environmental Protection Agency Telephone: 202-566-2777 Last EDR Contact: 12/16/2019 Next Scheduled EDR Contact: 03/30/2020 Data Release Frequency: Semi-Annually

#### Local Lists of Landfill / Solid Waste Disposal Sites

#### WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000 Date Data Arrived at EDR: 04/10/2000 Date Made Active in Reports: 05/10/2000 Number of Days to Update: 30Source: State Water Resources Control Board Telephone: 916-227-4448 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: No Update PlannedSWRCY: Recycler Database A listing of recycling facilities in California.Source: Department of Conservation Telephone: 916-323-3836 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: QuarterlyMAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers. Date of Government Version: 03/26/2019 Date Data Arrived at EDR: 03/27/2019 Date Data Arrived at EDR: 03/27/2019 Number of Days to Update: 34Source: Integrated Waste Management Board Telephone: 916-341-6422 Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: Voriee	
SWRCY: Recycler Database       A listing of recycling facilities in California.         Date of Government Version: 09/09/2019       Source: Department of Conservation         Date Data Arrived at EDR: 09/09/2019       Telephone: 916-323-3836         Date Made Active in Reports: 11/07/2019       Last EDR Contact: 12/10/2019         Number of Days to Update: 59       Next Scheduled EDR Contact: 03/23/2020         Date of Government Version: 03/26/2019       Next Scheduled EDR Contact: 03/23/2020         Date of Government Version: 03/26/2019       Source: Integrated Waste Management Board         Date of Government Version: 03/27/2019       Source: Integrated Waste Management Board         Date Made Active in Reports: 04/30/2019       Last EDR Contact: 11/07/2019         Number of Days to Update: 34       Next Scheduled EDR Contact: 02/24/2020	
Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/07/2019 Number of Days to Update: 59Source: Department of Conservation Telephone: 916-323-3836 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: QuarterlyHAULERS: Registered Waste Tire Haulers Listing A listing of registered waste tire haulers.Source: Integrated Waste Management Board Telephone: 916-341-6422 Last EDR Contact: 10/7/2019 Next Scheduled EDR Contact: 02/24/2020Date of Government Version: 03/27/2019 Date Made Active in Reports: 04/30/2019 Number of Days to Update: 34Source: Integrated Waste Management Board Telephone: 916-341-6422 Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 02/24/2020	
HAULERS: Registered Waste Tire Haulers Listing         A listing of registered waste tire haulers.         Date of Government Version: 03/26/2019         Date Data Arrived at EDR: 03/27/2019         Date Made Active in Reports: 04/30/2019         Number of Days to Update: 34    Source: Integrated Waste Management Board Telephone: 916-341-6422 Last EDR Contact: 11/07/2019 Next Scheduled EDR Contact: 02/24/2020 Date Balacea Enguarder: Variate	
Date of Government Version: 03/26/2019Source: Integrated Waste Management BoardDate Data Arrived at EDR: 03/27/2019Telephone: 916-341-6422Date Made Active in Reports: 04/30/2019Last EDR Contact: 11/07/2019Number of Days to Update: 34Next Scheduled EDR Contact: 02/24/2020	
Data Release Frequency: varies	
INDIAN ODI: Report on the Status of Open Dumps on Indian Lands Location of open dumps on Indian land.	
Date of Government Version: 12/31/1998Source: Environmental Protection AgencyDate Data Arrived at EDR: 12/03/2007Telephone: 703-308-8245Date Made Active in Reports: 01/24/2008Last EDR Contact: 10/28/2019Number of Days to Update: 52Next Scheduled EDR Contact: 02/10/2020Data Release Frequency: Varies	
DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riv County and northern Imperial County, California.	iverside
Date of Government Version: 01/12/2009Source: EPA, Region 9Date Data Arrived at EDR: 05/07/2009Telephone: 415-947-4219Date Made Active in Reports: 09/21/2009Last EDR Contact: 10/17/2019Number of Days to Update: 137Next Scheduled EDR Contact: 02/03/2020Data Release Frequency: No Update Planned	
IDI: Open Dump Inventory An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.	
Date of Government Version: 06/30/1985Source: Environmental Protection AgencyDate Data Arrived at EDR: 08/09/2004Telephone: 800-424-9346Date Made Active in Reports: 09/17/2004Last EDR Contact: 06/09/2004Number of Days to Update: 39Next Scheduled EDR Contact: N/AData Release Frequency: No Update Planned	
IHS OPEN DUMPS: Open Dumps on Indian Land A listing of all open dumps located on Indian Land in the United States.	
Date of Government Version: 04/01/2014Source: Department of Health & Human Serivces, IncDate Data Arrived at EDR: 08/06/2014Telephone: 301-443-1452Date Made Active in Reports: 01/29/2015Last EDR Contact: 11/01/2019Number of Days to Update: 176Next Scheduled EDR Contact: 02/10/2020Data Release Frequency: Varies	idian Health Service

### Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 06/13/2019	Telephone: 202-307-1000
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 11/20/2019
Number of Days to Update: 82	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: No Update Planned

# HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005 Date Data Arrived at EDR: 08/03/2006 Date Made Active in Reports: 08/24/2006 Number of Days to Update: 21 Source: Department of Toxic Substance Control Telephone: 916-323-3400 Last EDR Contact: 02/23/2009 Next Scheduled EDR Contact: 05/25/2009 Data Release Frequency: No Update Planned

# SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 07/29/2019 Date Data Arrived at EDR: 07/31/2019 Date Made Active in Reports: 10/08/2019 Number of Days to Update: 69 Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 10/29/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Quarterly

#### CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2018 Date Data Arrived at EDR: 07/16/2019 Date Made Active in Reports: 09/24/2019 Number of Days to Update: 70 Source: Department of Toxic Substances Control Telephone: 916-255-6504 Last EDR Contact: 09/24/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Varies

# TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995 Date Data Arrived at EDR: 08/30/1995 Date Made Active in Reports: 09/26/1995 Number of Days to Update: 27 Source: State Water Resources Control Board Telephone: 916-227-4364 Last EDR Contact: 01/26/2009 Next Scheduled EDR Contact: 04/27/2009 Data Release Frequency: No Update Planned

# CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 08/14/2019 Date Data Arrived at EDR: 08/14/2019 Date Made Active in Reports: 08/21/2019 Number of Days to Update: 7 Source: CalEPA Telephone: 916-323-2514 Last EDR Contact: 10/22/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 06/13/2019	Telephone: 202-307-1000
Date Made Active in Reports: 09/03/2019	Last EDR Contact: 11/20/2019
Number of Days to Update: 82	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/05/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

# Local Lists of Registered Storage Tanks

# SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Sc
Date Data Arrived at EDR: 07/07/2005	Τe
Date Made Active in Reports: 08/11/2005	La
Number of Days to Update: 35	Ne

Source: State Water Resources Control Board Telephone: N/A Last EDR Contact: 06/03/2005 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

# UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 08/20/2019	Source: Department of Public Health
Date Data Arrived at EDR: 09/09/2019	Telephone: 707-463-4466
Date Made Active in Reports: 10/31/2019	Last EDR Contact: 11/20/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Annually

#### HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990 Date Data Arrived at EDR: 01/25/1991 Date Made Active in Reports: 02/12/1991 Number of Days to Update: 18 Source: State Water Resources Control Board Telephone: 916-341-5851 Last EDR Contact: 07/26/2001 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing Aboveground storage tank sites

Date of Government Version: 08/01/2019	Source: San Francisco County Department of Public Health
Date Data Arrived at EDR: 08/02/2019	Telephone: 415-252-3896
Date Made Active in Reports: 10/11/2019	Last EDR Contact: 10/31/2019
Number of Days to Update: 70	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Varies

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 09/05/1995	Telephone: 916-341-5851
Date Made Active in Reports: 09/29/1995	Last EDR Contact: 12/28/1998
Number of Days to Update: 24	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 08/14/2019	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 08/14/2019	Telephone: 916-323-2514
Date Made Active in Reports: 08/21/2019	Last EDR Contact: 10/22/2019
Number of Days to Update: 7	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Quarterly

# Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 08/29/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/30/2019	Telephone: 916-323-3400
Date Made Active in Reports: 10/29/2019	Last EDR Contact: 12/02/2019
Number of Days to Update: 60	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Varies

# LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/20/2019 Number of Days to Update: 13 Source: Environmental Protection Agency Telephone: 202-564-6023 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing
Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 09/03/2019 Date Data Arrived at EDR: 09/04/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 62 Source: DTSC and SWRCB Telephone: 916-323-3400 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Semi-Annually

### **Records of Emergency Release Reports**

HMIRS: Hazardous Materials Information Reporting System Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2019	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/26/2019	Telephone: 202-366-4555
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 12/06/2019
Number of Days to Update: 89	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: Quarterly

#### CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 05/15/2019	Source: Office of Emergency Services
Date Data Arrived at EDR: 06/24/2019	Telephone: 916-845-8400
Date Made Active in Reports: 08/21/2019	Last EDR Contact: 10/25/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Semi-Annually

### LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 57

Source: State Water Quality Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Quarterly

#### MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 57 Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Quarterly

#### SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012Source: FirstSearchDate Data Arrived at EDR: 01/03/2013Telephone: N/ADate Made Active in Reports: 02/22/2013Last EDR Contact: 01/03/2013Number of Days to Update: 50Next Scheduled EDR Contact: N/AData Release Frequency: No Update Planned

#### Other Ascertainable Records

#### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 113 Source: Environmental Protection Agency Telephone: (415) 495-8895 Last EDR Contact: 12/16/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Quarterly

#### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/15/2019 Date Data Arrived at EDR: 05/21/2019 Date Made Active in Reports: 08/08/2019 Number of Days to Update: 79 Source: U.S. Army Corps of Engineers Telephone: 202-528-4285 Last EDR Contact: 11/19/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Varies

# DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS Telephone: 888-275-8747 Last EDR Contact: 10/11/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Semi-Annually

# FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	
Date Data Arrived at EDR: 04/11/2018	
Date Made Active in Reports: 11/06/2019	
Number of Days to Update: 574	

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 10/07/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: N/A

#### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017 Number of Days to Update: 63 Source: Environmental Protection Agency Telephone: 615-532-8599 Last EDR Contact: 12/02/2019 Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/24/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 09/23/2019 Number of Days to Update: 89 Source: Environmental Protection Agency Telephone: 202-566-1917 Last EDR Contact: 12/19/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Quarterly

### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014 Number of Days to Update: 88 Source: Environmental Protection Agency Telephone: 617-520-3000 Last EDR Contact: 10/31/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Quarterly

# 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018 Number of Days to Update: 73 Source: Environmental Protection Agency Telephone: 703-308-4044 Last EDR Contact: 11/08/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Varies

### TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 06/21/2017 Date Made Active in Reports: 01/05/2018 Number of Days to Update: 198 Source: EPA Telephone: 202-260-5521 Last EDR Contact: 09/19/2019 Next Scheduled EDR Contact: 12/30/2019 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 11/16/2018 Date Made Active in Reports: 11/21/2019 Number of Days to Update: 370 Source: EPA Telephone: 202-566-0250 Last EDR Contact: 11/22/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 09/30/2018 Date Data Arrived at EDR: 04/24/2019 Date Made Active in Reports: 08/08/2019 Number of Days to Update: 106

Source: EPA Telephone: 202-564-4203 Last EDR Contact: 10/23/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Annually

#### ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 10/25/2019	Source: EPA
Date Data Arrived at EDR: 11/07/2019	Telephone: 703
Date Made Active in Reports: 11/20/2019	Last EDR Conta
Number of Days to Update: 13	Next Scheduled

Source: EPA Telephone: 703-416-0223 Last EDR Contact: 12/09/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Annually

#### RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019 Date Data Arrived at EDR: 05/02/2019 Date Made Active in Reports: 05/23/2019 Number of Days to Update: 21 Source: Environmental Protection Agency Telephone: 202-564-8600 Last EDR Contact: 10/21/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

#### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995 Number of Days to Update: 35 Source: EPA Telephone: 202-564-4104 Last EDR Contact: 06/02/2008 Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties			
A listing of verified Potentially Responsible Parties			
Date of Government Version: 10/25/2019 Date Data Arrived at EDR: 11/07/2019 Date Made Active in Reports: 11/21/2019 Number of Days to Update: 14	Source: EPA Telephone: 202-564-6023 Last EDR Contact: 12/09/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Quarterly		
PADS: PCB Activity Database System PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.			
Date of Government Version: 03/20/2019 Date Data Arrived at EDR: 04/10/2019 Date Made Active in Reports: 05/14/2019 Number of Days to Update: 34	Source: EPA Telephone: 202-566-0500 Last EDR Contact: 10/11/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Annually		
ICIS: Integrated Compliance Information System The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.			
Date of Government Version: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017 Number of Days to Update: 79	Source: Environmental Protection Agency Telephone: 202-564-2501 Last EDR Contact: 10/07/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Quarterly		
FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.			
Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009 Number of Days to Update: 25	Source: EPA/Office of Prevention, Pesticides and Toxic Substances Telephone: 202-566-1667 Last EDR Contact: 08/18/2017 Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned		
FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.			
Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009 Number of Days to Update: 25	Source: EPA Telephone: 202-566-1667 Last EDR Contact: 08/18/2017 Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned		
MLTS: Material Licensing Tracking System MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.			
Date of Government Version: 06/20/2019 Date Data Arrived at EDR: 06/20/2019 Date Made Active in Reports: 08/08/2019 Number of Days to Update: 49	Source: Nuclear Regulatory Commission Telephone: 301-415-7169 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Quarterly		

#### COAL ASH DOE: Steam-Electric Plant Operation Data A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 12/04/2019
Number of Days to Update: 76	Next Scheduled EDR Contact: 03/16/2020
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 11/25/2019
Next Scheduled EDR Contact: 03/16/2020
Data Release Frequency: Varies

#### PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/30/2017	Telephone: 202-566-0517
Date Made Active in Reports: 12/15/2017	Last EDR Contact: 11/06/2019
Number of Days to Update: 15	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Varies

#### **RADINFO:** Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019 Date Data Arrived at EDR: 07/01/2019 Date Made Active in Reports: 09/23/2019 Number of Days to Update: 84

Source: Environmental Protection Agency Telephone: 202-343-9775 Last EDR Contact: 11/12/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Quarterly

## HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

#### HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

	Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007 Number of Days to Update: 40	Source: Environmental Protection Agency Telephone: 202-564-2501 Last EDR Contact: 12/17/2008 Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned	
DOT	OPS: Incident and Accident Data Department of Transporation, Office of Pipeline	Safety Incident and Accident data.	
	Date of Government Version: 07/01/2019 Date Data Arrived at EDR: 07/31/2019 Date Made Active in Reports: 10/24/2019 Number of Days to Update: 85	Source: Department of Transporation, Office of Pipeline Safety Telephone: 202-366-4595 Last EDR Contact: 10/29/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Quarterly	
CON	SENT: Superfund (CERCLA) Consent Decrees Major legal settlements that establish responsit periodically by United States District Courts after	pility and standards for cleanup at NPL (Superfund) sites. Released or settlement by parties to litigation matters.	
	Date of Government Version: 06/30/2019 Date Data Arrived at EDR: 07/16/2019 Date Made Active in Reports: 10/02/2019 Number of Days to Update: 78	Source: Department of Justice, Consent Decree Library Telephone: Varies Last EDR Contact: 10/02/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Varies	
BRS	3RS: Biennial Reporting System The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.		
	Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 09/28/2017 Number of Days to Update: 218	Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 12/16/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Biennially	
INDI	AN RESERV: Indian Reservations This map layer portrays Indian administered lar than 640 acres.	nds of the United States that have any area equal to or greater	
	Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 01/10/2017 Number of Days to Update: 546	Source: USGS Telephone: 202-208-3710 Last EDR Contact: 10/06/2019 Next Scheduled EDR Contact: 01/19/2020 Data Release Frequency: Semi-Annually	
FUSI	RAP: Formerly Utilized Sites Remedial Action P DOE established the Formerly Utilized Sites Re radioactive contamination remained from Manh	rogram emedial Action Program (FUSRAP) in 1974 to remediate sites where attan Project and early U.S. Atomic Energy Commission (AEC) operations.	
	Date of Government Version: 08/08/2017 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018 Number of Days to Update: 3	Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 11/04/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Varies	
имт	RA: Uranium Mill Tailings Sites		

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

	Date of Government Version: 08/01/2019 Date Data Arrived at EDR: 08/21/2019	Source: Department of Energy Telephone: 505-845-0011
	Date Made Active in Reports: 11/11/2019	Last EDR Contact: 11/15/2019
	Number of Days to Update: 82	Next Scheduled EDR Contact: 03/02/2020
		Data Release Frequency: Varies
LEA	D SMELTER 1: Lead Smelter Sites A listing of former lead smelter site locations.	
	Date of Government Version: 10/25/2019	Source: Environmental Protection Agency
	Date Data Arrived at EDR: 11/07/2019	Telephone: 703-603-8787
	Date Made Active in Reports: 11/20/2019	Last EDR Contact: 12/09/2019
	Number of Days to Update: 13	Next Scheduled EDR Contact: 01/13/2020
		Data Release Frequency: Varies
LEA	D SMELTER 2: Lead Smelter Sites	
	A list of several hundred sites in the U.S. where	e secondary lead smelting was done from 1931and 1964. These sites
	may pose a threat to public health through inge	stion or inhalation of contaminated soil or dust
	Date of Government Version: 04/05/2001	Source: American Journal of Public Health
	Date Data Arrived at EDR: 10/27/2010	Telephone: 703-305-6451
	Date Made Active in Reports: 12/02/2010	Last EDR Contact: 12/02/2009
	Number of Days to Update: 36	Next Scheduled EDR Contact: N/A
		Data Release Frequency: No Update Planned
110	VIRS (AES): Accomptris Information Patricular	(AFS)
057	The database is a sub system of Acrometric In	formation Potrioval System (APS)
	on air pollution point sources regulated by the l	LS FPA and/or state and local air regulatory agencies. This
	information comes from source reports by vario	bus stationary sources of air pollution, such as electric power plants.
	steel mills, factories, and universities, and prov	ides information about the air pollutants they produce. Action.
	air program, air program pollutant, and general	level plant data. It is used to track emissions and compliance
	data from industrial plants.	
	Date of Government Version: 10/12/2016	Source: FPA
	Date Data Arrived at EDR: 10/26/2016	Telephone: 202-564-2496
	Date Made Active in Reports: 02/03/2017	Last EDR Contact: 09/26/2017
	Number of Days to Update: 100	Next Scheduled EDR Contact: 01/08/2018
		Data Release Frequency: Annually
US A	AIRS MINOR: Air Facility System Data	
	A listing of minor source facilities.	
	Date of Government Version: 10/12/2016	Source: EPA
	Date Data Arrived at EDR: 10/26/2016	Telephone: 202-564-2496
	Date Made Active in Reports: 02/03/2017	Last EDR Contact: 09/26/2017
	Number of Days to Update: 100	Next Scheduled EDR Contact: 01/08/2018
		Data Release Frequency: Annually
	AINES: Minos Master Index File	
031	Contains all mine identification numbers issued	for mines active or opened since 1971. The data also includes
	violation information.	
	Date of Government Version: 08/01/2019	Source: Department of Labor, Mine Safety and Health Administration
	Date Data Arrived at EDR: 08/27/2019	Telephone: 303-231-5959
	Date Made Active in Reports: 11/11/2019	Last EDR Contact: 08/27/2019
	Number of Days to Update: 76	Next Scheduled EDR Contact: 12/09/2019
		Data Release Frequency: Semi-Annually
MINU	ER VIOLATIONS, MSHA Violation Account	Dete
IVITIN	ES VIOLATIONS: IVISTA VIOLATION ASSESSMENT	Dala

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 09/17/2019 Date Data Arrived at EDR: 09/18/2019 Date Made Active in Reports: 12/03/2019 Number of Days to Update: 76 Source: DOL, Mine Safety & Health Admi Telephone: 202-693-9424 Last EDR Contact: 12/02/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005	Source: USGS
Date Data Arrived at EDR: 02/29/2008	Telephone: 703-648-7709
Date Made Active in Reports: 04/18/2008	Last EDR Contact: 11/22/2019
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/09/2020
	Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at EDR: 06/08/2011 Date Made Active in Reports: 09/13/2011 Number of Days to Update: 97 Source: USGS Telephone: 703-648-7709 Last EDR Contact: 11/22/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: Varies

#### ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2019 Date Data Arrived at EDR: 09/10/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 37 Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Quarterly

### FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 08/12/2019 Date Data Arrived at EDR: 09/04/2019 Date Made Active in Reports: 12/03/2019 Number of Days to Update: 90 Source: EPA Telephone: (415) 947-8000 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Quarterly

### ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 07/06/2019 Date Data Arrived at EDR: 07/09/2019 Date Made Active in Reports: 10/02/2019 Number of Days to Update: 85 Source: Environmental Protection Agency Telephone: 202-564-2280 Last EDR Contact: 10/08/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Quarterly

#### UXO: Unexploded Ordnance Sites A listing of unexploded ordnance site locations Date of Government Version: 12/31/2017 Source: Department of Defense Date Data Arrived at EDR: 01/17/2019 Telephone: 703-704-1564 Date Made Active in Reports: 04/01/2019 Last EDR Contact: 10/10/2019 Number of Days to Update: 74 Next Scheduled EDR Contact: 01/27/2020 Data Release Frequency: Varies DOCKET HWC: Hazardous Waste Compliance Docket Listing A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities. Date of Government Version: 05/31/2018 Source: Environmental Protection Agency Date Data Arrived at EDR: 07/26/2018 Telephone: 202-564-0527 Last EDR Contact: 11/20/2019 Date Made Active in Reports: 10/05/2018 Number of Days to Update: 71 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: Varies FUELS PROGRAM: EPA Fuels Program Registered Listing This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations. Date of Government Version: 08/19/2019 Source: EPA Date Data Arrived at EDR: 08/20/2019 Telephone: 800-385-6164 Date Made Active in Reports: 11/11/2019 Last EDR Contact: 11/19/2019 Number of Days to Update: 83 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Quarterly CA BOND EXP. PLAN: Bond Expenditure Plan Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated. Date of Government Version: 01/01/1989 Source: Department of Health Services Date Data Arrived at EDR: 07/27/1994 Telephone: 916-255-2118 Date Made Active in Reports: 08/02/1994 Last EDR Contact: 05/31/1994 Number of Days to Update: 6 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned CORTESE: "Cortese" Hazardous Waste & Substances Sites List The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites). Date of Government Version: 09/23/2019 Source: CAL EPA/Office of Emergency Information Date Data Arrived at EDR: 09/24/2019 Telephone: 916-323-3400 Date Made Active in Reports: 11/06/2019 Last EDR Contact: 09/24/2019 Number of Days to Update: 43 Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Quarterly CUPA SAN FRANCISCO CO: CUPA Facility Listing Cupa facilities Date of Government Version: 10/31/2019 Source: San Francisco County Department of Environmental Health Date Data Arrived at EDR: 11/01/2019 Telephone: 415-252-3896 Date Made Active in Reports: 12/11/2019 Last EDR Contact: 10/31/2019 Next Scheduled EDR Contact: 02/17/2020 Number of Days to Update: 40 Data Release Frequency: Varies

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing list of facilities associated with the various CUPA programs in Livermore-Pleasanton

TC5914075.2s Page GR-27

	Date of Government Version: 05/01/2019 Date Data Arrived at EDR: 05/14/2019 Date Made Active in Reports: 07/17/2019 Number of Days to Update: 64	Source: Livermore-Pleasanton Fire Department Telephone: 925-454-2361 Last EDR Contact: 11/14/2019 Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: Varies
DRY	CLEAN SOUTH COAST: South Coast Air Qual A listing of dry cleaners in the South Coast Air	ity Management District Drycleaner Listing Quality Management District
	Date of Government Version: 09/27/2019 Date Data Arrived at EDR: 10/01/2019 Date Made Active in Reports: 11/07/2019 Number of Days to Update: 37	Source: South Coast Air Quality Management District Telephone: 909-396-3211 Last EDR Contact: 11/20/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: Varies
DRY	CLEAN AVAQMD: Antelope Valley Air Quality I A listing of dry cleaners in the Antelope Valley	Management District Drycleaner Listing Air Quality Management District.
	Date of Government Version: 08/28/2019 Date Data Arrived at EDR: 08/30/2019 Date Made Active in Reports: 10/29/2019 Number of Days to Update: 60	Source: Antelope Valley Air Quality Management District Telephone: 661-723-8070 Last EDR Contact: 12/02/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Varies
DRYCLEANERS: Cleaner Facilities A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundrie and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.		
	Date of Government Version: 09/06/2019 Date Data Arrived at EDR: 10/11/2019 Date Made Active in Reports: 12/12/2019 Number of Days to Update: 62	Source: Department of Toxic Substance Control Telephone: 916-327-4498 Last EDR Contact: 12/02/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Annually
EMI:	Emissions Inventory Data Toxics and criteria pollutant emissions data col	lected by the ARB and local air pollution agencies.
	Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 06/24/2019 Date Made Active in Reports: 08/22/2019 Number of Days to Update: 59	Source: California Air Resources Board Telephone: 916-322-2990 Last EDR Contact: 09/18/2019 Next Scheduled EDR Contact: 12/30/2019 Data Release Frequency: Varies
ENF: Enforcement Action Listing A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice Violation, Expedited Payment Letter, and Staff Enforcement Letter.		Formal is everything except Oral/Verbal Communication, Notice of Enforcement Letter.
	Date of Government Version: 07/19/2019 Date Data Arrived at EDR: 07/22/2019 Date Made Active in Reports: 09/26/2019 Number of Days to Update: 66	Source: State Water Resoruces Control Board Telephone: 916-445-9379 Last EDR Contact: 10/30/2019 Next Scheduled EDR Contact: 02/02/2020 Data Release Frequency: Varies
Fina	ncial Assurance 1: Financial Assurance Informa Financial Assurance information	tion Listing
	Date of Government Version: 07/19/2019 Date Data Arrived at EDR: 07/23/2019 Date Made Active in Reports: 09/30/2019 Number of Days to Update: 69	Source: Department of Toxic Substances Control Telephone: 916-255-3628 Last EDR Contact: 10/17/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

#### Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 08/16/2019	Source: California Integrated Waste Management Board
Date Data Arrived at EDR: 08/20/2019	Telephone: 916-341-6066
Date Made Active in Reports: 10/18/2019	Last EDR Contact: 11/07/2019
Number of Days to Update: 59	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: Varies

#### HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 05/29/2019	Telephone: 916-255-1136
Date Made Active in Reports: 07/22/2019	Last EDR Contact: 10/11/2019
Number of Days to Update: 54	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Annually

### ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 08/19/2019	Sc
Date Data Arrived at EDR: 08/20/2019	Te
Date Made Active in Reports: 10/18/2019	La
Number of Days to Update: 59	Ne

Source: Department of Toxic Subsances Control Telephone: 877-786-9427 Last EDR Contact: 11/19/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Quarterly

#### HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001 Date Data Arrived at EDR: 01/22/2009 Date Made Active in Reports: 04/08/2009 Number of Days to Update: 76 Source: Department of Toxic Substances Control Telephone: 916-323-3400 Last EDR Contact: 01/22/2009 Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

### HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 08/19/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 08/20/2019	Telephone: 916-323-3400
Date Made Active in Reports: 10/18/2019	Last EDR Contact: 11/19/2019
Number of Days to Update: 59	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: Quarterly

#### HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 10/07/2019	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/08/2019	Telephone: 916-440-7145
Date Made Active in Reports: 11/07/2019	Last EDR Contact: 10/08/2019
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/20/2020
	Data Release Frequency: Quarterly

IINES: Mines Site Location Listing A listing of mine site locations from the Office of Mine Reclamation.	
Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 57	Source: Department of Conservation Telephone: 916-322-1080 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Quarterly
MWMP: Medical Waste Management Program Li: The Medical Waste Management Program (I and inspecting medical waste Offsite Treatm state. MWMP also oversees all Medical Was	sting MWMP) ensures the proper handling and disposal of medical waste by permitting lent Facilities (PDF) and Transfer Stations (PDF) throughout the ste Transporters.
Date of Government Version: 07/19/2019 Date Data Arrived at EDR: 09/04/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 62	Source: Department of Public Health Telephone: 916-558-1784 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Varies
NPDES: NPDES Permits Listing A listing of NPDES permits, including stormwater.	
Date of Government Version: 08/12/2019 Date Data Arrived at EDR: 08/13/2019 Date Made Active in Reports: 10/16/2019 Number of Days to Update: 64	Source: State Water Resources Control Board Telephone: 916-445-9379 Last EDR Contact: 11/12/2019 Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: Quarterly
PEST LIC: Pesticide Regulation Licenses Listing A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licens and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.	
Date of Government Version: 09/03/2019 Date Data Arrived at EDR: 09/04/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 62	Source: Department of Pesticide Regulation Telephone: 916-445-4038 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Quarterly
PROC: Certified Processors Database A listing of certified processors.	
Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 57	Source: Department of Conservation Telephone: 916-323-3836 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Quarterly
NOTIFY 65: Proposition 65 Records Listings of all Proposition 65 incidents report Regional Water Quality Control Board. This	ed to counties by the State Water Resources Control Board and the database is no longer updated by the reporting agency.
Date of Government Version: 09/16/2019 Date Data Arrived at EDR: 09/18/2019 Date Made Active in Reports: 11/06/2019 Number of Days to Update: 49	Source: State Water Resources Control Board Telephone: 916-445-3846 Last EDR Contact: 12/11/2019 Next Scheduled EDR Contact: 03/30/2020

Data Release Frequency: No Update Planned

#### UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 08/20/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 11/18/2019 Number of Days to Update: 90

Source: Deaprtment of Conservation Telephone: 916-445-2408 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER) Underground control injection sites

Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/01/2019 Number of Days to Update: 53

Source: State Water Resource Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Varies

### WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018 Date Data Arrived at EDR: 07/11/2018 Date Made Active in Reports: 09/13/2018 Number of Days to Update: 64

Source: RWQCB, Central Valley Region Telephone: 559-445-5577 Last EDR Contact: 10/11/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Varies

#### WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 11/14/2019
Number of Days to Update: 9	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: No Update Planned

#### WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 12/17/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 04/06/2020
	Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER) Military privatized sites

Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/01/2019 Number of Days to Update: 53

Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER) Projects sites

Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/01/2019 Number of Days to Update: 53 Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Varies

### WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/06/2019 Number of Days to Update: 58 Source: State Water Resources Control Board Telephone: 916-341-5810 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Quarterly

#### CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 09/03/2019 Date Data Arrived at EDR: 09/04/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 62 Source: State Water Resources Control Board Telephone: 866-794-4977 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Varies

### CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 08/14/2019 Date Data Arrived at EDR: 08/14/2019 Date Made Active in Reports: 08/21/2019 Number of Days to Update: 7 Source: California Environmental Protection Agency Telephone: 916-323-2514 Last EDR Contact: 10/22/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER) Non-Case Information sites

Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/01/2019 Number of Days to Update: 53 Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER) Other Oil & Gas Projects sites

Date of Government Version: 09/09/2019	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/09/2019	Telephone: 866-480-1028
Date Made Active in Reports: 11/01/2019	Last EDR Contact: 12/10/2019
Number of Days to Update: 53	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Varies

	OD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER) Produced water ponds sites	
	Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/01/2019 Number of Days to Update: 53	Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Varies
	SAMPLING POINT: Sampling Point ? Public Sites ( Sampling point - public sites	GEOTRACKER)
	Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/01/2019 Number of Days to Update: 53	Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Varies
WELL STIM PROJ: Well Stimulation Project (GEOTRACKER) Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilitie and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water pond wells, water supply wells, etc?) being monitored		RACKER) is, a depiction of the monitoring network, and the facilities, boundaries, nd the features (oil and gas wells, produced water ponds, UIC id
	Date of Government Version: 09/09/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/01/2019 Number of Days to Update: 53	Source: State Water Resources Control Board Telephone: 866-480-1028 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Varies
	MINES MRDS: Mineral Resources Data System Mineral Resources Data System	
	Date of Government Version: 04/06/2018 Date Data Arrived at EDR: 10/21/2019 Date Made Active in Reports: 10/24/2019 Number of Days to Update: 3	Source: USGS Telephone: 703-648-6533 Last EDR Contact: 11/22/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: Varies
	EDR HIGH RISK HISTORICAL RECORDS	

#### EDR Exclusive Records

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: No Update Planned

### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

### EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

# EDR RECOVERED GOVERNMENT ARCHIVES

### Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 01/13/2014 Number of Days to Update: 196 Source: Department of Resources Recycling and Recovery Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

### RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/30/2013 Number of Days to Update: 182 Source: State Water Resources Control Board Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

#### COUNTY RECORDS

#### ALAMEDA COUNTY:

#### CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019 Date Data Arrived at EDR: 01/11/2019 Date Made Active in Reports: 03/05/2019 Number of Days to Update: 53 Source: Alameda County Environmental Health Services Telephone: 510-567-6700 Last EDR Contact: 10/02/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Semi-Annually

# UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 10/02/2019 Date Data Arrived at EDR: 10/03/2019 Date Made Active in Reports: 11/06/2019 Number of Days to Update: 34 Source: Alameda County Environmental Health Services Telephone: 510-567-6700 Last EDR Contact: 10/02/2019 Next Scheduled EDR Contact: 04/24/2047 Data Release Frequency: Semi-Annually

#### AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List Cupa Facility List

> Date of Government Version: 09/06/2019 Date Data Arrived at EDR: 09/10/2019 Date Made Active in Reports: 10/31/2019 Number of Days to Update: 51

Source: Amador County Environmental Health Telephone: 209-223-6439 Last EDR Contact: 12/02/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Varies

Source: Public Health Department

Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: No Update Planned

Telephone: 530-538-7149

Last EDR Contact: 10/02/2019

# BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing Cupa facility list.

> Date of Government Version: 04/21/2017 Date Data Arrived at EDR: 04/25/2017 Date Made Active in Reports: 08/09/2017 Number of Days to Update: 106

### CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

> Date of Government Version: 08/05/2019 Date Data Arrived at EDR: 08/07/2019 Date Made Active in Reports: 10/09/2019 Number of Days to Update: 63

Source: Calveras County Environmental Health Telephone: 209-754-6399 Last EDR Contact: 12/03/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Quarterly

#### COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List Cupa facility list.

> Date of Government Version: 08/14/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 10/18/2019 Number of Days to Update: 59

Source: Health & Human Services Telephone: 530-458-0396 Last EDR Contact: 10/31/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

#### SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 08/20/2019 Date Data Arrived at EDR: 08/23/2019 Date Made Active in Reports: 10/22/2019 Number of Days to Update: 60 Source: Contra Costa Health Services Department Telephone: 925-646-2286 Last EDR Contact: 10/28/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Semi-Annually

#### DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List Cupa Facility list

> Date of Government Version: 10/11/2019 Date Data Arrived at EDR: 10/29/2019 Date Made Active in Reports: 12/11/2019 Number of Days to Update: 43

Source: Del Norte County Environmental Health Division Telephone: 707-465-0426 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Varies

# EL DORADO COUNTY:

#### CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 09/06/2019 Date Data Arrived at EDR: 09/12/2019 Date Made Active in Reports: 10/31/2019 Number of Days to Update: 49 Source: El Dorado County Environmental Management Department Telephone: 530-621-6623 Last EDR Contact: 10/28/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Varies

#### FRESNO COUNTY:

#### CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 10/08/2019 Date Data Arrived at EDR: 10/10/2019 Date Made Active in Reports: 12/11/2019 Number of Days to Update: 62 Source: Dept. of Community Health Telephone: 559-445-3271 Last EDR Contact: 10/09/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Semi-Annually

### GLENN COUNTY:

#### CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018 Date Data Arrived at EDR: 01/24/2018 Date Made Active in Reports: 03/14/2018 Number of Days to Update: 49 Source: Glenn County Air Pollution Control District Telephone: 830-934-6500 Last EDR Contact: 10/17/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: No Update Planned

#### HUMBOLDT COUNTY:

### CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 07/08/2019 Date Data Arrived at EDR: 07/10/2019 Date Made Active in Reports: 09/20/2019 Number of Days to Update: 72 Source: Humboldt County Environmental Health Telephone: N/A Last EDR Contact: 10/30/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Semi-Annually

#### IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

> Date of Government Version: 07/19/2019 Date Data Arrived at EDR: 07/23/2019 Date Made Active in Reports: 09/26/2019 Number of Days to Update: 65

Source: San Diego Border Field Office Telephone: 760-339-2777 Last EDR Contact: 10/17/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

# INYO COUNTY:

CUPA INYO: CUPA Facility List Cupa facility list.

> Date of Government Version: 04/02/2018 Date Data Arrived at EDR: 04/03/2018 Date Made Active in Reports: 06/14/2018 Number of Days to Update: 72

Source: Inyo County Environmental Health Services Telephone: 760-878-0238 Last EDR Contact: 11/14/2019 Next Scheduled EDR Contact: 06/04/2018 Data Release Frequency: Varies

#### KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 08/01/2019 Date Data Arrived at EDR: 08/06/2019 Date Made Active in Reports: 10/08/2019 Number of Days to Update: 63 Source: Kern County Environment Health Services Department Telephone: 661-862-8700 Last EDR Contact: 10/31/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Quarterly

# KINGS COUNTY:

### CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/14/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 10/18/2019 Number of Days to Update: 59 Source: Kings County Department of Public Health Telephone: 559-584-1411 Last EDR Contact: 11/25/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Varies

LAKE COUNTY:

### CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 08/16/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 10/18/2019 Number of Days to Update: 59 Source: Lake County Environmental Health Telephone: 707-263-1164 Last EDR Contact: 10/15/2019 Next Scheduled EDR Contact: 01/27/2020 Data Release Frequency: Varies

### LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List Cupa facility list

> Date of Government Version: 07/22/2019 Date Data Arrived at EDR: 07/23/2019 Date Made Active in Reports: 09/26/2019 Number of Days to Update: 65

Source: Lassen County Environmental Health Telephone: 530-251-8528 Last EDR Contact: 10/17/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

# LOS ANGELES COUNTY:

### AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009 Date Data Arrived at EDR: 03/31/2009 Date Made Active in Reports: 10/23/2009 Number of Days to Update: 206 Source: N/A Telephone: N/A Last EDR Contact: 12/11/2019 Next Scheduled EDR Contact: 03/30/2020 Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 09/26/2019	Sc
Date Data Arrived at EDR: 10/04/2019	Te
Date Made Active in Reports: 11/07/2019	La
Number of Days to Update: 34	Ne

Source: Department of Public Works Telephone: 626-458-3517 Last EDR Contact: 10/02/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

> Date of Government Version: 10/15/2019 Date Data Arrived at EDR: 10/16/2019 Date Made Active in Reports: 12/12/2019 Number of Days to Update: 57

Source: La County Department of Public Works Telephone: 818-458-5185 Last EDR Contact: 10/16/2019 Next Scheduled EDR Contact: 01/27/2020 Data Release Frequency: Varies

#### LF LOS ANGELES CITY: City of Los Angeles Landfills Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019	Source: Engineering & Construction Division
Date Data Arrived at EDR: 01/15/2019	Telephone: 213-473-7869
Date Made Active in Reports: 03/07/2019	Last EDR Contact: 10/09/2019
Number of Days to Update: 51	Next Scheduled EDR Contact: 01/27/2020
	Data Release Frequency: Varies

#### LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019 Date Data Arrived at EDR: 06/25/2019 Date Made Active in Reports: 08/22/2019 Number of Days to Update: 58 Source: Los Angeles Fire Department Telephone: 213-978-3800 Last EDR Contact: 09/27/2019 Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Varies

#### LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/17/2019	Telephone: 626-458-6973
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 10/18/2019
Number of Days to Update: 42	Next Scheduled EDR Contact: 01/27/2020
	Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 09/27/2019
Number of Days to Update: 58	Next Scheduled EDR Contact: 01/06/2020
	Data Release Frequency: Varies

### LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019 Date Data Arrived at EDR: 06/25/2019 Date Made Active in Reports: 08/22/2019 Number of Days to Update: 58 Source: Los Angeles Fire Department Telephone: 213-978-3800 Last EDR Contact: 09/27/2019 Next Scheduled EDR Contact: 01/06/2020 Data Release Frequency: Varies

### SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 07/15/2019	Source: Community Health Services
Date Data Arrived at EDR: 07/17/2019	Telephone: 323-890-7806
Date Made Active in Reports: 08/05/2019	Last EDR Contact: 10/29/2019
Number of Days to Update: 19	Next Scheduled EDR Contact: 01/27/2020
	Data Release Frequency: Annually

#### UST EL SEGUNDO: City of El Segundo Underground Storage Tank Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 10/09/2019
Number of Days to Update: 21	Next Scheduled EDR Contact: 01/27/2020
	Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019 Date Data Arrived at EDR: 04/23/2019 Date Made Active in Reports: 06/27/2019 Number of Days to Update: 65 Source: City of Long Beach Fire Department Telephone: 562-570-2563 Last EDR Contact: 10/17/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 07/30/2019	Telephone: 310-618-2973
Date Made Active in Reports: 10/02/2019	Last EDR Contact: 10/17/2019
Number of Days to Update: 64	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Semi-Annually

# MADERA COUNTY:

#### CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/22/2019 Date Data Arrived at EDR: 08/26/2019 Date Made Active in Reports: 10/29/2019 Number of Days to Update: 64 Source: Madera County Environmental Health Telephone: 559-675-7823 Last EDR Contact: 11/14/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Varies

### MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites Currently permitted USTs in Marin County.

> Date of Government Version: 09/26/2018 Date Data Arrived at EDR: 10/04/2018 Date Made Active in Reports: 11/02/2018 Number of Days to Update: 29

Source: Public Works Department Waste Management Telephone: 415-473-6647 Last EDR Contact: 12/19/2019 Next Scheduled EDR Contact: 04/13/2020 Data Release Frequency: Semi-Annually

#### MERCED COUNTY:

CUPA MERCED: CUPA Facility List CUPA facility list.

> Date of Government Version: 05/29/2019 Date Data Arrived at EDR: 05/30/2019 Date Made Active in Reports: 07/22/2019 Number of Days to Update: 53

Source: Merced County Environmental Health Telephone: 209-381-1094 Last EDR Contact: 11/14/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Varies

MONO COUNTY:

### CUPA MONO: CUPA Facility List CUPA Facility List

Date of Government Version: 08/21/2019 Date Data Arrived at EDR: 09/03/2019 Date Made Active in Reports: 10/31/2019 Number of Days to Update: 58 Source: Mono County Health Department Telephone: 760-932-5580 Last EDR Contact: 11/20/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: Varies

### MONTEREY COUNTY:

# CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 07/25/2019 Date Data Arrived at EDR: 07/30/2019 Date Made Active in Reports: 09/30/2019 Number of Days to Update: 62 Source: Monterey County Health Department Telephone: 831-796-1297 Last EDR Contact: 12/19/2019 Next Scheduled EDR Contact: 04/13/2020 Data Release Frequency: Varies

# NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017 Date Data Arrived at EDR: 01/11/2017 Date Made Active in Reports: 03/02/2017 Number of Days to Update: 50 Source: Napa County Department of Environmental Management Telephone: 707-253-4269 Last EDR Contact: 11/20/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019	Source: Napa County Department of Environmental Management
Date Data Arrived at EDR: 09/09/2019	Telephone: 707-253-4269
Date Made Active in Reports: 10/31/2019	Last EDR Contact: 11/20/2019
Number of Days to Update: 52	Next Scheduled EDR Contact: 03/09/2020
<i>,</i>	Data Release Frequency: No Update Planned

#### NEVADA COUNTY:

#### CUPA NEVADA: CUPA Facility List CUPA facility list.

Date of Government Version: 10/30/2019 Date Data Arrived at EDR: 10/30/2019 Date Made Active in Reports: 12/11/2019 Number of Days to Update: 42 Source: Community Development Agency Telephone: 530-265-1467 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Varies

#### ORANGE COUNTY:

IND\_SITE ORANGE: List of Industrial Site Cleanups Petroleum and non-petroleum spills.

Date of Government Version: 07/10/2019
Date Data Arrived at EDR: 08/07/2019
Date Made Active in Reports: 10/09/2019
Number of Days to Update: 63

Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/04/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 07/10/2019	Source: Health Care Agency
Date Data Arrived at EDR: 08/09/2019	Telephone: 714-834-3446
Date Made Active in Reports: 10/09/2019	Last EDR Contact: 11/04/2019
Number of Days to Update: 61	Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Quarterly
T ORANGE: List of Underground Storage Tank	Facilities

UST ORANGE: List of Underground Storage Tank Facilities Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 07/10/2019 Date Data Arrived at EDR: 08/06/2019 Date Made Active in Reports: 10/09/2019 Number of Days to Update: 64 Source: Health Care Agency Telephone: 714-834-3446 Last EDR Contact: 11/05/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Quarterly

### PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 09/03/2019 Date Data Arrived at EDR: 09/05/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 61 Source: Placer County Health and Human Services Telephone: 530-745-2363 Last EDR Contact: 12/02/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Semi-Annually

# PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List Plumas County CUPA Program facilities.

> Date of Government Version: 03/31/2019 Date Data Arrived at EDR: 04/23/2019 Date Made Active in Reports: 06/26/2019 Number of Days to Update: 64

Source: Plumas County Environmental Health Telephone: 530-283-6355 Last EDR Contact: 10/17/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

### RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 10/17/2019 Date Data Arrived at EDR: 10/22/2019 Date Made Active in Reports: 12/13/2019 Number of Days to Update: 52 Source: Department of Environmental Health Telephone: 951-358-5055 Last EDR Contact: 12/16/2019 Next Scheduled EDR Contact: 03/30/2020 Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List Underground storage tank sites located in Riverside county. Date of Government Version: 07/10/2019 Date Data Arrived at EDR: 07/11/2019 Date Made Active in Reports: 09/23/2019 Number of Days to Update: 74 SACRAMENTO COUNTY: CS SACRAMENTO: Toxic Site Clean-Up List List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 08/06/2019Source: Sacramento County Environmental ManagementDate Data Arrived at EDR: 10/01/2019Telephone: 916-875-8406Date Made Active in Reports: 11/07/2019Last EDR Contact: 10/01/2019Number of Days to Update: 37Next Scheduled EDR Contact: 01/13/2020Data Release Frequency: Quarterly

#### ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Source: Sacramento County Environmental Management Telephone: 916-875-8406 Last EDR Contact: 10/01/2019 Next Scheduled EDR Contact: 01/13/2020 Data Release Frequency: Quarterly

#### SAN BENITO COUNTY:

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CUPA SAN BENITO: CUPA Facility List
Cupa facility list
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Date of Government Version: 07/16/2019 Date Data Arrived at EDR: 07/16/2019 Date Made Active in Reports: 09/24/2019 Number of Days to Update: 70 Source: San Benito County Environmental Health Telephone: N/A Last EDR Contact: 11/14/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Varies

#### SAN BERNARDINO COUNTY:

#### PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 08/29/2019	Source: San Bernardino County Fire Department Hazardous Materials Division
Date Data Arrived at EDR: 08/30/2019	Telephone: 909-387-3041
Date Made Active in Reports: 10/29/2019	Last EDR Contact: 11/04/2019
Number of Days to Update: 60	Next Scheduled EDR Contact: 02/17/2020
	Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/03/2019 Date Data Arrived at EDR: 09/04/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 62	Source: Hazardous Materials Management Division Telephone: 619-338-2268 Last EDR Contact: 12/04/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Quarterly
LF SAN DIEGO: Solid Waste Facilities San Diego County Solid Waste Facilities.	
Date of Government Version: 04/18/2018 Date Data Arrived at EDR: 04/24/2018 Date Made Active in Reports: 06/19/2018 Number of Days to Update: 56	Source: Department of Health Services Telephone: 619-338-2209 Last EDR Contact: 10/31/2019 Next Scheduled EDR Contact: 02/03/2020

#### SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 10/16/2019 Date Data Arrived at EDR: 10/22/2019 Date Made Active in Reports: 12/13/2019 Number of Days to Update: 52 Source: Department of Environmental Health Telephone: 858-505-6874 Last EDR Contact: 10/17/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

Data Release Frequency: Varies

#### SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010 Date Data Arrived at EDR: 06/15/2010 Date Made Active in Reports: 07/09/2010 Number of Days to Update: 24 Source: San Diego County Department of Environmental Health Telephone: 619-338-2371 Last EDR Contact: 11/25/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: No Update Planned

#### SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County Telephone: 415-252-3920 Last EDR Contact: 10/31/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information Underground storage tank sites located in San Francisco county.

Date of Government Version: 08/01/2019 Date Data Arrived at EDR: 08/02/2019 Date Made Active in Reports: 10/08/2019 Number of Days to Update: 67 Source: Department of Public Health Telephone: 415-252-3920 Last EDR Contact: 10/31/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Quarterly

# SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 12/11/2019
Next Scheduled EDR Contact: 03/30/2020
Data Release Frequency: Semi-Annually

### SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

> Date of Government Version: 08/14/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 10/18/2019 Number of Days to Update: 59

Source: San Luis Obispo County Public Health Department Telephone: 805-781-5596 Last EDR Contact: 12/11/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Varies

# SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 09/03/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 11/05/2019 Number of Days to Update: 57 Source: San Mateo County Environmental Health Services Division Telephone: 650-363-1921 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Annually

### LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019	Source: San Mateo County Environmental Health Services Division
Date Data Arrived at EDR: 03/29/2019	Telephone: 650-363-1921
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 12/05/2019
Number of Days to Update: 61	Next Scheduled EDR Contact: 03/23/2020
	Data Release Frequency: Semi-Annually

#### SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011	Source: Santa Barbara County Public Health Department
Date Data Arrived at EDR: 09/09/2011	Telephone: 805-686-8167
Date Made Active in Reports: 10/07/2011	Last EDR Contact: 11/14/2019
Number of Days to Update: 28	Next Scheduled EDR Contact: 03/02/2020
	Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List Cupa facility list	
Date of Government Version: 08/14/2019 Date Data Arrived at EDR: 08/20/2019 Date Made Active in Reports: 10/18/2019 Number of Days to Update: 59	Source: Department of Environmental Health Telephone: 408-918-1973 Last EDR Contact: 11/14/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Varies
HIST LUST SANTA CLARA: HIST LUST - Fuel Lea A listing of open and closed leaking undergroun Leaking underground storage tanks are now ha	k Site Activity Report nd storage tanks. This listing is no longer updated by the county. andled by the Department of Environmental Health.
Date of Government Version: 03/29/2005 Date Data Arrived at EDR: 03/30/2005 Date Made Active in Reports: 04/21/2005 Number of Days to Update: 22	Source: Santa Clara Valley Water District Telephone: 408-265-2600 Last EDR Contact: 03/23/2009 Next Scheduled EDR Contact: 06/22/2009 Data Release Frequency: No Update Planned
LUST SANTA CLARA: LOP Listing A listing of leaking underground storage tanks	located in Santa Clara county.
Date of Government Version: 03/03/2014 Date Data Arrived at EDR: 03/05/2014 Date Made Active in Reports: 03/18/2014 Number of Days to Update: 13	Source: Department of Environmental Health Telephone: 408-918-3417 Last EDR Contact: 11/20/2019 Next Scheduled EDR Contact: 03/09/2020 Data Release Frequency: No Update Planned
SAN JOSE HAZMAT: Hazardous Material Facilities Hazardous material facilities, including undergr	round storage tank sites.
Date of Government Version: 07/30/2019 Date Data Arrived at EDR: 08/02/2019 Date Made Active in Reports: 10/08/2019 Number of Days to Update: 67	Source: City of San Jose Fire Department Telephone: 408-535-7694 Last EDR Contact: 10/31/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Annually
SANTA CRUZ COUNTY:	
CUPA SANTA CRUZ: CUPA Facility List CUPA facility listing.	
Date of Government Version: 01/21/2017 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 05/23/2017 Number of Days to Update: 90	Source: Santa Cruz County Environmental Health Telephone: 831-464-2761 Last EDR Contact: 11/14/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Varies
SHASTA COUNTY:	
CUPA SHASTA: CUPA Facility List Cupa Facility List.	
Date of Government Version: 06/15/2017 Date Data Arrived at EDR: 06/19/2017 Date Made Active in Reports: 08/09/2017 Number of Days to Update: 51	Source: Shasta County Department of Resource Management Telephone: 530-225-5789 Last EDR Contact: 11/14/2019 Next Scheduled EDR Contact: 03/02/2020

Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tak A listing of leaking underground storage tank s	nks sites located in Solano county.	
Date of Government Version: 06/04/2019 Date Data Arrived at EDR: 06/06/2019 Date Made Active in Reports: 08/13/2019 Number of Days to Update: 68	Source: Solano County Department of Environmental Management Telephone: 707-784-6770 Last EDR Contact: 11/25/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Quarterly	
UST SOLANO: Underground Storage Tanks Underground storage tank sites located in Sol	ano county.	
Date of Government Version: 08/28/2019 Date Data Arrived at EDR: 08/30/2019 Date Made Active in Reports: 10/29/2019 Number of Days to Update: 60	Source: Solano County Department of Environmental Management Telephone: 707-784-6770 Last EDR Contact: 12/02/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Quarterly	
SONOMA COUNTY:		
CUPA SONOMA: Cupa Facility List Cupa Facility list		
Date of Government Version: 06/18/2019 Date Data Arrived at EDR: 06/25/2019 Date Made Active in Reports: 07/24/2019 Number of Days to Update: 29	Source: County of Sonoma Fire & Emergency Services Department Telephone: 707-565-1174 Last EDR Contact: 12/17/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Varies	
LUST SONOMA: Leaking Underground Storage Tank Sites A listing of leaking underground storage tank sites located in Sonoma county.		
Date of Government Version: 10/01/2019 Date Data Arrived at EDR: 10/02/2019 Date Made Active in Reports: 11/07/2019 Number of Days to Update: 36	Source: Department of Health Services Telephone: 707-565-6565 Last EDR Contact: 12/17/2019 Next Scheduled EDR Contact: 04/06/2020 Data Release Frequency: Quarterly	
STANISLAUS COUNTY:		
CUPA STANISLAUS: CUPA Facility List Cupa facility list		
Date of Government Version: 07/18/2019 Date Data Arrived at EDR: 07/18/2019 Date Made Active in Reports: 09/26/2019 Number of Days to Update: 70	Source: Stanislaus County Department of Ennvironmental Protection Telephone: 209-525-6751 Last EDR Contact: 10/28/2019 Next Scheduled EDR Contact: 01/27/2020 Data Release Frequency: Varies	
SUTTER COUNTY:		
UST SUTTER: Underground Storage Tanks Underground storage tank sites located in Sut	ter county.	
Date of Government Version: 08/29/2019 Date Data Arrived at EDR: 09/03/2019 Date Made Active in Reports: 11/06/2019 Number of Days to Update: 64	Source: Sutter County Environmental Health Services Telephone: 530-822-7500 Last EDR Contact: 12/02/2019 Next Scheduled EDR Contact: 03/16/2020 Data Release Frequency: Semi-Annually	

TEHAMA COUNTY:

# CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 05/20/2019 Date Data Arrived at EDR: 05/21/2019 Date Made Active in Reports: 07/18/2019 Number of Days to Update: 58 Source: Tehama County Department of Environmental Health Telephone: 530-527-8020 Last EDR Contact: 11/14/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Varies

### TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List Cupa facility list

> Date of Government Version: 07/19/2019 Date Data Arrived at EDR: 07/23/2019 Date Made Active in Reports: 09/26/2019 Number of Days to Update: 65

Source: Department of Toxic Substances Control Telephone: 760-352-0381 Last EDR Contact: 10/17/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

# TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

> Date of Government Version: 08/12/2019 Date Data Arrived at EDR: 08/14/2019 Date Made Active in Reports: 10/17/2019 Number of Days to Update: 64

Source: Tulare County Environmental Health Services Division Telephone: 559-624-7400 Last EDR Contact: 11/04/2019 Next Scheduled EDR Contact: 02/17/2020 Data Release Frequency: Varies

#### TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List Cupa facility list

> Date of Government Version: 04/23/2018 Date Data Arrived at EDR: 04/25/2018 Date Made Active in Reports: 06/25/2018 Number of Days to Update: 61

Source: Divison of Environmental Health Telephone: 209-533-5633 Last EDR Contact: 10/17/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Varies

#### VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 05/29/2019 Date Data Arrived at EDR: 07/29/2019 Date Made Active in Reports: 09/30/2019 Number of Days to Update: 63 Source: Ventura County Environmental Health Division Telephone: 805-654-2813 Last EDR Contact: 10/21/2019 Next Scheduled EDR Contact: 02/03/2020 Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011 Date Data Arrived at EDR: 12/01/2011 Date Made Active in Reports: 01/19/2012 Number of Days to Update: 49 Source: Environmental Health Division Telephone: 805-654-2813 Last EDR Contact: 12/19/2019 Next Scheduled EDR Contact: 04/13/2020 Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008	Source: Environmental Health Division
Date Data Arrived at EDR: 06/24/2008	Telephone: 805-654-2813
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 11/07/2019
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/24/2020
	Data Release Frequency: No Update Planned

### MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2019	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 10/23/2019	Telephone: 805-654-2813
Date Made Active in Reports: 12/13/2019	Last EDR Contact: 10/21/2019
Number of Days to Update: 51	Next Scheduled EDR Contact: 02/03/2020
	Data Release Frequency: Quarterly

# UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 07/26/2019 Date Data Arrived at EDR: 09/09/2019 Date Made Active in Reports: 10/31/2019 Number of Days to Update: 52 Source: Environmental Health Division Telephone: 805-654-2813 Last EDR Contact: 12/10/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Quarterly

# YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report Underground storage tank sites located in Yolo county.

Date of Government Version: 09/25/2019 Date Data Arrived at EDR: 10/01/2019 Date Made Active in Reports: 10/31/2019 Number of Days to Update: 30 Source: Yolo County Department of Health Telephone: 530-666-8646 Last EDR Contact: 12/19/2019 Next Scheduled EDR Contact: 04/13/2020 Data Release Frequency: Annually

### YUBA COUNTY:

CUPA YUBA: CUPA Facility List CUPA facility listing for Yuba County.

> Date of Government Version: 07/26/2019 Date Data Arrived at EDR: 07/31/2019 Date Made Active in Reports: 10/08/2019 Number of Days to Update: 69

Source: Yuba County Environmental Health Department Telephone: 530-749-7523 Last EDR Contact: 10/25/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Varies

# OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data Facility and manifest data. Manifest is a docum transporters to a tsd facility.	ent that lists and tracks hazardous waste from the generator through
Date of Government Version: 05/14/2019 Date Data Arrived at EDR: 05/14/2019 Date Made Active in Reports: 08/05/2019 Number of Days to Update: 83	Source: Department of Energy & Environmental Protection Telephone: 860-424-3375 Last EDR Contact: 11/11/2019 Next Scheduled EDR Contact: 02/24/2020 Data Release Frequency: No Update Planned
NJ MANIFEST: Manifest Information Hazardous waste manifest information.	
Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 04/10/2019 Date Made Active in Reports: 05/16/2019 Number of Days to Update: 36	Source: Department of Environmental Protection Telephone: N/A Last EDR Contact: 10/02/2019 Next Scheduled EDR Contact: 01/20/2020 Data Release Frequency: Annually
NY MANIFEST: Facility and Manifest Data Manifest is a document that lists and tracks has facility.	zardous waste from the generator through transporters to a TSD
Date of Government Version: 01/01/2019 Date Data Arrived at EDR: 05/01/2019 Date Made Active in Reports: 06/21/2019 Number of Days to Update: 51	Source: Department of Environmental Conservation Telephone: 518-402-8651 Last EDR Contact: 10/29/2019 Next Scheduled EDR Contact: 02/10/2020 Data Release Frequency: Quarterly
PA MANIFEST: Manifest Information Hazardous waste manifest information.	
Date of Government Version: 06/30/2018 Date Data Arrived at EDR: 07/19/2019 Date Made Active in Reports: 09/10/2019 Number of Days to Update: 53	Source: Department of Environmental Protection Telephone: 717-783-8990 Last EDR Contact: 10/09/2019 Next Scheduled EDR Contact: 12/07/2020 Data Release Frequency: Annually
RI MANIFEST: Manifest information Hazardous waste manifest information	
Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 10/02/2019 Date Made Active in Reports: 12/10/2019 Number of Days to Update: 69	Source: Department of Environmental Management Telephone: 401-222-2797 Last EDR Contact: 11/14/2019 Next Scheduled EDR Contact: 03/02/2020 Data Release Frequency: Annually
WI MANIFEST: Manifest Information Hazardous waste manifest information.	
Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 06/19/2019 Date Made Active in Reports: 09/03/2019 Number of Days to Update: 76	Source: Department of Natural Resources Telephone: N/A Last EDR Contact: 12/18/2019 Next Scheduled EDR Contact: 03/23/2020 Data Release Frequency: Annually

#### **Oil/Gas Pipelines**

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical

database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627 Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory Source: Department of Fish and Wildlife Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

# STREET AND ADDRESS INFORMATION

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# **GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM**

### TARGET PROPERTY ADDRESS

PROPOSED FUEL STATION SWC 8TH STREET/HIGHLAND SPRINGS AVENUE BEAUMONT, CA 92223

# TARGET PROPERTY COORDINATES

Latitude (North):	33.932317 - 33° 55' 56.34''
Longitude (West):	116.947606 - 116° 56' 51.38"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	504842.4
UTM Y (Meters):	3754458.5
Elevation:	2605 ft. above sea level

### USGS TOPOGRAPHIC MAP

Target Property Map:	5629739 BEAUMONT, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.
#### **GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

#### **TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSE

#### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

#### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

#### FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06065C0812G	FEMA FIRM Flood data
Additional Panels in search area:	FEMA Source Type
06065C0805G 06065C0808G 06065C0816G	FEMA FIRM Flood data FEMA FIRM Flood data FEMA FIRM Flood data
NATIONAL WETLAND INVENTORY	
	NWI Electronic
NWI Quad at Target Property	Data Coverage
BEAUMONT	YES - refer to the Overview Map and Detail Map

#### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:					
Search Radius:	1.25 miles				
Status:	Not found				

#### **AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID Not Reported LOCATION FROM TP GENERAL DIRECTION GROUNDWATER FLOW

#### **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

#### **GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

#### **GEOLOGIC AGE IDENTIFICATION**

Era:	Cenozoic	Category:	Stratifed Sequence
System:	Quaternary	0,	
Series:	Quaternary		
Code:	Q (decoded above as Era, System &	Series)	

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).



SITE NAME: ADDRESS: LAT/LONG:	Proposed Fuel Station SWC 8th Street/Highland Springs Avenue Beaumont CA 92223 33.932317 / 116.947606	CLIENT: CONTACT: INQUIRY #: DATE:	Salem Engineering Group Reily Rivera 5914075.2s December 20, 2019 6:58 pm
		Copyrig	ght © 2019 EDR, Inc. © 2015 TomTom Rel. 2015.

#### DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1	
Soil Component Name:	RAMONA
Soil Surface Texture:	sandy loam
Hydrologic Group:	Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Soil Drainage Class:	Well drained
Hydric Status: Not hydric	
Corrosion Potential - Uncoated Steel:	Moderate
Depth to Bedrock Min:	> 0 inches
Depth to Watertable Min:	> 0 inches

Soil Layer Information							
	Bou	ndary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	14 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
2	14 inches	22 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6
3	22 inches	68 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

	Soil Layer Information						
	Boundary Classification					Saturated	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
4	68 inches	74 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

GREENFIELD
sandy loam
Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
Well drained
: Low
> 0 inches
> 0 inches

	Soil Layer Information						
Boundary Classification						Saturated	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	25 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6

	Soil Layer Information						
	Bou	indary		Classi	fication	Saturated hvdraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
2	25 inches	42 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6
3	42 inches	59 inches	loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6
4	59 inches	72 inches	stratified loamy sand to sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 6.6

#### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

#### WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

#### FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000139131	0 - 1/8 Mile NE
3	USGS40000139108	1/8 - 1/4 Mile SE

#### FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B5	USGS40000139093	1/4 - 1/2 Mile SSE
6	USGS40000139087	1/4 - 1/2 Mile SSE
C7	USGS40000139132	1/2 - 1 Mile East
D9	USGS40000139128	1/2 - 1 Mile East
D10	USGS40000139123	1/2 - 1 Mile East
11	USGS40000139086	1/2 - 1 Mile ESE
13	USGS40000139115	1/2 - 1 Mile East
E14	USGS40000139034	1/2 - 1 Mile SE
15	USGS40000139066	1/2 - 1 Mile ESE

#### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

		LOCATION
MAP ID	WELL ID	FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

#### STATE DATABASE WELL INFORMATION

		LOCATION
MAP ID		FROM TP
A1	CADWR8000006161	0 - 1/8 Mile NNW
B4	CADWR8000006143	1/4 - 1/2 Mile South
C8	CADWR8000006162	1/2 - 1 Mile East
E12	CADWR800006114	1/2 - 1 Mile SE

#### **OTHER STATE DATABASE INFORMATION**

#### STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CAOG13000006348	1/2 - 1 Mile SE
A2	CAOG1300006405	1/2 - 1 Mile SE

# **PHYSICAL SETTING SOURCE MAP - 5914075.2s**



SITE NAME: ADDRESS: LAT/LONG:	Proposed Fuel Station SWC 8th Street/Highland Springs Avenue Beaumont CA 92223 33.932317 / 116.947606	CLIENT: CONTACT: INQUIRY #: DATE:	Salem Engineering Group Reily Rivera 5914075.2s December 20, 2019 6:58 pm
		Copyrl	ght © 2019 EDR, Inc. © 2015 TomTom Rel. 2015.

Map ID Direction Distance				
Elevation			Database	EDR ID Number
A1 NNW 0 - 1/8 Mile Higher			CA WELLS	CADWR8000006161
State Well #: Well Name: Well Type: Basin Name:	03S01W01N001S Not Reported Unknown San Timoteo	Station ID: Well Use: Well Depth: Well Completion Rpt #:	4318 Unkr 0 Not F	nown Reported
A2 NE 0 - 1/8 Mile Higher			FED USGS	USGS40000139131
Organization ID:	USGS-CA			
Organization Name:	USGS California Water Sc	ience Center		
Monitor Location:	003S001W01N001S		Well	
HUC:	18070202	Drainage Area:	Not F	Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not F	Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Basir	n and Range basin-fill aquifers
Formation Type:	Not Reported	Aquifer Type:	Not F	Reported
Construction Date:	1931 ft	Well Depth:	368 Not I	Poportod
Well Hole Depth Units:	Not Reported	Weir Hole Deptil.	Noti	
	f Magauramanta, 1	01 Lovel reading data	2001	06.05
Feet below surface:	Not Reported	Feet to sea level:	2001 Not F	-00-05 Reported
Note:	The site was dry (no water	level recorded).		
Level reading date:	2000-04-25	Feet below surface:	Not F	Reported
Feet to sea level:	Not Reported			
Note:	The site was dry (no water	level recorded).		
Level reading date:	1999-10-26	Feet below surface:	Not F	Reported
Feet to sea level:	Not Reported			
Note:	The site was dry (no water	level recorded).		
Level reading date:	1999-04-26	Feet below surface:	367.5	5
Feet to sea level:	Not Reported	Note:	Not F	Reported
Level reading date:	1998-06-04	Feet below surface:	367.0	6
Feet to sea level:	Not Reported	Note:	Not F	Reported
Level reading date:	1997-10-22	Feet below surface:	Not F	Reported
Feet to sea level:	2234	Note:	Not F	Reported
Level reading date:	1997-05-14	Feet below surface:	Not F	Reported
Feet to sea level:	2235	Note:	Not F	Reported
Level reading date:	1996-11-12	Feet below surface.	Not F	Reported
Feet to sea level:	2234	Note:	Not F	Reported
Level reading data:	1006-05-07	Feet below surface:	Not I	Penarted
Feet to sea level:	2235	Note:	Not F	Reported

Level reading date:	1995-05-12	Feet below surface:	Not Reported
Feet to sea level:	2234	Note:	Not Reported
Level reading date:	1994-11-07	Feet below surface:	370.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1994-05-09	Feet below surface:	368.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-10-13	Feet below surface:	368
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-06-07	Feet below surface:	Not Reported
Feet to sea level:	2237	Note:	Not Reported
Level reading date:	1993-06-06	Feet below surface:	Not Reported
Feet to sea level:	2237	Note:	Not Reported
Level reading date:	1993-06-04	Feet below surface:	Not Reported
Feet to sea level:	2237	Note:	Not Reported
Level reading date:	1993-05-31	Feet below surface:	366.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-05-30	Feet below surface:	366.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-05-29	Feet below surface:	366.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-05-28	Feet below surface:	366.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1993-04-29	Feet below surface:	365
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1991-11-01	Feet below surface:	361.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-07-18	Feet below surface:	365.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-06-27	Feet below surface:	364.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-05-26	Feet below surface:	363.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-04-26	Feet below surface:	363.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-03-27	Feet below surface:	363.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-02-23	Feet below surface:	363.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1978-01-26	Feet below surface:	363.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-12-22	Feet below surface:	363.6
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1977-11-22	Feet below surface:	363.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-10-24	Feet below surface:	363.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-09-23	Feet below surface:	363.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-08-26	Feet below surface:	362.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-27	Feet below surface:	362.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-07-05	Feet below surface:	362.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-06-01	Feet below surface:	362.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-04-01	Feet below surface:	361.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-03-02	Feet below surface:	361.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1977-02-02	Feet below surface:	361.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-12-04	Feet below surface:	361.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-11-03	Feet below surface:	362.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-10-04	Feet below surface:	361.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-09-04	Feet below surface:	361.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-31	Feet below surface:	361.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-07-02	Feet below surface:	360.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-06-02	Feet below surface:	360.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-05-01	Feet below surface:	360.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-04-01	Feet below surface:	360.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-03-31	Feet below surface:	361.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1976-02-29	Feet below surface:	361.3
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1976-02-12	Feet below surface:	361
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-09-28	Feet below surface:	359
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-07-06	Feet below surface:	375.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-04-27	Feet below surface:	372.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1973-02-23	Feet below surface:	357
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-12-14	Feet below surface:	357.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-07-07	Feet below surface:	356.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-04-07	Feet below surface:	355.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1972-01-28	Feet below surface:	355.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-24	Feet below surface:	355.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-11-03	Feet below surface:	355.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-09-03	Feet below surface:	354.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-07-30	Feet below surface:	354.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-04-23	Feet below surface:	353.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-04-03	Feet below surface:	353.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-04-01	Feet below surface:	353.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-03-01	Feet below surface:	353.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-02-24	Feet below surface:	353.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-02-01	Feet below surface:	353.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-01-18	Feet below surface:	353.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1971-01-01	Feet below surface:	353.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1970-12-01	Feet below surface:	353.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-11-01	Feet below surface:	353.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-10-19	Feet below surface:	353.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-10-01	Feet below surface:	353.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-09-01	Feet below surface:	353
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-08-07	Feet below surface:	353.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-08-01	Feet below surface:	352.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-07-01	Feet below surface:	352.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-06-01	Feet below surface:	352.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-05-01	Feet below surface:	352.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-04-01	Feet below surface:	352.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-03-01	Feet below surface:	351.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-02-01	Feet below surface:	352
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-01-01	Feet below surface:	352.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-12-01	Feet below surface:	352.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-11-01	Feet below surface:	352
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-10-01	Feet below surface:	351.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-09-01	Feet below surface:	351.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-08-22	Feet below surface:	351.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-08-01	Feet below surface:	351.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-07-11	Feet below surface:	351.7
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1969-07-01	Feet below surface:	351.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-06-19	Feet below surface:	351.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-06-06	Feet below surface:	351
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1969-03-28	Feet below surface:	350.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-11-22	Feet below surface:	350.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1968-02-09	Feet below surface:	347.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-10-20	Feet below surface:	347.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-07-28	Feet below surface:	345.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1967-05-12	Feet below surface:	344.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-08-26	Feet below surface:	343.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-05-06	Feet below surface:	342.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1966-01-07	Feet below surface:	342
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-09-17	Feet below surface:	340.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-06-25	Feet below surface:	340.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-04-23	Feet below surface:	339.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1965-01-20	Feet below surface:	339.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-12-11	Feet below surface:	339.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-10-12	Feet below surface:	339.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-08-21	Feet below surface:	339
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-06-19	Feet below surface:	338.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date: Feet to sea level: 1964-04-10

Not Reported

Feet below surface:

Note:

337.2

Not Reported

Level reading date:	1964-02-06	Feet below surface:	337.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-12-06	Feet below surface:	336.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-09-27	Feet below surface:	336.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-08-01	Feet below surface:	335.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-06-07	Feet below surface:	335.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-03-29	Feet below surface:	334.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1963-01-24	Feet below surface:	334.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-12-12	Feet below surface:	333.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-10-05	Feet below surface:	333.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-08-03	Feet below surface:	332.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-05-25	Feet below surface:	332.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-04-06	Feet below surface:	332.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1962-01-26	Feet below surface:	332.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-12-01	Feet below surface:	332.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-10-13	Feet below surface:	331.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-08-04	Feet below surface:	330.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-06-02	Feet below surface:	329.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-04-07	Feet below surface:	328.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1961-02-10	Feet below surface:	329.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-12-02	Feet below surface:	326.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1960-10-07	Feet below surface:	327.7
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:
Feet to sea level:

Level reading date: Feet to sea level:

#### 1960-08-11 Not Reported

1960-05-27 Not Reported

1960-04-08 Not Reported

1960-02-05 Not Reported

1959-12-11 Not Reported

1959-09-04 Not Reported

1959-06-11 Not Reported

1959-04-17 Not Reported

> 1959-02-20 Not Reported

1958-11-28 Not Reported

1958-10-02 Not Reported

1958-08-08 Not Reported

1958-06-11 Not Reported

1958-04-11 Not Reported

1958-02-07 Not Reported

1957-12-13 Not Reported

1957-10-02 Not Reported

1957-08-01 Not Reported

1957-06-24 Not Reported

1957-03-29 Not Reported

1957-01-25 Not Reported Note: Feet below surface: Note:

Feet below surface:

Feet below surface: Note:

Feet below surface: Note: Not Reported

326.8

325.5 Not Reported

325.2 Not Reported

325.3 Not Reported

325.4 Not Reported

323.9 Not Reported

322.6 Not Reported

321.5 Not Reported

321.8 Not Reported

321.8 Not Reported

321.5 Not Reported

320 Not Reported

319.4 Not Reported

318.8 Not Reported

318.9 Not Reported

318.5 Not Reported

317.9 Not Reported

317.1 Not Reported

318.1 Not Reported

315.8 Not Reported

315.6 Not Reported

Level reading date:	1956-11-30	Feet below surface:	315.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-09-28	Feet below surface:	314.9
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-07-27	Feet below surface:	313.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-05-25	Feet below surface:	312.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-03-30	Feet below surface:	312.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1956-02-03	Feet below surface:	312.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-12-09	Feet below surface:	312.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-10-05	Feet below surface:	311.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-08-08	Feet below surface:	310.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-05-27	Feet below surface:	309.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-03-31	Feet below surface:	308
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1955-01-29	Feet below surface:	308.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-10-01	Feet below surface:	307.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-07-30	Feet below surface:	306.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-05-28	Feet below surface:	305.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-04-02	Feet below surface:	305
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1954-01-29	Feet below surface:	305
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-11-28	Feet below surface:	304.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-10-16	Feet below surface:	304.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-07-31	Feet below surface:	303.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-06-05	Feet below surface:	302.2
Feet to sea level:	Not Reported	Note:	Not Reported

Level reading date:	1953-03-27	Feet below surface:	301.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1953-01-30	Feet below surface:	301.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-12-05	Feet below surface:	301.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-10-03	Feet below surface:	301.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-08-08	Feet below surface:	300.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-05-29	Feet below surface:	299.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-03-24	Feet below surface:	298.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1952-02-01	Feet below surface:	299
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-11-30	Feet below surface:	289.8
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-10-01	Feet below surface:	298.4
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-09-04	Feet below surface:	289
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-08-03	Feet below surface:	297.5
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1951-07-09	Feet below surface:	297.2
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1930-12-03	Feet below surface:	308.3
Feet to sea level:	Not Reported	Note:	Not Reported

#### 3 SE 1/8 - 1/4 Mile Lower

#### Organization ID: USGS-CA Organization Name: USGS California Water Science Center Monitor Location: 003S001W12D001S Well Type: HUC: Description: Not Reported Not Reported Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Basin and Range basin-fill aquifers Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Well Depth: Not Reported 316 Well Hole Depth: Well Depth Units: Not Reported ft Well Hole Depth Units: Not Reported 125

Ground water levels, Number of Measurements:

Level reading date:

1955-12-09

USGS40000139108

FED USGS

Feet below surface: Note:	Not Reported Not Reported	Feet to sea level:	2290
Level reading date:	1955-10-05	Feet below surface:	Not Reported
Feet to sea level:	2290	Note:	Not Reported
Level reading date:	1955-08-08	Feet below surface:	Not Reported
Feet to sea level:	2291	Note:	Not Reported
Level reading date:	1955-05-27	Feet below surface:	Not Reported
Feet to sea level:	2292	Note:	Not Reported
Level reading date:	1955-03-31	Feet below surface:	Not Reported
Feet to sea level:	2293	Note:	Not Reported
Level reading date:	1955-01-29	Feet below surface:	Not Reported
Feet to sea level:	2292	Note:	Not Reported
Level reading date:	1954-12-03	Feet below surface:	Not Reported
Feet to sea level:	2292	Note:	Not Reported
Level reading date:	1954-10-01	Feet below surface:	Not Reported
Feet to sea level:	2293	Note:	Not Reported
Level reading date:	1954-07-30	Feet below surface:	Not Reported
Feet to sea level:	2294	Note:	Not Reported
Level reading date:	1954-05-28	Feet below surface:	Not Reported
Feet to sea level:	2295	Note:	Not Reported
Level reading date:	1954-04-02	Feet below surface:	Not Reported
Feet to sea level:	2295	Note:	Not Reported
Level reading date:	1954-01-29	Feet below surface:	Not Reported
Feet to sea level:	2296	Note:	Not Reported
Level reading date:	1953-11-27	Feet below surface:	Not Reported
Feet to sea level:	2296	Note:	Not Reported
Level reading date:	1953-10-16	Feet below surface:	Not Reported
Feet to sea level:	2296	Note:	Not Reported
Level reading date:	1953-07-31	Feet below surface:	Not Reported
Feet to sea level:	2297	Note:	Not Reported
Level reading date:	1953-06-05	Feet below surface:	Not Reported
Feet to sea level:	2298	Note:	Not Reported
Level reading date:	1953-03-27	Feet below surface:	Not Reported
Feet to sea level:	2299	Note:	Not Reported
Level reading date:	1953-01-30	Feet below surface:	Not Reported
Feet to sea level:	2299	Note:	Not Reported
Level reading date:	1952-12-05	Feet below surface:	Not Reported
Feet to sea level:	2299	Note:	Not Reported
Level reading date:	1952-10-03	Feet below surface:	Not Reported
Feet to sea level:	2300	Note:	Not Reported
Level reading date:	1952-08-08	Feet below surface:	Not Reported
Feet to sea level:	2300	Note:	Not Reported

Level reading date:	1952-05-29	Feet below surface:	Not Reported
Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1952-03-24	Feet below surface:	Not Reported
Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1952-02-01	Feet below surface:	Not Reported
Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1951-11-03	Feet below surface:	Not Reported
Feet to sea level:	2302	Note:	Not Reported
Level reading date:	1951-10-01	Feet below surface:	Not Reported
Feet to sea level:	2302	Note:	Not Reported
Level reading date:	1951-09-04	Feet below surface:	Not Reported
Feet to sea level:	2303	Note:	Not Reported
Level reading date:	1951-08-03	Feet below surface:	Not Reported
Feet to sea level:	2303	Note:	Not Reported
Level reading date:	1951-07-09	Feet below surface:	Not Reported
Feet to sea level:	2303	Note:	Not Reported
Level reading date:	1949-10-01	Feet below surface:	Not Reported
Feet to sea level:	2307	Note:	Not Reported
Level reading date:	1949-07-02	Feet below surface:	Not Reported
Feet to sea level:	2308	Note:	Not Reported
Level reading date:	1949-04-05	Feet below surface:	Not Reported
Feet to sea level:	2308	Note:	Not Reported
Level reading date:	1949-01-03	Feet below surface:	Not Reported
Feet to sea level:	2309	Note:	Not Reported
Level reading date:	1948-10-05	Feet below surface:	Not Reported
Feet to sea level:	2310	Note:	Not Reported
Level reading date:	1948-07-06	Feet below surface:	Not Reported
Feet to sea level:	2310	Note:	Not Reported
Level reading date:	1948-04-15	Feet below surface:	Not Reported
Feet to sea level:	2311	Note:	Not Reported
Level reading date:	1947-10-07	Feet below surface:	Not Reported
Feet to sea level:	2311	Note:	Not Reported
Level reading date:	1947-07-03	Feet below surface:	Not Reported
Feet to sea level:	2308	Note:	Not Reported
Level reading date:	1946-10-05	Feet below surface:	Not Reported
Feet to sea level:	2310	Note:	Not Reported
Level reading date:	1946-04-12	Feet below surface:	Not Reported
Feet to sea level:	2312	Note:	Not Reported
Level reading date:	1946-01-07	Feet below surface:	Not Reported
Feet to sea level:	2311	Note:	Not Reported
Level reading date:	1945-10-11	Feet below surface:	Not Reported
Feet to sea level:	2311	Note:	Not Reported

Level reading date:	1945-07-08	Feet below surface:	Not Reported
Feet to sea level:	2312	Note:	Not Reported
Level reading date:	1945-04-04	Feet below surface:	Not Reported
Feet to sea level:	2313	Note:	Not Reported
Level reading date:	1945-01-03	Feet below surface:	Not Reported
Feet to sea level:	2314	Note:	Not Reported
Level reading date:	1944-10-03	Feet below surface:	Not Reported
Feet to sea level:	2314	Note:	Not Reported
Level reading date:	1944-07-05	Feet below surface:	Not Reported
Feet to sea level:	2314	Note:	Not Reported
Level reading date:	1944-04-08	Feet below surface:	Not Reported
Feet to sea level:	2315	Note:	Not Reported
Level reading date:	1944-01-08	Feet below surface:	Not Reported
Feet to sea level:	2315	Note:	Not Reported
Level reading date:	1943-10-05	Feet below surface:	Not Reported
Feet to sea level:	2315	Note:	Not Reported
Level reading date:	1943-07-05	Feet below surface:	Not Reported
Feet to sea level:	2314	Note:	Not Reported
Level reading date:	1943-01-05	Feet below surface:	Not Reported
Feet to sea level:	2316	Note:	Not Reported
Level reading date:	1942-10-02	Feet below surface:	Not Reported
Feet to sea level:	2316	Note:	Not Reported
Level reading date:	1942-04-07	Feet below surface:	Not Reported
Feet to sea level:	2314	Note:	Not Reported
Level reading date:	1942-01-06	Feet below surface:	Not Reported
Feet to sea level:	2315	Note:	Not Reported
Level reading date:	1941-10-04	Feet below surface:	Not Reported
Feet to sea level:	2316	Note:	Not Reported
Level reading date:	1941-07-09	Feet below surface:	Not Reported
Feet to sea level:	2317	Note:	Not Reported
Level reading date:	1941-04-09	Feet below surface:	Not Reported
Feet to sea level:	2318	Note:	Not Reported
Level reading date:	1941-01-04	Feet below surface:	Not Reported
Feet to sea level:	2316	Note:	Not Reported
Level reading date:	1940-10-02	Feet below surface:	Not Reported
Feet to sea level:	2318	Note:	Not Reported
Level reading date:	1940-07-03	Feet below surface:	Not Reported
Feet to sea level:	2318	Note:	Not Reported
Level reading date:	1940-04-02	Feet below surface:	Not Reported
Feet to sea level:	2319	Note:	Not Reported
Level reading date:	1940-01-05	Feet below surface:	Not Reported
Feet to sea level:	2319	Note:	Not Reported

Level reading date:	1939-10-05	Feet below surface:	Not Reported
Feet to sea level:	2319	Note:	Not Reported
Level reading date:	1939-07-03	Feet below surface:	Not Reported
Feet to sea level:	2320	Note:	Not Reported
Level reading date:	1939-04-05	Feet below surface:	Not Reported
Feet to sea level:	2320	Note:	Not Reported
Level reading date:	1939-01-03	Feet below surface:	Not Reported
Feet to sea level:	2320	Note:	Not Reported
Level reading date:	1938-10-03	Feet below surface:	Not Reported
Feet to sea level:	2320	Note:	Not Reported
Level reading date:	1938-07-01	Feet below surface:	Not Reported
Feet to sea level:	2320	Note:	Not Reported
Level reading date:	1938-04-30	Feet below surface:	Not Reported
Feet to sea level:	2371	Note:	Not Reported
Level reading date:	1938-01-10	Feet below surface:	Not Reported
Feet to sea level:	2322	Note:	Not Reported
Level reading date:	1937-10-06	Feet below surface:	Not Reported
Feet to sea level:	2322	Note:	Not Reported
Level reading date:	1937-07-25	Feet below surface:	Not Reported
Feet to sea level:	2318	Note:	Not Reported
Level reading date:	1937-04-06	Feet below surface:	Not Reported
Feet to sea level:	2322	Note:	Not Reported
Level reading date:	1937-01-08	Feet below surface:	Not Reported
Feet to sea level:	2323	Note:	Not Reported
Level reading date:	1936-10-08	Feet below surface:	Not Reported
Feet to sea level:	2323	Note:	Not Reported
Level reading date:	1936-07-07	Feet below surface:	Not Reported
Feet to sea level:	2324	Note:	Not Reported
Level reading date:	1936-04-02	Feet below surface:	Not Reported
Feet to sea level:	2324	Note:	Not Reported
Level reading date:	1935-10-15	Feet below surface:	Not Reported
Feet to sea level:	2325	Note:	Not Reported
Level reading date:	1935-01-18	Feet below surface:	Not Reported
Feet to sea level:	2327	Note:	Not Reported
Level reading date:	1934-10-11	Feet below surface:	Not Reported
Feet to sea level:	2327	Note:	Not Reported
Level reading date:	1934-07-12	Feet below surface:	Not Reported
Feet to sea level:	2327	Note:	Not Reported
Level reading date:	1934-04-04	Feet below surface:	Not Reported
Feet to sea level:	2328	Note:	Not Reported
Level reading date:	1933-12-07	Feet below surface:	Not Reported
Feet to sea level:	2328	Note:	Not Reported

Level reading date:	1933-10-12	Feet below surface:	Not Reported
Feet to sea level:	2328	Note:	Not Reported
Level reading date:	1933-06-08	Feet below surface:	Not Reported
Feet to sea level:	2329	Note:	Not Reported
Level reading date:	1932-12-06	Feet below surface:	Not Reported
Feet to sea level:	2329	Note:	Not Reported
Level reading date:	1932-10-11	Feet below surface:	Not Reported
Feet to sea level:	2330	Note:	Not Reported
Level reading date:	1932-07-07	Feet below surface:	Not Reported
Feet to sea level:	2330	Note:	Not Reported
Level reading date:	1932-04-09	Feet below surface:	Not Reported
Feet to sea level:	2330	Note:	Not Reported
Level reading date:	1931-10-08	Feet below surface:	Not Reported
Feet to sea level:	2330	Note:	Not Reported
Level reading date:	1931-06-08	Feet below surface:	Not Reported
Feet to sea level:	2331	Note:	Not Reported
Level reading date:	1931-03-05	Feet below surface:	Not Reported
Feet to sea level:	2331	Note:	Not Reported
Level reading date:	1930-10-01	Feet below surface:	Not Reported
Feet to sea level:	2331	Note:	Not Reported
Level reading date:	1930-06-04	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported
Level reading date:	1930-03-19	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported
Level reading date:	1930-02-04	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported
Level reading date:	1929-10-12	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported
Level reading date:	1929-08-03	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported
Level reading date:	1929-06-11	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported
Level reading date:	1929-04-12	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported
Level reading date:	1929-03-04	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported
Level reading date:	1929-02-04	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported
Level reading date:	1929-01-03	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1928-12-04	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported

Level reading date:	1928-11-01	Feet below surface:	Not Reported
Feet to sea level:	2332	Note:	Not Reported
Level reading date:	1928-10-05	Feet below surface:	Not Reported
Feet to sea level:	2327	Note:	Not Reported
Level reading date:	1928-09-05	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1928-08-02	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1928-07-02	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1928-06-02	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1928-04-20	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1928-04-03	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1928-03-02	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1928-02-02	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1928-01-10	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1927-12-05	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1927-11-01	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1927-10-07	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1927-09-02	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1927-08-04	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1927-07-06	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1927-06-04	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1927-04-30	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported
Level reading date:	1927-04-14	Feet below surface:	Not Reported
Feet to sea level:	2333	Note:	Not Reported

Map ID Direction Distance				
Elevation		[	Database	EDR ID Number
B4 South 1/4 - 1/2 Mile Lower		c	A WELLS	CADWR8000006143
State Well #: Well Name: Well Type: Basin Name:	03S01W12E001S 335543116564801 Single Well San Timoteo	Station ID: Well Use: Well Depth: Well Completion Rpt #:	2535 Obse 480 Not F	4 ervation Reported
B5 SSE 1/4 - 1/2 Mile Lower		F	ED USGS	USGS40000139093
Organization ID: Organization Name: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-CA USGS California Water Science Ce 003S001W12E001S Not Reported Not Reported Basin and Range basin-fill aquifers Not Reported Not Reported ft	enter Type: HUC: Drainage Area Units: Contrib Drainage Area Unt Aquifer Type: Well Depth: Well Hole Depth:	Well Not F Not F S: Not F 480 529	Reported Reported Reported Reported
6 SSE 1/4 - 1/2 Mile Lower		F	ED USGS	USGS40000139087
Organization ID: Organization Name: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-CA USGS California Water Science Ce 003S001W12E002S Not Reported Not Reported Basin and Range basin-fill aquifers Not Reported Not Reported ft Not Reported	enter Type: HUC: Drainage Area Units: Contrib Drainage Area Unt Aquifer Type: Well Depth: Well Hole Depth:	Well 1807 Not F s: Not F 390 Not F	0202 Reported Reported Reported
Ground water levels,Number Feet below surface: Note:	of Measurements: 252 Not Reported Not Reported	Level reading date: Feet to sea level:	1993 2232	-10-14
Level reading date: Feet to sea level:	1992-01-29 2239	Feet below surface: Note:	Not F Not F	Reported Reported
Level reading date: Feet to sea level:	1981-09-15 2226	Feet below surface: Note:	Not F Not F	Reported Reported
Level reading date:	1980-07-16	Feet below surface:	Not F	Reported

Feet to sea level:	2221	Note:	Not Reported
Level reading date:	1980-06-16	Feet below surface:	Not Reported
Feet to sea level:	2220	Note:	Not Reported
Level reading date:	1980-01-30	Feet below surface:	Not Reported
Feet to sea level:	2218	Note:	Not Reported
Level reading date:	1979-12-30	Feet below surface:	Not Reported
Feet to sea level:	2220	Note:	Not Reported
Level reading date:	1979-11-30	Feet below surface:	Not Reported
Feet to sea level:	2229	Note:	Not Reported
Level reading date:	1979-10-30	Feet below surface:	Not Reported
Feet to sea level:	2230	Note:	Not Reported
Level reading date:	1979-10-10	Feet below surface:	Not Reported
Feet to sea level:	2229	Note:	Not Reported
Level reading date:	1979-09-26	Feet below surface:	Not Reported
Feet to sea level:	2230	Note:	Not Reported
Level reading date:	1979-03-15	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1979-02-15	Feet below surface:	Not Reported
Feet to sea level:	2252	Note:	Not Reported
Level reading date:	1979-01-15	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1978-12-15	Feet below surface:	Not Reported
Feet to sea level:	2248	Note:	Not Reported
Level reading date:	1975-07-21	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1975-05-25	Feet below surface:	Not Reported
Feet to sea level:	2238	Note:	Not Reported
Level reading date:	1975-05-06	Feet below surface:	Not Reported
Feet to sea level:	2239	Note:	Not Reported
Level reading date:	1975-04-15	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1975-03-28	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1975-02-28	Feet below surface:	Not Reported
Feet to sea level:	2249	Note:	Not Reported
Level reading date:	1975-01-30	Feet below surface:	Not Reported
Feet to sea level:	2243	Note:	Not Reported
Level reading date:	1975-01-12	Feet below surface:	Not Reported
Feet to sea level:	2244	Note:	Not Reported
Level reading date:	1974-12-16	Feet below surface:	Not Reported
Feet to sea level:	2244	Note:	Not Reported

Level reading date:	1974-11-11	Feet below surface:	Not Reported
Feet to sea level:	2244	Note:	Not Reported
Level reading date:	1974-10-10	Feet below surface:	Not Reported
Feet to sea level:	2242	Note:	Not Reported
Level reading date:	1974-09-24	Feet below surface:	Not Reported
Feet to sea level:	2237	Note:	Not Reported
Level reading date:	1974-09-03	Feet below surface:	Not Reported
Feet to sea level:	2236	Note:	Not Reported
Level reading date:	1974-08-19	Feet below surface:	Not Reported
Feet to sea level:	2238	Note:	Not Reported
Level reading date:	1974-08-05	Feet below surface:	Not Reported
Feet to sea level:	2242	Note:	Not Reported
Level reading date:	1974-07-15	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1974-06-24	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1974-06-05	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1974-05-18	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1974-05-01	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1974-04-15	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1974-03-27	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1974-02-25	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1974-01-28	Feet below surface:	Not Reported
Feet to sea level:	2246	Note:	Not Reported
Level reading date:	1973-12-28	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1973-11-22	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1973-10-22	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1973-10-10	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1973-09-28	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1973-09-14	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported

Level reading date:	1973-08-06	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1973-07-17	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1973-07-06	Feet below surface:	Not Reported
Feet to sea level:	2245	Note:	Not Reported
Level reading date:	1973-06-30	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1973-06-14	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1973-05-23	Feet below surface:	Not Reported
Feet to sea level:	2248	Note:	Not Reported
Level reading date:	1973-05-09	Feet below surface:	Not Reported
Feet to sea level:	2249	Note:	Not Reported
Level reading date:	1973-04-15	Feet below surface:	Not Reported
Feet to sea level:	2248	Note:	Not Reported
Level reading date:	1973-03-15	Feet below surface:	Not Reported
Feet to sea level:	2248	Note:	Not Reported
Level reading date:	1973-02-23	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1973-02-15	Feet below surface:	Not Reported
Feet to sea level:	2248	Note:	Not Reported
Level reading date:	1973-01-15	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1972-12-14	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1972-11-12	Feet below surface:	Not Reported
Feet to sea level:	2249	Note:	Not Reported
Level reading date:	1972-10-30	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1972-10-12	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1972-04-07	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1972-01-28	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1971-09-03	Feet below surface:	Not Reported
Feet to sea level:	2248	Note:	Not Reported
Level reading date:	1971-09-01	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1971-08-16	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported

Level reading date:	1971-07-01	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1971-06-01	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1971-05-10	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1971-04-05	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1971-03-24	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1971-02-24	Feet below surface:	Not Reported
Feet to sea level:	2248	Note:	Not Reported
Level reading date:	1971-02-10	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1971-01-22	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1971-01-18	Feet below surface:	Not Reported
Feet to sea level:	2249	Note:	Not Reported
Level reading date:	1970-12-07	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1970-11-05	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1970-10-20	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1970-10-17	Feet below surface:	Not Reported
Feet to sea level:	2248	Note:	Not Reported
Level reading date:	1970-09-23	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1970-09-02	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1970-08-18	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1970-08-07	Feet below surface:	Not Reported
Feet to sea level:	2249	Note:	Not Reported
Level reading date:	1970-08-03	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1970-07-13	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1970-06-26	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1970-06-08	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported

Level reading date:	1970-05-18	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1970-05-03	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1970-04-16	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1970-03-23	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1970-02-23	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1970-01-21	Feet below surface:	Not Reported
Feet to sea level:	2247	Note:	Not Reported
Level reading date:	1969-12-31	Feet below surface:	Not Reported
Feet to sea level:	2248	Note:	Not Reported
Level reading date:	1969-12-28	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported
Level reading date:	1969-12-01	Feet below surface:	Not Reported
Feet to sea level:	2252	Note:	Not Reported
Level reading date:	1969-11-12	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-10-24	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-09-24	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-09-08	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-08-22	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-08-13	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-07-22	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-07-05	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-06-18	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-06-02	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-05-07	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-04-07	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported

Level reading date:	1969-03-28	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1969-03-10	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1969-02-04	Feet below surface:	Not Reported
Feet to sea level:	2252	Note:	Not Reported
Level reading date:	1969-01-23	Feet below surface:	Not Reported
Feet to sea level:	2252	Note:	Not Reported
Level reading date:	1968-12-30	Feet below surface:	Not Reported
Feet to sea level:	2252	Note:	Not Reported
Level reading date:	1968-11-22	Feet below surface:	Not Reported
Feet to sea level:	2251	Note:	Not Reported
Level reading date:	1968-11-19	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1968-10-21	Feet below surface:	Not Reported
Feet to sea level:	2252	Note:	Not Reported
Level reading date:	1968-10-08	Feet below surface:	Not Reported
Feet to sea level:	2248	Note:	Not Reported
Level reading date:	1968-02-09	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1967-10-20	Feet below surface:	Not Reported
Feet to sea level:	2255	Note:	Not Reported
Level reading date:	1967-07-29	Feet below surface:	Not Reported
Feet to sea level:	2256	Note:	Not Reported
Level reading date:	1966-09-11	Feet below surface:	Not Reported
Feet to sea level:	2262	Note:	Not Reported
Level reading date:	1966-09-05	Feet below surface:	Not Reported
Feet to sea level:	2266	Note:	Not Reported
Level reading date:	1966-08-26	Feet below surface:	Not Reported
Feet to sea level:	2258	Note:	Not Reported
Level reading date:	1966-08-14	Feet below surface:	Not Reported
Feet to sea level:	2262	Note:	Not Reported
Level reading date:	1966-07-28	Feet below surface:	Not Reported
Feet to sea level:	2267	Note:	Not Reported
Level reading date:	1966-07-12	Feet below surface:	Not Reported
Feet to sea level:	2263	Note:	Not Reported
Level reading date:	1966-06-13	Feet below surface:	Not Reported
Feet to sea level:	2266	Note:	Not Reported
Level reading date:	1966-06-01	Feet below surface:	Not Reported
Feet to sea level:	2264	Note:	Not Reported
Level reading date:	1966-05-16	Feet below surface:	Not Reported
Feet to sea level:	2266	Note:	Not Reported

Level reading date:	1966-05-06	Feet below surface:	Not Reported
Feet to sea level:	2259	Note:	Not Reported
Level reading date:	1966-05-01	Feet below surface:	Not Reported
Feet to sea level:	2271	Note:	Not Reported
Level reading date:	1966-04-18	Feet below surface:	Not Reported
Feet to sea level:	2258	Note:	Not Reported
Level reading date:	1966-03-22	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1966-02-21	Feet below surface:	Not Reported
Feet to sea level:	2264	Note:	Not Reported
Level reading date:	1966-01-25	Feet below surface:	Not Reported
Feet to sea level:	2259	Note:	Not Reported
Level reading date:	1966-01-07	Feet below surface:	Not Reported
Feet to sea level:	2260	Note:	Not Reported
Level reading date:	1965-12-31	Feet below surface:	Not Reported
Feet to sea level:	2262	Note:	Not Reported
Level reading date:	1965-12-01	Feet below surface:	Not Reported
Feet to sea level:	2266	Note:	Not Reported
Level reading date:	1965-11-08	Feet below surface:	Not Reported
Feet to sea level:	2262	Note:	Not Reported
Level reading date:	1965-10-05	Feet below surface:	Not Reported
Feet to sea level:	2262	Note:	Not Reported
Level reading date:	1965-09-07	Feet below surface:	Not Reported
Feet to sea level:	2263	Note:	Not Reported
Level reading date:	1965-08-04	Feet below surface:	Not Reported
Feet to sea level:	2263	Note:	Not Reported
Level reading date:	1965-07-01	Feet below surface:	Not Reported
Feet to sea level:	2263	Note:	Not Reported
Level reading date:	1965-06-03	Feet below surface:	Not Reported
Feet to sea level:	2265	Note:	Not Reported
Level reading date:	1965-05-05	Feet below surface:	Not Reported
Feet to sea level:	2261	Note:	Not Reported
Level reading date:	1965-04-23	Feet below surface:	Not Reported
Feet to sea level:	2262	Note:	Not Reported
Level reading date:	1965-04-14	Feet below surface:	Not Reported
Feet to sea level:	2262	Note:	Not Reported
Level reading date:	1965-03-03	Feet below surface:	Not Reported
Feet to sea level:	2264	Note:	Not Reported
Level reading date:	1965-02-05	Feet below surface:	Not Reported
Feet to sea level:	2264	Note:	Not Reported
Level reading date:	1965-01-20	Feet below surface:	Not Reported
Feet to sea level:	2262	Note:	Not Reported

Level reading date:	1965-01-05	Feet below surface:	Not Reported
Feet to sea level:	2264	Note:	Not Reported
Level reading date:	1964-12-11	Feet below surface:	Not Reported
Feet to sea level:	2263	Note:	Not Reported
Level reading date:	1964-12-01	Feet below surface:	Not Reported
Feet to sea level:	2278	Note:	Not Reported
Level reading date:	1964-10-28	Feet below surface:	Not Reported
Feet to sea level:	2265	Note:	Not Reported
Level reading date:	1964-09-28	Feet below surface:	Not Reported
Feet to sea level:	2265	Note:	Not Reported
Level reading date:	1964-08-28	Feet below surface:	Not Reported
Feet to sea level:	2266	Note:	Not Reported
Level reading date:	1964-08-21	Feet below surface:	Not Reported
Feet to sea level:	2263	Note:	Not Reported
Level reading date:	1964-07-28	Feet below surface:	Not Reported
Feet to sea level:	2263	Note:	Not Reported
Level reading date:	1964-06-28	Feet below surface:	Not Reported
Feet to sea level:	2267	Note:	Not Reported
Level reading date:	1964-06-19	Feet below surface:	Not Reported
Feet to sea level:	2264	Note:	Not Reported
Level reading date:	1964-05-22	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1964-04-23	Feet below surface:	Not Reported
Feet to sea level:	2277	Note:	Not Reported
Level reading date:	1964-04-10	Feet below surface:	Not Reported
Feet to sea level:	2264	Note:	Not Reported
Level reading date:	1964-03-19	Feet below surface:	Not Reported
Feet to sea level:	2273	Note:	Not Reported
Level reading date:	1964-02-25	Feet below surface:	Not Reported
Feet to sea level:	2274	Note:	Not Reported
Level reading date:	1964-02-06	Feet below surface:	Not Reported
Feet to sea level:	2265	Note:	Not Reported
Level reading date:	1964-01-20	Feet below surface:	Not Reported
Feet to sea level:	2290	Note:	Not Reported
Level reading date:	1963-12-16	Feet below surface:	Not Reported
Feet to sea level:	2283	Note:	Not Reported
Level reading date:	1963-12-06	Feet below surface:	Not Reported
Feet to sea level:	2265	Note:	Not Reported
Level reading date:	1963-11-12	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1963-10-14	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported

Level reading date:	1963-09-27	Feet below surface:	Not Reported
Feet to sea level:	2266	Note:	Not Reported
Level reading date:	1963-08-30	Feet below surface:	Not Reported
Feet to sea level:	2267	Note:	Not Reported
Level reading date:	1963-07-11	Feet below surface:	Not Reported
Feet to sea level:	2269	Note:	Not Reported
Level reading date:	1963-06-07	Feet below surface:	Not Reported
Feet to sea level:	2266	Note:	Not Reported
Level reading date:	1963-05-14	Feet below surface:	Not Reported
Feet to sea level:	2269	Note:	Not Reported
Level reading date:	1963-04-11	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1963-03-27	Feet below surface:	Not Reported
Feet to sea level:	2266	Note:	Not Reported
Level reading date:	1963-03-14	Feet below surface:	Not Reported
Feet to sea level:	2269	Note:	Not Reported
Level reading date:	1963-02-13	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1963-01-24	Feet below surface:	Not Reported
Feet to sea level:	2267	Note:	Not Reported
Level reading date:	1963-01-16	Feet below surface:	Not Reported
Feet to sea level:	2272	Note:	Not Reported
Level reading date:	1962-12-12	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1962-12-08	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1962-11-09	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1962-10-23	Feet below surface:	Not Reported
Feet to sea level:	2269	Note:	Not Reported
Level reading date:	1962-10-05	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1962-09-20	Feet below surface:	Not Reported
Feet to sea level:	2271	Note:	Not Reported
Level reading date:	1962-09-04	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1962-08-22	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1962-08-03	Feet below surface:	Not Reported
Feet to sea level:	2271	Note:	Not Reported
Level reading date:	1962-06-08	Feet below surface:	Not Reported
Feet to sea level:	2269	Note:	Not Reported

Level reading date:	1962-05-04	Feet below surface:	Not Reported
Feet to sea level:	2271	Note:	Not Reported
Level reading date:	1962-04-06	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1962-03-16	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1962-02-16	Feet below surface:	Not Reported
Feet to sea level:	2276	Note:	Not Reported
Level reading date:	1962-01-26	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1962-01-16	Feet below surface:	Not Reported
Feet to sea level:	2269	Note:	Not Reported
Level reading date:	1961-12-27	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1961-12-06	Feet below surface:	Not Reported
Feet to sea level:	2273	Note:	Not Reported
Level reading date:	1961-12-01	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1961-10-13	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1961-10-06	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1961-09-25	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1961-09-12	Feet below surface:	Not Reported
Feet to sea level:	2269	Note:	Not Reported
Level reading date:	1961-08-29	Feet below surface:	Not Reported
Feet to sea level:	2267	Note:	Not Reported
Level reading date:	1961-08-14	Feet below surface:	Not Reported
Feet to sea level:	2266	Note:	Not Reported
Level reading date:	1961-08-03	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1961-07-18	Feet below surface:	Not Reported
Feet to sea level:	2269	Note:	Not Reported
Level reading date:	1961-07-05	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1961-06-21	Feet below surface:	Not Reported
Feet to sea level:	2266	Note:	Not Reported
Level reading date:	1961-06-08	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1961-05-23	Feet below surface:	Not Reported
Feet to sea level:	2256	Note:	Not Reported
I should be a discondition	1001 05 00	E a thalan and a	Net Demented
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Level reading date:	1961-05-03	Feet below surface:	Not Reported
Feet to sea level:	2271	Note:	Not Reported
Level reading date:	1961-04-17	Feet below surface:	Not Reported
Feet to sea level:	2255	Note:	Not Reported
Level reading date:	1961-03-31	Feet below surface:	Not Reported
Feet to sea level:	2267	Note:	Not Reported
Level reading date:	1961-03-24	Feet below surface:	Not Reported
Feet to sea level:	2268	Note:	Not Reported
Level reading date:	1961-02-25	Feet below surface:	Not Reported
Feet to sea level:	2276	Note:	Not Reported
Level reading date:	1960-02-05	Feet below surface:	Not Reported
Feet to sea level:	2277	Note:	Not Reported
Level reading date:	1959-12-11	Feet below surface:	Not Reported
Feet to sea level:	2277	Note:	Not Reported
Level reading date:	1959-04-15	Feet below surface:	Not Reported
Feet to sea level:	2286	Note:	Not Reported
Level reading date:	1959-04-06	Feet below surface:	Not Reported
Feet to sea level:	2282	Note:	Not Reported
Level reading date:	1959-03-25	Feet below surface:	Not Reported
Feet to sea level:	2274	Note:	Not Reported
Level reading date:	1959-03-16	Feet below surface:	Not Reported
Feet to sea level:	2276	Note:	Not Reported
Level reading date:	1959-03-04	Feet below surface:	Not Reported
Feet to sea level:	2282	Note:	Not Reported
Level reading date:	1959-02-25	Feet below surface:	Not Reported
Feet to sea level:	2281	Note:	Not Reported
Level reading date:	1959-02-18	Feet below surface:	Not Reported
Feet to sea level:	2282	Note:	Not Reported
Level reading date:	1959-02-14	Feet below surface:	Not Reported
Feet to sea level:	2282	Note:	Not Reported
Level reading date:	1959-02-04	Feet below surface:	Not Reported
Feet to sea level:	2282	Note:	Not Reported
Level reading date:	1959-01-28	Feet below surface:	Not Reported
Feet to sea level:	2282	Note:	Not Reported
Level reading date:	1959-01-20	Feet below surface:	Not Reported
Feet to sea level:	2279	Note:	Not Reported
Level reading date:	1958-12-31	Feet below surface:	Not Reported
Feet to sea level:	2282	Note:	Not Reported
Level reading date:	1958-12-15	Feet below surface:	Not Reported
Feet to sea level:	2282	Note:	Not Reported
Level reading date:	1958-12-01	Feet below surface:	Not Reported
Feet to sea level:	2283	Note:	Not Reported

Level reading date:	1958-11-15	Feet below surface:	Not Reported
Feet to sea level:	2283	Note:	Not Reported
Level reading date:	1958-10-01	Feet below surface:	Not Reported
Feet to sea level:	2284	Note:	Not Reported
Level reading date:	1958-09-15	Feet below surface:	Not Reported
Feet to sea level:	2270	Note:	Not Reported
Level reading date:	1958-08-30	Feet below surface:	Not Reported
Feet to sea level:	2284	Note:	Not Reported
Level reading date:	1958-08-08	Feet below surface:	Not Reported
Feet to sea level:	2286	Note:	Not Reported
Level reading date:	1958-06-11	Feet below surface:	Not Reported
Feet to sea level:	2287	Note:	Not Reported
Level reading date:	1958-04-11	Feet below surface:	Not Reported
Feet to sea level:	2285	Note:	Not Reported
Level reading date:	1958-02-07	Feet below surface:	Not Reported
Feet to sea level:	2288	Note:	Not Reported
Level reading date:	1957-12-13	Feet below surface:	Not Reported
Feet to sea level:	2286	Note:	Not Reported
Level reading date:	1957-02-14	Feet below surface:	Not Reported
Feet to sea level:	2291	Note:	Not Reported
Level reading date:	1957-02-04	Feet below surface:	Not Reported
Feet to sea level:	2291	Note:	Not Reported
Level reading date:	1957-01-22	Feet below surface:	Not Reported
Feet to sea level:	2289	Note:	Not Reported
Level reading date:	1957-01-17	Feet below surface:	Not Reported
Feet to sea level:	2288	Note:	Not Reported
Level reading date:	1957-01-11	Feet below surface:	Not Reported
Feet to sea level:	2288	Note:	Not Reported
Level reading date:	1957-01-03	Feet below surface:	Not Reported
Feet to sea level:	2288	Note:	Not Reported
Level reading date:	1956-12-28	Feet below surface:	Not Reported
Feet to sea level:	2287	Note:	Not Reported
Level reading date:	1956-09-28	Feet below surface:	Not Reported
Feet to sea level:	2288	Note:	Not Reported
Level reading date:	1956-08-08	Feet below surface:	Not Reported
Feet to sea level:	2250	Note:	Not Reported

C7 East 1/2 - 1 Mile Lower

> Organization ID: Organization Name:

USGS-CA USGS California Water Science Center FED USGS USGS40000139132

Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	003S001W01Q001S Not Reported Not Reported Basin and Range basin-fill aquifers Not Reported 19611210 ft ft	Type: HUC: Drainage Area Units: Contrib Drainage Area Unts: Aquifer Type: Well Depth: Well Hole Depth:	Well Not Reported Not Reported Not Reported 1152 1210
Ground water levels,Number of M Feet below surface: Note:	leasurements: 29 Not Reported Not Reported	Level reading date: Feet to sea level:	1993-04-28 2223
Level reading date:	1993-04-13	Feet below surface:	Not Reported
Feet to sea level:	2224	Note:	Not Reported
Level reading date:	1993-03-16	Feet below surface:	Not Reported
Feet to sea level:	2223	Note:	Not Reported
Level reading date:	1991-11-06	Feet below surface:	Not Reported
Feet to sea level:	2227	Note:	Not Reported
Level reading date:	1969-08-22	Feet below surface:	Not Reported
Feet to sea level:	2242	Note:	Not Reported
Level reading date:	1969-06-06	Feet below surface:	Not Reported
Feet to sea level:	2242	Note:	Not Reported
Level reading date:	1969-03-28	Feet below surface:	Not Reported
Feet to sea level:	2242	Note:	Not Reported
Level reading date:	1968-11-22	Feet below surface:	Not Reported
Feet to sea level:	2238	Note:	Not Reported
Level reading date:	1968-02-09	Feet below surface:	Not Reported
Feet to sea level:	2246	Note:	Not Reported
Level reading date:	1967-05-12	Feet below surface:	Not Reported
Feet to sea level:	2249	Note:	Not Reported
Level reading date:	1965-04-23	Feet below surface:	Not Reported
Feet to sea level:	2253	Note:	Not Reported
Level reading date:	1965-02-12	Feet below surface:	Not Reported
Feet to sea level:	2253	Note:	Not Reported
Level reading date:	1964-12-11	Feet below surface:	Not Reported
Feet to sea level:	2253	Note:	Not Reported
Level reading date:	1964-10-12	Feet below surface:	Not Reported
Feet to sea level:	2253	Note:	Not Reported
Level reading date:	1964-08-21	Feet below surface:	Not Reported
Feet to sea level:	2253	Note:	Not Reported
Level reading date:	1964-06-19	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1964-04-10	Feet below surface:	Not Reported
Feet to sea level:	2255	Note:	Not Reported

Level reading date:	1964-02-06	Feet below surface:	Not Reported
Feet to sea level:	2254	Note:	Not Reported
Level reading date:	1963-12-06	Feet below surface:	Not Reported
Feet to sea level:	2256	Note:	Not Reported
Level reading date:	1963-09-27	Feet below surface:	Not Reported
Feet to sea level:	2246	Note:	Not Reported
Level reading date:	1963-08-01	Feet below surface:	Not Reported
Feet to sea level:	2257	Note:	Not Reported
Level reading date:	1963-06-07	Feet below surface:	Not Reported
Feet to sea level:	2258	Note:	Not Reported
Level reading date:	1963-03-29	Feet below surface:	Not Reported
Feet to sea level:	2258	Note:	Not Reported
Level reading date:	1963-01-24	Feet below surface:	Not Reported
Feet to sea level:	2258	Note:	Not Reported
Level reading date:	1962-12-14	Feet below surface:	Not Reported
Feet to sea level:	2258	Note:	Not Reported
Level reading date:	1962-10-05	Feet below surface:	Not Reported
Feet to sea level:	2259	Note:	Not Reported
Level reading date:	1962-08-03	Feet below surface:	Not Reported
Feet to sea level:	2260	Note:	Not Reported
Level reading date:	1962-05-25	Feet below surface:	Not Reported
Feet to sea level:	2260	Note:	Not Reported
Level reading date:	1962-04-06	Feet below surface:	Not Reported
Feet to sea level:	2261	Note:	Not Reported

#### C8 East 1/2 - 1 Mile

Lower State Well #:

Well Name: Well Type: Basin Name: 03S01W01Q001S 335601116561701 Single Well San Gorgonio Pass

#### CA WELLS CADWR8000006162

Station ID: Well Use: Well Depth: Well Completion Rpt #:

25353 Observation 1152 100212

D9 East 1/2 - 1 Mile Lower

> Organization ID: Organization Name: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type:

FED USGS USGS40000139128

USGS-CA USGS California Water Science Center 003S001W12B001S Type: Not Reported HUC: Not Reported Drainage Area Not Reported Contrib Drainage Basin and Range basin-fill aquifers Not Reported Aquifer Type:

Type: Well HUC: Not F Drainage Area Units: Not F Contrib Drainage Area Unts: Not F

Not Reported Not Reported Not Reported

Not Reported

Construction Date: Well Depth Units: Well Hole Depth Units:	Not Reported ft Not Reported		Well Depth: Well Hole Depth:	480 Not Reported
Ground water levels,Number of I Feet below surface: Note:	Measurements: Not Reported Not Reported	18	Level reading date: Feet to sea level:	1951-07-09 2428
Level reading date:	1941-06-24		Feet below surface:	Not Reported
Feet to sea level:	2307		Note:	Not Reported
Level reading date:	1941-02-03		Feet below surface:	Not Reported
Feet to sea level:	2307		Note:	Not Reported
Level reading date:	1940-06-13		Feet below surface:	Not Reported
Feet to sea level:	2308		Note:	Not Reported
Level reading date:	1940-03-26		Feet below surface:	Not Reported
Feet to sea level:	2309		Note:	Not Reported
Level reading date:	1939-06-21		Feet below surface:	Not Reported
Feet to sea level:	2309		Note:	Not Reported
Level reading date:	1939-03-09		Feet below surface:	Not Reported
Feet to sea level:	2310		Note:	Not Reported
Level reading date:	1938-11-18		Feet below surface:	Not Reported
Feet to sea level:	2300		Note:	Not Reported
Level reading date:	1938-08-12		Feet below surface:	Not Reported
Feet to sea level:	2305		Note:	Not Reported
Level reading date:	1938-05-11		Feet below surface:	Not Reported
Feet to sea level:	2310		Note:	Not Reported
Level reading date:	1937-12-16		Feet below surface:	Not Reported
Feet to sea level:	2310		Note:	Not Reported
Level reading date:	1929-04-12		Feet below surface:	Not Reported
Feet to sea level:	2321		Note:	Not Reported
Level reading date:	1928-10-05		Feet below surface:	Not Reported
Feet to sea level:	2321		Note:	Not Reported
Level reading date:	1928-08-02		Feet below surface:	Not Reported
Feet to sea level:	2321		Note:	Not Reported
Level reading date:	1927-10-07		Feet below surface:	Not Reported
Feet to sea level:	2321		Note:	Not Reported
Level reading date:	1927-08-04		Feet below surface:	Not Reported
Feet to sea level:	2321		Note:	Not Reported
Level reading date:	1927-04-30		Feet below surface:	Not Reported
Feet to sea level:	2321		Note:	Not Reported
Level reading date:	1926-12-13		Feet below surface:	Not Reported
Feet to sea level:	2321		Note:	Not Reported

Map ID				
Direction				
Distance		_		
Elevation		Da	atabase	EDR ID Number
D10				
East		FE	ED USGS	USGS40000139123
1/2 - 1 Mile				
Lower				
Organization ID:				
Organization ID.		1		
Organization Name:	USGS California water Science Cen			
Monitor Location:	003S001W12B002S	Туре:	Well	
Description:	Not Reported	HUC:	18100	0200
Drainage Area:	Not Reported	Drainage Area Units:	Not R	eported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts	: Not R	eported
Aquifer:	Basin and Range basin-fill aquifers	-		
Formation Type:	Not Reported	Aquifer Type:	Not R	eported
Construction Date:	19900914	Well Depth	1030	
Well Depth Units:	ft	Well Hole Depth:	1065	
Well Hele Dopth Units:	ft		1000	
Weil Hole Depth Offits.	It			
Ground water levels,Numbe	r of Measurements: 14	Level reading date:	1999-	04-01
Feet below surface:	385	Feet to sea level:	Not R	eported
Note	The site was being numped		Hoth	oponod
1000	The site was being pumped.			
Lovel reading date:	1008 11 01	Foot bolow surface:	396	
East to one lovel:	Not Poportod	Noto:	300 The e	ite wee being numped
Feel to sea level.	Not Reported	Note.	The s	ne was being pumpeu.
Level reading date:	1998-06-14	Feet below surface	388	
Feet to sea level	Not Reported	Note:	The s	ite was being numped
	Nor Reported		The s	ne was being pumped.
Level reading date:	1997-10-20	Feet below surface:	Not R	eported
Feet to sea level:	2148	Note:	Not R	eported
Level reading date:	1997-05-15	Feet below surface:	Not R	eported
Feet to sea level:	2232	Note:	Not R	eported
				•
Level reading date:	1996-09-17	Feet below surface:	351.8	3
Feet to sea level:	Not Reported	Note:	Not R	eported
Level reading date:	1996-05-15	Feet below surface:	Not R	eported
Feet to sea level	2234	Note:	Not R	eported
	2204	Note:	Notin	oponed
Lovel reading date:	1005 11 17	Foot bolow surface:	Not P	oported
East to app lovel:	2212	Noto:		eported
reel lo sea level.	2212	Note.		eponed
Lovel reading data	1005 05 10			anartad
Level reading date:	1995-05-12	Feet below surface:		eported
Feet to sea level:	2180	Note:	NOT R	еропеа
Lovel reading data	1004 11 00			anartad
	1994-11-09	Neto:		
Feel lo sea level.	2100	Note.	NOL K	eponed
Level reading date:	1993-06-07	Feet below surface:	Not R	enorted
East to one lovel:	1993-00-07	Noto:		eported
Feel to sea level.		Note.		eponeu
Level reading date:	1993-06-06	Feet below surface:	Not P	eported
Feet to see level.	2222	Note		enorted
		1000.		oponou
Level reading date.	1993-06-05	Feet below surface.	Not R	eported
Feet to sea level	2222	Note:	Not R	eported
Level reading date:	1993-04-29	Feet below surface.	Not R	eported
Fact to see level.	2214	Note		enorted
1 CCL 10 SCA IEVEI.	2217	INULC.		oponeu

Map ID Direction Distance Elevation		C	Database	EDR ID Number
11 ESE 1/2 - 1 Mile Lower		F	ED USGS	USGS40000139086
Organization ID: Organization Name: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-CA USGS California Water Science Cer 003S001W12G001S Not Reported Not Reported Basin and Range basin-fill aquifers Not Reported Not Reported Not Reported Not Reported	tter Type: HUC: Drainage Area Units: Contrib Drainage Area Unt Aquifer Type: Well Depth: Well Hole Depth:	Well Not F Not F S: Not F Not F Not F	Reported Reported Reported Reported Reported Reported
E12 SE 1/2 - 1 Mile Lower		c	A WELLS	CADWR8000006114
State Well #: Well Name: Well Type: Basin Name:	03S01W12L001S 335519116561701 Single Well San Timoteo	Station ID: Well Use: Well Depth: Well Completion Rpt #:	2915 Obse 0 Not F	5 prvation Reported
13 East 1/2 - 1 Mile Lower		F	ED USGS	USGS40000139115
Organization ID: Organization Name: Monitor Location: Description: Drainage Area: Contrib Drainage Area: Aquifer: Formation Type: Construction Date: Well Depth Units: Well Hole Depth Units:	USGS-CA USGS California Water Science Cer 003S001W12A002S Not Reported Not Reported Basin and Range basin-fill aquifers Not Reported 19220101 Not Reported ft	tter Type: HUC: Drainage Area Units: Contrib Drainage Area Unt Aquifer Type: Well Depth: Well Hole Depth:	Well Not F Not F S: Not F Not F Not F 2236	Reported Reported Reported Reported Reported
Ground water levels,Number Feet below surface: Note:	of Measurements: 12 Not Reported Not Reported	Level reading date: Feet to sea level:	1929 2301	-04-12
Level reading date: Feet to sea level:	1928-10-05 2301	Feet below surface: Note:	Not F Not F	Reported Reported
Level reading date: Feet to sea level:	1928-07-02 2301	Feet below surface: Note:	Not F Not F	Reported Reported
Level reading date:	1928-03-02	Feet below surface:	Not F	Reported

Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1928-01-10	Feet below surface:	Not Reported
Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1927-10-07	Feet below surface:	Not Reported
Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1927-09-02	Feet below surface:	Not Reported
Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1927-08-04	Feet below surface:	Not Reported
Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1927-07-06	Feet below surface:	Not Reported
Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1927-06-04	Feet below surface:	Not Reported
Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1927-04-30	Feet below surface:	Not Reported
Feet to sea level:	2301	Note:	Not Reported
Level reading date:	1926-12-13	Feet below surface:	Not Reported
Feet to sea level:	2302	Note:	Not Reported

#### E14 SE 1/2 - 1 Mile Lower

#### FED USGS USGS40000139034

Organization ID:	USGS-CA			
Organization Name:	USGS California Water Scie	ence Cente	r	
Monitor Location:	003S001W12L001S		Туре:	Well
Description:	Not Reported		HUC:	18100200
Drainage Area:	Not Reported		Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported		Contrib Drainage Area Unts:	Not Reported
Aquifer:	Other aquifers		Formation Type:	Not Reported
Aquifer Type:	Not Reported		Construction Date:	Not Reported
Well Depth:	Not Reported		Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported		Well Hole Depth Units:	Not Reported
Ground water levels Number of M	easurements: 12		Level reading date:	2004-10-26
Feet below surface:	140 1		Feet to sea level	Not Reported
Note:	Not Reported			nornoponou
Level reading date:	2004-04-22		Feet below surface:	135.1
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-11-19		Feet below surface:	135.3
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2003-04-29		Feet below surface:	133.1
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2002-11-07		Feet below surface:	131.1
Feet to sea level:	Not Reported		Note:	Not Reported
Level reading date:	2002-04-23		Feet below surface:	124.5
Feet to sea level:	Not Reported		Note:	Not Reported

Level reading date:	2001-11-06	Feet below surface:	124.3
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2001-05-15	Feet below surface:	125.1
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-10-24	Feet below surface:	126.6
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	2000-04-25	Feet below surface:	127.7
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1999-10-27	Feet below surface:	127.0
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1996-09-18	Feet below surface:	136.56
Feet to sea level:	Not Reported	Note:	Not Reported

#### 15 ESE 1/2 - 1 Mile Lower

#### Organization ID: USGS-CA Organization Name: USGS California Water Science Center Monitor Location: 003S001W12K001S Type: Well Description: HUC: 18100200 Not Reported Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area Unts: Contrib Drainage Area: Not Reported Not Reported Basin and Range basin-fill aquifers Aquifer: Formation Type: Not Reported Aquifer Type: Not Reported Well Depth: Construction Date: Not Reported Not Reported Well Hole Depth: Well Depth Units: Not Reported Not Reported Well Hole Depth Units: Not Reported 1997-10-20 Ground water levels, Number of Measurements: 83 Level reading date: Feet below surface: Not Reported Feet to sea level: 2225 Note: Not Reported Level reading date: 1997-05-15 Feet below surface: Not Reported Feet to sea level: Not Reported 2215 Note: Level reading date: 1995-11-17 Feet below surface: Not Reported Feet to sea level: 2206 Note: Not Reported Level reading date: 1995-05-12 Feet below surface: Not Reported Feet to sea level: 2211 Note: Not Reported Level reading date: 1994-11-09 Feet below surface: Not Reported Feet to sea level: 2105 Note: Not Reported Level reading date: 1993-06-05 Feet below surface: Not Reported Feet to sea level: 2189 Note: Not Reported 1993-06-04 Feet below surface: Level reading date: Not Reported Feet to sea level: 2190 Note: Not Reported Level reading date: 1993-05-04 Feet below surface: Not Reported Feet to sea level: 2189 Note: Not Reported

FED USGS

USGS40000139066

Level reading date:	1991-12-31	Feet below surface:	Not Reported
Feet to sea level:	2164	Note:	Not Reported
Level reading date:	1991-11-22	Feet below surface:	Not Reported
Feet to sea level:	2157	Note:	Not Reported
Level reading date:	1991-11-01	Feet below surface:	Not Reported
Feet to sea level:	2152	Note:	Not Reported
Level reading date:	1991-10-25	Feet below surface:	Not Reported
Feet to sea level:	2153	Note:	Not Reported
Level reading date:	1991-09-27	Feet below surface:	Not Reported
Feet to sea level:	2153	Note:	Not Reported
Level reading date:	1991-08-31	Feet below surface:	Not Reported
Feet to sea level:	2148	Note:	Not Reported
Level reading date:	1991-07-26	Feet below surface:	Not Reported
Feet to sea level:	2173	Note:	Not Reported
Level reading date:	1991-06-28	Feet below surface:	Not Reported
Feet to sea level:	2160	Note:	Not Reported
Level reading date:	1991-06-02	Feet below surface:	Not Reported
Feet to sea level:	2139	Note:	Not Reported
Level reading date:	1991-05-02	Feet below surface:	Not Reported
Feet to sea level:	2111	Note:	Not Reported
Level reading date:	1991-03-29	Feet below surface:	Not Reported
Feet to sea level:	2123	Note:	Not Reported
Level reading date:	1991-02-14	Feet below surface:	Not Reported
Feet to sea level:	2147	Note:	Not Reported
Level reading date:	1991-01-31	Feet below surface:	Not Reported
Feet to sea level:	2140	Note:	Not Reported
Level reading date:	1990-12-31	Feet below surface:	Not Reported
Feet to sea level:	2159	Note:	Not Reported
Level reading date:	1990-11-30	Feet below surface:	Not Reported
Feet to sea level:	2140	Note:	Not Reported
Level reading date:	1990-10-27	Feet below surface:	Not Reported
Feet to sea level:	2114	Note:	Not Reported
Level reading date:	1990-09-28	Feet below surface:	Not Reported
Feet to sea level:	2100	Note:	Not Reported
Level reading date:	1990-08-17	Feet below surface:	Not Reported
Feet to sea level:	2070	Note:	Not Reported
Level reading date:	1990-07-30	Feet below surface:	Not Reported
Feet to sea level:	2070	Note:	Not Reported
Level reading date:	1990-07-18	Feet below surface:	Not Reported
Feet to sea level:	2067	Note:	Not Reported
Level reading date:	1990-06-08	Feet below surface:	Not Reported
Feet to sea level:	2090	Note:	Not Reported

Level reading date:	1990-06-04	Feet below surface:	Not Reported
Feet to sea level:	2155	Note:	Not Reported
Level reading date:	1990-05-15	Feet below surface:	Not Reported
Feet to sea level:	2125	Note:	Not Reported
Level reading date:	1990-05-11	Feet below surface:	Not Reported
Feet to sea level:	2145	Note:	Not Reported
Level reading date:	1990-04-20	Feet below surface:	Not Reported
Feet to sea level:	2155	Note:	Not Reported
Level reading date:	1990-04-12	Feet below surface:	Not Reported
Feet to sea level:	2140	Note:	Not Reported
Level reading date:	1990-03-23	Feet below surface:	Not Reported
Feet to sea level:	2190	Note:	Not Reported
Level reading date:	1990-02-23	Feet below surface:	Not Reported
Feet to sea level:	2195	Note:	Not Reported
Level reading date:	1990-02-09	Feet below surface:	Not Reported
Feet to sea level:	2183	Note:	Not Reported
Level reading date:	1990-01-05	Feet below surface:	Not Reported
Feet to sea level:	2183	Note:	Not Reported
Level reading date:	1989-12-29	Feet below surface:	Not Reported
Feet to sea level:	2183	Note:	Not Reported
Level reading date:	1989-12-15	Feet below surface:	Not Reported
Feet to sea level:	2183	Note:	Not Reported
Level reading date:	1989-12-12	Feet below surface:	Not Reported
Feet to sea level:	2183	Note:	Not Reported
Level reading date:	1989-11-19	Feet below surface:	Not Reported
Feet to sea level:	2184	Note:	Not Reported
Level reading date:	1989-11-03	Feet below surface:	Not Reported
Feet to sea level:	2183	Note:	Not Reported
Level reading date:	1989-10-27	Feet below surface:	Not Reported
Feet to sea level:	2130	Note:	Not Reported
Level reading date:	1989-09-29	Feet below surface:	Not Reported
Feet to sea level:	2148	Note:	Not Reported
Level reading date:	1989-09-15	Feet below surface:	Not Reported
Feet to sea level:	2182	Note:	Not Reported
Level reading date:	1989-08-25	Feet below surface:	Not Reported
Feet to sea level:	2183	Note:	Not Reported
Level reading date:	1989-08-17	Feet below surface:	Not Reported
Feet to sea level:	2171	Note:	Not Reported
Level reading date:	1989-08-11	Feet below surface:	Not Reported
Feet to sea level:	2183	Note:	Not Reported
Level reading date:	1989-07-28	Feet below surface:	Not Reported
Feet to sea level:	2183	Note:	Not Reported

Level reading date:	1989-07-07	Feet below surface:	Not Reported
Feet to sea level:	2153	Note:	Not Reported
Level reading date:	1989-06-02	Feet below surface:	Not Reported
Feet to sea level:	2171	Note:	Not Reported
Level reading date:	1989-05-19	Feet below surface:	Not Reported
Feet to sea level:	2195	Note:	Not Reported
Level reading date:	1989-05-15	Feet below surface:	Not Reported
Feet to sea level:	2175	Note:	Not Reported
Level reading date:	1989-04-28	Feet below surface:	Not Reported
Feet to sea level:	2190	Note:	Not Reported
Level reading date:	1989-04-14	Feet below surface:	Not Reported
Feet to sea level:	2143	Note:	Not Reported
Level reading date:	1989-03-24	Feet below surface:	Not Reported
Feet to sea level:	2162	Note:	Not Reported
Level reading date:	1989-03-17	Feet below surface:	Not Reported
Feet to sea level:	2125	Note:	Not Reported
Level reading date:	1989-02-10	Feet below surface:	Not Reported
Feet to sea level:	2137	Note:	Not Reported
Level reading date:	1988-12-16	Feet below surface:	Not Reported
Feet to sea level:	2205	Note:	Not Reported
Level reading date:	1988-11-04	Feet below surface:	Not Reported
Feet to sea level:	2148	Note:	Not Reported
Level reading date:	1988-10-28	Feet below surface:	Not Reported
Feet to sea level:	2114	Note:	Not Reported
Level reading date:	1988-10-14	Feet below surface:	Not Reported
Feet to sea level:	2079	Note:	Not Reported
Level reading date:	1988-09-30	Feet below surface:	Not Reported
Feet to sea level:	2079	Note:	Not Reported
Level reading date:	1988-09-23	Feet below surface:	Not Reported
Feet to sea level:	2079	Note:	Not Reported
Level reading date:	1988-09-16	Feet below surface:	Not Reported
Feet to sea level:	2072	Note:	Not Reported
Level reading date:	1988-09-02	Feet below surface:	Not Reported
Feet to sea level:	2097	Note:	Not Reported
Level reading date:	1988-08-26	Feet below surface:	Not Reported
Feet to sea level:	2079	Note:	Not Reported
Level reading date:	1988-08-19	Feet below surface:	Not Reported
Feet to sea level:	2079	Note:	Not Reported
Level reading date:	1988-08-12	Feet below surface:	Not Reported
Feet to sea level:	2090	Note:	Not Reported
Level reading date:	1988-08-05	Feet below surface:	Not Reported
Feet to sea level:	2091	Note:	Not Reported

Level reading date:	1988-07-29	Feet below surface:	Not Reported
Feet to sea level:	2078	Note:	Not Reported
Level reading date:	1988-07-15	Feet below surface:	Not Reported
Feet to sea level:	2091	Note:	Not Reported
Level reading date:	1988-07-08	Feet below surface:	Not Reported
Feet to sea level:	2110	Note:	Not Reported
Level reading date:	1988-06-17	Feet below surface:	Not Reported
Feet to sea level:	2079	Note:	Not Reported
Level reading date:	1988-04-21	Feet below surface:	Not Reported
Feet to sea level:	2124	Note:	Not Reported
Level reading date:	1988-04-07	Feet below surface:	Not Reported
Feet to sea level:	2123	Note:	Not Reported
Level reading date:	1987-10-30	Feet below surface:	Not Reported
Feet to sea level:	2136	Note:	Not Reported
Level reading date:	1987-10-23	Feet below surface:	Not Reported
Feet to sea level:	2106	Note:	Not Reported
Level reading date:	1987-10-16	Feet below surface:	Not Reported
Feet to sea level:	2094	Note:	Not Reported
Level reading date:	1987-09-04	Feet below surface:	Not Reported
Feet to sea level:	2047	Note:	Not Reported
Level reading date:	1987-08-14	Feet below surface:	Not Reported
Feet to sea level:	2056	Note:	Not Reported
Level reading date:	1987-08-07	Feet below surface:	Not Reported
Feet to sea level:	2060	Note:	Not Reported

Map ID
Direction
Distance

Database EDR ID Number

#### A1 SE 1/2 - 1 Mile OIL\_GAS CAOG13000006348 API #: 0406500066 Well #: 1 Well Status: Plugged Well Type: DH Beaumont Expl. Co. Lease Name: John Drew **Operator Name:** Field Name: Any Field Area Name: Any Area GIS Source: hud Confidential Well: Ν Directionally Drilled: Ν SPUD Date: Not Reported A2 SE 1/2 - 1 Mile OIL\_GAS CAOG13000006405 API #: 0406500130 Well #: 1

- Well Status: Operator Name: Field Name: GIS Source: Directionally Drilled:
- 0406500130 Idle Riverside County Oil Co. Any Field hud N
- Well #: Well Type: Lease Name: Area Name: Confidential Well: SPUD Date:

1 OG Lease by Riverside County Oil Co. Any Area N

Not Reported

#### AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92223	13	0

#### Federal EPA Radon Zone for RIVERSIDE County: 2

```
Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.
```

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor Living Area - 2nd Floor	0.117 pCi/L 0.450 pCi/L	100% 100%	0% 0%	0% 0%
Basement	1.700 pCi/L	100%	0%	0%

#### **TOPOGRAPHIC INFORMATION**

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

#### HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA Telephone: 877-336-2627 Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife Telephone: 916-445-0411

#### HYDROGEOLOGIC INFORMATION

AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

#### **GEOLOGIC INFORMATION**

#### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

#### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS) The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS) Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

#### LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS) This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database Source: Department of Water Resources Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

#### **OTHER STATE DATABASE INFORMATION**

California Oil and Gas Well Locations Source: Department of Conservation Telephone: 916-323-1779 Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

#### RADON

State Database: CA Radon Source: Department of Public Health Telephone: 916-210-8558 Radon Database for California

Area Radon Information

Source: USGS Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency

(USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones Source: EPA Telephone: 703-356-4020 Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

#### OTHER

Airport Landing Facilities: Private and public use landing facilities Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

#### STREET AND ADDRESS INFORMATION

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# **REILY RIVERA**Environmental Project Manager

#### **EDUCATION**

Bachelor of Science - Environmental Science - University of California, Riverside

#### **EXPERIENCE**

2019 to Present – Environmental Project Manager – Salem Engineering Group, Inc. – Rancho Cucamonga, CA
2017 to 2019 – Engineering Technician – Adkan Engineers – Riverside, CA
2015 to 2016 – Research Associate – Lyons Biogeochemistry Laboratory at UCR – Riverside, CA

#### **PROFESSIONAL BACKGROUND**

**Environmental Engineering:** Manage and conduct Phase I Environmental Site Assessments of commercial and multi-tenant properties. Manage of Phase II Environmental Site Assessments, including: oversight of installation of groundwater and soil vapor monitoring wells; groundwater, soil vapor, and ambient air sampling; report preparation for ongoing monitoring. Special knowledge includes environmental laws and regulations, technical writing, independent research, and environmental impact analysis.

**Civil Engineering:** Write full Initial Studies and manage associated technical studies; use AutoCAD Civil 3D for civil design, including sewer lines, water lines, storm drain lines, housing tracts, grading, topographic maps, and tract maps. Special knowledge includes AutoCAD Civil 3D, civil design, and technical writing.

**Biogeochemical Research:** Responsible for laboratory work involving sequential and total iron extractions, total organic/inorganic carbon analysis, chromium reductions, and sample preparation for ICP-MS analysis. Special knowledge includes soil sampling and classification; soil water content analysis; operation and troubleshooting of field equipment including dissolved oxygen meters, electrical conductivity/TDS meters, and iron, magnesium, and nitrogen test strips; and operation and troubleshooting of laboratory equipment including ELTRA Furnace and Carbon Sulfur Determinator, inductively coupled plasma mass spectrometer, pipettes, pH probes, and microscopes.



#### **REGISTRATION**

Registered Geotechnical Engineer – California Registered Civil Engineer - California Registered Grading Inspector – Los Angeles

#### **CERTIFICATION**

OSHA 40-Hour Hazardous Waste Operations and Emergency Response Training (29 CFR 110.120) (HAZWOPER) Certified Hazardous Materials Manager

#### **EDUCATION**

Masters of Science in Geotechnical Engineering, Utah State University, Logan, Utah Bachelor of Science in Civil Engineering, Chung-Yuan University, Chung-Li, Taiwan

#### **EXPERIENCE**

2007 to Present – Senior Geotechnical Engineer, Salem Engineering Group, Inc., Rancho Cucamonga, California
2003 to 2007 – Senior Engineer, Krazan & Associates, Inc., Ontario, California
1994 to 2003 – Senior Engineer/Vice President, Morhol, Inc., Anaheim, California
1988 to 1994 – Project Engineer, Leighton & Associates, Inc., Irvine, California

#### **PROFESSIONAL BACKGROUND**

**Geotechnical Investigations:** Responsible for staff supervision, client relations, technical review, budget preparations, and profit/loss statements. Provided project management for geotechnical engineering projects for industrial plants, school and hospital sites, wastewater treatment plants, bridges and culverts, sewer lines, stadiums, embankments, service stations, commercial developments, industrial facilities, and landfills. Experienced in a broad range of geotechnical engineering applications such as shallow and deep foundation investigation, slope stability, pavement design, liquefaction potential, ground improvement, soil suitability and availability assessment, soil-cement treatment, soil-lime stabilization, erosion control, landfill construction, septic system design, as well as field and laboratory soil testing.

**Construction Testing & Inspection Services:** Responsible for overseeing Special Inspectors, testing laboratory personnel and procedures, client relations, technical review of reports, and insure conscientious cost management. Oversee the testing of concrete, post-tension cables, soil, welding, and construction materials to insure conformance to current building standards and codes. Report the results of materials tested to the appropriate agencies and companies.

**Environmental Engineering:** Provide detailed Phase I investigative site reports. Conduct environmental audits and provide recommendations for corrective measures. Extensive experience in lithologic logging and sampling in consolidated and unconsolidated material for environmental exploration. Provide recommendations for the management of underground storage tanks and hazardous waste.

<u>PROFESSIONAL ORGANIZATIONS</u> American Society of Civil Engineers (ASCE)





# APPENDIX B AIR QUALITY AND GREENHOUSE GAS ASSESSMENT WITH CALEEMOD OUTPUT MAY 2020

# AIR QUALITY AND GREENHOUSE GAS ASSESSMENT FOR SWC 8<sup>TH</sup> STREET & NORTH HIGHLAND SPRINGS AVE CITY OF BEAUMONT, CALIFORNIA

**Prepared For:** 

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## **Prepared By:**

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May 2020

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# APPENDICES

Appendix A Modeling Results

# **1.0 INTRODUCTION**

The Project Proponent has submitted an application to the City of Beaumont for a Tentative Parcel Map and Conditional Use Permit to develop a 3,500 square-foot quick service restaurant (QSR), a gas station with six fuel pumps with 12 dispensers, and a 4,088 square-foot convenience store on a 2.08-acre parcel in the City of Beaumont, Riverside County. The Project Site is located on the southwest corner of Highland Springs Avenue and East 8<sup>th</sup> Street. The site is described as Assessor's Parcel Number 419-150-034. and is currently vacant and undeveloped. Refer to Figures 1, 2, and 3 for a regional location map, project vicinity map, and site plan, respectively.

This report is a study of the potential impacts the Proposed Project may have on the local and regional air quality in the vicinity during construction and ultimate operational use. Air quality emissions modeling data output is included in Appendix A.

# 2.0 GENERAL SETTING

# 2.1 CLIMATE

The Proposed Project is located in western Riverside County. The study area has a Mediterranean climate with warm dry summers, mild winters and moderate rainfall. The climate is modified by the cold California Current in the Pacific Ocean, the mountain ranges that outline the Los Angeles Basin and San Bernardino Valley, and the deserts to the north and east.

The California Current causes a cold layer of air to form close to the surface. As the air above this layer is warm, air within it cannot rise normally, a phenomenon known as an inversion. The inversion traps pollutants close to the surface causing higher than usual concentrations of ozone, suspended particles and other ingredients of smog. The mountains prevent cooler marine air from traveling very far inland, making the deserts drier and hotter than the coastal regions. The hot desert air rises and cooler marine air from the west moves inland in the form of a sea breeze. A sea breeze is normal in all coastal regions, but in southern California it is exceptionally strong due to the great contrasts in temperature and the funneling effects of the mountains. In this region, the sea breeze brings higher quantities of pollutants from the Los Angeles metropolitan area to the inland valleys, exacerbating problems caused by local pollution sources.

The topographic and climatologic regional effects summarized above cause numerous days when air pollutants exceed federal and/or State air quality standards. This has led to aggressive air quality management measures being required by the federal, State, and local governments.

# 2.2 APPLICABLE POLICES, PLANS, AND REGULATIONS

A combination of climatic and geographic factors, and urbanization cause the interior valleys of Southern California to have higher air pollution levels than the coastal areas. The South Coast Air Quality Management District (SCAQMD) monitors and enforces the federal and state air quality standards in association with federal, state, local, and regional governmental agencies.





**REGIONAL LOCATION** Convenience Store and Gas Station Beaumont, California



Peet Source: Lilburn Corp., March, 2020. LILBURN CORPORATION

**PROJECT VICINITY** Convenience Store and Gas Station Beaumont, California

FIGURE 2



# SITE PLAN Convenience Store and Gas Station Beaumont, California

LILBURN

FIGURE 3

These agencies work jointly as well as individually to reduce air pollution through legislation, regulation, policy making, education, and a variety of programs. These agencies include:

**Environmental Protection Agency (EPA)** - Responsible for setting and enforcing the national standards for atmospheric pollutants, including the Clean Air Act (CAA), as amended.

**California Air Resources Board (CARB)** - Part of the California Environmental Protection Agency (Cal-EPA) and responsible for assuring implementation of the California Clean Air Act (CCAA), responding to federal regulations, and regulating emission standards.

**SCAQMD** - Primarily responsible for comprehensive air pollution control in the South Coast Air Basin (SCAB), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). SCAQMD implements the CAA and CCAA and works directly with federal, state, and local agencies.

**Local Governments** - Have the authority and responsibility to reduce air pollution through their local land use decision-making authority and the California Environmental Quality Act.

Air emissions from the Proposed Project are subject to federal, state, and local rules and regulations as implemented through provisions of the federal Clean Air Act, California Clean Air Act, and the 2016 Air Quality Management Plan (AQMP) adopted and updated regularly by SCAQMD. The following is an overview of current rules and regulations.

**Federal Clean Air Act**. The federal Clean Air Act was established in an effort to assure that acceptable levels of air quality are maintained in all areas of the United States. These levels are based upon health-related exposure limits and are referred to as National Ambient Air Quality Standards (NAAQS). The NAAQS establish maximum allowable concentrations of specific pollutants in the atmosphere and characterize the amount of exposure deemed safe of the public. The NAAQS set standards for the following pollutants:

Nitrogen dioxide (NO<sub>2</sub>) Sulfur dioxide (SO<sub>2</sub>) Particulate matter less than 10 microns, aerodynamic diameter (PM<sub>10</sub>) Particulate matter less than 2.5 microns, aerodynamic diameter (PM<sub>2.5</sub>) Ozone (O<sub>3</sub>) Lead (Pb) Carbon Monoxide (CO)

Primary and secondary NAAQS have been established and are shown in Table 1. Primary standards reflect levels of air quality deemed necessary by the EPA to provide an adequate margin of safety to protect public health. Areas found to be in violation of primary standards are termed "nonattainment areas". Secondary standards reflect levels of air quality necessary to protect public welfare from the known or anticipated adverse effects of a pollutant.

During California Standards <sup>1</sup>		Standards <sup>1</sup>	Federal Standards <sup>2</sup>			
Pollutant	Time	Concentration <sup>3</sup>	Method <sup>4</sup>	Primary <sup>3,5</sup>	Secondary <sup>3,6</sup>	Method <sup>7</sup>
$\Omega_{7000} (\Omega_{\star})^8$	1-Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet		Same as	Ultraviolet
Ozone (O <sub>3</sub> )	8-Hour	0.07 ppm (137 µg/m <sup>3</sup> )	Photometry	0.070 ppm (137 µg/m <sup>3</sup> )	Primary Standard	Photometry
Respirable	24-Hour	$50 \ \mu g/m^3$		$150 \ \mu g/m^3$		Inertial
Particulate Matter (PM <sub>10</sub> ) <sup>9</sup>	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation		Same as Primary Standard	Separation and Gravimetic Analysis
Fine	24-Hour			$35 \ \mu g/m^3$	Same as Primary Standard	Inertial
Particulate Matter (PM <sub>2.5</sub> ) <sup>9</sup>	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	12 µg/m <sup>3</sup>	$15 \ \mu g/m^3$	Separation and Gravimetic Analysis
	1-Hour	20 ppm (23 mg/m <sup>3</sup> )	Non-Dispersive	35 ppm (40 mg/m <sup>3</sup> )		Non-Dispersive
Carbon Monoxide	8-Hour	9.0 ppm (10 mg/m <sup>3</sup> )	Infrared	9 ppm (10 mg/m <sup>3</sup> )		Infrared
(CO)	8-Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )	Photometry (NDIR)	-		Photometry (NDIR)
Nitrogen	1-Hour	0.18 ppm (339 µg/m <sup>3</sup> )		100 ppb (188 $\mu g/m^3$ )		
Dioxide (NO <sub>2</sub> ) <sup>10</sup>	Annual Arithmetic Mean	0.030 ppm (57 μg/m <sup>3</sup> )	Gas Phase Chemiluminescence	0.053 ppb (100 µg/m <sup>3</sup> )	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.25 ppm (655 μg/m <sup>3</sup> )	Ultraviolet Fluorescence	75 ppd (196 µg/m <sup>3</sup> )	_	Ultraviolet Flourescence, Spectrophotometry (Pararosaniline Method)
Sulfur	3-Hour				0.5 ppm (1300 µg/m <sup>3</sup> )	
Dioxide (SO <sub>2</sub> ) <sup>11</sup>	24-Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (for certain areas) <sup>10</sup>		
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas) <sup>10</sup>	-	
	30-day average	1.5 µg/m <sup>3</sup>		_	_	
Lead <sup>12,13</sup>	Calendar Quarter		Atomic Absorption	<ol> <li>1.5 μg/m<sup>3</sup></li> <li>(for certain areas)<sup>12</sup></li> </ol>	Same as	High Volume Sampler and Atomic Absorption
	Rolling 3- Month Average	-		0.15 µg/m <sup>3</sup>	Primary Standard	ritonile riosorphon
Visibility- Reducing Particles <sup>14</sup>	8-Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape		No	
Sulfates	24-Hour	25 μg/m <sup>3</sup>	Ion Chromatography		Federal	
Hydrogen Sulfide	1-Hour	0.03 ppm (42 μg/m <sup>3</sup> )	Ultraviolet Fluorescence		Standards	
Vinyl Chloride <sup>12</sup>	24-Hour	0.01 ppm (26 μg/m <sup>3</sup> )	Gas Chromatography			

# Table 1State and FederalAmbient Air Quality Standards

Source: ARB, May 4, 2016.

- California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- 2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

- 3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- 4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- 5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
- 8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- 9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 μg/m3 to 12.0 μg/m3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 μg/m3, as was the annual secondary standard of 15 μg/m3. The existing 24-hour PM10 standards (primary and secondary) of 150 μg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm
- 11. On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

- 12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants
- 13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

<u>California Clean Air Act</u>. Under the federal Clean Air Act, state and local authorities have primary responsibility for assuring that their respective regions are in attainment of, or have a verifiable plan to attain, the NAAQS. The federal Clean Air Act also provides state and local agencies authority to promulgate more stringent ambient air quality standards. The California Ambient Air Quality Standards (CAAQS) for the following pollutants are also included in Table 1.

Hydrogen sulfide (H<sub>2</sub>S) Vinyl chloride Sulfates (SO<sub>4</sub>) Visibility-reducing particles

Under the provisions of the federal and California Clean Air Acts, air quality districts in areas not in attainment of the NAAQS or CAAQS are required to prepare an AQMP. An AQMP establishes an area-specific program to control existing and proposed sources of air emissions so that the NAAQS or CAAQS may be attained by the applicable target date. CARB and EPA are required to designate areas of the state as "attainment", "nonattainment", or "unclassified" for state and federal ambient air quality standards. An attainment designation for an area signifies that pollutant concentrations did not violate the standard for that pollutant. A nonattainment designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an extraordinary event. An unclassified designation indicates a lack of adequate air quality data or other information on which to base an attainment or nonattainment designation.

## 2.3 EXISTING AIR QUALITY

Air quality is determined primarily by the types and amounts of contaminants emitted into the atmosphere, the size and topography of the local air basin, and the pollutant-dispersing properties of local weather patterns. When airborne pollutants are produced in such volume that they are not dispersed by local meteorological conditions, air quality problems result. Dispersion of pollutants in the SCAB is influenced by periodic temperature inversions, persistent meteorological conditions and the local topography. As pollutants become more concentrated in the atmosphere, photochemical reactions occur, producing ozone and other oxidants.

The federal Clean Air Act was established in an effort to assure that acceptable levels of air quality are maintained in all areas of the United States. These levels are based upon health-related exposure limits and are referred to as NAAQS. The NAAQS establish maximum allowable concentrations of specific pollutants in the atmosphere and characterize the amount of exposure deemed safe for the public.

NAAQS have been set for a number of criteria pollutants. The following is a brief description of health effects and whether the SCAB is or is not in attainment for these pollutants:

**Ozone** ( $O_3$ ) is a toxic gas that irritates the lungs and damages materials and vegetation. Ozone is a secondary pollutant; it is not directly emitted. Ozone is the result of chemical reactions between other pollutants, most importantly hydrocarbons and NO<sub>2</sub>, which occur only in the presence of bright sunlight. Pollutants emitted from areas cities react during transport downwind to produce the oxidant concentrations experienced in the area. Pollutants emitted in the Los Angeles area contribute to the ozone levels experienced in the SCAB.

Data summarized in Table 2 shows that the 1-hour State ozone standard was exceeded between 16 to 50 days per year between 2014 and 2018 at the Banning Airport air monitoring site, the closest monitoring station to the Project Site. The SCAB is designated as a nonattainment basin for ozone. The 8-hour Ozone standard has been exceeded between 46 to 82 days per year between 2014 and 2018.

**Carbon Monoxide** (**CO**) is a gas produced almost entirely from automobiles that interferes with the transfer of oxygen to the brain. Peak levels of CO occur in winter and are highest where there is very heavy and concentrated traffic (major cities and transportation congestion). CO levels are not a concern in the project area due to the low traffic volumes and are therefore not monitored.

2014 – 2018				
Year	Days Exceeding 1-Hour State Standard	Days Exceeding 8-Hour State Standard	Maximum 1-Hour Reading (ppm)	Maximum 8-Hour Reading (ppm)
2014	22	58	0.114	0.097
2015	16	46	0.124	0.097
2016	26	52	0.128	0.106
2017	50	82	0.128	0.105
2018	33	69	0.119	0.106

Table 2
<b>Ozone Data: Banning Airport Air Monitoring Site</b>
2014 - 2018

Source: CARB, 2020

**Nitrogen dioxide** (NO<sub>2</sub>) is a gas that can cause breathing difficulties at high levels. Peak readings of NO<sub>2</sub> occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries and other industrial operations). AAQS for NO<sub>2</sub> have not been exceeded since 2006.

**Particulate Matter (PM<sub>10</sub>)** consists of extremely small-suspended particles or droplets 10 microns or smaller in diameter that can lodge in lungs contributing to respiratory problems.  $PM_{10}$  arises from such sources as road dust, diesel soot, combustion products, abrasion of tires and brakes, construction operations and windstorms.  $PM_{10}$  scatters light and significantly reduces visibility.  $PM_{10}$  poses a health hazard, alone or in combination with other pollutants.

Data summarized in Table 3 shows that  $PM_{10}$  levels at the Banning Airport air monitoring site did not exceed the Federal Standard between 2014 and 2018, while the State standard was exceeded between zero and six days per year during the same time period.

2014 - 2018					
Year	Days Exceeding State Standard	Days Exceeding Federal Standard	Maximum 24-Hour Reading (µg/m <sup>3</sup> )		
2014	*	0	45.0		
2015	6	0	139.0		
2016	*	0	65.0		
2017	6	0	97.9		
2018	0	0	39.3		

Table 3PM10 Data: Banning Airport Air Monitoring Site20142018

Source: CARB, 2020

State Standard – 50  $\mu$ g/m<sup>3</sup> based on 24-hour average Federal Standard – 150  $\mu$ g/m<sup>3</sup> based on 24-hour average  $\mu$ g/m<sup>3</sup> = micrograms per cubic meter Measurements usually taken every 6 days. \* Insufficient Data Fine Particulate Matter (PM2.5) consists of extremely small suspended particles 2.5 microns in diameter and arise primarily from combustion sources. The Banning Airport air monitoring station contains insufficient data regarding PM<sub>2.5</sub> between 2014 and 2018 as demonstrated in Table 4, below.

2014 - 2018				
Year	Maximum 24-Hour Reading (µg/m <sup>3</sup> )	Days Exceeding Federal Standard		
2014	38.8	*		
2015	27.9	*		
2016	110.5	*		
2017	34.9	*		
2018	32.0	*		

Table 4
PM2.5 Data: Banning Airport Air Monitoring Site
2014 - 2018

Source: CARB, 2020

Federal Standard – lowered to 35  $\mu$ g/m<sup>3</sup> in 2006; based on 24 hour average.  $\mu g/m^3 =$  micrograms per cubic meter

\* Insufficient Data

**Sulfur dioxide** (SO<sub>2</sub>) is a gas produced when fossil fuels are burned. SO<sub>2</sub> is the main pollutant contributing to the formation of acid rain. No exceedances of this pollutant have occurred for decades and concentrations are well under Federal and State standards.

Lead (Pb) is a heavy metal used in industry and for years was a component in gasoline. Since the elimination of lead as a gasoline additive, lead in the atmosphere in southern California has been virtually eliminated.

**Hydrogen Sulfide** ( $H_2S$ ) This pollutant is not commonly found in the ambient atmosphere but can originate from natural sources such as volcanoes, sulfur hot springs, or mineral brine associated with dry lakebeds. The CAAQS for H<sub>2</sub>S is not health-based but rather an aesthetic one, because the compound smells like rotten eggs. This pollutant is not an issue in the project area.

**Sulfates** are produced by the reaction in the air of sulfur dioxide (SO<sub>2</sub>), which is a component of acid rain. Sources for sulfur dioxide include coal burning power plants and diesel engines. California does not have any coal burning power plants and all diesel fuels sold in the state are now lower in sulfur. Sulfates are not an issue in the area.

Visibility-reducing particles are common in the SCAB due to the vast open desert area, especially during windy conditions. Particles reduce visibility, obscuring the desert scenery, including views of the mountains. Dust control measures reduce particulates in the area.

**Reactive Organic Gases (ROG)** is also considered in the air quality analysis of projects in the State. Ozone is a secondary pollutant that is the result of chemical reactions between other pollutants, most importantly reactive hydrocarbons (also referred to as ROG), and NO<sub>2</sub>, which occurs only in the presence of bright sunlight. The result is the formation of smog. There are no federal or state air quality standards for hydrocarbons or ROG as there are for other pollutants, however the SCAQMD does have thresholds for determining the severity of emissions of several criteria pollutants including ROG.

## Air Quality Attainment Plans

The project area is under the jurisdiction of the SCAQMD, which implements and enforces the applicable AQMP. The 2016 AQMP was adopted by the SCAQMD on March 3, 2017. The Plan recognized the critical importance of working with other agencies to develop new regulations, as well as secure funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy. The 2016 AQMP also includes transportation control measures developed by the Southern California Association of Governments (SCAG) from the 2016 Regional Transportation Plan/ Sustainable Communities Strategy. The 2016 AQMP includes the integrated strategies and measures needed to meet the NAAQS. The 2016 AQMP demonstrates attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual PM<sub>2.5</sub> standards.

The 2016 AQMP is a comprehensive and integrated Plan primarily focused on addressing the ozone standards. The Plan is a regional and multi-agency effort (AQMD, California Air Resources Board, Southern California Association of Governments (SCAG) and U.S. EPA). State and federal planning requirements include developing control strategies, attainment demonstrations, reasonable further progress, and maintenance plans. The 2016 AQMP incorporate the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Regional Transportation Plan/Sustainable Communities Strategy, and updated emission inventory methodologies for various source categories.

The primary guidance for implementing the air quality standards in relation to the California Environmental Quality Act (CEQA) is the 1993 SCAQMD CEQA Air Quality Handbook. This handbook is being revised and updated, but until the new edition is published, the 1993 version as updated, is still the current reference and directive.

## Climate Change and Greenhouse Gases

Gases that trap heat in the atmosphere are often called Greenhouse Gases (GHG); analogous to a greenhouse. GHGs are emitted by natural processes and human activities. The accumulation of GHGs in the atmosphere helps regulate the earth's temperature. Without these natural GHGs, the Earth's surface would be approximately 60°F cooler (EPA 2017). Emissions from human activities such as electricity production and vehicles have elevated the concentration of these gases in the atmosphere.

GHGs have varying global warming potential (GWP). A GWP is a "quantified measure of the globally averaged relative radiative forcing impacts of a particular greenhouse gas, defined as the accumulated radiative forcing within a specific time horizon caused by emitting one kilogram of

the gas, relative to that of the reference gas" (EPA 2017). The reference gas for GWP is carbon dioxide; carbon dioxide has a GWP of one. For example, methane has a GWP of 21, which means that it has a greater global warming effect than carbon dioxide on a molecule per molecule basis. One teragram of carbon dioxide equivalent (Tg CO2 Eq.) is the emissions of the gas multiplied by the GWP. One teragram is equal to one million metric tons. The carbon dioxide equivalent is a good way to assess emissions because it gives weight to the GWP of the gas. The lifetime and GWP of selected GHG are summarized in Table 5. As shown in the table, GWP for a 100-year time horizon ranges from one (carbon dioxide) to 23,500 (sulfur hexafluoride).

Gas	Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide	*	1
Methane	$12.4^{\dagger}$	28
Nitrous Oxide	121†	265
HFC-23	222	12,400
HFC-134a	13.4	1,300
HFC-152a	1.5	138
PFC-14: Tetrafluoromethane (CF4)	50,000	6,630
PFC-116: Hexafluoroethane (C2F6)	10,000	11,100
Sulfur Hexafluoride (SF6)	3,200	23,500

Table 5Global Warming Potentials and AtmosphericLifetimes of Select Greenhouse Gases

Source: IPCC 2013

\* No single lifetime can be given.

<sup>†</sup> Perturbation lifetime is used in calculation of metrics, not the lifetime of the atmospheric burden.

**Water vapor** is the most abundant, important, and variable GHG in the atmosphere. It is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from ice and snow, and transpiration from plant leaves.

**Carbon dioxide** (**CO**<sub>2</sub>) is an odorless, colorless natural GHG. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Carbon dioxide is the primary greenhouse gas emitted through human activities and anthropogenic sources of carbon dioxide are from burning coal, oil, natural gas, and wood. Concentrations are currently around 400 ppm; some say that concentrations may increase to 540 ppm by 2100 as a direct result of anthropogenic sources (IPCC 2001). Some predict that this will result in an average global temperature rise of at least 2° Celsius (IPCC 2001).
**Methane** is a flammable gas and is the main component of natural gas. When one molecule of methane is burned in the presence of oxygen, one molecule of carbon dioxide and two molecules of water are released. There are no health effects from methane. A natural source of methane is from the anaerobic decay of organic matter. Geological deposits known as natural gas fields contain methane, which is extracted for fuel. Other sources are from landfills, fermentation of manure, and cattle.

**Nitrous oxide** ( $N_2O$ ), also known as laughing gas, is a colorless GHG. Higher concentrations can cause dizziness, euphoria, and sometimes slight hallucinations. Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used in rocket engines, as an aerosol spray propellant, and in race cars.

**Chlorofluorocarbons** (**CFCs**) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were first synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone; therefore, their production was stopped as required by the Montreal Protocol.

**Hydrofluorocarbons (HFCs)** are synthetic man-made chemicals that are used as a substitute for CFCs for automobile air conditioners and refrigerants.

**Perfluorocarbons (PFCs)** have stable molecular structures and do not break down though the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane and hexafluoroethane. Concentrations of tetrafluoromethane in the atmosphere are over 79 ppt (IPCC 2013). The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

**Sulfur hexafluoride (SF6)** is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated, 23,500. Concentrations in the 2011 were about 7.3 ppt, while concentrations in 2005 were about 5.6 ppt (EPA 2013). Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

**Ozone** found in the troposphere is considered a GHG; however, unlike the other GHG, ozone in the troposphere is relatively short-lived and therefore is not global in nature. Ozone is not directly emitted into the air but is formed through chemical reactions between precursor emissions of reactive organic gases (ROG) and nitrogen oxides (NO<sub>X</sub>) in the presence of sunlight. It is difficult to make an accurate determination of the contribution of ozone precursors (nitrogen oxides and volatile organic compounds) to climate change (CARB 2004).

Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols. Sulfate aerosols are emitted when fuel with sulfur in it is burned. Black carbon (or soot) is emitted during biomass burning incomplete combustion of fossil fuels. Particulate matter regulation has been lowering aerosol concentrations in the United States; however, global concentrations are likely increasing.

#### Assembly Bill 32

In 2006, the California State Legislature adopted Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006. AB 32 requires CARB, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020 through an enforceable statewide emission cap which was phased in starting in 2012. On January 1, 2017 AB 32 was revised to include a statewide GHG emission reduction of 40 percent below the state GHG emissions limit no later than December 31, 2020.

#### Senate Bill 32

The California Global Warming Solutions Act of 2006: emissions limit, or SB-32, is a California Senate bill expanding upon AB-32 to reduce greenhouse gas (GHG) emissions. SB-32 sets into law the mandated reduction target in GHG emissions as written into Executive Order B-30-15.

The Senate bill requires that there be a reduction in GHG emissions to 40% below the 1990 levels by 2030. Greenhouse gas emissions include carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons. CARB is responsible for ensuring that California meets this goal. AB-32 required California to reduce greenhouse gas emissions to 1990 levels by 2020 and SB-32 continues that timeline to reach the targets set in Executive Order B-30-15. SB-32 provides another intermediate target between the 2020 and 2050 targets set in Executive Order S-3-05. SB-32 was contingent on the passing of AB-197, which increases legislative oversight of CARB and is intended to ensure CARB must report to the Legislature. AB-197 also passed and was signed into law on September 8, 2016.

#### Assembly Bill 197

California Assembly Bill 197 (AB 197). AB-197 was signed into law on September 8, 2016. It increases legislative oversight of the CARB and is intended to ensure CARB must report to the Legislature. AB-197 is directly related to SB-32 in that AB-197 contains language stating AB-197 is only operative if SB-32 is enacted and becomes law on or before January 1, 2017.

The provisions of AB-197 are intended to provide more legislative oversight of CARB by adding two new legislatively appointed non-voting members to the CARB Board, increasing the Legislature's role in the ARB Board's decisions. Additionally, AB-197 limits the term length of CARB Board members to six years. AB-197 also requires that CARB "protect the state's most impacted and disadvantaged communities ... consider the social costs of the emissions of greenhouse gases" in preparing plans to meet GHG reduction goals.

AB-197 requires a committee to be formed and called the Joint Legislative Committee on Climate Change Policies (JLCCCP), which will be responsible, among other duties, for addressing and prioritizing the disadvantaged communities in California. Additionally, as part of AB-197, reports of emissions inventories for GHGs, criteria pollutants, and toxic air contaminants are required to be made public and updated at least once a year.

## Title 24, Part 6 California Energy Code

Title 24, part 6 California Energy Code is the Energy Efficiency Standards for residential and nonresidential buildings, new construction, remodels and additions.

## Title 24, Part 11 CALGreen

CALGreen is California's first green building code and first in the nation state-mandated green building code. It is formally known as the California Green Building Standards Code, Title 24, Part 11, of the California Code of Regulations.

The purpose of CALGreen is to improve public health, safety, and general welfare through enhanced design and construction of buildings using concepts which reduce negative impacts and promote those principles which have a positive environmental impact and encourage sustainable construction practices.

CALGreen was adopted to address the five divisions of building construction: Planning and design, Energy efficiency, Water efficiency and conservation, Material conservation and resource efficiency, and Environmental quality.

#### SB 100

On September 10, 2018, Governor Jerry Brown signed California's most ambitious energy bill into law: Senate Bill 100 (SB 100). This environmental measure sets a world-leading precedent by committing to 100% clean energy in California by 2045, speeding up the state's timeline for moving to carbon-free power sources.

## AB 2127

Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission), on a biennial basis, to adopt an integrated energy policy report containing an overview of major energy trends and issues facing the state. Existing law requires the Energy Commission, as a part of the report, to conduct transportation forecasting and assessment activities that include, among other things, an assessment of trends in transportation fuels, technologies, and infrastructure supply and demand.

Existing law requires the Public Utilities Commission (PUC), in consultation with the State Air Resources Board and the Energy Commission, to direct the electrical corporations to file applications for programs and investments to accelerate widespread transportation electrification to achieve certain state goals.

This bill would require the Energy Commission, working with the State Air Resources Board and the PUC, to prepare and biennially update a statewide assessment of the electric vehicle charging infrastructure needed to support the levels of electric vehicle adoption required for the state to meet its goals of putting at least 5 million zero-emission vehicles on California roads by 2030 and of reducing emissions of greenhouse gases to 40% below 1990 levels by 2030. The bill would require the Energy Commission to regularly seek data and input from stakeholders relating to electric vehicle charging infrastructure.

#### SB 375

The Sustainable Communities and Climate Protection Act of 2008, also known as Senate Bill 375 or SB 375, is a State of California law targeting greenhouse gas emissions from passenger vehicles. The Global Warming Solutions Act of 2006 (AB 32) sets goals for the reduction of statewide greenhouse gas emissions. Passenger vehicles are the single largest source of greenhouse gas emissions statewide, accounting for 30% of total emissions. SB 375 therefore provides key support to achieve the goals of AB 32.

SB 375 instructs the California Air Resources Board (CARB) to set regional emissions' reduction targets from passenger vehicles. The Metropolitan Planning Organization for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use and housing policies to plan for achievement of the emissions target for their region.

## EPA Safe Vehicles Rule

The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, issued today by NHTSA and EPA, sets tough but feasible fuel economy and carbon dioxide standards that increase 1.5% in stringency each year from model years 2021 through 2026.

#### City of Beaumont General Plan

On November 3<sup>rd</sup>, 2015, the City of Beaumont adopted a "Sustainable Beaumont", the City's Roadmap to Greenhouse Gas Reduction. This Plan outlines the goal of preserving and enhancing local regional air quality for the protection of the health and welfare of the community through adherence of programs in accordance with the following goals:

- Goal 1: Increase Energy Efficiency in Existing Residential Units
- Goal 2: Increase Energy Efficiency in New Residential Development
- Goal 3: Increase Energy Efficiency in Existing Commercial Units
- Goal 4: Increase Energy Efficiency in New Commercial Development
- Goal 5: Increase Energy Efficiency through Water Efficiency
- Goal 6: Decrease Energy Demand through Reducing Urban Heat Island Effect
- Goal 7: Decrease GHG Emissions through Reducing Vehicle Miles Traveled
- Goal 8: Decrease GHG Emissions through Reducing Solid Waste Generation

- Goal 9: Decrease GHG Emissions through Increasing Clean Energy Use
- Goal 10: Decrease GHG Emissions from New Development through Performance Standards
- Goal M-1: Participate in Education, Outreach, and Planning Efforts for Energy Efficiency
- Goal M-2: Increase Energy Efficiency in Municipal Buildings
- Goal M-3: Increase Energy Efficiency in Community Buildings and Infrastructure
- Goal M-4: On-Road Energy Efficiency Enhancements; Employee Commute and Vehicle Fleet
- Goal M-5: Reduce Energy Consumption in the Long Term

#### Health and Other Effects

The potential health effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, and air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (i.e., heat rash and heat stroke). In addition, climate sensitive diseases may increase, such as those spread by mosquitoes and other disease carrying insects. Those diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture, which would have negative consequences. Drought in some areas may increase, which would decrease water and food availability. Global climate change may also contribute to air quality problems from increased frequency of smog and particulate air pollution (EPA 2006).

# 3.0 AIR QUALITY IMPACT EVALUATION

## 3.1 STANDARDS OF SIGNIFICANCE

Air quality analyses for the Proposed Project have been conducted in accordance with the CEQA Air Quality Handbook prepared by the SCAQMD (1993 as updated). SCAQMD has established the following emissions criteria (found at <u>http://www.aqmd.gov/ceqa/hdbk.html</u>) for determining whether the impacts from a project would be considered significant under CEQA:

Thresholds of Significance for Construction:

- 75 pounds per day of ROG
- 100 pounds per day of NO<sub>x</sub>
- 550 pounds per day of CO
- 150 pounds per day of SO<sub>X</sub>
- 150 pounds per day of PM<sub>10</sub>
- 55 pounds per day of PM<sub>2.5</sub>

Thresholds of Significance for Operations:

- 55 pounds per day of ROG
- 55 pounds per day of NO<sub>x</sub>
- 550 pounds per day of CO
- 150 pounds per day of SO<sub>X</sub>
- 150 pounds per day of  $PM_{10}$
- 55 pounds per day of PM<sub>2.5</sub>

Greenhouse Gas Emissions

• 3,000 metric tons of CO<sub>2</sub> equivalent (MTCO2e)

#### Toxic Air Contaminants

Maximum Incremental Cancer Risk  $\geq 10$  in 1 million

# **3.2 CONSTRUCTION AIR QUALITY EVALUATION**

The Proposed Commercial Development is on approximately 2.08 acres of vacant land. Construction-related emissions generated by the Proposed Project would be from short-term construction activities. The Proposed Project was screened using CalEEMod version 2016.3.2. The criteria pollutants and Greenhouse Gas (GHGs) analyzed include reactive organic gases (ROG), nitrous oxides (NO<sub>x</sub>), carbon monoxide (CO), particulates (PM<sub>10</sub> and PM<sub>2.5</sub>), carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Construction emissions are screened and quantified to document the effectiveness of control measures.

The CalEEMod model allows the user to set certain defaults and run the model to incorporate SCAQMD required rules and regulations. Therefore, per SCAQMD Rules 403, the mitigation requiring that exposed surfaces during construction be watered twice per day was "turned on". The developer and its contractor will be required to comply with mandated SCAQMD rules and regulations, including but not limited to Rule 403. Therefore, the following dust control conditions applicable to the site activities as recommended by Rule 403 shall also be implemented:

- 1. The Project Proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.
  - (a) The Project Proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading activity on the site at least twice daily. Portions of the site that are actively being graded shall be watered regularly to ensure that a crust is formed on the ground surface and shall be watered at the end of each workday.
  - (b) The Project Proponent shall ensure that all disturbed areas are treated to prevent erosion until the site is constructed upon.
  - (c) The Project Proponent shall ensure that landscaped areas are installed as soon as possible to reduce the potential for wind erosion.

(d) The Project Proponent shall ensure that all grading activities are suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.

During construction, exhaust emissions from construction vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces, would increase  $NO_X$  and  $PM_{10}$  levels in the area. The following Best Management Practices shall be implemented to reduce emissions.

- 2. To reduce emissions, all equipment used in grading and construction must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel. Site development will be limited to one acre disturbed per day.
- 3. The contractor shall utilize (as much as possible) pre-coated building materials and coating transfer or spray equipment with high transfer efficiency, such as high volume, low pressure (HVLP) spray method, or manual coatings application such as paint brush, hand roller, trowel, dauber, rag, or sponge.
- 4. The contractor shall utilize water-based or low VOC coating per SCAQMD Rule 1113. The following measures shall also be implemented:
  - Use Super-Compliant VOC paints whenever possible.
  - If feasible, avoid painting during peak smog season: July, August, and September.
  - Recycle leftover paint. Take any left-over paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
  - Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
  - For water-based paints, clean up with water only. Whenever possible, do not rinse the clean-up water down the drain or pour it directly into the ground or the storm drain. Set aside the can of clean-up water and take it to a hazardous waste center (www.cleanup.org).
  - Recycle the empty paint can.
  - Look for non-solvent containing stripping products.
  - Use Compliant Low-VOC cleaning solvents to clean paint application equipment.
  - Keep all paint and solvent laden rags in sealed containers to prevent VOC emissions.
- 5. The Project Proponent shall ensure that existing power sources are utilized where feasible via temporary power poles to avoid on-site diesel power generation.
- 6. The Project Proponent shall ensure that construction personnel are informed of ride sharing and transit opportunities.
- 7. All buildings on the project site shall conform to energy use guidelines in Title 24 of the California Administrative Code as updated to reduce energy consumption and reduce GHG emissions.

8. The operator shall maintain and effectively utilize and schedule on site equipment and delivery trucks in order to minimize exhaust emissions from truck idling.

#### Modeled Analysis

The emissions calculations for the construction phase of the Proposed Project includes fugitive dust from grading and exhaust emissions from on-site equipment and worker travel and are summarized in Table 6 and Table 7, which represent summer and winter construction emissions, respectively. The fugitive dust emissions are based on earthwork activities per day. The proposed construction activities will include implementation of the "best available fugitive dust control requirements" listed above and the developer will comply with SCAQMD rules and regulations (particularly Rule 403) that require controls for fugitive dust. These standard conditions will reduce emissions to the lowest amounts feasible. Construction emissions were screened and quantified to document the effectiveness of control measures. For additional information, refer to Appendix A for the CalEEMod emissions model output data.

(Pounds Per Day)						
Source/Phase ROG NO <sub>X</sub> CO SO <sub>2</sub> PM <sub>10</sub> PM <sub>2.5</sub>						
Site Preparation	1.9	17.5	8.0	0.0	3.5	2.1
Grading	1.6	24.6	7.9	0.0	3.8	2.0
Building Construction	2.0	15.0	14.4	0.0	1.1	0.8
Paving	1.2	7.8	9.3	0.0	0.5	0.5
Architectural Coating	9.5	1.5	2.1	0.0	0.1	0.1
Highest Value (lbs/day)	9.5	24.6	14.4	0.0	3.8	2.1
SCAQMD Threshold	75	100	550	150	150	55
Significant	No	No	No	No	No	No

Table 6
<b>Summer Construction Emissions</b>
(Dounda Don Dou)

Source: CalEEMod 2016.3.2, Summer Emissions

Phases don't overlap and represent the highest concentration.

Winter Construction Emissions						
(Pounds Per Day)						
Source/Phase	ROG	NO <sub>X</sub>	CO	$SO_2$	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>
Site Preparation	1.6	17.4	7.8	0.0	3.4	2.1
Grading	1.6	24.6	7.9	0.0	3.8	2.0
Building Construction	2.0	15.0	14.2	0.0	1.1	0.8
Paving	1.2	7.8	9.4	0.0	0.5	0.5
Architectural Coating	9.5	1.5	2.0	0.0	0.1	0.1
Highest Value (lbs/day)	9.5	24.6	14.4	0.0	3.8	2.1
SCAQMD Threshold	75	100	550	150	150	55
Significant	No	No	No	No	No	No

Table 7
Winter Construction Emissions
(Pounds Per Dav)

Source: CalEEMod 2016.3.2, Winter Emissions

Phases don't overlap and represent the highest concentration.

As shown in Table 6 and Table 7, construction emissions during either summer or winter seasonal conditions would not exceed SCAQMD thresholds. Impacts would be less than significant, and no mitigation measures are required.

#### Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions are cumulative in nature, in that, no one single project can measurably contribute to climate change and its affects (global average change in temperature, rising sea levels etc.). The direct or indirect GHG impacts are therefore not evaluated on a local level, but whether or not the GHG emissions resulting from the project are cumulative; that is, they add considerably to an increase in GHGs as compared to the existing environmental setting based on: 1) an established significance threshold(s); or 2) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

AB 32 defines seven (7) major GHGs that are emitted into the atmosphere, the first three are both biogenic (occur naturally in the environment) and anthropogenic (are man-made), through the burning of fossil fuels, the decay of organic waste in landfills etc. and they include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O). The other four, known as Fluorinated gases (Hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride) are synthetic (made artificially by chemical processes). The Proposed Project would not generate Fluorinated gases as defined by AB 32, only the GHGs (CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O) that are emitted by construction equipment. Therefore, GHG emissions from CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O are modeled. Results for GHG emissions related to construction of the Proposed Project are shown in Table 8.

(MT Per Year)						
Source/Phase	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> 0			
Site Preparation	1.6	0.0	0.0			
Grading	9.4	0.0	0.0			
Building Construction	249.5	0.0	0.0			
Paving	6.5	0.0	0.0			
Architectural Coating	1.6	0.0	0.0			
Total (CO2e)	268.6					
SCAQMD Threshold		3,000				
Significant	No					

Table 8
<b>Greenhouse Gas Construction Emissions</b>
(MT Per Year)

Source: CalEEMod 2016.3.2, Annual Emissions

Model results for GHG emissions related to construction of the Proposed Project as shown in Table 8 do not exceed the SCAQMD yearly threshold of 3,000 MTCO<sub>2</sub>e and therefore would not result in a significant impact. No mitigation measures are required.

#### Toxic Air Contaminants

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during the construction phase of the Project. According to the Office of Environmental Health Hazard Assessment (OEHHA) and the SCAQMD *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (August 2003), health effects from TACs are described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 30-year lifetime will contract cancer based on the use of standard risk assessment methodology. The SCAQMD CEQA guidance does not require a health risk screening for short-term construction emissions. Construction activities associated with the project would be sporadic, transitory, and short-term in nature.

# 3.3 OPERATIONAL AIR QUALITY EVALUATION

Operational emissions are categorized as energy (generation and distribution of energy to the end use), area (operational use of the project), mobile (vehicle trips), water (generation and distribution of water to the land use), and waste (collecting and hauling waste to the landfill). The proposed project will not include the manufacture or production of any products on-site; therefore, no industrial type emissions will be generated. The operational mobile source emissions were calculated in accordance with the Traffic Impact Analysis (TIA) prepared for the Proposed Project by Urban Crossroads in March 2020. The Proposed Project is anticipated to generate approximatively 1,100 daily trips. The Trip Generation rates from the TIA were input into the CalEEMod Version 2016.3.2 model. Additionally, in accordance with the site plan, CalEEMod operational emissions include the following design features: a) Improve Destination Accessibility with a two-mile distance to a downtown job center, b) Increase Transit Accessibility with a two-mile distance to the nearest transit station, and c) Improve Pedestrian Network by including improvements of the adjacent intersection, curb, gutter, and sidewalks. Fuel dispensing emissions were calculated using SCAQMD guidelines (RULE 461-Gasoline Transfer and Dispensing). The VOC emissions can be calculated using 0.53 pounds per 1,000 gallons of gasoline (0.15 pounds of VOC per 1,000 gallons from the loading of gasoline into storage tanks (Phase I) and 0.38 pounds of VOC per 1,000 gallons from the dispensing of gasoline into vehicle fuel tanks (Phase II)). Emissions associated with the operational activities are listed in Tables 9 through 11.

(Pounds Per Day)						
Source	ROG	NO <sub>X</sub> /VOC <sup>1</sup>	СО	$SO_2$	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>
Area	0.2	0.0	0.0	0.0	0.0	0.0
Energy	0.0	0.3	0.2	0.0	0.0	0.0
Mobile	1.6	10.1	8.9	0.0	1.9	0.5
Fuel Dispensing		1.5				
Total Value (lbs/day)	3.3	11.9	9.1	0.0	1.9	0.5
SCAQMD Threshold	55	55	550	150	150	55
Significant	No	No	No	No	No	No

Table 9
<b>Summer Operational Emissions</b>
(Pounds Per Dav)

Source: CalEEMod 2016.3.2, Summer Emissions

<sup>1</sup> VOC emissions, SCAQMD guidelines (RULE 461-Gasoline Transfer and Dispensing).

#### Table 10 Winter Operational Emissions (Pounds Per Day)

(I builds I ci Day)						
Source	ROG	NO <sub>X</sub> /VOC <sup>1</sup>	СО	SO <sub>2</sub>	<b>PM</b> <sub>10</sub>	PM <sub>2.5</sub>
Area	0.2	0.0	0.0	0.0	0.0	0.0
Energy	0.0	0.3	0.2	0.0	0.0	0.0
Mobile	1.3	9.9	8.7	0.0	1.9	0.5
Fuel Dispensing		1.5				
Total Value (lbs/day)	3.0	11.7	8.9	0.0	1.9	0.5
SCAQMD Threshold	55	55	550	150	150	55
Significant	No	No	No	No	No	No

Source: CalEEMod 2016.3.2, Winter Emissions

<sup>1</sup> VOC emissions, SCAQMD guidelines (RULE 461-Gasoline Transfer and Dispensing).

Table 11
<b>Greenhouse Gas Operational Emissions</b>
(MT Per Year)

Source	CO <sub>2</sub>	CH4	N <sub>2</sub> O			
Area	0.0	0.0	0.0			
Energy	121.0	0.0	0.0			
Mobile	566.2	0.0	0.0			
Waste	8.2	0.5	0.0			
Water	5.8	0.0	0.0			
Construction Amortized over 30 years	8.9					
Total CO2e Per Year	725.3					
SCAQMD Threshold (tons)	3,000					
Significant	No					

Source: CalEEMod 2016.3.2, Annual Emissions

As shown in Tables 9 through 11, operational emissions produced from the Proposed Project would not exceed the SCAQMD yearly threshold of 3,000 MTCO<sub>2</sub>e and therefore would not result in a significant impact. No mitigation measures are required. However, would be required to comply with the following but limited to SCAQMD Rules:

- Rule 201-Permit to Construct: A person shall not build, erect, install, alter or replace any equipment or agricultural permit unit, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce or control the issuance of air contaminants without first obtaining written authorization for such construction from the Executive Officer. A permit to construct shall remain in effect until the permit to operate the equipment or agricultural permit unit for which the application was filed is granted or denied, or the application is canceled.
- Rule 203-Permit to Operate: A person shall not operate or use any equipment or agricultural permit unit, the use of which may cause the issuance of air contaminants, or the use of which may reduce or control the issuance of air contaminants, without first obtaining a written permit to operate from the Executive Officer or except as provided in Rule 202.

- Rule 461-Gasoline Transfer and Dispensing Facilities: Applicability This rule applies to the transfer of gasoline from any tank truck, trailer, or railroad tank car into any stationary storage tank or mobile fueler, and from any stationary storage tank or mobile fueler into any mobile fueler or motor vehicle fuel tank.
- Rule 1138- Control of Emissions from Restaurants: (a) Applicability This rule applies to owners and operators of commercial cooking operations, preparing food for human consumption. The rule requirements currently apply to chain-driven charbroilers used to cook meat. All other commercial restaurant cooking equipment including, but not limited to, under-fired charbroilers, may be subject to future rule provisions.
- Rule 1401- New Source Review of Toxic Air Contaminants: This rule specifies limits for maximum individual cancer risk (MICR), cancer burden, and noncancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants listed in Table I. The rule establishes allowable risks for permit units requiring new permits pursuant to Rules 201 or 203.

#### Toxic Air Contaminant Impacts

Emissions resulting from gasoline service station operations may include toxic air contaminants (TACs) (e.g., benzene, hexane, MTBE, toluene, xylene) and have the potential to contribute to health risk in the Project vicinity. Standard regulatory controls such as the SCAQMD's Rule 461 (Gasoline Transfer and Dispensing) would apply to the Project in addition to any permits required that demonstrate appropriate operational controls. Gasoline dispensing facilities are required to use Phase I/II EVR (enhanced vapor recovery) systems. Phase I EVR have an average efficiency of 98 percent and Phase II EVR have an average efficiency of 95.1 percent. Therefore, the potential for fugitive VOC or TAC emissions from the gasoline pumps is negligible. Prior to issuance of a Permit to Operate, each individual gasoline dispensing station would be required to obtain the required permits from SCAQMD which would identify the maximum annual throughput allowed based on specific fuel storage and dispensing equipment that is proposed by the operator.

The analysis reflects a maximum annual throughput on approximately 1,000,000 gallons as the actual value is unknown. However, ultimate fuel throughput allowances/requirements would be established by SCAQMD through the fueling station permitting processes. For purposes of this evaluation, cancer risk estimates have been made consistent with the methodology presented in SCAQMD's Risk Assessment Procedures for Rules 1401 & 212 which provide screening-level risk estimates for gasoline dispensing operations. The Project site is located within Source Receptor Area (SRA) 29.

The nearest residential receptor and worker receptor is located immediately adjacent to the proposed gasoline canopy.

Based on the established SCAQMD procedure outlined in the SCAQMD Permit Application Package "N" it is estimated that the maximum risk attributable to the gasoline dispensing would be 5.46 in one million for the nearest sensitive receptor and the maximum risk to workers would

be 0.45 in one million both of which are below the threshold of 10 in one million. SCAQMD Permit Application Package "N" identifies the potential risk per one million gallons of gasoline dispensed at the defined downwind distances and Gasoline Dispensing Service Station. The further the distance from the source the lower the risk. Refer to Table 12 for a linear regression risk estimate.

**T** 11 44

Linear Regression Risk Estimate				
Residential				
Risk				
5.46				
2.17				
er				
0.45				
0.17				

Source: Risk Tool V1.103

As shown, no sensitive receptors in the Project vicinity would be exposed to a cancer risk of greater than 10 in one million. The maximum risk estimate at any sensitive land use in the vicinity of the Project would be 5.46 in one million. The Project gas station operations would therefore not generate emissions that would cause or result in an exceedance of the applicable SCAQMD cancer threshold of 10 in one million. As such, the Project would not have a significant impact with respect to health risks from the gasoline dispensing stations. No significant impacts would occur.

## 3.4 LOCALIZED SIGNIFICANCE THRESHOLD

SCAQMD has developed a methodology to assess the localized impacts of emissions from a proposed project as outlined within the Final Localized Significance Threshold (LST) Methodology report; completed in June 2003 and revised in July 2008. The use of LSTs is voluntary, to be implemented at the discretion of local public agencies acting as a lead agency pursuant to CEQA. LSTs apply to projects that must undergo CEQA or the National Environmental Policy Act (NEPA) and are five acres or less. LST methodology is incorporated to represent worst-case scenario emissions thresholds. CalEEMod version 2016.3.2 was used to estimate the on-site and off-site construction emissions. The LSTs were developed to analyze the significance of potential local air quality impacts of proposed projects to sensitive receptors and provide screening tables for small projects (one, two, or five acres). Projects are evaluated based on geographic location and distance from the sensitive receptor (25, 50, 100, 200, or 500 meters from the site).

For the purposes of a CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, convalescent facility or anywhere that it is possible for an individual to remain for 24 hours. Additionally, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors. Commercial and industrial facilities are not included in the definition of a sensitive receptor because employees do not

typically remain on-site for a full 24 hours, but are usually present for shorter periods of time, such as eight hours.

The Project Site is approximately 2.08 acres, however, the "2 acres scenario" was used to represent a worst-case scenario as larger sites are typically granted a larger emission allowance. The nearest sensitive receptor land use is an assisted care facility located immediately to the west of the Project Site and therefore LSTs are based on 25-meter distance. The resulting Proposed Project's construction and operational emissions with the appropriate LST are presented in Table 13.

Table 13
Localized Significance Thresholds
(Pounds Per Day)

	NO <sub>x</sub> /VOC	CO	PN	A10	P	$M_{2.5}$
Construction Emissions (Max. from Table 6 and Table 7)	9.5	14.4	3	.8		2.1
Operational Emissions (Max. Total from Table 3 and Table 4) <sup>1</sup>	11.9	9.1	0.	10	0.	.025
Highest Value (lbs./day)	11.9	14.2	3.8	0.10	2.1	0.025
LST Thresholds	149	1,541	10*	3†	6*	$2^{\dagger}$
Greater Than Threshold	No	No	No	No	No	No

Sources: CalEEMod.2016.3.2 Summer and Winter Emissions; SCAQMD Final Localized Significance Threshold Methodology; SCAQMD Mass Rate Look-up Tables for 2-acre site in SRA No. 29, distance of 25 meters.

Note: PM10 and PM2.5 emissions are separated into construction and operational thresholds in accordance with the SCAQMD Mass Rate LST Look-up Tables.

\* Construction emissions LST

<sup>†</sup> Operational emissions LST

<sup>1</sup> Per LST Methodology, mobile source emissions do not need to be included except for land use emissions and on-site vehicle emissions. It is estimated that approximately 10 percent of mobile emissions will occur on the Project Site.

As shown in Table 12, the Proposed Project's emissions are not anticipated to exceed the LSTs. Therefore, the Proposed Project is not anticipated to expose sensitive receptors to substantial pollutant concentrations. No mitigation measures are required.

## **3.5 PROJECT CUMULATIVE IMPACTS**

Development of the Proposed Project will be conditioned to comply with current SCAQMD rules and regulations to minimize impacts to air quality as discussed herein. Development of the QSR, gas station, and convenience store on a 2.08-acre is not anticipated to generate significant impacts or generate significant operational mobile emissions. The Proposed Project is anticipated to generate approximately 1,100 daily trips. Approval of the project does not require a zone change nor a general plan amendment and is consistent with the 2007 Beaumont General Plan. Therefore, cumulative impacts are anticipated to be less than significant.

# 4.0 **REPORT SUMMARY**

Construction emissions from the Proposed Project will not exceed the CEQA thresholds of significance. Construction emissions are considered short-term. Potential dust emissions would be further reduced by implementation of standard dust control measures (water exposed surfaces twice per day, etc.) as required for all projects within the SCAB. Therefore, potential impacts from construction activities are determined to be less than significant and no further analysis is required.

The operational emissions from the Proposed Project would not exceed SCAQMD thresholds of significance. No impacts to local or regional air quality are anticipated during project operations. The Proposed Project as well as all projects within the SCAB will be required to comply with current SCAQMD rules and regulations as applicable. Therefore, potential impacts from operational activities are determined to be less than significant and no further analysis is required.

# 5.0 **REFERENCES**

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California Air Resources Board, California Air Quality Data Summaries 2014 to 2018.

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California Climate Action Registry General Reporting Protocol, January 2009.

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Risk Assessment (RA) Procedures for Rules 1401 and 212 http://www.aqmd.gov/home/permits/risk-assessment

SCAQMD Permit Application Package "N" http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/attachmentn\_080717.pdf

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https://www.ipcc.ch/report/ar5/wg1/.

SCAQMD CEQA Guidelines with revisions, 1993.

Traffic Impact Analysis, Urban Crossroads, March 2020.

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http://unfccc.int/ghg\_emissions\_data/predefined\_queries/items/3841.php.

# APPENDIX A MODELING RESULTS

Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

## **Evergreen C-Store Beaumont**

**Riverside-South Coast County, Annual** 

#### **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	60.30	1000sqft	1.50	60,300.00	0
Other Non-Asphalt Surfaces	20.00	1000sqft	0.46	20,000.00	0
Fast Food Restaurant with Drive Thru	3.50	1000sqft	0.08	3,500.00	0
Convenience Market With Gas Pumps	12.00	Pump	0.04	4,088.00	0

#### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (Ib/MWhr)	702.44	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

#### **1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Per Site Plan

Construction Phase -

Grading -

Vehicle Trips - Per TIA

Construction Off-road Equipment Mitigation -

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	1,694.10	4,088.00
tblLandUse	LotAcreage	1.38	1.50
tblTripsAndVMT	HaulingTripNumber	0.00	189.00
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	PB_TP	65.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	ST_TR	204.47	47.16
tblVehicleTrips	ST_TR	722.03	152.57
tblVehicleTrips	SU_TR	166.88	47.16
tblVehicleTrips	SU_TR	542.72	152.57
tblVehicleTrips	WD_TR	542.60	47.16
tblVehicleTrips	WD_TR	496.12	152.57

# 2.0 Emissions Summary

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# Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

## 2.1 Overall Construction

## **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2021	0.3097	2.0888	1.8787	3.8300e- 003	0.0798	0.0977	0.1775	0.0259	0.0934	0.1193	0.0000	327.9820	327.9820	0.0544	0.0000	329.3430
Maximum	0.3097	2.0888	1.8787	3.8300e- 003	0.0798	0.0977	0.1775	0.0259	0.0934	0.1193	0.0000	327.9820	327.9820	0.0544	0.0000	329.3430

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2021	0.3097	2.0888	1.8787	3.8300e- 003	0.0677	0.0977	0.1654	0.0202	0.0934	0.1136	0.0000	327.9817	327.9817	0.0544	0.0000	329.3427
Maximum	0.3097	2.0888	1.8787	3.8300e- 003	0.0677	0.0977	0.1654	0.0202	0.0934	0.1136	0.0000	327.9817	327.9817	0.0544	0.0000	329.3427

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	15.19	0.00	6.83	21.97	0.00	4.78	0.00	0.00	0.00	0.00	0.00	0.00

#### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-11-2021	4-10-2021	0.6596	0.6596
2	4-11-2021	7-10-2021	0.6395	0.6395
3	7-11-2021	9-30-2021	0.5762	0.5762
		Highest	0.6596	0.6596

# 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											МТ	/yr		
Area	0.0374	1.0000e- 005	1.2200e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3800e- 003	2.3800e- 003	1.0000e- 005	0.0000	2.5300e- 003
Energy	5.2100e- 003	0.0474	0.0398	2.8000e- 004		3.6000e- 003	3.6000e- 003		3.6000e- 003	3.6000e- 003	0.0000	120.9550	120.9550	3.8500e- 003	1.5400e- 003	121.5096
Mobile	0.3049	2.6050	3.6070	0.0165	1.2590	0.0114	1.2703	0.3373	0.0106	0.3479	0.0000	1,526.856 1	1,526.856 1	0.0794	0.0000	1,528.839 9
Waste	n					0.0000	0.0000		0.0000	0.0000	8.1846	0.0000	8.1846	0.4837	0.0000	20.2770
Water	n					0.0000	0.0000		0.0000	0.0000	0.3769	5.4404	5.8173	0.0389	9.6000e- 004	7.0768
Total	0.3474	2.6523	3.6480	0.0167	1.2590	0.0150	1.2739	0.3373	0.0142	0.3515	8.5615	1,653.253 9	1,661.815 4	0.6058	2.5000e- 003	1,677.705 8

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# Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

#### 2.2 Overall Operational

# Mitigated Operational

	ROG	NO	x	СО	SO2	Fugi PN	itive 110	Exhaust PM10	PM1 Tota	0 Fug al Pl	gitive M2.5	Exhaust PM2.5	PM2.	5 Total	Bio- (	CO2 NB	io- CO2	Total	CO2	CH4	N	20	CO2e	
Category							ton	s/yr											MT/yr					
Area	0.0374	1.000 005	0e- 1.2 5	2200e- 003	0.0000			0.0000	0.00	00		0.0000	0.0	0000	0.00	000 2.3	3800e- 003	2.380 00	00e- 1 3	.0000e- 005	0.0	000	2.5300e 003	<b>}-</b>
Energy	5.2100e- 003	0.047	74 0	.0398	2.8000e 004			3.6000e- 003	3.600 003	0e- 3		3.6000e- 003	· 3.60	000e- 03	0.00	000 12	0.9550	120.9	9550 3	.8500e- 003	1.54 0	00e- 03	121.509	16
Mobile	0.3049	2.605	50 3	8.6070	0.0165	1.2	590	0.0114	1.27	03 0.3	3373	0.0106	0.3	3479	0.00	000 1,5	26.856 1	1,526 1	.856	0.0794	0.0	000	1,528.83 9	39
Waste	F;				       			0.0000	0.00	00		0.0000	0.0	0000	8.18	946 0	.0000	8.18	346	0.4837	0.0	000	20.2770	C
Water	F;				     			0.0000	0.00	00		0.0000	0.0	0000	0.37	'69     5	.4404	5.81	73	0.0389	9.60 0	000e- 04	7.0768	;
Total	0.3474	2.652	23 3	3.6480	0.0167	1.2	590	0.0150	1.273	39 0.3	3373	0.0142	0.3	3515	8.56	615 1,6	53.253 9	1,661 4	.815	0.6058	2.50 0	00e- 03	1,677.70 8	)5
	ROG		NOx	С	0	SO2	Fugi PN	itive Ex 110 F	haust M10	PM10 Total	Fugit PM2	ive Ex 2.5 F	haust M2.5	PM2 Tota	.5 al	Bio- CO2	NBio-	CO2 <sup>-</sup>	Total CC	02 C	;H4	N2(	0 0	CO2e
Percent Reduction	0.00		0.00	0.0	00	0.00	0.	00	0.00	0.00	0.0	0	0.00	0.0	0	0.00	0.0	0	0.00	0	.00	0.0	0	0.00

# 3.0 Construction Detail

**Construction Phase** 

#### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/11/2021	1/13/2021	5	3	
2	Grading	Grading	1/14/2021	1/21/2021	5	6	
3	Building Construction	Building Construction	1/22/2021	11/25/2021	5	220	
4	Paving	Paving	11/26/2021	12/9/2021	5	10	
5	Architectural Coating	Architectural Coating	12/10/2021	12/23/2021	5	10	

#### Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

#### Acres of Paving: 1.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,382; Non-Residential Outdoor: 3,794; Striped Parking Area: 4,818 (Architectural Coating – sqft)

#### OffRoad Equipment

Evergicent o otore bedamont introiside oodin oodst oodinty, Annua
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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	189.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	37.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 Site Preparation - 2021

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					2.3900e- 003	0.0000	2.3900e- 003	2.6000e- 004	0.0000	2.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e- 003	0.0274	0.0161	4.0000e- 005		1.0500e- 003	1.0500e- 003		9.7000e- 004	9.7000e- 004	0.0000	3.2290	3.2290	1.0400e- 003	0.0000	3.2551
Total	2.3200e- 003	0.0274	0.0161	4.0000e- 005	2.3900e- 003	1.0500e- 003	3.4400e- 003	2.6000e- 004	9.7000e- 004	1.2300e- 003	0.0000	3.2290	3.2290	1.0400e- 003	0.0000	3.2551

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#### 3.2 Site Preparation - 2021

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e- 005	3.0000e- 005	3.8000e- 004	0.0000	1.3000e- 004	0.0000	1.3000e- 004	4.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1067	0.1067	0.0000	0.0000	0.1067
Total	5.0000e- 005	3.0000e- 005	3.8000e- 004	0.0000	1.3000e- 004	0.0000	1.3000e- 004	4.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1067	0.1067	0.0000	0.0000	0.1067

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust		1 1 1	, , ,		1.0700e- 003	0.0000	1.0700e- 003	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3200e- 003	0.0274	0.0161	4.0000e- 005		1.0500e- 003	1.0500e- 003	 1 1 1 1	9.7000e- 004	9.7000e- 004	0.0000	3.2290	3.2290	1.0400e- 003	0.0000	3.2551
Total	2.3200e- 003	0.0274	0.0161	4.0000e- 005	1.0700e- 003	1.0500e- 003	2.1200e- 003	1.2000e- 004	9.7000e- 004	1.0900e- 003	0.0000	3.2290	3.2290	1.0400e- 003	0.0000	3.2551

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#### 3.2 Site Preparation - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e- 005	3.0000e- 005	3.8000e- 004	0.0000	1.3000e- 004	0.0000	1.3000e- 004	4.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1067	0.1067	0.0000	0.0000	0.1067
Total	5.0000e- 005	3.0000e- 005	3.8000e- 004	0.0000	1.3000e- 004	0.0000	1.3000e- 004	4.0000e- 005	0.0000	4.0000e- 005	0.0000	0.1067	0.1067	0.0000	0.0000	0.1067

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust		1 1 1	, , ,		0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4800e- 003	0.0606	0.0293	6.0000e- 005		2.7500e- 003	2.7500e- 003		2.5300e- 003	2.5300e- 003	0.0000	5.4312	5.4312	1.7600e- 003	0.0000	5.4751
Total	5.4800e- 003	0.0606	0.0293	6.0000e- 005	0.0197	2.7500e- 003	0.0224	0.0101	2.5300e- 003	0.0126	0.0000	5.4312	5.4312	1.7600e- 003	0.0000	5.4751

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# 3.3 Grading - 2021

# Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	4.7000e- 004	0.0210	2.9000e- 003	7.0000e- 005	1.6300e- 003	6.0000e- 005	1.6900e- 003	4.5000e- 004	6.0000e- 005	5.1000e- 004	0.0000	6.7803	6.7803	4.1000e- 004	0.0000	6.7907
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e- 004	9.0000e- 005	9.4000e- 004	0.0000	3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2667	0.2667	1.0000e- 005	0.0000	0.2668
Total	6.0000e- 004	0.0211	3.8400e- 003	7.0000e- 005	1.9600e- 003	6.0000e- 005	2.0200e- 003	5.4000e- 004	6.0000e- 005	6.0000e- 004	0.0000	7.0470	7.0470	4.2000e- 004	0.0000	7.0575

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust		1 1 1	, , ,		8.8500e- 003	0.0000	8.8500e- 003	4.5500e- 003	0.0000	4.5500e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4800e- 003	0.0606	0.0293	6.0000e- 005		2.7500e- 003	2.7500e- 003		2.5300e- 003	2.5300e- 003	0.0000	5.4312	5.4312	1.7600e- 003	0.0000	5.4751
Total	5.4800e- 003	0.0606	0.0293	6.0000e- 005	8.8500e- 003	2.7500e- 003	0.0116	4.5500e- 003	2.5300e- 003	7.0800e- 003	0.0000	5.4312	5.4312	1.7600e- 003	0.0000	5.4751

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# 3.3 Grading - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	4.7000e- 004	0.0210	2.9000e- 003	7.0000e- 005	1.6300e- 003	6.0000e- 005	1.6900e- 003	4.5000e- 004	6.0000e- 005	5.1000e- 004	0.0000	6.7803	6.7803	4.1000e- 004	0.0000	6.7907
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e- 004	9.0000e- 005	9.4000e- 004	0.0000	3.3000e- 004	0.0000	3.3000e- 004	9.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2667	0.2667	1.0000e- 005	0.0000	0.2668
Total	6.0000e- 004	0.0211	3.8400e- 003	7.0000e- 005	1.9600e- 003	6.0000e- 005	2.0200e- 003	5.4000e- 004	6.0000e- 005	6.0000e- 004	0.0000	7.0470	7.0470	4.2000e- 004	0.0000	7.0575

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2250	1.7630	1.6019	2.7500e- 003		0.0899	0.0899		0.0861	0.0861	0.0000	228.4136	228.4136	0.0449	0.0000	229.5371
Total	0.2250	1.7630	1.6019	2.7500e- 003		0.0899	0.0899		0.0861	0.0861	0.0000	228.4136	228.4136	0.0449	0.0000	229.5371

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#### 3.4 Building Construction - 2021

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6700e- 003	0.1436	0.0276	3.9000e- 004	9.7300e- 003	2.7000e- 004	0.0100	2.8100e- 003	2.6000e- 004	3.0700e- 003	0.0000	37.5719	37.5719	2.8700e- 003	0.0000	37.6435
Worker	0.0175	0.0118	0.1281	4.0000e- 004	0.0447	2.7000e- 004	0.0450	0.0119	2.5000e- 004	0.0121	0.0000	36.1761	36.1761	8.4000e- 004	0.0000	36.1971
Total	0.0211	0.1554	0.1558	7.9000e- 004	0.0545	5.4000e- 004	0.0550	0.0147	5.1000e- 004	0.0152	0.0000	73.7479	73.7479	3.7100e- 003	0.0000	73.8406

#### Mitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	'/yr		
Off-Road	0.2250	1.7630	1.6019	2.7500e- 003		0.0899	0.0899		0.0861	0.0861	0.0000	228.4133	228.4133	0.0449	0.0000	229.5368
Total	0.2250	1.7630	1.6019	2.7500e- 003		0.0899	0.0899		0.0861	0.0861	0.0000	228.4133	228.4133	0.0449	0.0000	229.5368

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#### 3.4 Building Construction - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6700e- 003	0.1436	0.0276	3.9000e- 004	9.7300e- 003	2.7000e- 004	0.0100	2.8100e- 003	2.6000e- 004	3.0700e- 003	0.0000	37.5719	37.5719	2.8700e- 003	0.0000	37.6435
Worker	0.0175	0.0118	0.1281	4.0000e- 004	0.0447	2.7000e- 004	0.0450	0.0119	2.5000e- 004	0.0121	0.0000	36.1761	36.1761	8.4000e- 004	0.0000	36.1971
Total	0.0211	0.1554	0.1558	7.9000e- 004	0.0545	5.4000e- 004	0.0550	0.0147	5.1000e- 004	0.0152	0.0000	73.7479	73.7479	3.7100e- 003	0.0000	73.8406

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	5.3200e- 003	0.0532	0.0589	9.0000e- 005		2.9100e- 003	2.9100e- 003		2.6900e- 003	2.6900e- 003	0.0000	7.7524	7.7524	2.4600e- 003	0.0000	7.8138
Paving	1.9700e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.2900e- 003	0.0532	0.0589	9.0000e- 005		2.9100e- 003	2.9100e- 003		2.6900e- 003	2.6900e- 003	0.0000	7.7524	7.7524	2.4600e- 003	0.0000	7.8138

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#### 3.5 Paving - 2021

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e- 004	2.2000e- 004	2.3600e- 003	1.0000e- 005	8.2000e- 004	0.0000	8.3000e- 004	2.2000e- 004	0.0000	2.2000e- 004	0.0000	0.6666	0.6666	2.0000e- 005	0.0000	0.6670
Total	3.2000e- 004	2.2000e- 004	2.3600e- 003	1.0000e- 005	8.2000e- 004	0.0000	8.3000e- 004	2.2000e- 004	0.0000	2.2000e- 004	0.0000	0.6666	0.6666	2.0000e- 005	0.0000	0.6670

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	5.3200e- 003	0.0532	0.0589	9.0000e- 005		2.9100e- 003	2.9100e- 003		2.6900e- 003	2.6900e- 003	0.0000	7.7524	7.7524	2.4600e- 003	0.0000	7.8138
Paving	1.9700e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.2900e- 003	0.0532	0.0589	9.0000e- 005		2.9100e- 003	2.9100e- 003		2.6900e- 003	2.6900e- 003	0.0000	7.7524	7.7524	2.4600e- 003	0.0000	7.8138

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#### 3.5 Paving - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e- 004	2.2000e- 004	2.3600e- 003	1.0000e- 005	8.2000e- 004	0.0000	8.3000e- 004	2.2000e- 004	0.0000	2.2000e- 004	0.0000	0.6666	0.6666	2.0000e- 005	0.0000	0.6670
Total	3.2000e- 004	2.2000e- 004	2.3600e- 003	1.0000e- 005	8.2000e- 004	0.0000	8.3000e- 004	2.2000e- 004	0.0000	2.2000e- 004	0.0000	0.6666	0.6666	2.0000e- 005	0.0000	0.6670

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0463					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e- 003	7.6300e- 003	9.0900e- 003	1.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788
Total	0.0474	7.6300e- 003	9.0900e- 003	1.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788

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#### 3.6 Architectural Coating - 2021

#### Unmitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e- 004	1.0000e- 004	1.1000e- 003	0.0000	3.8000e- 004	0.0000	3.9000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.3111	0.3111	1.0000e- 005	0.0000	0.3113
Total	1.5000e- 004	1.0000e- 004	1.1000e- 003	0.0000	3.8000e- 004	0.0000	3.9000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.3111	0.3111	1.0000e- 005	0.0000	0.3113

#### Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.0463					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e- 003	7.6300e- 003	9.0900e- 003	1.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788
Total	0.0474	7.6300e- 003	9.0900e- 003	1.0000e- 005		4.7000e- 004	4.7000e- 004		4.7000e- 004	4.7000e- 004	0.0000	1.2766	1.2766	9.0000e- 005	0.0000	1.2788

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#### 3.6 Architectural Coating - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e- 004	1.0000e- 004	1.1000e- 003	0.0000	3.8000e- 004	0.0000	3.9000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.3111	0.3111	1.0000e- 005	0.0000	0.3113
Total	1.5000e- 004	1.0000e- 004	1.1000e- 003	0.0000	3.8000e- 004	0.0000	3.9000e- 004	1.0000e- 004	0.0000	1.0000e- 004	0.0000	0.3111	0.3111	1.0000e- 005	0.0000	0.3113

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile
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### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.3049	2.6050	3.6070	0.0165	1.2590	0.0114	1.2703	0.3373	0.0106	0.3479	0.0000	1,526.856 1	1,526.856 1	0.0794	0.0000	1,528.839 9
Unmitigated	0.3049	2.6050	3.6070	0.0165	1.2590	0.0114	1.2703	0.3373	0.0106	0.3479	0.0000	1,526.856 1	1,526.856 1	0.0794	0.0000	1,528.839 9

## 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	565.92	565.92	565.92	1,685,162	1,685,162
Fast Food Restaurant with Drive Thru	534.00	534.00	534.00	1,612,412	1,612,412
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	1,099.92	1,099.92	1,099.92	3,297,573	3,297,573

## 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	100	0	0
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	100	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Fast Food Restaurant with Drive Thru	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Other Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

# 5.0 Energy Detail

### Historical Energy Use: N

## 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	69.3994	69.3994	2.8700e- 003	5.9000e- 004	69.6477
Electricity Unmitigated	M					0.0000	0.0000		0.0000	0.0000	0.0000	69.3994	69.3994	2.8700e- 003	5.9000e- 004	69.6477
NaturalGas Mitigated	5.2100e- 003	0.0474	0.0398	2.8000e- 004		3.6000e- 003	3.6000e- 003		3.6000e- 003	3.6000e- 003	0.0000	51.5556	51.5556	9.9000e- 004	9.5000e- 004	51.8620
NaturalGas Unmitigated	5.2100e- 003	0.0474	0.0398	2.8000e- 004		3.6000e- 003	3.6000e- 003		3.6000e- 003	3.6000e- 003	0.0000	51.5556	51.5556	9.9000e- 004	9.5000e- 004	51.8620

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

### 5.2 Energy by Land Use - NaturalGas

### <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Convenience Market With Gas Pumps	9075.36	5.0000e- 005	4.4000e- 004	3.7000e- 004	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005	0.0000	0.4843	0.4843	1.0000e- 005	1.0000e- 005	0.4872
Fast Food Restaurant with Drive Thru	957040	5.1600e- 003	0.0469	0.0394	2.8000e- 004		3.5700e- 003	3.5700e- 003		3.5700e- 003	3.5700e- 003	0.0000	51.0713	51.0713	9.8000e- 004	9.4000e- 004	51.3748
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		5.2100e- 003	0.0474	0.0398	2.8000e- 004		3.6000e- 003	3.6000e- 003		3.6000e- 003	3.6000e- 003	0.0000	51.5556	51.5556	9.9000e- 004	9.5000e- 004	51.8620

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## Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

### 5.2 Energy by Land Use - NaturalGas

### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
Convenience Market With Gas Pumps	9075.36	5.0000e- 005	4.4000e- 004	3.7000e- 004	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005	0.0000	0.4843	0.4843	1.0000e- 005	1.0000e- 005	0.4872
Fast Food Restaurant with Drive Thru	957040	5.1600e- 003	0.0469	0.0394	2.8000e- 004		3.5700e- 003	3.5700e- 003		3.5700e- 003	3.5700e- 003	0.0000	51.0713	51.0713	9.8000e- 004	9.4000e- 004	51.3748
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		5.2100e- 003	0.0474	0.0398	2.8000e- 004		3.6000e- 003	3.6000e- 003		3.6000e- 003	3.6000e- 003	0.0000	51.5556	51.5556	9.9000e- 004	9.5000e- 004	51.8620

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

## 5.3 Energy by Land Use - Electricity

## <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		ΜT	/yr	
Convenience Market With Gas Pumps	51631.4	16.4509	6.8000e- 004	1.4000e- 004	16.5097
Fast Food Restaurant with Drive Thru	166180	52.9485	2.1900e- 003	4.5000e- 004	53.1379
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		69.3994	2.8700e- 003	5.9000e- 004	69.6477

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

# 5.3 Energy by Land Use - Electricity

## Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Convenience Market With Gas Pumps	51631.4	16.4509	6.8000e- 004	1.4000e- 004	16.5097
Fast Food Restaurant with Drive Thru	166180	52.9485	2.1900e- 003	4.5000e- 004	53.1379
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		69.3994	2.8700e- 003	5.9000e- 004	69.6477

## 6.0 Area Detail

6.1 Mitigation Measures Area

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.0374	1.0000e- 005	1.2200e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3800e- 003	2.3800e- 003	1.0000e- 005	0.0000	2.5300e- 003
Unmitigated	0.0374	1.0000e- 005	1.2200e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3800e- 003	2.3800e- 003	1.0000e- 005	0.0000	2.5300e- 003

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	'/yr		
Architectural Coating	4.6300e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0326					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e- 004	1.0000e- 005	1.2200e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3800e- 003	2.3800e- 003	1.0000e- 005	0.0000	2.5300e- 003
Total	0.0374	1.0000e- 005	1.2200e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3800e- 003	2.3800e- 003	1.0000e- 005	0.0000	2.5300e- 003

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## Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

### 6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	4.6300e- 003					0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0326					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e- 004	1.0000e- 005	1.2200e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3800e- 003	2.3800e- 003	1.0000e- 005	0.0000	2.5300e- 003
Total	0.0374	1.0000e- 005	1.2200e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3800e- 003	2.3800e- 003	1.0000e- 005	0.0000	2.5300e- 003

# 7.0 Water Detail

7.1 Mitigation Measures Water

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Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category		MT	ī/yr	
Mitigated	5.8173	0.0389	9.6000e- 004	7.0768
Unmitigated	5.8173	0.0389	9.6000e- 004	7.0768

# 7.2 Water by Land Use

<u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr				
Convenience Market With Gas Pumps	0.125486 / 0.0769109	0.8327	4.1200e- 003	1.0000e- 004	0.9665	
Fast Food Restaurant with Drive Thru	1.06237 / 0.0678107	4.9846	0.0348	8.6000e- 004	6.1102	
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000	
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000	
Total		5.8173	0.0389	9.6000e- 004	7.0768	

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Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

### 7.2 Water by Land Use

### Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr				
Convenience Market With Gas Pumps	0.125486 / 0.0769109	0.8327	4.1200e- 003	1.0000e- 004	0.9665	
Fast Food Restaurant with Drive Thru	1.06237 / 0.0678107	4.9846	0.0348	8.6000e- 004	6.1102	
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000	
Other Non- Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000	
Total		5.8173	0.0389	9.6000e- 004	7.0768	

# 8.0 Waste Detail

8.1 Mitigation Measures Waste

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Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

# Category/Year

	Total CO2	CH4	N2O	CO2e	
	MT/yr				
Mitigated	8.1846	0.4837	0.0000	20.2770	
Unmitigated	8.1846	0.4837	0.0000	20.2770	

# 8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	√yr	
Fast Food Restaurant with Drive Thru	40.32	8.1846	0.4837	0.0000	20.2770
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		8.1846	0.4837	0.0000	20.2770

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Annual

#### 8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e	
Land Use	tons	MT/yr				
Fast Food Restaurant with Drive Thru	40.32	8.1846	0.4837	0.0000	20.2770	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	
Total		8.1846	0.4837	0.0000	20.2770	

# 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

### **10.0 Stationary Equipment**

#### Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

### User Defined Equipment

Equipment Type Number
-----------------------

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11.0 Vegetation

Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### **Evergreen C-Store Beaumont**

Riverside-South Coast County, Summer

### **1.0 Project Characteristics**

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	60.30	1000sqft	1.50	60,300.00	0
Other Non-Asphalt Surfaces	20.00	1000sqft	0.46	20,000.00	0
Fast Food Restaurant with Drive Thru	3.50	1000sqft	0.08	3,500.00	0
Convenience Market With Gas Pumps	12.00	Pump	0.04	4,088.00	0

#### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (Ib/MWhr)	702.44	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity (Ib/MWhr)	0.006

#### **1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Per Site Plan

Construction Phase -

Grading -

Vehicle Trips - Per TIA

Construction Off-road Equipment Mitigation -

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	1,694.10	4,088.00
tblLandUse	LotAcreage	1.38	1.50
tblTripsAndVMT	HaulingTripNumber	0.00	189.00
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	PB_TP	65.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	ST_TR	204.47	47.16
tblVehicleTrips	ST_TR	722.03	152.57
tblVehicleTrips	SU_TR	166.88	47.16
tblVehicleTrips	SU_TR	542.72	152.57
tblVehicleTrips	WD_TR	542.60	47.16
tblVehicleTrips	WD_TR	496.12	152.57

# 2.0 Emissions Summary

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## Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year		lb/day											lb/d	day		
2021	9.5193	27.0873	16.1620	0.0454	7.2151	0.9373	8.1524	3.5482	0.8631	4.4112	0.0000	4,619.991 9	4,619.991 9	0.7942	0.0000	4,639.847 1
Maximum	9.5193	27.0873	16.1620	0.0454	7.2151	0.9373	8.1524	3.5482	0.8631	4.4112	0.0000	4,619.991 9	4,619.991 9	0.7942	0.0000	4,639.847 1

#### Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year		lb/day											lb/c	lay		
2021	9.5193	27.0873	16.1620	0.0454	3.6113	0.9373	4.5486	1.6961	0.8631	2.5591	0.0000	4,619.991 9	4,619.991 9	0.7942	0.0000	4,639.847 1
Maximum	9.5193	27.0873	16.1620	0.0454	3.6113	0.9373	4.5486	1.6961	0.8631	2.5591	0.0000	4,619.991 9	4,619.991 9	0.7942	0.0000	4,639.847 1

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	49.95	0.00	44.21	52.20	0.00	41.99	0.00	0.00	0.00	0.00	0.00	0.00

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

## 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Area	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224
Energy	0.0285	0.2595	0.2180	1.5600e- 003		0.0197	0.0197		0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495
Mobile	1.9805	14.1040	22.1241	0.0958	7.0323	0.0622	7.0945	1.8815	0.0583	1.9397		9,786.612 1	9,786.612 1	0.4775		9,798.549 4
Total	2.2140	14.3636	22.3519	0.0974	7.0323	0.0819	7.1142	1.8815	0.0780	1.9595		10,098.03 21	10,098.03 21	0.4835	5.7100e- 003	10,111.82 12

#### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Area	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224
Energy	0.0285	0.2595	0.2180	1.5600e- 003		0.0197	0.0197		0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495
Mobile	1.9805	14.1040	22.1241	0.0958	7.0323	0.0622	7.0945	1.8815	0.0583	1.9397		9,786.612 1	9,786.612 1	0.4775		9,798.549 4
Total	2.2140	14.3636	22.3519	0.0974	7.0323	0.0819	7.1142	1.8815	0.0780	1.9595		10,098.03 21	10,098.03 21	0.4835	5.7100e- 003	10,111.82 12

#### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### **3.0 Construction Detail**

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/11/2021	1/13/2021	5	3	
2	Grading	Grading	1/14/2021	1/21/2021	5	6	
3	Building Construction	Building Construction	1/22/2021	11/25/2021	5	220	
4	Paving	Paving	11/26/2021	12/9/2021	5	10	
5	Architectural Coating	Architectural Coating	12/10/2021	12/23/2021	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 1.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,382; Non-Residential Outdoor: 3,794; Striped Parking Area: 4,818 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	189.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	37.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### **3.1 Mitigation Measures Construction**

Water Exposed Area

### 3.2 Site Preparation - 2021

#### Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.883 2	2,372.883 2	0.7674		2,392.069 2
Total	1.5463	18.2862	10.7496	0.0245	1.5908	0.7019	2.2926	0.1718	0.6457	0.8175		2,372.883 2	2,372.883 2	0.7674		2,392.069 2

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## Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 3.2 Site Preparation - 2021

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0379	0.0216	0.2958	8.5000e- 004	0.0894	5.3000e- 004	0.0900	0.0237	4.9000e- 004	0.0242		85.1801	85.1801	2.0300e- 003		85.2309
Total	0.0379	0.0216	0.2958	8.5000e- 004	0.0894	5.3000e- 004	0.0900	0.0237	4.9000e- 004	0.0242		85.1801	85.1801	2.0300e- 003		85.2309

### Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust		, , ,			0.7158	0.0000	0.7158	0.0773	0.0000	0.0773		1 1 1	0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457	0.0000	2,372.883 2	2,372.883 2	0.7674		2,392.069 2
Total	1.5463	18.2862	10.7496	0.0245	0.7158	0.7019	1.4177	0.0773	0.6457	0.7230	0.0000	2,372.883 2	2,372.883 2	0.7674		2,392.069 2

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## Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 3.2 Site Preparation - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	Jay							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0379	0.0216	0.2958	8.5000e- 004	0.0894	5.3000e- 004	0.0900	0.0237	4.9000e- 004	0.0242		85.1801	85.1801	2.0300e- 003	, , ,	85.2309
Total	0.0379	0.0216	0.2958	8.5000e- 004	0.0894	5.3000e- 004	0.0900	0.0237	4.9000e- 004	0.0242		85.1801	85.1801	2.0300e- 003		85.2309

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	6.5523	0.9158	7.4681	3.3675	0.8425	4.2100		1,995.611 4	1,995.611 4	0.6454		2,011.747 0

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## Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

## 3.3 Grading - 2021

## Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.1533	6.8467	0.9003	0.0237	0.5510	0.0209	0.5719	0.1510	0.0199	0.1710		2,517.905 4	2,517.905 4	0.1463		2,521.561 6
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0270	0.3697	1.0700e- 003	0.1118	6.6000e- 004	0.1124	0.0296	6.1000e- 004	0.0303		106.4751	106.4751	2.5400e- 003		106.5386
Total	0.2007	6.8737	1.2701	0.0248	0.6628	0.0215	0.6843	0.1807	0.0206	0.2012		2,624.380 5	2,624.380 5	0.1488		2,628.100 2

### Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Fugitive Dust			1		2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	2.9486	0.9158	3.8643	1.5154	0.8425	2.3579	0.0000	1,995.611 4	1,995.611 4	0.6454		2,011.747 0

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

## 3.3 Grading - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.1533	6.8467	0.9003	0.0237	0.5510	0.0209	0.5719	0.1510	0.0199	0.1710		2,517.905 4	2,517.905 4	0.1463		2,521.561 6
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0270	0.3697	1.0700e- 003	0.1118	6.6000e- 004	0.1124	0.0296	6.1000e- 004	0.0303		106.4751	106.4751	2.5400e- 003		106.5386
Total	0.2007	6.8737	1.2701	0.0248	0.6628	0.0215	0.6843	0.1807	0.0206	0.2012		2,624.380 5	2,624.380 5	0.1488		2,628.100 2

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/c	lay		
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.935 5	2,288.935 5	0.4503		2,300.193 5
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.935 5	2,288.935 5	0.4503		2,300.193 5

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 3.4 Building Construction - 2021

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0327	1.2956	0.2312	3.6300e- 003	0.0897	2.4600e- 003	0.0921	0.0258	2.3600e- 003	0.0282		382.5514	382.5514	0.0274		383.2356
Worker	0.1754	0.0999	1.3679	3.9500e- 003	0.4136	2.4400e- 003	0.4160	0.1097	2.2400e- 003	0.1119		393.9578	393.9578	9.3900e- 003		394.1927
Total	0.2081	1.3955	1.5991	7.5800e- 003	0.5032	4.9000e- 003	0.5081	0.1355	4.6000e- 003	0.1401		776.5093	776.5093	0.0368		777.4283

### Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	Jay		
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.935 5	2,288.935 5	0.4503		2,300.193 5
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.935 5	2,288.935 5	0.4503		2,300.193 5

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 3.4 Building Construction - 2021

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0327	1.2956	0.2312	3.6300e- 003	0.0897	2.4600e- 003	0.0921	0.0258	2.3600e- 003	0.0282		382.5514	382.5514	0.0274		383.2356
Worker	0.1754	0.0999	1.3679	3.9500e- 003	0.4136	2.4400e- 003	0.4160	0.1097	2.2400e- 003	0.1119		393.9578	393.9578	9.3900e- 003		394.1927
Total	0.2081	1.3955	1.5991	7.5800e- 003	0.5032	4.9000e- 003	0.5081	0.1355	4.6000e- 003	0.1401		776.5093	776.5093	0.0368		777.4283

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.110 7	0.5417		1,722.652 4
Paving	0.3930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4563	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.110 7	1,709.110 7	0.5417		1,722.652 4

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 3.5 Paving - 2021

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0405	0.5546	1.6000e- 003	0.1677	9.9000e- 004	0.1687	0.0445	9.1000e- 004	0.0454		159.7126	159.7126	3.8100e- 003		159.8078
Total	0.0711	0.0405	0.5546	1.6000e- 003	0.1677	9.9000e- 004	0.1687	0.0445	9.1000e- 004	0.0454		159.7126	159.7126	3.8100e- 003		159.8078

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.652 4
Paving	0.3930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4563	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.110 7	1,709.110 7	0.5417		1,722.652 4

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 3.5 Paving - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0711	0.0405	0.5546	1.6000e- 003	0.1677	9.9000e- 004	0.1687	0.0445	9.1000e- 004	0.0454		159.7126	159.7126	3.8100e- 003		159.8078
Total	0.0711	0.0405	0.5546	1.6000e- 003	0.1677	9.9000e- 004	0.1687	0.0445	9.1000e- 004	0.0454		159.7126	159.7126	3.8100e- 003		159.8078

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Archit. Coating	9.2672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	9.4861	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 3.6 Architectural Coating - 2021

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0189	0.2588	7.5000e- 004	0.0782	4.6000e- 004	0.0787	0.0208	4.2000e- 004	0.0212		74.5326	74.5326	1.7800e- 003		74.5770
Total	0.0332	0.0189	0.2588	7.5000e- 004	0.0782	4.6000e- 004	0.0787	0.0208	4.2000e- 004	0.0212		74.5326	74.5326	1.7800e- 003		74.5770

### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Archit. Coating	9.2672					0.0000	0.0000	, , ,	0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	9.4861	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 3.6 Architectural Coating - 2021

### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0332	0.0189	0.2588	7.5000e- 004	0.0782	4.6000e- 004	0.0787	0.0208	4.2000e- 004	0.0212		74.5326	74.5326	1.7800e- 003		74.5770
Total	0.0332	0.0189	0.2588	7.5000e- 004	0.0782	4.6000e- 004	0.0787	0.0208	4.2000e- 004	0.0212		74.5326	74.5326	1.7800e- 003		74.5770

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Mitigated	1.9805	14.1040	22.1241	0.0958	7.0323	0.0622	7.0945	1.8815	0.0583	1.9397		9,786.612 1	9,786.612 1	0.4775		9,798.549 4
Unmitigated	1.9805	14.1040	22.1241	0.0958	7.0323	0.0622	7.0945	1.8815	0.0583	1.9397		9,786.612 1	9,786.612 1	0.4775		9,798.549 4

## 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	565.92	565.92	565.92	1,685,162	1,685,162
Fast Food Restaurant with Drive Thru	534.00	534.00	534.00	1,612,412	1,612,412
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	1,099.92	1,099.92	1,099.92	3,297,573	3,297,573

### 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	100	0	0
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	100	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Fast Food Restaurant with Drive Thru	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Other Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

# 5.0 Energy Detail

### Historical Energy Use: N

## 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
NaturalGas Mitigated	0.0285	0.2595	0.2180	1.5600e- 003		0.0197	0.0197		0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495
NaturalGas Unmitigated	0.0285	0.2595	0.2180	1.5600e- 003		0.0197	0.0197	r 1 1 1 1	0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495

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## Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 5.2 Energy by Land Use - NaturalGas

### <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/d	day		
Convenience Market With Gas Pumps	24.864	2.7000e- 004	2.4400e- 003	2.0500e- 003	1.0000e- 005		1.9000e- 004	1.9000e- 004		1.9000e- 004	1.9000e- 004		2.9252	2.9252	6.0000e- 005	5.0000e- 005	2.9426
Fast Food Restaurant with Drive Thru	2622.03	0.0283	0.2571	0.2159	1.5400e- 003		0.0195	0.0195		0.0195	0.0195		308.4738	308.4738	5.9100e- 003	5.6600e- 003	310.3069
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0286	0.2595	0.2180	1.5500e- 003		0.0197	0.0197		0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 5.2 Energy by Land Use - NaturalGas

### Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day									lb/day							
Convenience Market With Gas Pumps	0.024864	2.7000e- 004	2.4400e- 003	2.0500e- 003	1.0000e- 005		1.9000e- 004	1.9000e- 004		1.9000e- 004	1.9000e- 004		2.9252	2.9252	6.0000e- 005	5.0000e- 005	2.9426	
Fast Food Restaurant with Drive Thru	2.62203	0.0283	0.2571	0.2159	1.5400e- 003		0.0195	0.0195		0.0195	0.0195		308.4738	308.4738	5.9100e- 003	5.6600e- 003	310.3069	
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	
Total		0.0286	0.2595	0.2180	1.5500e- 003		0.0197	0.0197		0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495	

## 6.0 Area Detail

6.1 Mitigation Measures Area

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Mitigated	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224
Unmitigated	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224

# 6.2 Area by SubCategory

### <u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.0254		1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Consumer Products	0.1787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Landscaping	9.1000e- 004	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224	
Total	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224	

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

### 6.2 Area by SubCategory

**Mitigated** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	0.0254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Consumer Products	0.1787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Landscaping	9.1000e- 004	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224	
Total	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224	

### 7.0 Water Detail

7.1 Mitigation Measures Water

### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

### 9.0 Operational Offroad

Equipment Type Number Hours/Day Days/Year Horse Power Load Factor Fuel Type
---

# **10.0 Stationary Equipment**

Fire Pumps and Emergency Generators
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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						
Equipment Type	Number					
11 0 Vegetation						

Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

### **Evergreen C-Store Beaumont**

**Riverside-South Coast County, Winter** 

### **1.0 Project Characteristics**

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	60.30	1000sqft	1.50	60,300.00	0
Other Non-Asphalt Surfaces	20.00	1000sqft	0.46	20,000.00	0
Fast Food Restaurant with Drive Thru	3.50	1000sqft	0.08	3,500.00	0
Convenience Market With Gas Pumps	12.00	Pump	0.04	4,088.00	0

### **1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (Ib/MWhr)	702.44	CH4 Intensity (Ib/MWhr)	0.029	N2O Intensity ( (Ib/MWhr)	0.006

#### **1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Per Site Plan

Construction Phase -

Grading -

Vehicle Trips - Per TIA

Construction Off-road Equipment Mitigation -

#### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblLandUse	LandUseSquareFeet	1,694.10	4,088.00
tblLandUse	LotAcreage	1.38	1.50
tblTripsAndVMT	HaulingTripNumber	0.00	189.00
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	PB_TP	65.00	0.00
tblVehicleTrips	PB_TP	50.00	0.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	PR_TP	29.00	100.00
tblVehicleTrips	ST_TR	204.47	47.16
tblVehicleTrips	ST_TR	722.03	152.57
tblVehicleTrips	SU_TR	166.88	47.16
tblVehicleTrips	SU_TR	542.72	152.57
tblVehicleTrips	WD_TR	542.60	47.16
tblVehicleTrips	WD_TR	496.12	152.57

# 2.0 Emissions Summary

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

#### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	day							lb/d	day		
2021	9.5187	27.1346	15.9406	0.0447	7.2151	0.9376	8.1527	3.5482	0.8633	4.4115	0.0000	4,545.774 7	4,545.774 7	0.8076	0.0000	4,565.965 3
Maximum	9.5187	27.1346	15.9406	0.0447	7.2151	0.9376	8.1527	3.5482	0.8633	4.4115	0.0000	4,545.774 7	4,545.774 7	0.8076	0.0000	4,565.965 3

#### Mitigated Construction

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day											lb/c	lay			
2021	9.5187	27.1346	15.9406	0.0447	3.6113	0.9376	4.5489	1.6961	0.8633	2.5594	0.0000	4,545.774 7	4,545.774 7	0.8076	0.0000	4,565.965 3
Maximum	9.5187	27.1346	15.9406	0.0447	3.6113	0.9376	4.5489	1.6961	0.8633	2.5594	0.0000	4,545.774 7	4,545.774 7	0.8076	0.0000	4,565.965 3

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	49.95	0.00	44.20	52.20	0.00	41.98	0.00	0.00	0.00	0.00	0.00	0.00

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

### 2.2 Overall Operational

#### Unmitigated Operational

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Area	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224
Energy	0.0285	0.2595	0.2180	1.5600e- 003		0.0197	0.0197		0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495
Mobile	1.6732	14.0620	19.2859	0.0884	7.0323	0.0629	7.0952	1.8815	0.0589	1.9404		9,035.743 4	9,035.743 4	0.4964		9,048.153 0
Total	1.9068	14.3216	19.5137	0.0899	7.0323	0.0826	7.1149	1.8815	0.0787	1.9601		9,347.163 4	9,347.163 4	0.5024	5.7100e- 003	9,361.424 8

#### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Area	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005	-	0.0210	0.0210	6.0000e- 005		0.0224
Energy	0.0285	0.2595	0.2180	1.5600e- 003		0.0197	0.0197		0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495
Mobile	1.6732	14.0620	19.2859	0.0884	7.0323	0.0629	7.0952	1.8815	0.0589	1.9404		9,035.743 4	9,035.743 4	0.4964		9,048.153 0
Total	1.9068	14.3216	19.5137	0.0899	7.0323	0.0826	7.1149	1.8815	0.0787	1.9601		9,347.163 4	9,347.163 4	0.5024	5.7100e- 003	9,361.424 8

#### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### **3.0 Construction Detail**

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/11/2021	1/13/2021	5	3	
2	Grading	Grading	1/14/2021	1/21/2021	5	6	
3	Building Construction	Building Construction	1/22/2021	11/25/2021	5	220	
4	Paving	Paving	11/26/2021	12/9/2021	5	10	
5	Architectural Coating	Architectural Coating	12/10/2021	12/23/2021	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 1.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 11,382; Non-Residential Outdoor: 3,794; Striped Parking Area: 4,818 (Architectural Coating – sqft)

OffRoad Equipment

Evergreen	C-Store	Beaumont	- Riverside	-South	Coast C	county.	Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	189.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	37.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 Site Preparation - 2021

#### Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Fugitive Dust					1.5908	0.0000	1.5908	0.1718	0.0000	0.1718			0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457		2,372.883 2	2,372.883 2	0.7674		2,392.069 2
Total	1.5463	18.2862	10.7496	0.0245	1.5908	0.7019	2.2926	0.1718	0.6457	0.8175		2,372.883 2	2,372.883 2	0.7674		2,392.069 2

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

### 3.2 Site Preparation - 2021

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0224	0.2387	7.7000e- 004	0.0894	5.3000e- 004	0.0900	0.0237	4.9000e- 004	0.0242		76.4155	76.4155	1.7700e- 003		76.4596
Total	0.0372	0.0224	0.2387	7.7000e- 004	0.0894	5.3000e- 004	0.0900	0.0237	4.9000e- 004	0.0242		76.4155	76.4155	1.7700e- 003		76.4596

#### Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust		, , ,			0.7158	0.0000	0.7158	0.0773	0.0000	0.0773		1 1 1	0.0000			0.0000
Off-Road	1.5463	18.2862	10.7496	0.0245		0.7019	0.7019		0.6457	0.6457	0.0000	2,372.883 2	2,372.883 2	0.7674		2,392.069 2
Total	1.5463	18.2862	10.7496	0.0245	0.7158	0.7019	1.4177	0.0773	0.6457	0.7230	0.0000	2,372.883 2	2,372.883 2	0.7674		2,392.069 2

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

#### 3.2 Site Preparation - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0372	0.0224	0.2387	7.7000e- 004	0.0894	5.3000e- 004	0.0900	0.0237	4.9000e- 004	0.0242		76.4155	76.4155	1.7700e- 003		76.4596
Total	0.0372	0.0224	0.2387	7.7000e- 004	0.0894	5.3000e- 004	0.0900	0.0237	4.9000e- 004	0.0242		76.4155	76.4155	1.7700e- 003		76.4596

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425		1,995.6114	1,995.611 4	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	6.5523	0.9158	7.4681	3.3675	0.8425	4.2100		1,995.611 4	1,995.611 4	0.6454		2,011.747 0

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

### 3.3 Grading - 2021

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	0.1614	6.8931	1.0503	0.0231	0.5510	0.0212	0.5722	0.1510	0.0202	0.1713		2,454.643 9	2,454.643 9	0.1600		2,458.643 8
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0465	0.0279	0.2984	9.6000e- 004	0.1118	6.6000e- 004	0.1124	0.0296	6.1000e- 004	0.0303		95.5194	95.5194	2.2100e- 003		95.5745
Total	0.2079	6.9210	1.3487	0.0241	0.6628	0.0218	0.6846	0.1807	0.0209	0.2015		2,550.163 2	2,550.163 2	0.1622		2,554.218 3

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Fugitive Dust		1 1 1	1 1 1		2.9486	0.0000	2.9486	1.5154	0.0000	1.5154			0.0000			0.0000
Off-Road	1.8271	20.2135	9.7604	0.0206		0.9158	0.9158		0.8425	0.8425	0.0000	1,995.6114	1,995.6114	0.6454		2,011.7470
Total	1.8271	20.2135	9.7604	0.0206	2.9486	0.9158	3.8643	1.5154	0.8425	2.3579	0.0000	1,995.611 4	1,995.611 4	0.6454		2,011.747 0

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

### 3.3 Grading - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.1614	6.8931	1.0503	0.0231	0.5510	0.0212	0.5722	0.1510	0.0202	0.1713		2,454.643 9	2,454.643 9	0.1600		2,458.643 8
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0465	0.0279	0.2984	9.6000e- 004	0.1118	6.6000e- 004	0.1124	0.0296	6.1000e- 004	0.0303		95.5194	95.5194	2.2100e- 003		95.5745
Total	0.2079	6.9210	1.3487	0.0241	0.6628	0.0218	0.6846	0.1807	0.0209	0.2015		2,550.163 2	2,550.163 2	0.1622		2,554.218 3

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/d	lay		
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.935 5	2,288.935 5	0.4503		2,300.193 5
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831		2,288.935 5	2,288.935 5	0.4503		2,300.193 5

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

#### 3.4 Building Construction - 2021

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0347	1.2844	0.2734	3.4900e- 003	0.0897	2.5400e- 003	0.0922	0.0258	2.4300e- 003	0.0282		368.1625	368.1625	0.0305		368.9249
Worker	0.1721	0.1034	1.1042	3.5500e- 003	0.4136	2.4400e- 003	0.4160	0.1097	2.2400e- 003	0.1119		353.4216	353.4216	8.1700e- 003		353.6258
Total	0.2069	1.3877	1.3776	7.0400e- 003	0.5032	4.9800e- 003	0.5082	0.1355	4.6700e- 003	0.1402		721.5841	721.5841	0.0387		722.5507

#### Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/c	Jay		
Off-Road	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.935 5	2,288.935 5	0.4503		2,300.193 5
Total	2.0451	16.0275	14.5629	0.0250		0.8173	0.8173		0.7831	0.7831	0.0000	2,288.935 5	2,288.935 5	0.4503		2,300.193 5

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

#### 3.4 Building Construction - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0347	1.2844	0.2734	3.4900e- 003	0.0897	2.5400e- 003	0.0922	0.0258	2.4300e- 003	0.0282		368.1625	368.1625	0.0305		368.9249
Worker	0.1721	0.1034	1.1042	3.5500e- 003	0.4136	2.4400e- 003	0.4160	0.1097	2.2400e- 003	0.1119		353.4216	353.4216	8.1700e- 003		353.6258
Total	0.2069	1.3877	1.3776	7.0400e- 003	0.5032	4.9800e- 003	0.5082	0.1355	4.6700e- 003	0.1402		721.5841	721.5841	0.0387		722.5507

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.1107	1,709.1107	0.5417		1,722.652 4
Paving	0.3930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4563	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371		1,709.110 7	1,709.110 7	0.5417		1,722.652 4

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

#### 3.5 Paving - 2021

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0698	0.0419	0.4476	1.4400e- 003	0.1677	9.9000e- 004	0.1687	0.0445	9.1000e- 004	0.0454		143.2790	143.2790	3.3100e- 003		143.3618
Total	0.0698	0.0419	0.4476	1.4400e- 003	0.1677	9.9000e- 004	0.1687	0.0445	9.1000e- 004	0.0454		143.2790	143.2790	3.3100e- 003		143.3618

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
Off-Road	1.0633	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.1107	1,709.1107	0.5417		1,722.652 4
Paving	0.3930					0.0000	0.0000		0.0000	0.0000		 - - - -	0.0000			0.0000
Total	1.4563	10.6478	11.7756	0.0178		0.5826	0.5826		0.5371	0.5371	0.0000	1,709.110 7	1,709.110 7	0.5417		1,722.652 4

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

### 3.5 Paving - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0698	0.0419	0.4476	1.4400e- 003	0.1677	9.9000e- 004	0.1687	0.0445	9.1000e- 004	0.0454		143.2790	143.2790	3.3100e- 003		143.3618
Total	0.0698	0.0419	0.4476	1.4400e- 003	0.1677	9.9000e- 004	0.1687	0.0445	9.1000e- 004	0.0454		143.2790	143.2790	3.3100e- 003		143.3618

3.6 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	9.2672					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	9.4861	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

### 3.6 Architectural Coating - 2021

### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0326	0.0196	0.2089	6.7000e- 004	0.0782	4.6000e- 004	0.0787	0.0208	4.2000e- 004	0.0212		66.8636	66.8636	1.5500e- 003		66.9022
Total	0.0326	0.0196	0.2089	6.7000e- 004	0.0782	4.6000e- 004	0.0787	0.0208	4.2000e- 004	0.0212		66.8636	66.8636	1.5500e- 003		66.9022

#### Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Archit. Coating	9.2672					0.0000	0.0000		0.0000	0.0000		1 1 1	0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	9.4861	1.5268	1.8176	2.9700e- 003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

#### 3.6 Architectural Coating - 2021

#### Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0326	0.0196	0.2089	6.7000e- 004	0.0782	4.6000e- 004	0.0787	0.0208	4.2000e- 004	0.0212		66.8636	66.8636	1.5500e- 003		66.9022
Total	0.0326	0.0196	0.2089	6.7000e- 004	0.0782	4.6000e- 004	0.0787	0.0208	4.2000e- 004	0.0212		66.8636	66.8636	1.5500e- 003		66.9022

# 4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Mitigated	1.6732	14.0620	19.2859	0.0884	7.0323	0.0629	7.0952	1.8815	0.0589	1.9404		9,035.743 4	9,035.743 4	0.4964		9,048.153 0
Unmitigated	1.6732	14.0620	19.2859	0.0884	7.0323	0.0629	7.0952	1.8815	0.0589	1.9404		9,035.743 4	9,035.743 4	0.4964		9,048.153 0

### 4.2 Trip Summary Information

	Aver	age Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	565.92	565.92	565.92	1,685,162	1,685,162
Fast Food Restaurant with Drive Thru	534.00	534.00	534.00	1,612,412	1,612,412
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	1,099.92	1,099.92	1,099.92	3,297,573	3,297,573

### 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	100	0	0
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	100	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

#### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Fast Food Restaurant with Drive Thru	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Other Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Other Non-Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

# 5.0 Energy Detail

### Historical Energy Use: N

### 5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
NaturalGas Mitigated	0.0285	0.2595	0.2180	1.5600e- 003		0.0197	0.0197		0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495
NaturalGas Unmitigated	0.0285	0.2595	0.2180	1.5600e- 003		0.0197	0.0197	 	0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

#### 5.2 Energy by Land Use - NaturalGas

### <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/d	day		
Convenience Market With Gas Pumps	24.864	2.7000e- 004	2.4400e- 003	2.0500e- 003	1.0000e- 005		1.9000e- 004	1.9000e- 004		1.9000e- 004	1.9000e- 004		2.9252	2.9252	6.0000e- 005	5.0000e- 005	2.9426
Fast Food Restaurant with Drive Thru	2622.03	0.0283	0.2571	0.2159	1.5400e- 003		0.0195	0.0195		0.0195	0.0195		308.4738	308.4738	5.9100e- 003	5.6600e- 003	310.3069
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0286	0.2595	0.2180	1.5500e- 003		0.0197	0.0197		0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

#### 5.2 Energy by Land Use - NaturalGas

### Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/e	day							lb/c	lay		
Convenience Market With Gas Pumps	0.024864	2.7000e- 004	2.4400e- 003	2.0500e- 003	1.0000e- 005		1.9000e- 004	1.9000e- 004		1.9000e- 004	1.9000e- 004		2.9252	2.9252	6.0000e- 005	5.0000e- 005	2.9426
Fast Food Restaurant with Drive Thru	2.62203	0.0283	0.2571	0.2159	1.5400e- 003		0.0195	0.0195		0.0195	0.0195		308.4738	308.4738	5.9100e- 003	5.6600e- 003	310.3069
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non- Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0286	0.2595	0.2180	1.5500e- 003		0.0197	0.0197		0.0197	0.0197		311.3990	311.3990	5.9700e- 003	5.7100e- 003	313.2495

### 6.0 Area Detail

6.1 Mitigation Measures Area

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	Jay		
Mitigated	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224
Unmitigated	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224

# 6.2 Area by SubCategory

#### <u>Unmitigated</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/o	day		
Architectural Coating	0.0254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e- 004	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224
Total	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224

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#### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

#### 6.2 Area by SubCategory

**Mitigated** 

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/e	day							lb/o	day		
Architectural Coating	0.0254					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e- 004	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224
Total	0.2050	9.0000e- 005	9.8000e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0210	0.0210	6.0000e- 005		0.0224

### 7.0 Water Detail

7.1 Mitigation Measures Water

### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

#### 9.0 Operational Offroad

Equipment Type       Number       Hours/Day       Days/Year       Horse Power       Load Factor       Fuel
--

# **10.0 Stationary Equipment**

Fire Pumps and Emergency Generators

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### Evergreen C-Store Beaumont - Riverside-South Coast County, Winter

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Boilers						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						'
Equipment Type	Number					
11.0 Vegetation						

APPENDIX C BIOLOGICAL RESOURCES ASSESSMENT JUNE 23, 2020

# NATURAL RESOURCES ASSESSMENT, INC.

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis

General Biological Assessment Beaumont Commercial Center Beaumont, California

#### Prepared for:

Lilburn Corporation 1905 Business Center Drive San Bernardino, CA 92408

Prepared by:

Natural Resources Assessment, Inc. 3415 Valencia Hill Drive Riverside, California 92507

June 23, 2020

Project Number: LIL19-124

3415 Valencia Hill Drive Riverside, California 92507 *Telephone: 951 686 4483 Fax: 951 686 8418* 

www.naturalresourcesassessment.com

### CERTIFICATION

I hereby certify that the statements furnished below and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Karen Kirtland

NATURAL RESOURCES ASSESSMENT, INC.

June 23, 2020

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5.1 5.2 5.2 6.0 7.0 7.1 7.2 7.3	Name     7       Fairy Shrimp     7       Riparian Birds     7       NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)     10       ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)     10       Criteria Area Plant Species     10       Amphibians     10       Burrowing Owl     10
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5.1 5.2 5.2 6.0 7.0 7.1 7.2 7.2 8.0 8.1 8.2	Vernal Pools     7       Fairy Shrimp     7       Riparian Birds     7       NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)     10       ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)     10       Criteria Area Plant Species     10       Amphibians     10       Burrowing Owl     10       NARRATION ON OTHER SPECIES     10       INFORMATION ON OTHER SPECIES     10       Species Not Adequately Conserved     10
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Appendix A – List of Plants and Wildlife Species Observed Appendix B - Survey Approach and Findings

# 1.0 Executive Summary

Natural Resources Assessment, Inc. (NRAI) was contracted by Lilburn Corporation to provide biological services for a proposed commercial center in Beaumont (Assessor's Parcel Numbers 419-150-034). The assessment was completed consistent with the requirements of the Western Riverside County Multiple Species Habitat Conservation Plan (MSCHP).

The property is located in eastern Beaumont, Riverside County, California and consists of a single parcel covering 2.08 acres on the southwest corner of East 8<sup>th</sup> Street and Highland Springs Avenue.

NRAI requested a report from the MSHCP website for this APN. No biological resources of concern were identified in the report for the recorded APN. The APN is not in or adjacent to any Criteria Cells. No Covered Roads, Covered Public Access Activities, Public Quasi-Public Lands, or Urban/Wildlands Interface were identified to be of concern for the parcel or the project.

The MSHCP identifies vernal pools, fairy shrimp habitat, and riparian/riverine as resources of concern for all the parcels within the MSHCP Conservation Area. The property does not have any of these additional resources.

The U.S. Army Corps (Corps), under the authority of the Clean Water Act, requires an assessment of the property for waters of the U.S. There are no federal jurisdictional waters.

The State Water Resources Control Board regulations require an assessment of the property for drainages and Corps jurisdictional waters for which a 404 permit may be required. There are no drainages or federal jurisdictional waters.

The California Department of Fish and Wildlife requires an assessment of the property for State waters. There are no State Waters.

The Migratory Bird Treaty Act requires an evaluation of the site for nesting birds and their habitat.

# 2.0 Introduction

Natural Resources Assessment, Inc. (NRAI) was contracted by Lilburn Corporation to provide biological services for a proposed commercial center in Beaumont (Assessor's Parcel Numbers 419-150-034). The assessment was completed consistent with the requirements of the Western Riverside County Multiple Species Habitat Conservation Plan (MSCHP).

#### 2.1 Project Area

The project consists of a single parcel covering 2.08 acres north of Interstate 10 on the southwest corner of East 8<sup>th</sup> Street and Highland Springs Avenue.

#### 2.2 Project Description

The Applicant is requesting the approval of a Conditional Use Permit (CUP) for a proposed commercial store, quick-serve restaurant, and a gasoline station (Figure 1).



Figure 1. Project Layout.

#### 2.3 Covered Roads

Highland Springs Avenue and East 8th Street are Covered Roads. No improvements to these roads is proposed.

#### 2.4 Covered Public Access Activities

The MSHCP did not identify covered public access activities as an issue for the project.

#### 2.5 General Setting

The property is located in eastern Beaumont, Riverside County, California (Figures 2 and 3). Existing development is along the western, eastern, southern and northern borders (Figure 4, Photo 1).

The parcel is located in Section 11, Township 3 south, Range 1 west on the Beaumont USGS 7.5-minute quadrangle, San Bernardino Base and Meridian (Figure 3).

# 3.0 Reserve Assembly Analysis

The MSHCP does not identify the parcel as within or adjacent to a Criteria Cell.

#### 3.1 Public Quasi-Public Lands in Reserve Assembly Analysis

The parcel is not within Public Quasi-Public land, as would be consistent with the RCA MSHCP Information Map.

## 4.0 Vegetation Mapping

The MSHCP mapped the property as disturbed/developed in 1994 and it still identified as disturbed/developed in the 2016 mapping.

In our mapping of the property, we identified barren and disturbed areas and ruderal plant community present on site (Figure 6, Photos 2 and 3).

#### 4.1 Barren or Disturbed Soil

This condition is represented by mostly bare ground, part or all of which has been disked for weed abatement.

### 4.2 Ruderal Vegetation

The ruderal plant community found on the property is comprised of a mix of mostly native weeds such as telegraph weed (*Heterotheca grandiflora*), Canada horseweed (*Erigeron canadensis*) and doveweed (*Croton setiger*). Non-native weeds such as foxtail brome (*Bromus madritensis* ssp. *rubens*), Russian thistle (*Salsola tragus*), short-pod mustard (*Hirschfeldia incana*) and red-stemmed filaree (*Erodium cicutarium*) also occur in this plant community.

The ruderal plant community is found throughout the property. A list of all plant species observed is provided in Appendix A.



Figure 2. Regional Location of the Project Site.



Figure 3. Project Topographic Location.



Figure 4. Aerial Showing Project site Conditions as of 2019.


Photo 1. New development along the northern border.

# 5.0 Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2)

#### 5.1 Riparian/Riverine

There are no riparian/riverine habitats on site. No riparian/riverine species will be impacted by project development. The project is consistent with MSHCP Section 6.1.2.

#### 5.2 Vernal Pools

There are no vernal pools on the property. No vernal pools or vernal pools species will be impacted by project development. The project is consistent with MSHCP Section 6.1.2.

#### 5.3 Fairy Shrimp

There are no pools on the property. There is no potential for pools to form based on the soils and site conditions. No shrimp species will be impacted by project development. The project is consistent with MSHCP Section 6.1.2.

#### 5.4 Riparian Birds

As stated under Section 5.1, there is no riverine/riparian habitat on the property. Therefore, no riverine/riparian bird species are present or will use the site, and no impacts to these species or their habitat will occur. The project is consistent with MSHCP Section 6.1.2.



Figure 5. Vegetation Designation under the MSHCP, 2016.

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Photo 2. Ruderal habitat. Looking northwest from the southeastern corner.



Photo 3. Ruderal habitat, Looking southeast from the northwestern corner.

# 6.0 Narrow Endemic Plant Species (Section 6.1.3)

The MSHCP did not identify any Narrow Endemic Plant Species as potentially present on the parcel. The project is consistent with MSHCP Section 6.1.3.

# 7.0 Additional Survey Needs and Procedures (Section 6.3.2)

### 7.1 Criteria Area Plant Species

The MSHCP did not identify any Criteria Area Species as potentially present on the parcel. The project is consistent with MSHCP Section 6.3.2.

### 7.2 Amphibians

The MSHCP did not identify any amphibian species as potentially present on the parcel. The project is consistent with MSHCP Section 6.3.2.

### 7.3 Burrowing Owl

The MSHCP did not identify burrowing owl as potentially present on the parcel. The property is not in the mapped survey area for burrowing owl. The project is consistent with MSHCP Section 6.3.2.

### 7.4 Mammals

The MSHCP did not identify mammal species as potentially present on the parcel. The property is not in the mapped survey area for protected mammals. The project is consistent with MSHCP Section 6.3.2.

# 8.0 Information on Other Species

#### 8.1 Delhi Sands Flower-loving Fly

The MSHCP did not identify Delhi sands flower-loving fly as potentially present on the parcel. The property is not in the mapped survey area for Delhi sands flower-loving fly. There are no Delhi sands within the parcel boundaries.

#### 8.2 Species Not Adequately Conserved

There is no suitable habitat on the property for the species identified as not adequately conserved in the MSHCP.

# 9.0 Guidelines Pertaining to the Urban/Wildland Interface (Section 6.1.4)

The Urban/Wildland Interface guidelines of the MSHCP address indirect effects associated with locating development in the MSHCP Conservation Area near wildlands or other open space areas.

The property is not near or in the vicinity of MSHCP Conservation Area. There will be no impacts to the Urban/Wildland Interface. The project is consistent with MSHCP Section 6.1.4.

# 10.0 Best Management Practices

The MSHCP has included a list of Best Management Practices (BMPs) for projects in the MSHCP Conservation Area. NRAI has included only those BMP measures that are relevant for this project.

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- 1. Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
- 2. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
- 3. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
- 4. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
- 5. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
- 6. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.
- 7. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

# 11.0 Raptors, Migratory Birds, and Habitat

Most of the raptor species (eagles, hawks, falcons and owls) are experiencing population declines because of habitat loss. Some, such as the peregrine falcon, have also experienced population losses because of environmental toxins affecting reproductive success, animals destroyed as pests or collected for falconry, and other direct impacts on individuals. Only a few species, such as the red-tailed hawk and barn owl, have expanded their range despite or a result of human modifications to the environment. As a group, raptors are of concern to state and federal agencies.

Raptors and all migratory bird species, whether listed or not, also receive protection under the Migratory Bird Treaty Act (MBTA) of 1918<sup>1</sup>. The MBTA prohibits individuals to kill, take, possess or sell any migratory bird, bird parts (including nests and eggs) except per regulations prescribed by the Secretary of the Department (16 U. S. Code 7032).

Additional protection is provided to all bald and golden eagles under the Bald and Golden Eagle Protection Act of 1940, as amended3. State protection is extended to all birds of prey by the California Fish and Game

<sup>&</sup>lt;sup>1</sup> https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php

<sup>&</sup>lt;sup>2</sup> https://www.fws.gov/le/USStatutes/MBTA.pdf

<sup>&</sup>lt;sup>3</sup> https://www.fws.gov/le/USStatutes/BEPA.pdf

Code, Section 2503.54. No take is allowed under these provisions except through the approval of the agencies or their designated representatives.

No take is allowed under these provisions except through the approval of the agencies or their designated representatives.

#### Findings

At the time of the survey, the parcel had very limited marginal nesting habitat for ground-nesting bird species. There is no shrub habitat. Adjacent properties had trees and shrubs that may provide nesting habitat for species using these habitats (Photo 4).



Photo 5. Trees and shrubs on the adjacent property.

If construction is scheduled to occur between February 1 and August 31, a breeding bird survey following the recommended guidelines of the MBTA may be required to determine if nesting is occurring. A qualified biologist shall conduct a breeding bird survey no more than 30 days prior to the start of construction.

If occupied nests are found, they shall not be disturbed unless the qualified biologist verifies through noninvasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are capable of independent survival.

If the biologist is not able to verify one of the above conditions, then no disturbance shall occur within a distance specified by the qualified biologist for each nest or nesting site. The qualified biologist will

<sup>&</sup>lt;sup>4</sup>https://law.justia.com/codes/california/2015/code-fgc/division-4/part-2/chapter-1/section-3513

determine the appropriate distance in consultation with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.

"Construction" includes selection of staging areas, demolition, tree, trash and debris removal, placement of equipment and machinery on to the site preparatory to grading, and any other project-related activity that increases noise and human activity on the project site beyond existing levels. Emergency measures are exempt from this definition.

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# Appendix A - Plant and Animal Species Observed

#### Plants

Scientific Name	Common Name	Status		
	EUDICOTS			
ADOXACEAE	MOSCHATEL FAMILY			
Sambucus nigra ssp. caerulea	Black elderberry	native		
AMARANTHACEAE	AMARANTHUS FAMILY			
Amaranthus albus	Tumbleweed	non-native		
ANACARDIACEAE	CASHEW FAMILY			
Malosma laurina	Laurel sumac	native		
Rhus ovata	Sugar bush	native		
ASTERACEAE	SUNFLOWER FAMILY			
Ambrosia acanthicarpa	Flat-spined Bur Ragweed	Native		
Artemisia californica	Coastal sage brush	native		
Corethrogyne filaginifolia var. filaginifolia	Common sandaster	native		
Erigeron canadensis	Canadian Horseweed	Native		
Eriophyllum confertiflorum var. confertiflorum	Golden yarrow	native		
Heterotheca grandiflora	Telegraph weed	native		
Senecio vulgaris	Common groundsel	non-native		
BRASSICACEAE	MUSTARD FAMILY			
Hirschfeldia incana	Mustard	invasive non-native		
CHENOPODIACEAE	GOOSEFOOT FAMILY			
Chenopodium album	Lamb's Quarters	Non-native		
Salsola tragus	Russian thistle	invasive non-native		
EUPHORBIACEAE	SPURGE FAMILY			
Croton californicus	Desert croton	native		
Croton setiger	Turkey-mullein	native		
FABACEAE	PEA FAMILY			
Acmispon glaber var. brevialatus	Short winged deerweed	native		
GERANIACEAE	GERANIUM FAMILY			
Erodium cicutarium	Coastal heron's bill	invasive non-native		
SOLANACEAE	NIGHTSHADE FAMILY			
Datura wrightii	Jimsonweed	native		
Nicotiana glauca	Tree tobacco	invasive non-native		
MONOCOTS				
POACEAE GRASS FAMILY				
Bromus diandrus	Ripgut brome	invasive non-native		
Bromus madritensis ssp. rubens	Foxtail brome	invasive non-native		
Schismus barbatus	Old han schismus	invasive non-native		

#### Animals

BIRDS	CLASS AVES
Common Name	Scientific Name
Doves and Pigeons	Family Columbidae
Mourning Dove	Zenaida macroura
Crows, Ravens, and Jays	Family Corvidae
American Crow	Corvus brachyrhynchos
Common Raven	Corvus corax
Sparrows Buntings and Relatives	Family Emberizidae
Savannah Sparrow	Passerculus sandwichensis
White-crowned Sparrow	Zonotrichia leucophrys
Finches	Family Fringillidae
House Finch	Haemorhous mexicanus
New World Warblers	Family Parulidae
Yellow-rumped Warbler	Setophaga coronata
Old World Sparrows	Family Passeridae
House Sparrow	Passer domesticus
MAMMALS	CLASS MAMMALIA
Common Name	Scientific Name
Gophers	Family Geomyidae
California Pocket Gopher	Thomomys bottae
Squirrels	Family Sciuridae
California Ground Squirrel	Otospermophilus beecheyi

#### Appendix B – Survey Approach and Findings

#### Methods

#### **Data Review**

NRAI conducted a data search for information on plant and wildlife species known occurrences within the vicinity of the project. This review included biological texts on general and specific biological resources, and those resources considered to be sensitive by various wildlife agencies, local governmental agencies and interest groups. Information sources included but are not limited to the following:

- Information provided by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) for the project site, Assessor's Parcel Number (APN) 419-150-034.
- U.S. Army Corps 404 requirements, State Water Resources Control Board requirements and California Department of Fish and Wildlife 1602 requirements.
- General texts and other documents regarding potential resources on the project.

NRAI used the information to focus our survey efforts in the field. Please see Section 5.0 for a complete listing of documents reviewed.

#### **Field Assessment**

Ms. Karen Kirtland of NRAI and Mr. Ricardo Montijo conducted a biological assessment of the development area on December 18, 2019. The field team evaluated the property habitats, making notes on the general and sensitive biological resources present and taking representative photographs. The survey included habitat assessment surveys for resources covered under the MSHCP survey requirements.

#### Weather, Topography and Soils

Weather at the beginning of the survey was 50 degrees Fahrenheit, with partly cloudy skies (stratus) and no wind. By the end of the survey, the temperature was 52 degrees Fahrenheit, with partly cloudy skies (stratus) and winds of one to two miles per hour.

The property has a flat topography (Figure B1 in Appendix B).

One soil type is found within the property boundaries (Figure 5, Natural Resources Conservation Service 2019). Ramona sandy loam, 2 to 5 percent slopes, eroded (RaB2) is a non-hydric sandy loam that occurs on alluvial fans and terraces. It is a well-drained soil that does not flood or pond and is developed from alluvium derived from granite. This soil occupies the entire property; the property has been impacted by disking for weed abatement.

#### Land Uses

A review of aerial imagery from Google Earth indicates that the property has been an empty lot since at least 1996. Other disturbances include foot traffic, off-road driving, and minor trash dumping. The disturbances have continued up to the time of our survey.



Figure B1. Soil Type Mapped on the Property.

#### Wildlife

No amphibian or reptile species were observed. No water sources are found on the property that would be used by amphibians, and the relative lack of ground cover, rocks or shrub makes the site unsuitable for most reptile species.

Bird species seen or hear included mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), savannah sparrow (*Passerculus sandwichensis*) and house sparrow (*Passer domesticus*).

California ground squirrel (*Otospermophilus beecheyi*) and Botta's gopher (*Thomomys bottae*) burrows were observed. No other sign of native mammal species was observed.

APPENDIX D PHASE I CULTURAL RESOURCES INVESTIGATION MAY 20, 2020

# CULTURAL RESOURCES INVESTIGATIONS: A PHASE I CULTURAL RESOURCES INVESTIGATION FOR THE EVERGREEN DEVCO, INC. COMMERCIAL DEVELOPMENT AT 8<sup>TH</sup> STREET AND HIGHLAND SPRINGS AVENUE IN BEAUMONT, RIVERSIDE COUNTY, CALIFORNIA

(APN 419-18-034)

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Job No.: 10-19-11-2037 November 29, 2019 Revised May 20, 2020

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# CULTURAL RESOURCES INVESTIGATIONS: A PHASE I CULTURAL RESOURCES INVESTIGATION FOR THE EVERGREEN DEVCO, INC. COMMERCIAL DEVELOPMENT AT 8<sup>TH</sup> STREET AND HIGHLAND SPRINGS AVENUE IN BEAUMONT, RIVERSIDE COUNTY, CALIFORNIA

(APN 419-18-034)

by,

Jeanette A. McKenna McKenna et al., Whittier CA

# INTRODUCTION

McKenna et al. (Appendix A) initiated this Phase I cultural resources survey for the project area on the southwestern corner of 8<sup>th</sup> Street and Highland Springs Avenue (APN 419-15-034), Beaumont, Riverside County, California, at the request of Lilburn Corporation, San Bernardino, representing the Evergreen Devco., Inc. This investigation was prepared for the City of Beaumont for compliance with the California Environmental Quality Act (CEQA), as amended, and City policies and guidelines. This project/undertaking has been required by the City, the Lead Agency responsible for reviewing and approving the project. As such, any identified cultural resources have been subjected to an evaluation in accordance with applicable policies, guidelines, and defined criteria for the assessment of cultural resources.

# PROJECT LOCATION AND DESCRIPTION

The proposed project area is located on the southwestern corner of 8<sup>th</sup> Street and Highland Springs Avenue, Beaumont; Assessor Parcel No. 419-15-034, a property of approximately 2.8 acres (Figures 1 and 2). More specifically, the project area is located in the northeastern corner of Section 11 (Township 3 South, Range 1 West). This vacant lot is located north and east of modern improvements (post-1966; Figures 3 and 4) and a significant development is currently ongoing north of 8<sup>th</sup> Street (Sundance Corporate Center). The UTM coordinates for the project area are presented in Table 1. There is no street address.

Table 1. UTM Coordinates of the Current Project Area.				
Location	NAD 83 Coordinates		NAD 27 Coordinates	
NE	504900E	3754705N	504980E	3754510N
NW	504810E	3754701N	504889E	3754505N
SE	504903E	3754619N	504982E	3754423N
SW	504810E	3754619N	504889E	3754423N



Figure 1. General Location of the Proposed Project Area.



Figure 2. Specific Location of the Project Area (USGS Beaumont Quadrangle (rev. 1988).

The proposed project involves the development of a commercial complex tentatively planned to include a fuel station, quick service restaurant, and convenience store on a property consisting of 2.8 acres. The project will involve a subdivision of the property into two commercial lots:



Figure 3. Aerial Photograph Illustrating the Project Area and Surrounding Properties.



Figure 4. Street View of the Project Area.

- Lot A: .85 acre property for the development of the tire store or restaurant;
- Lot B: A 1.1 acre property for the development of the gas station and convenience store.

# ENVIRONMENTAL SETTING

The proposed project is within the City of Beaumont, north of Interstate 10, south of 8<sup>th</sup> Street, and west of Highland Springs Avenue. This general area is associated with the San Gorgonio Pass, a relatively narrow valley located between the San Bernardino Mountains (north) and the San Jacinto Mountains (south). As a portion of the southern extent of the Mojave Desert and western extent of the Colorado Desert, this area is characterized by the presence of decomposing granite derived from the nearby hillsides and windborne or water-borne alluvial deposits. Native vegetation in the area is generally limited to desert sage scrub, but riparian zones can be found along washes and intermittent streams.

Citing McLeod (2003), the general area of the San Gorgonio Pass is characterized as having "... exposures of some Mesozoic age granitics and metasedimentary rocks that, of course, will not contain recognizable vertebrate fossils ... Quaternary Alluvium that are unlikely to contain significant vertebrate fossils, at least in the uppermost layers." More recently, however, McLeod (2018), with respect to the current project area, stated:

"Surficial deposits in the entire proposed project area consists of older Quaternary Alluvium, derived as alluvial fan deposits from the San Jacinto Mountains to the south. These deposits usually do not contain significant fossil vertebrates in the uppermost layers in the vicinity, but at relatively shallow depth there may be older Quaternary deposits with finer-grained pockets. Our closest vertebrate fossil locality from older Quaternary deposits is LACM 4540, situated west-southwest of the proposed project area along Jackrabbit Trail near the east side of the San Jacinto Valley, that produced a specimen of fossil horse, *Equus* ... Shallow excavations in the older Quaternary alluvial fan deposits exposed throughout the proposed project area are unlikely to uncover significant fossil vertebrate remains. Deeper excavations in those Quaternary deposits, however, may well encounter significant vertebrate fossils similar to those found at the Rancho La Brea asphalt deposits in Los Angeles."

A geotechnical report was completed for this property (Salem Engineering Group, Inc. 2020:3) described the general area as being dominated by northwest-trending faults and anticlinal uplifts with "... intervening deep synclinal troughs filled with poorly consolidated Upper Pleistocene and unconsolidated Holocene sediments." The Upper Pleistocene and Holocene deposits are subsets of the larger Quaternary period and the most recent.

In Southern California, the Upper Pleistocene is generally associated with a pre-human presence, although research is now showing humans were present in the later years of the Upper Pleistocene. Fossil specimens are also associated with the Pleistocene, particularly in area where deposits are referred to as "older Alluvium" (McLeod 2020; Lowe and Walker 1997). The Holocene is considered to be the most recent geologic period and one that is directly associated with human activity. The Holocene is also generally associated with "younger Alluvium" and not fossil bearing, except in instances where fossils have been redeposited.

Currently, non-native grasses dominate the project area and there is no evidence of the native Desert Sage Scrub biotic community.

# CULTURE HISTORY BACKGROUND

The project area is geographically associated with both the Serrano and Cahuilla of Southern California (Kroeber 1925:615-619 and 692-708). Though near the territorial boundary separating these two populations, the area is more generally considered part of the "Pass Cahuilla" territory, a reference to the San Gorgonio Pass (Strong 1929:88-143). Cahuilla culture has been described by a number of scholars, but most thoroughly by Bean (1972 and 1978). The name "Cahuilla" translates as "master" or "powerful one."

The "Pass Cahuilla" are one of the three main Cahuilla populations associated with western Riverside County (with the Desert Cahuilla and Mountain Cahuilla). Wilke's studies have shown that the local population exploited almost every available food resource in the area.

The Cahuilla were hunter-gatherers of Shoshonean heritage who lived in small villages of 100 to 200 persons and who were organized into clans and lineages owning village areas and associate gathering tracts (James 1969; Kroeber 1976; Bean 1978; and Emanuels 1991). The Cahuilla produced skillfully manufactured pottery (believed to have been introduced by Colorado River tribes) and basketry. They constructed brush dwellings and ritual structures; conducted trade between the eastern desert and coastal populations, enjoyed games, music, and a rich ceremonial life.

The Cahuilla had relatively extensive exchanges and interactions with neighboring populations and maintained a wide range of cultural traditions represented in the material remains recovered in archaeological sites throughout the area.

In the mid-1800s (ca. 1849-50), the United States took possession of the State of California and immediately initiated the completion of surveys and property identifications. Government surveyors documented the presence of twenty-two Cahuilla villages in the San Gorgonio Pass and larger Coachella Valley (to the east), with most of the populations in these villages exceeded 100 individuals (Wilke 1978:120; Wilke and Lawton 1975). Many of these villages were located in areas of fresh water – as springs, streams, or well sites. Smaller, limited use areas have been identified in areas where "walk-in wells" were excavated and maintained (Strong 1929:38), hence the references to "Indians Wells" in the Coachella Valley.

Population estimates for the prehistoric Cahuilla range from 2600 to 10,000 individuals. These individuals maintained extensive networks for trade, including contacts along the Colorado River and the Pacific Coast. Trails, small camp sites, and other limited use areas have been recorded throughout the area and attest to the wide-spread use of the Valley and Pass. Additional evidence of long-term occupation has been identified along the various shorelines of prehistoric Lake Cahuilla. Trade routes (e.g. the Coco-Maricopa Trail) and encampments between known freshwater sites have been identified through archaeological evidence and some have been recorded in historic records or on historic period maps.

Wilke (1986:9) also emphasized that the Cahuilla did not rely heavily on stone tools, but manufactured numerous tools and utility items of wood (even projectile points, at times) and ceramic goods. Nets and traps were also used in hunting and fishing. Ceramics, mainly Tizon Brown and Salton Buff wares, have been found throughout the area, represented by a wide variety of vessel types. Basketry was used, but few examples have survived. Likewise, few examples of wooden implements have survived. Recent archaeological investigations have suggested some Cahuilla practiced limited agriculture (von Worloff n.d.; see Wilke 1986:9).

The Cahuilla are also associated with a relatively complex social organization based on lineages and clans. Individual clans occupied village sites and exploited specific clanrelated territories. Interactions between clans provided exchange in the form of trade, marriages, and ceremonial contacts (e.g. funerary practices). The Cahuilla practiced cremation and often burned the residences of the deceased. Extensive grave goods have also been identified and associated with the cremation practices. New residences were built some distance from the burned residence and the families reestablished themselves at the new locale. Analysis of ethnographic and archaeological data has resulted in the development of various chronologies for the Cahuilla (Wallace 1962; Warren and Orr 1978; Weide and Barker 1975; Hall and Barker 1976; and Gallegos et al. 1979). Jertberg (1982:5-7) synthesized this data and proposed the following chronology for comparative purposes:

10,000 - 6,000 B.C.: The Lake Mojave/San Dieguito Complex and/or Western Lithic Co-Tradition). Characterized by the presence of projectile points, large knives, scrapers, chopping tools, and scraper planes (Bettinger and Taylor 1974; Campbell and Campbell 1937; Rogers 1939; Davis et al. 1969). Items associated with vegetal food processing and hunting and the presence of a coniferous woodland and pluvial lakes. (This tradition is not known to be represented in the Indio area).

- 6,000 B.C. A.D. 500: Archaic or Pinto Armagosa periods (Wallace 1962: Bettinger and Taylor 1974; Weide and Barker 1974). Characterized by diagnostic projectile points, leaf shaped blades, choppers, and scraper planes. Some sites exhibit a small assemblage of milling stones. A shift in climate and vegetation les to a shift in exploitation with an emphasis on vegetal resources. (Likewise, these periods are not represented in the immediate area, but associated with other desert populations to the north).
- A.D. 500 to Contact: (unnamed). Characterized by the presence of the bow and arrow (as opposed to darts), ceramics, and cremations. Milling tools increase, including mortars and pestles. There is evidence of limited agriculture and the appearance of Shoshonean-speakers displacing local Hokan-speaking populations (Wallace 1962:176). Sites are associated with the presence of Lake Cahuilla and the exploitation of resources directly associated with fresh water sources. This unnamed period is more directly associated with the presence of Native Americans in the Indio/La Quinta area and surrounding Cahuilla territories.

Initial contact with the Cahuilla occurred in the early 1800s (ca. 1823) with the Jose Romero Expedition through the Colorado Desert (Bean and Mason 1962). This expedition noted some agricultural activities conducted by the Cahuilla and including corn, beans, and squash. Wilke and Lawton (1975) suggest the presence of agriculture was a trait derived from contact with populations in Mexico (or the Greater Southwest).

U.S. Government surveys were completed in the 1850s and led to the identification of occupied Cahuilla villages. Shortly thereafter, Blake completed surveys for railroad development in 1856, which also resulted in the identification of village sites. By 1862, the Homestead Act opened government-owned lands for settlement through purchase, land trades, or homesteading. With respect to the San Gorgonio Pass, Gunther (1984:457-458) states:

**"SAN GORGONIO PASS.** Named for San Gorgonio Rancho (see), which occupied the entire pass areas. The pass as known to the Spaniards and Mexicans at least as early as 1815. When the first *jornada para sal*, of "journey for salt," set out from Los Angeles to secure a salt supply from what is now Salton Sea, but no name was recorded for it at the time (Guinn 1907-08, p. 169). Although existence of the pass and its name were undoubtedly known to American at an early date, the first mention of the pass by name in print has yet been found was in Lieut. E.O.C. Ord's November 6, 1849, report in which he called it "San Gorgona [sic] Pass ... Long before the Spanish name was applied to the pass, the Indians had their name for it.

According to legend, when the Indian tribes first came into this desert area from the west, so many people were trying to get through the pass, some of the smaller tribes decided to settle where they were. The Indians called this great gap (which measures 21 miles between two high peaks of San Gorgonio and San Jacinto) *Ha much cha visba*, meaning "the place where there were so many people trying to get through" (Patencio 1943, p. 100)."

The San Gorgonio Rancho is described by Gunter (1984:458) as "... one of the 24 principal cattle ranchos or rancherias, as well as the most distant, belonging to San Gabriel Mission ...". After several disputes over the ownership of the rancho, sales were recorded in the early 1850s and into the 1860s. Subdivision and continued sales were recorded into the early 1900s. Lamb Canyon was named for Elijah Weston Lamb, who settled in the area in 1866. He and an associate, Mr. Snyder, are credited with establishing the road through the canyon, permitted access between "San Gorgonia" (as the area was called) and San Jacinto. The Lamb family was in the Beaumont area until the 1940s.

Nearby Laborda Canyon (and creek), also referred to as Necochea – for Jose Maria de Necochea, an 1890 homesteader, was named for Jacques LaBorde, a Frenchman who arrived in the United States in 1874 and eventually married Necochea's daughter (ca. 1883). The road through Laborda Canyon reportedly follows an old Indian trail through the hills. Eyer (1974) prepared a brief history of the Beaumont area and states:

"Beaumont, originally called Summit, later named San Gorgonio, and finally renamed Beaumont, was in the earliest date, 1800 and prior to that date solely occupied by three tribes of Indians, known as the Cahuillas, Kawais and Shoshone.

"They roamed the country from San Bernardino territory, Mt. San Gorgonio, Mt. San Jacinto, Palm Springs, Coachella Valley, Banning and San Timoteo Canyon ... In deciding who came thru the Pass first, it is noted that the Mexican Army trraveled [sic] thru in 1820 ... 1843 marks the data wherin [sic] Governor Pio Pico granted Rancho San Gorgonio to a Santiago Johnson. He failed to develop it.

"July 2, 1845 Paulino Weaver, a Mexican citizen, acquired Rancho San Gorgonio and settled down to live with the Indians ... In 1846 A Dr. Isaac Smith came from San Bernardino and lived with Paulino Weaver. Later he bought the ranch from Weaver.

"Smith raised cattle, sheep, vegetables and planted a fruit orchard and a small vineyard ... In 1862 Smith's Ranch was named Smith's Station and was made the stage coach stop on the way to Yuma, Arizona ...The route followed San Timoteo Canyon past Brookside, Siding and Edgar's ranch to Smith's Station (Highland Home) thence one half mile north of Banning,

north of Cabazon and to White Water which was the last stop before entering the desert ... Beaumont was not to see a railroad until 1876 when the first passenger train come chugging up to Summit (Beaumont) stopping at Cabazon and continued as far as Indian Wells (Indio) ...

The origin of the City of Beaumont has been reported by Gunther (1984), who relates that it began modestly in 1866 as a mail stop called "Summit Station", the highest point on the passenger stage route through San Gorgonio Pass. The Summit Station mail stop became a railroad telegraph office for the Southern Pacific Company in 1876 and the name was changed to "San Gorgonio" in 1884 to coincide with the newly named town site (established by George C. Egan in 1884). The Southern California Investment Company purchased Egan's town site in 1886 and, headed by H.C. Sigler from Beaumont, Texas, renamed the station "Beaumont" (beautiful mountain" in French).

The Beaumont town site was officially surveyed in 1886 by John Goldworthy and filed in San Bernardino County on March 15, 1887. When the county of Riverside was established in 1893, Beaumont was included within the Riverside County boundaries and, therefore, records prior to 1893 would be in the San Bernardino County Archives and records following 1893 would be in the Riverside County Archives.

In this case, the Bureau of Land Management, General Land Office records confirmed all of Township 3 North, Range 1 West, Section 11 was granted to the Southern Pacific Railroad in 1885. Although the Southern Pacific Railroad was granted all of Section 11, it was not unusual for the railroad to establish their right-of-way (in this case at the east/west midsection line) and allow settlement in the remainder of the Section (selling unused lands that would, with settlement, further support the railroad enterprises). Here, in Beaumont, the settlement was concentrated to the north of the railroad, with 6<sup>th</sup> Street representing to original roadway through the area. The 8<sup>th</sup> Street alignment was established much later and the eastern extension of 8<sup>th</sup> Street even later.

The area south of the railroad was sold as agricultural land (e.g. the Stewart Ranch). While the core area of Beaumont was to the west (north half of Section 10). Improvements or occupation in Section 11 were initiated slowly. As late as 1952, the USGS topographic quadrangle identified structures between Pennsylvania Avenue and Highland Springs Avenue (and between 6<sup>th</sup> Street and 8<sup>th</sup> Street), but the 8<sup>th</sup> Street alignment did not formally extend to the current alignment of Highland Springs Avenue.

A review of historic Sanborn Fire Insurance Maps confirmed this particular project area was outside the core area of Beaumont, east of the community of Beaumont and west of the community of Banning and, therefore, not mapped. The alignment of 8<sup>th</sup> Street was a dirt road until the late 1960s, when the alignment was shifted slightly to the north and the intersection was formally defined. At this same time, the modern improvements to the west and south of the project area were completed and the realignment of 8<sup>th</sup> Street resulted in the current definition of the project area.

Aerial photographs provided by Salem Engineering Group, Inc. (2020; and as part of the larger EDR documentation) was summarized in the AAI Phase I Environmental Site Assessment. This data, with additional data compiled by McKenna et al., has resulted in the following summary:

• **1938** Subject property is undeveloped, but appears to be under cultivation (grain). The subject property is also depicted as part of a larger property bounded by 6<sup>th</sup> Street (south); 8<sup>th</sup> Street (north); Highland Springs Avenue (east) and Allegeheny Avenue (west). The larger property was approximately 20 acres. A modest improvements appears to be present in the southwestern area of the larger property and a residence appears to the west of this property.

Highland Springs Avenue is present, but unpaved, as is the early alignment for 8<sup>th</sup> Street (unpaved). The 8<sup>th</sup> Street alignment to the west of Highland Springs Avenue is slightly south of the alignment to the east of Highland Springs Avenue. It is noted, Highland Springs Avenue is the boundary between Beaumont (west) and Banning (east).

- **1949** The larger property was significantly changed by 1949, with various subdivision and improvements primarily along the 6<sup>th</sup> Street and Highland Springs Avenue frontages. The northeastern corner (approximately 7-8 acres was held as a single property with improvements along the western boundary. The alignment of 8th Street runs due east/west and these improvements were relatively close to the street frontage. The remainder of the property appears to be under cultivation likely row crops, as illustrated.
- **1953** The scant improvements on the western boundary of the property appears to be the same, but there is a larger structure to the east, centrally located along the 8<sup>th</sup> Street frontage. The relative size of the eastern structure suggests it is a residence with a short drive off 8<sup>th</sup> Street and to the west of this structure. There is no address associated with this improvement (per directories), so no specific owner has been identified.
- **1961** The improvements appear to be the same, with some additional vegetation around the structures. The cultivated plots are still identified to the south of the improvements. The large development on the east side of Highland Springs Avenue has been established (medical center), but there are no improvements to the north of 8<sup>th</sup> Street.
- **1966** Aerial photograph from NETR Historical Aerial Photographs show the improvements have already been cleared from the property.

- **1967** Major changes have occurred by 1967. All structural improvements have been cleared from the property; the alignment of 8<sup>th</sup> Street has shifted to the north to intersect with the alignment to the east of Highland Springs Avenue, defining the northern and eastern boundaries of the current project area; and the southern portion of the 7-8 acre property is under development (dental offices). There is evidence of a single tree along the western boundary of the property.
- **1975** No changes were noted. However, there appears to be a small tree springing up in the center of the property. A foot path is also evidence, cutting across the property towards Highland Springs Avenue.
- **1985** No significant changes, but the southeastern corner of the property appears to have been impacted by some minor vegetation clearing (possibly related to nearby construction). Two centralized trees have erupted.
- **1989** No significant changes.
- **1990** No significant changes.
- **1996** No significant changes; only one tree in center of property.
- **2002** No significant changes.
- 2006 No significant changes; property covered in dense grass cover, except in southeastern corner where area has been cleared an apparently used as a staging area for unspecified activity.
- **2009** No significant changes; grasses are dry and brown.
- **2012** No significant changes.
- 2016 No significant changes; southeastern corner overgrown with grasses.

Based on the data compiled BLM-GLO, County, City, historic research, and aerial photographs, the current project area was originally granted to the railroad (all of Section 11) and later sold in smaller lots to individuals settling in the Beaumont area. In this case, the project area was peripheral to the core area of historic Beaumont and, being on the west side of Highland Springs Avenue, was on the very eastern extent of Beaumont and in an are considered rural. The property was not covered by the Sanborn maps (not within the incorporated City when occupied) and the City was not responsible for or issuing building or use permits. This property was not assigned a street address, but early photographs suggest the owner may have been located in a residence on 6<sup>th</sup> Street rather than 8<sup>th</sup> Street. The County Archives is currently closed to research (COVID-19) and, therefore, McKenna et al. could not confirm the property ownership in the 1940s to 1960s.

# METHODOLOGY

To adequately investigate and address this project area for compliance with the California Environmental Quality Act, as amended, McKenna et al. completed the following tasks:

- <u>Archaeological Records Search</u>: McKenna et al. completed a standard archaeological records search through the University of California, Riverside, Eastern Information Center, Riverside, California (Appendix B). This research was conducted as an in-house search and included a review of previously completed projects within one mile of the project area; a review of the recorded cultural resources within one mile of the project area; a review of listings for the National Register of Historic Places, the California Register of Historical Resources, California Landmarks, and California Points of Historical Interest. Historic maps were also reviewed. The results are documented later in this report (see Previous Research).
- 2. <u>Native American Consultation</u>: McKenna et al. consulted with the Native American Heritage Commission as to the presence/absence of sacred or religious sites in the vicinity of the project area (Appendix C). McKenna et al. also sent letters to those Native American representatives identified by the Commission, requesting information on any issues, concerns, or resources they may be aware of and requested written responses. McKenna et al. identified the City as the Lead Agency for this project and recommended the individuals contact the city for formal consultation, if wanted.
- 3. <u>Paleontological Overview</u>: A paleontological overview was prepared by the Natural History Museum of Los Angeles County for the project area (Appendix D). Data compiled by the Museum and supplemental data from the Riverside County GIS system were used to assess the potential for the project area to yield evidence of fossil specimens.
- 4. <u>Historic Background Research</u>: Historic background research was completed through a review of the Bureau of Land Management, General Land Office Records; San Bernardino County Archives; Riverside County Archives, Riverside County Assessor data; local research; and research through the McKenna et al. in-house library. Additional research was completed through the University of California, Riverside, Historic Map Library,

and aerials photographs available on-line. McKenna et al. reviewed histories of the City of Beaumont and the San Gorgonio Pass. Some resources were found on-line, while others were found in published references. Supplemental data is presented in Appendix E of this report. (NOTE: as noted above, McKenna et al. could not complete the research at the County Archives, although research was attempted).

- 5. <u>Field Survey</u>: The field survey for this undertaking was completed in Saturday, November 23, 2019. This fieldwork was completed by Jeanette A Mc-Kenna, Principal Investigator for McKenna et al. Prior to the completion of the field survey, McKenna et al. reviewed the Archaeological Records Search data and visited the Beaumont City Hall, Department of Community Planning to compile additional data on the project area. To insure adequate coverage, the project area was subjected to an intensive level of survey with paralleling swaths averaging fifteen meters apart. The surveyor carried a Garmin GPS unit to record any identified resources and the survey was supplemented by field notes (on file, McKenna et al.) and a detailed photographic record (Appendix E).
- 6. <u>Analysis</u>: The analysis was dependent upon the nature of the resources, if any, were identified within the project area and accordance with state guidelines and criteria (CEQA) for assessing the significance of the resources.
- 7. <u>Report Preparation</u>: This report was prepared in a format and with the data requirements consistent with the Office of Historic Preservation Archaeological Resource Management Report guidelines and the data requested by the University of California, Riverside, Eastern Information Center.

# EVALUATION CRITERIA

The approach to the current research was designed to address the potential eligibility of any identified cultural resource for eligibility for the California Register of Historic Resources (CEQA, as amended). The state (CEQA, Section 15064.5) criteria for evaluation mirror the federal guidelines and read as follows:

- a) For purposes of this section, the term "historical resources" shall include the following:
  - A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4850 et seq.).
  - 2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified

as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

- 3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code§5024.1, Title 14 CCR, Section 4852) including the following:
  - A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
  - B) Is associated with the lives of persons important in our past;
  - C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
  - D) Has yielded, or may be likely to yield, information important in prehistory or history.

# PREVIOUS RESEARCH

McKenna et al. completed a standard archaeological records search through the University of California, Riverside, Eastern Information Center, Riverside (Appendix B). This research confirmed the project APE was not previously surveyed for cultural resources, but identified a minimum of 29 studies within one mile of the project area (Table 2).

As a result of the studies identified above, only six cultural resources have been recorded within one mile of the project area (Table 3). Both prehistoric and historic resources have been identified. None of these resources is within the project area, but the three resources recorded by Harris (2004) are located due north of the current project area and within Section 2 (north of 8<sup>th</sup> Street).

Table 2. Cultural Resources Investigations Completed within One Mile of the Current Project Area.				
Report Citation Description Resc			Resources	
RI-01432 SRS 1986		Stewart Ranch Monitoring		
RI-01433 SRS 1985		Stewart Ranch Project		
RI-01434	SRS 1981	900 Acres Stewart Ranch	Yes	
RI-01830	Sutton 1984	Parcel 18132		
RI-02210	Underwood et al. 1986	US Telecom Fiber Optic Cable	Yes	
RI-02917	McMillan 1989	Sewer System, Beaumont	Yes	
RI-03421	Brown & Shinn 1989	1162 Deutsch Specific Plan		
RI-03852	Whitney-Desautels 1993	Water Importation Project		
RI-04840	Demcak 2002	23 Acres		
RI-04841	Demcak 2002	23 Acres Addendum		
RI-06722 Brunzell 2006 Deutsch Prop. Specific Plan		Yes		
RI-07055 Tang & Hogan 2007 APN 419-170-031				
RI-03997 Shepard & McKenna 1996 3 Acres and Pipeline		Yes		
RI-04421	1 LSA Associates 1990 Measure A Program		Yes	
RI-04815 York & Wooley 1987 Oak Valley Evaluation		Yes		
RI-07364 Crews & Sander 2007		29.7 Acres		
RI-08027 Allred 2009 Cell		Cell Tower Site		
RI-08409	Eckhardt et al. 2004	Transmission Alignment	Yes	
RI-08449 Tang et al. 2004		Beaumont General Plan		
RI-08980	Justus et al. 2010	DPV2 Construction Yards	Yes	
RI-09167 McLean et al. 2013 Devers Project		Devers Project	Yes	
RI-09230 Puckett 2014 Transmission Alignment		Yes		
RI-09460 Tang & Hogan 2015 Beaumont Project				
RI-10157	157 Williams and Belcourt 2014 Transmission Alignment Ye		Yes	
RI-10219 Puckett 2015 Cell Tower Site				
RI-10461	Eckhardt et al. 2015	Transmission Alignment	Yes	
RI-10478	McKenna 2018	6 <sup>th</sup> and Maple Septic Project	Yes	
RI-10754	Garrison and Smith 2018	Atwell Project	Yes	
RI-10766 Garrison and Smith 2018 Atwell Project Phase II Y		Yes		

Resources that were identified included properties included in the Office of Historic Preservation Historic Property Data File, including 130 properties (P-33-006093 through P-33-006233) within the core area of Beaumont. Of these, only thirteen (13) were determined "potentially eligible for National Register listing. A total of 109 of the 130 structures were specifically identified as **NOT** eligible for National register listing, but may be of local interest. The remaining resources have not been evaluated. None of the resources are within one mile of the current project area.

Table 3. Cultural Resources Identified within One Mile of the Current Project Area.				
Primary No.	Trinomial	Citation	Description	
	CA-RIV-4038	Drover and Smith1990	Lithic Scatter	
33-013827		Harris 2004	Historic Refuse	
33-013828		Harris 2004	Historic Refuse	
33-013829		Harris 2004	Historic Complex	
33-015033	CA-RIV-7997	Decarlo and Mengers 2018; Williams 2014; Miller et al 2013; Wilson and Giacinto 2010; Brunzell 2006	Smith Creek Ditch	
33-015034	CA-RIV-7998	Brunzell 2006	Modern and Historic Refuse	

The paleontological overview for this undertaking identified the project area as consisting entirely of "... Quaternary Alluvium, derived as alluvial fan deposits from the San Jacinto Mountains." Despite these deposits of Quaternary Alluvium (Upper Pleistocene and Holocene deposits), the shallow deposits are not considered sensitive for paleontological specimens. However, deeper deposits of older Quaternary Alluvium (Late Pleistocene), likely present in pockets, have been associated with paleontological specimens. McLeod (2018 and 2020) concluded shallow excavations are not likely to impact fossil bearing deposits, but deeper excavations may impact Older Quaternary Alluvium (fossil bearing deposits) and, therefore, should be subjected to paleontological monitoring – specifically in areas of undisturbed substrate.

# Summary

As noted above, the project area has not been associated with any recorded prehistoric archaeological resources, historic archaeological resources, built environments, or paleontological resources. Numerous historic structures have been recorded in the core area of Beaumont (west of Pennsylvania Avenue), but not in or near the current project area. Nonetheless, since the San Gorgonio Pass is known to have been a major trade route during both prehistoric and historic times, there is still a potential to identify prehistoric and/or historic archaeological resource. The area should be considered moderately sensitive for both archaeological resources and paleontological resources.

# **RESULTS OF THE INVESTIGATION**

At the time of the recent field investigations, the weather was clear, following a recent rain. The property was covered in dry grass and tumbleweeds, but otherwise accessible. Ground visibility ranged from 25% to 75%. The survey was determined to be consistent with an intensive level of coverage (transects at 15 meter intervals).

### Native American Consultation

The Native American Heritage Commission responded to the McKenna et al. request for data pertaining to the project area and was informed the Commission's files have not identified any sacred or religious sites in the area. To date, McKenna et al. has received no responses to the letters sent to local Native American representatives. The project area is relatively close to the Morongo Band of Mission Indians reservation and the Morongo are likely to contact the City, directly. As a general rule, the Morongo request copies of technical reports for review and to insure no Native American resources will be adverse impacted by any proposed project.

# Paleontological Resources

The paleontological overview for this undertaking identified the project area as consisting entirely of "... Quaternary Alluvium, derived as alluvial fan deposits from the San Jacinto Mountains." Shallow deposits (Holocene) are not considered sensitive for paleontological specimens, but deeper deposits of older Quaternary Alluvium (Late Pleistocene) may yield paleontological specimens. McLeod (2018 and 2020) concluded shallow excavations are not likely to impact fossil bearing deposits, but deeper excavation may and, therefore, should be subjected to paleontological monitoring – specifically in areas of undisturbed substrate. A monitoring program consistent with the policies and guidelines of the County Geologist should be considered, should project-related grading and site preparation impact the older Quaternary deposits.

# Archaeological Resources

No evidence of prehistoric or historic archaeological resources were identified within the project area. The project area was dominated by grass and tumble weeds with no evidence of any prior development or occupation. The native soils have been disturbed by disking, weed abatement, peripheral road development, and minor impacts from adjacent modern developments. The survey did identify a single (and partially buried) expanse of poured concrete (Figures 5 and 6). This pad is consistent with the concrete pad referenced by Salem Engineering Group, Inc. 2020: Photo 10; Page 5 of 7). At the time of their recording, Salem Engineering Group, Inc. estimated the ad measured 10 by 15 feet (2020:5).

As illustrated, this pad is located along the western property boundary and, prior to the realignment of 8<sup>th</sup> Street, was nearer the northwestern boundary of the property. In inspecting the small exposed portion of this pad, it was apparent the concrete was poured and smoothly finished. It was not a rough pad or an early pad. The complex illustrated on the historic aerial photographs showed this particular area of the property was in use prior to the construction of the large residence to the east of the pad, indicating the pad dates between 1938 and 1949 and likely post-dates WWII. There is no physical evidence defining the use of the pad, but it was likely associated with the agricultural activities (e.g.


Figure 5. The Exposed Portion of the Concrete Pad, Western Property Boundary.



Figure 6. Aerial Photo Illustrating Location of the Concrete Pad.

harvesting, transporting, etc.). There were no anchor bolts evident, suggesting the pad was associated with open-air use and not a structural pad. It is not considered a significant element to any potential historical significance. Despite the lack of physical evidence, the property is still considered moderately sensitive for prehistoric and/or late historic archaeological resources. The prehistoric sensitivity is based on the general use of the area by the Cahuilla. The historic sensitivity is based on the research and the identification of a 1930s to 1970s use of the property for agricultural and residential purposes. While the historic uses are not necessarily significant, archaeological evidence may assist in filling gaps in the historic record. There is always a potential for buried resources not evident during a surface survey.

# Built Environment

There are no standing structures on the property. All evidence of the post-1949 improvements (save the small concrete pad) have been removed from the property. There is no evidence of foundations or structural debris. Impacts to the southeastern corner of the property area modern (based on aerials) and of no historic significance. No physical evidence of prior developments was evidence and no such identification is anticipated.

# Summary

In summary, McKenna et al. found no physical evidence of archaeological or paleontological resources within the project area. This finding is based primarily on a visual examination of the native soils per a surface survey. McLeod, in assessing the potential for paleontological resources, recommended paleontological monitoring during excavations, as shallow deposits of fossil bearing deposits are likely to be impacted by the undertaking. Similarly, while no surficial evidence of prehistoric or historic archaeological resources were identified, but the Native American community identifies the area of the San Gorgonio Pass as highly sensitive for Native American resources and, as an area associated with early Beaumont (and Banning) development, has the potential to yield late historic archaeological evidence - likely in a shallow context. The built environment is not applicable to this analysis.

Overall, the subsurface within the project area is still considered sensitive for buried archaeological and/or paleontological resources. McKenna et al. concurs with McLeod and the local Native American community – the project area should be deemed sensitive for buried resources.

# FINDING OF FACT

No surficial evidence of cultural or paleontological resources was found during the recent investigations. The project area is considered clear of any surface resources, but McKenna et al. acknowledges there is still a relative level of sensitivity for buried resources. To avoid any adverse impacts to previously unidentified finds (paleontological

or archaeological), McKenna et al. has developed recommendations consistent with CEQA to lessen any impacts to a level of insignificance.

### RECOMMENDATIONS

Based on the relative sensitivity for the project area to be associated with prehistoric archaeological resources, historic archaeological resources, and/or paleontological resources, McKenna et al. is recommending the following:

- Mitigation Measure CR-1: Should older Quaternary Alluvial deposits be encountered during site preparation activities, a qualified paleontologist shall oversee the excavations to insure any paleontological specimens are identified, recovered, analyzed, reported, and curated in accordance wit CEQA and the County of Riverside policies and guidelines. This program should be conducted while these older deposits are impacted and while the paleontological consultant deems the program necessary..
- Mitigation Measure CR-2: A qualified archaeologist shall oversee excavations in the younger alluvial deposits (Holocene) during the first two days of ground disturbance. If the archaeologist determines it necessary, an archaeological monitoring program shall be implemented. The monitoring program shall be conducted in accordance with current professional guidelines and protocols. The program should be designed to be flexible and account for changes in findings through the management of the resources in a professional manner and via evaluation in accordance with the current CEQA criteria.
- Mitigation Measure CR-3: If, at any time, human remains or suspected human remains are identified within the project area, the Contractor will halt work in the immediate vicinity of the find and establish a buffer zone around the find. If the archaeological consultant is on-site, the archaeological consultant will oversee this level of protection. The City will be immediately notified and the City will contact the County Coroner (within 24 hours). The Coroner has the authority to examine the find in situ and make a determination as to the nature of the find:
  - a) If the remains are determined to be human, the Coroner will determine whether or not they are likely of Native American origin. If so, the Coroner will contact the Na-

tive American Heritage Commission and the Commission will name the Most Likely Descendent (MLD). In consultation between the City, Property Owner, MLD, and consulting archaeologist, the disposition of the remains will be defined. If there is a conflict, the Native American Heritage Commission with act as an mediator.

- b) If the remains are determined to be archaeological, but not of Native American origin, the City, Property Owner and archaeological consultant will determine the management of the find and the removal from the site. The Property Owner would be responsible for any costs related to the removal, analysis, and reburial.
- c) If the remains are determined to be of forensic value, the Coroner will arrange for the removal of the remains and oversee the analysis and disposition.

# CERTIFICATION

CERTIFICATION. I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological/cultural resources report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

eanette A. McKenna

Jeanette A. McKenna, Principal Investigator, McKenna et al. Certified Riverside County Cultural Resources Consultant #62

May 20, 2020 Date (of revisions)

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# APPENDIX E ENERGY CALCULATIONS

#### **Evergreen in Beaumont**

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

0.059 HP: Greater than 100

HP: 0 to 100

Values above are expressed in gallons per horsepower-hour/BSFC.

0.0529

#### CONSTRUCTION EQUIPMENT

Construction Equipment	#	Hours per Dav	Horsepower	Load Factor	Construction Phas	Fuel Used (gallons)	Total Gallons
Graders	1	8	89	0.2	Site Prep	15.07	15.07
Other Material Handling Eqp.	0	0	168	0.4	Site Prep	0.00	0.00
Rubber Tired Dozer	1	7	247	0.4	Site Prep	73.17	73.17
Tractors/Loaders/Backhoes	1	8	97	0.37	Site Prep	33.77	33.77
Concrete/Industrial Saws	0	0	81	0.73	Grading	0.00	0.00
Graders	1	6	187	0.41	Grading	97.34	97.34
Excavators	0	0	158	0.38	Grading	0.00	0.00
Rubber Tired Dozer	1	6	247	0.4	Grading	125.44	125.44
Tractors/Loaders/Backhoes	1	7	97	0.37	Grading	59.09	59.09
Bore/Drill Rig	0	0	221	0.5	Building Con.	0.00	0.00
Cranes	1	6	231	0.29	Building Con.	4252.53	4252.53
Forklifts	1	6	89	0.2	Building Con.	1255.97	1255.97
Generator Sets	1	8	84	0.74	Building Con.	5848.01	5848.01
Other Construction Eqp.	0	0	172	0.42	Building Con.	0.00	0.00
Rubber Tired Dozer	0	0	247	0.4	Building Con.	0.00	0.00
Tractors/Loaders/Backhoes	1	6	97	0.37	Building Con.	2532.40	2532.40
Welders	3	8	46	0.45	Building Con.	1947.46	5842.37
Cement and Motor Mixers	1	6	9	0.56	Paving	17.78	17.78
Concrete/Industiral Saws	0	0	81	0.73	Paving	0.00	0.00
Dumpers/Tenders	0	0	16	0.38	Paving	0.00	0.00
Graders	0	0	187	0.41	Paving	0.00	0.00
Pavers	1	6	130	0.42	Paving	173.30	173.30
Paving Equipment	1	8	132	0.36	Paving	201.10	201.10
Rollers	1	7	80	0.38	Paving	125.13	125.13
Tractors/Loaders/Backhoes	1	8	97	0.37	Paving	168.83	168.83
Air Compressors	1	6	78	0.48	Architectual Coat.	132.09	132.09
					Total Fuel Used	17058.46	20953.37

(Gallons)

Construction Phase	Days of Operation
Site Preparation	2
Grading	4
Building Construction	200
Paving	10
Architectual Coating	10

WORKER TRIPS					
				Fuel Used	Total
Construction Phase	MPG [2]	Trips	Trip Length (miles)	(gallons)	Gallons
Site Prepration Phase	24.0	8	15	5.00	10
Grading	24.0	8	15	5.00	20
Building Construction Phase	24.0	37	15	23.13	4625
Paving Phase	24.0	13	15	8.13	81.25
Architectural Coating	24.0	7	15	4.38	43.75
			Total	45.63	4780

#### VENDOR TRIPS

				Fuel Used	Total
Construction Phase	MPG [2]	Trips	Trip Length (miles)	(gallons)	Gallons
Site Preparation Phase	7.4	0	7	0.00	0.00
Grading	7.4	0	7	0.00	0.00
Building Construction Phase	7.4	14	7	13.24	2648.65
Paving Phase	7.4	0	7	0.00	0.00
			Total	13.24	2648.65

Construction Phase	Days of Operation
Site Preparation	2
Grading	4
Building Construction	200
Paving	10
Architectural Coating	10
-	

Total Gasoline Consumption (gallons)	7428.65
Total Diesel Consumption (gallons)	20953.37

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# **Operational Trips**

	Annual		
Use	Miles	MPG	Total Gallons (50%)
Con. Market with Gas Pumps	338070.0	24	7043.1
Fast Food Rest. With Drive Thru	562080.0	24	11710.0
Other Asphalt Surface	0.0	0	0.0
Parking Lot	0.0	0	0.0
		Total	18753.1

	Annual		
Use	Miles	MPG	Total Gallons (50%)
Con. Market with Gas Pumps	338070.0	7	24147.9
Fast Food Rest. With Drive Thru	562080.0	7	40148.6
Other Asphalt Surface	0.0	0	0.0
Parking Lot	0.0	0	0.0
		Total	64296.4
		Grand Tota	83049.6

APPENDIX F GEOTECHNICAL ENGINEERING REPORT JANUARY 31, 2020



# GEOTECHNICAL ENGINEERING INVESTIGATION

PROPOSED MULTI-TENANT DEVELOPMENT 8<sup>TH</sup> STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

> SALEM PROJECT NO. 3-220-0008 JANUARY 31, 2020

> > **PREPARED FOR:**

MS. KAYTLIN FOX EVERGREEN DEVCO, INC. 2390 EAST CAMELBACK ROAD, SUITE 410 PHOENIX, AZ 85016

PREPARED BY:

SALEM ENGINEERING GROUP, INC. 8711 MONROE COURT, SUITE A RANCHO CUCAMONGA, CA 91730 P: (909) 980-6455 F: (909) 980-6435 www.salem.net



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January 31, 2020

Project No. 3-220-0008

Ms. Kaytlin Fox Development Manager **Evergreen Devco, Inc.** 2390 East Camelback Road, Suite 410 Phoenix, AZ 85016

SUBJECT:GEOTECHNICAL ENGINEERING INVESTIGATION<br/>PROPOSED MULTI-TENANT DEVELOPMENT<br/>8<sup>TH</sup> STREET AND HIGHLAND SPRINGS AVENUE<br/>BEAUMONT, CALIFORNIA

Dear Ms. Fox:

At your request and authorization, SALEM Engineering Group, Inc. (SALEM) has prepared this Geotechnical Engineering Investigation report for the Proposed Multi-Tenant Development to be located at the subject site.

The accompanying report presents our findings, conclusions, and recommendations regarding the geotechnical aspects of designing and constructing the project as presently proposed. In our opinion, the proposed project is feasible from a geotechnical viewpoint provided our recommendations are incorporated into the design and construction of the project.

We appreciate the opportunity to assist you with this project. Should you have questions regarding this report or need additional information, please contact the undersigned at (909) 980-6455.

Respectfully Submitted,

SALEM ENGINEERING GROUP, INC.

Clarence Jiang, GE Geotechnical Division Manager RGE 2477

R. Sammy Salem, MS, PE, GE Principal Engineer RCE 52762 / RGE 2549

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# GEOTECHNICAL ENGINEERING INVESTIGATION PROPSOED MULTI-TENANT DEVELOPMENT 8<sup>TH</sup> STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

# 1. PURPOSE AND SCOPE

This report presents the results of our Geotechnical Engineering Investigation for the site of the Proposed Multi-Tenant Development to be located at the southwest corner of 8<sup>th</sup> Street and Highland Springs Avenue in Beaumont, California (see Figure 1, Vicinity Map).

The purpose of our geotechnical engineering investigation was to observe and sample the subsurface conditions encountered at the site, and provide conclusions and recommendations relative to the geotechnical aspects of constructing the project as presently proposed.

The scope of this investigation included a field exploration, percolation testing, laboratory testing, engineering analysis and the preparation of this report. Our field exploration was performed on January 17, 2020 and included the drilling of eleven (11) small-diameter soil borings to a maximum depth of 50 feet at the site. Additionally, two (2) percolation tests were performed at depths of approximately 5 and 10 feet below existing grade for the determination of the infiltration rate. The locations of the soil borings and percolation tests are depicted on Figure 2, Site Plan. A detailed discussion of our field investigation, percolation tests, and exploratory boring logs are presented in Appendix A.

Laboratory tests were performed on selected soil samples obtained during the investigation to evaluate pertinent physical properties for engineering analyses. Appendix B presents the laboratory test results in tabular and graphic format.

The recommendations presented herein are based on analysis of the data obtained during the investigation and our experience with similar soil and geologic conditions. If project details vary significantly from those described herein, SALEM should be contacted to determine the necessity for review and possible revision of this report. Earthwork and Pavement Specifications are presented in Appendix C. If text of the report conflict with the specifications in Appendix C, the recommendations in the text of the report have precedence.

## 2. **PROJECT DESCRIPTION**

Based on the Site Plan provided to us, we understand that the proposed development will include construction of a 3,500 square-foot quick service restaurant (QSR) with a drive-thru, a 4,088 square-foot convenience store (7-Eleven), a 6-MPD canopy, and underground storage tanks. Parking, trash enclosures, and landscaping are planned to be associated with the proposed development. Maximum wall





load is expected to be on the order of 5 kips per linear foot. Maximum column load is expected to be on the order of 100 kips. Floor slab soil bearing pressure is expected to be on the order of 150 psf.

A site grading plan was not available at the time of preparation of this report. As the existing project area is essentially level, we anticipate that cuts and fills during earthwork will be minimal and limited to providing a level pad and positive site drainage. In the event that changes occur in the nature or design of the project, the conclusions and recommendations contained in this report will not be considered valid unless the changes are reviewed and the conclusions of our report are modified. The site configuration and locations of proposed improvements are shown on the Site Plan, Figure 2.

# 3. SITE LOCATION AND DESCRIPTION

The subject site is rectangular in shape and encompasses approximately 2.07 acres. The site is located on the southwest corner of 8<sup>th</sup> Street and Highland Springs Avenue in the City of Beaumont, California (see Vicinity Map, Figure 1).

The site is currently a vacant lot with miscellaneous grasses and weeds throughout the site. Overhead power lines run along the western portion of the site and are grounded at the power line pole in the northwest corner of the site. The site is relatively flat with no major changes in grade. The average elevation of the site is approximately 2,600 feet above mean sea level based on Google Earth imagery.

# 4. FIELD EXPLORATION

Our field exploration consisted of site surface reconnaissance and subsurface exploration. The exploratory test borings (B-1 through B-11) were drilled on January 17, 2020 in the area shown on the Site Plan, Figure 2. The test borings were advanced with 4-inch diameter solid flight augers rotated by a truck-mounted CME 45 drill rig. The test borings were extended to a maximum depth of 50 feet below existing grade.

The materials encountered in the test borings were visually classified in the field, and logs were recorded by a field engineer and stratification lines were approximated on the basis of observations made at the time of drilling. Visual classification of the materials encountered in the test borings were generally made in accordance with the Unified Soil Classification System (ASTM D2487). A soil classification chart and key to sampling is presented on the Unified Soil Classification Chart, in Appendix "A." The logs of the test borings are presented in Appendix "A." The Boring Logs include the soil type, color, moisture content, dry density, and the applicable Unified Soil Classification System symbol.

The location of the test borings were determined by measuring from features shown on the Site Plan, provided to us. Hence, accuracy can be implied only to the degree that this method warrants. The actual boundaries between different soil types may be gradual and soil conditions may vary. For a more detailed description of the materials encountered, the Boring Logs in Appendix "A" should be consulted.

Soil samples were obtained from the test borings at the depths shown on the logs of borings. The MCS samples were recovered and capped at both ends to preserve the samples at their natural moisture content; SPT samples were recovered and placed in a sealed bag to preserve their natural moisture content. The borings were backfilled with soil cuttings after completion of the drilling.



# 5. LABORATORY TESTING

Laboratory tests were performed on selected soil samples to evaluate their physical characteristics and engineering properties. The laboratory-testing program was formulated with emphasis on the evaluation of natural moisture, in-situ density, shear strength, consolidation potential, expansion index, maximum density and optimum moisture determination, R-Value and gradation of the materials encountered.

In addition, chemical tests were performed to evaluate the corrosivity of the soils to buried concrete and metal. Details of the laboratory test program and the results of laboratory test are summarized in Appendix "B." This information, along with the field observations, was used to prepare the final boring logs in Appendix "A."

# 6. GEOLOGIC SETTING

The subject site is located near the eastern portion of the Inland Valley, within the Peninsular Ranges Geomorphic Province of California. The Inland Valley is situated between the San Bernardino Mountains to the northeast, the San Gabriel Mountains to the north, the Chino Hills to the southwest, and to the southeast by the hilly uplands that separate it from the San Jacinto Basin. These mountain ranges are part of the Transverse Ranges Geomorphic Province of California.

The Inland Valley is dominated by northwest-trending faults and adjacent anticlinal uplifts. The intervening deep synclinal troughs are filled with poorly consolidated Upper Pleistocene and unconsolidated Holocene sediments. Tectonism of the region is dominated by the interaction of the East Pacific Plate and the North American Plate along a transform boundary. The Inland Valley has been filled with a variable thickness of relatively young, heterogeneous alluvial deposits. The Inland Valley, in the vicinity of the project site, is drained by minor tributaries toward the Santa Ana River. This drainage system trends towards the southwest in the vicinity of the subject site. Soil deposits encountered on the subject site during exploratory drilling are discussed in detail in this report

# 7. GEOLOGIC HAZARDS

# 7.1 Faulting and Seismicity

The Peninsular Range has historically been a province of relatively high seismic activity. The nearest faults to the project site are associated with the San Andreas Fault system located approximately 6.8 miles from the site. There are no known active fault traces in the project vicinity. Based on mapping and historical seismicity, the seismicity of the Peninsular Range has been generally considered high by the scientific community.

The project area is not within an Alquist-Priolo Earthquake Fault (Special Studies) Zone and will not require a special site investigation by an Engineering Geologist. Soils on site are classified as Site Class D in accordance with Chapter 16 of the California Building Code. The proposed structures are determined to be in Seismic Design Category D.

To determine the distance of known active faults within 100 miles of the site, we used the United States Geological Survey (USGS) web-based application 2008 National Seismic Hazard Maps - Fault Parameters.

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Site latitude is  $33.9322^{\circ}$  North; site longitude is  $116.9475^{\circ}$  West. The ten closest active faults are summarized below in Table 7.1.

Fault Name	Distance to Site (miles)	Max. Earthquake Magnitude, M <sub>w</sub>
S. San Andreas; PK+CH+CC+BB+NM+SM+NSB+SSB+BG+CO	6.8	8.2
San Jacinto; SBV+SJV	6.8	7.4
San Jacinto; SBV+SJV+A+CC+B+SM	7.5	7.9
S. San Andreas; BG+CO	8.5	7.4
San Jacinto; A+CC+B	8.7	7.6
Pinto Mtn	15.5	7.3
San Jacinto; SBV	17.7	7.1
S. San Andreas; PK+CH+CC+BB+NM+SM+NSB	21.8	8.0
Helendale-So Lockhart	28.1	7.4
Elsinore; W+GI	28.3	7.3

## TABLE 7.1 REGIONAL FAULT SUMMARY

The faults tabulated above and numerous other faults in the region are sources of potential ground motion. However, earthquakes that might occur on other faults throughout California are also potential generators of significant ground motion and could subject the site to intense ground shaking.

# 7.2 Surface Fault Rupture

The site is not within a currently established State of California Earthquake Fault Zone for surface fault rupture hazards. No active faults with the potential for surface fault rupture are known to pass directly beneath the site. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed development is considered low.

# 7.3 Ground Shaking

Seismic coefficients and spectral response acceleration values were developed based on the 2019 California Building Code (CBC). The CBC methodology for determining design ground motion values is based on the Office of Statewide Health Planning and Development (OSHPD) Seismic Design Maps, which incorporate both probabilistic and deterministic seismic ground motion.

Based on the 2019 CBC, a Site Class D represents the on-site soil conditions with standard penetration resistance, N-values, averaging between 15 and 50 blows per foot in the upper 100 feet below site grade. A table providing the recommended design acceleration parameters for the project site, based on the Site Class D designation, is included in Section 9.2.1 of this report.

Based on Office of Health Planning and Development (OSHPD) Seismic Design Maps, the estimated design peak ground acceleration adjusted for site class effects (PGA<sub>M</sub>) was determined to be 0.926g (based on both probabilistic and deterministic seismic ground motion).

# 7.4 Liquefaction

Soil liquefaction is a state of soil particles suspension caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional. Primary factors that trigger liquefaction are: moderate to strong ground shaking (seismic source), relatively clean, loose granular soils (primarily poorly graded sands and silty sands), and saturated soil conditions (shallow groundwater). Due to the increasing overburden pressure with depth, liquefaction of granular soils is generally limited to the upper 50 feet of a soil profile. However, liquefaction has occurred in soils other than clean sand.

The soils encountered within the depth of 50 feet on the project site consisted predominately of medium dense to dense silty sand. The historically highest groundwater is estimated to be at a depth of more than 50 feet below ground surface according regional groundwater well data. Low to very low cohesion strength is associated with the sandy soil. A seismic hazard, which could cause damage to the proposed development during seismic shaking, is the post-liquefaction settlement of the liquefied sands. The liquefaction potential of the site is considered to be low due the absence of shallow groundwater. The Riverside County Office of Information Technology GIS website shows the subject site to be in a low liquefaction potential area. Therefore, no mitigation measures are warranted.

# 7.5 Lateral Spreading

Lateral spreading is a phenomenon in which soils move laterally during seismic shaking and is often associated with liquefaction. The amount of movement depends on the soil strength, duration and intensity of seismic shaking, topography, and free face geometry. Due to the relatively flat site topography and low liquefaction potential, we judge the likelihood of lateral spreading to be low.

# 7.6 Landslides

There are no known landslides at the site, nor is the site in the path of any known or potential landslides. We do not consider the potential for a landslide to be a hazard to this project.

# 7.7 Tsunamis and Seiches

The site is not located within a coastal area. Therefore, tsunamis (seismic sea waves) are not considered a significant hazard at the site. Seiches are large waves generated in enclosed bodies of water in response to ground shaking. No major water-retaining structures are located immediately up gradient from the project site. Flooding from a seismically-induced seiche is considered unlikely.

# 8. SOIL AND GROUNDWATER CONDITIONS

# 8.1 Subsurface Conditions

The subsurface conditions encountered appear typical of those found in the geologic region of the site. In general, the soils within the depth of exploration consisted of loose to dense silty sand with lenses of sandy silt and sand.

Fill soils may be present on site between our boring locations. Verification of the extent of fill should be determined during site grading. Field and laboratory tests suggest that the deeper native soils are



moderately strong and slightly compressible. These soils extended to the termination depth of our borings.

The soils were classified in the field during the drilling and sampling operations. The stratification lines were approximated by the field engineer on the basis of observations made at the time of drilling. The actual boundaries between different soil types may be gradual and soil conditions may vary. For a more detailed description of the materials encountered, the Boring Logs in Appendix "A" should be consulted.

The Boring Logs include the soil type, color, moisture content, dry density, and the applicable Unified Soil Classification System symbol. The locations of the test borings were determined by measuring from feature shown on the Site Plan, provided to us. Hence, accuracy can be implied only to the degree that this method warrants.

# 8.2 Groundwater

The test boring locations were checked for the presence of groundwater during and after the drilling operations. Free groundwater was not encountered during this investigation. The historically highest groundwater is estimated to be at a depth of more than 50 feet below ground surface according to regional groundwater well data.

It should be recognized that water table elevations may fluctuate with time, being dependent upon seasonal precipitation, irrigation, land use, localized pumping, and climatic conditions as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report.

# 8.3 Soil Corrosion Screening

Excessive sulfate in either the soil or native water may result in an adverse reaction between the cement in concrete and the soil. The 2014 Edition of ACI 318 (ACI 318) has established criteria for evaluation of sulfate and chloride levels and how they relate to cement reactivity with soil and/or water.

A soil sample was obtained from the project site and was tested for the evaluation of the potential for concrete deterioration or steel corrosion due to attack by soil-borne soluble salts and soluble chloride. The water-soluble sulfate concentration in the saturation extract from the soil sample was detected to be 113 mg/kg. ACI 318 Tables 19.3.1.1 and 19.3.2.1 outline exposure categories, classes, and concrete requirements by exposure class. ACI 318 requirements for site concrete based upon soluble sulfate are summarized in Table 8.3 below.

Water Soluble Sulfate (SO <sub>4</sub> ) in Soil, Percentage by Weight	Exposure Severity	Exposure Class	Maximum w/cm Ratio	Minimum Concrete Compressive Strength	Cementitious Materials Type
0.0113	Not Applicable	SO	N/A	2,500 psi	No Restriction

TABLE 8.3WATER SOLUBLE SULFATE EXPOSURE REQUIREMENTS



The water-soluble chloride concentration detected in saturation extract from the soil samples was 58 mg/kg. This level of chloride concentration is considered to be mildly corrosive.

It is recommended that a qualified corrosion engineer be consulted regarding protection of buried steel or ductile iron piping and conduit or, at a minimum, applicable manufacturer's recommendations for corrosion protection of buried metal pipe be closely followed.

# 8.4 Percolation Testing

Two percolation tests (P-1 and P-2) were performed within assumed infiltration areas and were conducted in accordance with in accordance with the guidelines established by the County of Riverside. The approximate locations of the percolation tests are shown on the attached Site Plan, Figure 2. The boreholes were advanced to the depths shown on the percolation test worksheets. The holes were pre-saturated before percolation testing commenced.

Percolation rates were measured by filling the test holes with clean water and measuring the water drops at a certain time interval. The percolation rate data are presented in tabular format at the end of this Report. The difference in the percolation rates are reflected by the varied type of soil materials at the bottom of the test holes. The test results are shown on the table below.

Test No.	Depth (feet)	Measured Percolation Rate (min/inch)	Infiltration Rate* (inch/hour)	Soil Type
P-1	10	19.2	0.35	Silty SAND (SM)
P-2	5	250.0	0.02	Clayey SAND (SC)

PERCOLATION TEST RESULTS

\* Tested infiltration Rate = ( $\Delta H 60 r$ ) / ( $\Delta t(r + 2H_{avg})$ )

The soil infiltration or percolation rates are based on tests conducted with clear water. The infiltration/percolation rates may vary with time as a result of soil clogging from water impurities. The infiltration/percolation rates will deteriorate over time due to the soil conditions.

The soils may also become less permeable to impermeable if the soil is compacted. Thus, periodic maintenance consisting of clearing the bottom of the drainage system of clogged soils should be expected. The infiltration/percolation rate may become slower if the surrounding soil is wet or saturated due to prolonged rainfalls. Additional percolation tests should be conducted at bottom of the infiltration system during construction to verify the infiltration/percolation rate. Groundwater, if closer to the bottom of the drainage system, will also reduce the infiltration/percolation rate.

The scope of our services did not include a groundwater study and was limited to the performance of percolation testing and soil profile description, and the submitted data only. Our services did not include those associated with septic system design. Neither did services include an Environmental Site Assessment for the presence or absence of hazardous and/or toxic materials in the soil, groundwater, or atmosphere; or the presence of wetlands.



Any statements, or absence of statements, in this report or on any boring logs regarding odors, unusual or suspicious items, or conditions observed, are strictly for descriptive purposes and are not intended to convey engineering judgment regarding potential hazardous and/or toxic assessment.

The geotechnical engineering information presented herein is based upon professional interpretation utilizing standard engineering practices. The work conducted through the course of this investigation, including the preparation of this report, has been performed in accordance with the generally accepted standards of geotechnical engineering practice, which existed in the geographic area at the time the report was written. No other warranty, express or implied, is made.

Please be advised that when performing percolation testing services in relatively small diameter borings, that the testing may not fully model the actual full scale long term performance of a given site. This is particularly true where percolation test data is to be used in the design of large infiltration system such as may be proposed for the site. The measured percolation rate includes dispersion of the water at the sidewalls of the boring as well as into the underlying soils. Subsurface conditions, including percolation rates, can change over time as fine-grained soils migrate. It is not warranted that such information and interpretation cannot be superseded by future geotechnical engineering developments. We emphasize that this report is valid for the project outlined above and should not be used for any other sites.

# 9. CONCLUSIONS AND RECOMMENDATIONS

# 9.1 General

- 9.1.1 Based upon the data collected during this investigation, and from a geotechnical engineering standpoint, it is our opinion that the site is suitable for the proposed construction of improvements at the site as planned, provided the recommendations contained in this report are incorporated into the project design and construction. Conclusions and recommendations provided in this report are based on our review of available literature, analysis of data obtained from our field exploration and laboratory testing program, and our understanding of the proposed development at this time.
- 9.1.2 The primary geotechnical constraints identified in our investigation is the presence of upper loose and potentially compressible material at the site. Recommendations to mitigate the effects of these soils are provided in this report.
- 9.1.3 Fill soils may be present on-site between our test boring locations. Undocumented fill materials are not suitable to support any future structures and should be replaced with Engineered Fill. Prior to fill placement, Salem Engineering Group, Inc. should inspect the bottom of the excavation to verify the fill condition.
- 9.1.4 Site demolition activities shall include removal of all surface obstructions not intended to be incorporated into final site design. In addition, underground buried structures and/or utility lines encountered during demolition and construction should be properly removed and the resulting excavations backfilled with Engineered Fill. It is suspected that possible demolition activities of the existing structures may disturb the upper soils. After demolition activities, it is recommended that disturbed soils be removed and/or recompacted.



- 9.1.5 The near-surface onsite soils are moisture-sensitive and are moderately to highly compressible (collapsible soil) under saturated conditions. Structures within the project vicinity have experienced excessive post-construction settlement, when the foundation soils become near saturated. The collapsible or weak soils should be removed and recompacted according to the recommendations in the Grading section of this report (Section 9.5).
- 9.1.6 Surface vegetation consisting of grasses and other similar vegetation should be removed by stripping to a sufficient depth to remove organic-rich topsoil. The upper 2 to 4 inches of the soils containing, vegetation, roots and other objectionable organic matter encountered at the time of grading should be stripped and removed from the surface. Deeper stripping may be required in localized areas. The stripped vegetation, will not be suitable for use as Engineered Fill or within 5 feet of building pads or within pavement areas. However, stripped topsoil may be stockpiled and reused in landscape or non-structural areas or exported from the site.
- 9.1.7 Based on the subsurface conditions at the site and the anticipated structural loading, we anticipate that the proposed building may be supported using conventional shallow foundations provided that the recommendations presented herein are incorporated in the design and construction of the project.
- 9.1.8 Provided the site is graded in accordance with the recommendations of this report and foundations constructed as described herein, we estimate that total settlement due to static loads utilizing conventional shallow foundations for the proposed building will be within 1 inch and corresponding differential settlement will be less than ½ inch.
- 9.1.9 All references to relative compaction and optimum moisture content in this report are based on ASTM D 1557 (latest edition).
- 9.1.10 SALEM shall review the project grading and foundation plans prior to final design submittal to assess whether our recommendations have been properly implemented and evaluate if additional analysis and/or recommendations are required. If SALEM is not provided plans and specifications for review, we cannot assume any responsibility for the future performance of the project.
- 9.1.11 SALEM shall be present at the site during site demolition and preparation to observe site clearing/demolition, preparation of exposed surfaces after clearing, and placement, treatment and compaction of fill material.
- 9.1.12 SALEM's observations should be supplemented with periodic compaction tests to establish substantial conformance with these recommendations. Moisture content of footings and slab subgrade should be tested immediately prior to concrete placement. SALEM should observe foundation excavations prior to placement of reinforcing steel or concrete to assess whether the actual bearing conditions are compatible with the conditions anticipated during the preparation of this report.



### 9.2 Seismic Design Criteria

9.2.1 For seismic design of the structures, and in accordance with the seismic provisions of the 2019 CBC, our recommended parameters are shown below. These parameters were determined using California's Office of Statewide Health Planning and Development (OSHPD) Seismic Design Map Tool Website (https://seismicmaps.org/) in accordance with the 2019 CBC. The Site Class was determined based on the soils encountered during our field exploration.

Seismic Item	Symbol	Value	2016 ASCE 7 or 2019 CBC Reference
Site Coordinates (Datum = NAD 83)		33.9322 Lat -116.9475 Lon	
Site Class		D	ASCE 7 Table 20.3-1
Soil Profile Name		Stiff Soil	ASCE 7 Table 20.3-1
Risk Category		II	Table 1604.5
Site Coefficient for PGA	F <sub>PGA</sub>	1.1	ASCE 7 Table 11.8-1
Peak Ground Acceleration (adjusted for Site Class effects)	PGA <sub>M</sub>	0.926	ASCE 7 Equation 11.8-1
Seismic Design Category	SDC	D	CBC Table 1613.2.5
Mapped Spectral Acceleration (Short period - 0.2 sec)	Ss	2.064 g	CBC Figure 1613.2.1(1-8)
Mapped Spectral Acceleration (1.0 sec. period)	$\mathbf{S}_1$	0.708 g	CBC Figure 1613.2.1(1-8)
Site Class Modified Site Coefficient	$F_{a}$	1.000	CBC Figure 1613.2.3(1)
Site Class Modified Site Coefficient	$F_{v}$	* 1.700	CBC Figure 1613.2.3(2)
MCE Spectral Response Acceleration (Short period - 0.2 sec) $S_{MS} = F_a S_S$	S <sub>MS</sub>	2.064 g	CBC Equation 16-36
MCE Spectral Response Acceleration (1.0 sec. period) $S_{M1} = F_v S_1$	$S_{M1}$	* 1.204 g	CBC Equation 16-37
Design Spectral Response Acceleration $S_{DS}=^{2}_{3}S_{MS}$ (short period - 0.2 sec)	$\mathbf{S}_{\mathrm{DS}}$	1.376 g	CBC Equation 16-38
Design Spectral Response Acceleration $S_{D1}=\frac{2}{3}S_{M1}$ (1.0 sec. period)	$\mathbf{S}_{\mathrm{D1}}$	* 0.802 g	CBC Equation 16-39
Short Term Transition Period (S <sub>D1</sub> /S <sub>DS</sub> ), Seconds	Ts	0.583	ASCE 7-16, Section 11.4.6
Long Period Transition Period (seconds)	$T_L$	8	ASCE 7-16, Figure 22-14

TABLE 9.2.1SEISMIC DESIGN PARAMETERS

Note: \* Determined per ASCE Table 11.4-2 for use in calculating Ts only

Site Specific Ground Motion Analysis was not included in the scope of this investigation. Per ASCE 11.4.8, structures on Site Class D with S<sub>1</sub> greater than or equal to 0.2 may require Site Specific Ground Motion Analysis. However, a site specific motion analysis may not be required based on Exceptions listed in ASCE 11.4.8. The Structural Engineer should verify whether Exception No. 2 of ASCE 7-16, Section 11.4.8, is valid for the site. In the event that a site specific ground motion analysis is required, SALEM should be contacted for these services.



9.2.2 Conformance to the criteria in the above table for seismic design does not constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur if a large earthquake occurs. The primary goal of seismic design is to protect life, not to avoid all damage, since such design may be economically prohibitive.

# 9.3 Soil and Excavation Characteristics

- 9.3.1 Based on the soil conditions encountered in our soil borings, the onsite soils can be excavated with moderate effort using conventional earthmoving equipment.
- 9.3.2 It is the responsibility of the contractor to ensure that all excavations and trenches are properly shored and maintained in accordance with applicable Occupational Safety and Health Administration (OSHA) rules and regulations to maintain safety and maintain the stability of adjacent existing improvements. Temporary excavations are further discussed in a later Section of this report.
- 9.3.3 The upper soils are moisture-sensitive and moderately collapsible under saturated conditions. These soils, in their present condition, possess moderate risk to construction in terms of possible post-construction movement of the foundations and floor systems if no mitigation measures are employed. Accordingly, measures are considered necessary to reduce anticipated expansion and collapse potential. As recommended in Section 9.5, the collapsible soils should be overexcavated and recompacted. Mitigation measures will not eliminate post-construction soil movement, but will reduce the soil movement. Success of the mitigation measures will depend on the thoroughness of the contractor in dealing with the soil conditions.
- 9.3.4 The near surface soils identified as part of our investigation are, generally, slightly moist to moist due to the absorption characteristics of the soil. Earthwork operations may encounter very moist unstable soils which may require removal to a stable bottom. Exposed native soils exposed as part of site grading operations shall not be allowed to dry out and should be kept continuously moist prior to placement of subsequent fill.

# 9.4 Materials for Fill

- 9.4.1 Excavated soils generated from cut operations at the site are suitable for use as general Engineered Fill in structural areas, provided they do not contain deleterious matter, organic material, or rock material larger than 3 inches in maximum dimension.
- 9.4.2 The preferred materials specified for Engineered Fill are suitable for most applications with the exception of exposure to erosion. Project site winterization and protection of exposed soils during the construction phase should be the sole responsibility of the Contractor, since they have complete control of the project site.
- 9.4.3 Import soil shall be well-graded, slightly cohesive silty fine sand or sandy silt, with relatively impervious characteristics when compacted. A clean sand or very sandy soil is not acceptable for this purpose. This material should be approved by the Engineer prior to use and should typically possess the soil characteristics summarized below in Table 9.4.3.

2	
Minimum Percent Passing No. 200 Sieve	20
Maximum Percent Passing No. 200 Sieve	50
Minimum Percent Passing No. 4 Sieve	80
Maximum Particle Size	3"
Maximum Plasticity Index	12
Maximum CBC Expansion Index	20

# TABLE 9.4.3IMPORT FILL REQUIREMENTS

- 9.4.4 Environmental characteristics and corrosion potential of import soil materials should also be considered.
- 9.4.5 Proposed import materials should be sampled, tested, and approved by SALEM prior to its transportation to the site.

## 9.5 Grading

- 9.5.1 A representative of our firm should be present during all site clearing and grading operations to test and observe earthwork construction. This testing and observation is an integral part of our service as acceptance of earthwork construction is dependent upon compaction of the material and the stability of the material. The Geotechnical Engineer may reject any material that does not meet compaction and stability requirements. Further recommendations of this report are predicated upon the assumption that earthwork construction will conform to recommendations set forth in this section as well as other portions of this report.
- 9.5.2 A preconstruction conference should be held at the site prior to the beginning of grading operations with the owner, contractor, civil engineer and geotechnical engineer in attendance.
- 9.5.3 Site preparation should begin with removal of existing surface/subsurface structures, underground utilities (as required), any existing uncertified fill, and debris. Excavations or depressions resulting from site clearing operations, or other existing excavations or depressions, should be restored with Engineered Fill in accordance with the recommendations of this report.
- 9.5.4 Surface vegetation consisting of grasses and other similar vegetation should be removed by stripping to a sufficient depth to remove organic-rich topsoil. The upper 2 to 4 inches of the soils containing, vegetation, roots and other objectionable organic matter encountered at the time of grading should be stripped and removed from the surface. Deeper stripping may be required in localized areas. In addition, existing concrete and asphalt materials shall be removed from areas of proposed improvements and stockpiled separately from excavated soil material. The stripped vegetation, asphalt and concrete materials will not be suitable for use as Engineered Fill or within 5 feet of building pads or within pavement areas. However, stripped topsoil may be stockpiled and reused in landscape or non-structural areas or exported from the site.



- 9.5.5 Any undocumented fill materials encountered during grading should be removed and replaced with engineered fill. The actual depth of the overexcavation and recompaction should be determined by our field representative during construction.
- 9.5.6 Structural building pad areas should be considered as areas extending a minimum of 5 feet horizontally beyond the outside dimensions of building, including footings and non-cantilevered overhangs carrying structural loads.
- 9.5.7 To minimize post-construction soil movement and provide uniform support for the proposed building, overexcavation and recompaction within the proposed building areas should be performed to a minimum depth of **four (4) feet** below existing grade or **two (2) feet** below proposed shallow footing bottom, whichever is deeper. The overexcavation and recompaction should also extend laterally to a minimum of 5 feet beyond the outer edges of the proposed footings.
- 9.5.8 Within pavement and canopy areas, it is recommended that the overexcavation and recompaction be performed to a minimum depth of **one (1) foot** below existing grade or proposed grade, whichever is deeper. The overexcavation and recompaction should also extend laterally to a minimum of 2 feet beyond the pavement area.
- 9.5.9 Prior to placement of fill soils, the upper 10 to 12 inches of native subgrade soils should be scarified, moisture-conditioned to <u>no less</u> than the optimum moisture content and recompacted to a minimum of 95% (90% for fine grained, cohesive soils) of the maximum dry density based on ASTM D1557 Test Method.
- 9.5.10 All Engineered Fill (including scarified ground surfaces and backfill) should be placed in thin lifts which will allow for adequate bonding and compaction (typically 6 to 8 inches in loose thickness).
- 9.5.11 Engineered Fill soils should be moisture conditioned to near optimum moisture content and compacted to at least 95% (90% for fine grained, cohesive soils) of the maximum dry density based on ASTM D1557-07 Test Method.
- 9.5.12 An integral part of satisfactory fill placement is the stability of the placed lift of soil. If placed materials exhibit excessive instability as determined by a SALEM field representative, the lift will be considered unacceptable and shall be remedied prior to placement of additional fill material. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil conditions are not stable.
- 9.5.13 Final pavement subgrade should be finished to a smooth, unyielding surface. We further recommend proof-rolling the subgrade with a loaded water truck (or similar equipment with high contact pressure) to verify the stability of the subgrade prior to placing aggregate base.
- 9.5.14 The most effective site preparation alternatives will depend on site conditions prior to grading. We should evaluate site conditions and provide supplemental recommendations immediately prior to grading, if necessary.




9.5.15 We do not anticipate groundwater or seepage to adversely affect construction if conducted during the drier moths of the year (typically summer and fall). However, groundwater and soil moisture conditions could be significantly different during the wet season (typically winter and spring) as surface soil becomes wet; perched groundwater conditions may develop. Grading during this time period will likely encounter wet materials resulting in possible excavation and fill placement difficulties.

Project site winterization consisting of placement of aggregate base and protecting exposed soils during construction should be performed. If the construction schedule requires grading operations during the wet season, we can provide additional recommendations as conditions warrant.

9.5.16 The wet soils may become non conducive to site grading as the upper soils yield under the weight of the construction equipment. Therefore, mitigation measures should be performed for stabilization.

Typical remedial measures include: discing and aerating the soil during dry weather; mixing the soil with dryer materials; removing and replacing the soil with an approved fill material or placement of slurry, crushed rocks or aggregate base material; or mixing the soil with an approved lime or cement product.

The most common remedial measure of stabilizing the bottom of the excavation due to wet soil condition is to reduce the moisture of the soil to near the optimum moisture content by having the subgrade soils scarified and aerated or mixed with drier soils prior to compacting. However, the drying process may require an extended period of time and delay the construction operation.

To expedite the stabilizing process, slurry or crushed rock may be utilized for stabilization provided this method is approved by the owner for the cost purpose. If the use of slurry or crushed rock is considered, it is recommended that the upper soft and wet soils be replaced by 6 to 24 inches of 2-sack slurry or <sup>3</sup>/<sub>4</sub>-inch to 1-inch crushed rocks. The thickness of the slurry or rock layer depends on the severity of the soil instability.

The recommended 6 to 24 inches of slurry or crushed rock material will provide a stable platform. It is further recommended that lighter compaction equipment be utilized for compacting the crushed rock. A layer of geofabric is recommended to be placed on top of the compacted crushed rock to minimize migration of soil particles into the voids of the crushed rock, resulting in soil movement. Although it is not required, the use of geogrid (e.g. Tensar TX7) below the crushed rock will enhance stability and reduce the required thickness of crushed rock necessary for stabilization.

Our firm should be consulted prior to implementing remedial measures to provide appropriate recommendations.



#### 9.6 Shallow Foundations

- 9.6.1 The site is suitable for use of conventional shallow foundations consisting of continuous footings and isolated pad footings bearing in properly compacted Engineered Fill.
- 9.6.2 The bearing wall footings considered for the structure should be continuous with a minimum width of 18 inches and extend to a minimum depth of 18 inches below the lowest adjacent grade. Isolated column footings should have a minimum width of 24 inches and extend a minimum depth of 18 inches below the lowest adjacent grade.
- 9.6.3 The bottom of footing excavations should be maintained free of loose and disturbed soil. Footing concrete should be placed into a neat excavation.
- 9.6.4 Footings proportioned as recommended above may be designed for the maximum allowable soil bearing pressures shown in the table below.

Loading Condition	Allowable Bearing
Dead Load Only	2,000 psf
Dead-Plus-Live Load	2,500 psf
Total Load, Including Wind or Seismic Loads	3,325 psf

- 9.6.5 For design purposes, total settlement due to static loadings on the order of 1 inch may be assumed for shallow footings. Differential settlement due to static loadings, along a 20-foot exterior wall footing or between adjoining column footings, should be ½ inch, producing an angular distortion of 0.002. Most of the settlement is expected to occur during construction as the loads are applied. However, additional post-construction settlement may occur if the foundation soils are flooded or saturated. The footing excavations should not be allowed to dry out any time prior to pouring concrete.
- 9.6.6 Resistance to lateral footing displacement can be computed using an allowable coefficient of friction factor of 0.40 acting between the base of foundations and the supporting native subgrade.
- 9.6.7 Lateral resistance for footings can alternatively be developed using an equivalent fluid passive pressure of 350 pounds per cubic foot acting against the appropriate vertical native footing faces. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance. An increase of one-third is permitted when using the alternate load combination that includes wind or earthquake loads.
- 9.6.8 Minimum reinforcement for continuous footings should consist of four No. 5 steel reinforcing bars; two placed near the top of the footing and two near the bottom. Reinforcement for spread footings should be designed by the project structural engineer.
- 9.6.9 Underground utilities running parallel to footings should not be constructed in the zone of influence of footings. The zone of influence may be taken to be the area beneath the footing and within a 1:1 plane extending out and down from the bottom edge of the footing.



9.6.10 The foundation subgrade should be sprinkled as necessary to maintain a moist condition without significant shrinkage cracks as would be expected in any concrete placement. Prior to placing rebar reinforcement, foundation excavations should be evaluated by a representative of SALEM for appropriate support characteristics and moisture content. Moisture conditioning may be required for the materials exposed at footing bottom, particularly if foundation excavations are left open for an extended period.

#### 9.7 Caisson Foundations

- 9.7.1 It is recommended that the caisson foundation should have a minimum depth of 10 feet below the lowest adjacent grade.
- 9.7.2 The caissons may be designed using an allowable sidewall friction of 200 psf. This value is for dead-plus-live loads. An allowable end bearing capacity of 4,500 psf may be used provided that the bottom of the caisson is cleaned with the use of a clean-out bucket or equivalent and inspected by our representative prior to placement of reinforcement and concrete. An increase of one-third is permitted when using the alternate load combination that includes wind or earthquake loads.
- 9.7.3 Uplift loads can be resisted by caissons using an allowable sidewall friction of 150 psf of the surface area and the weight of the caisson.
- 9.7.4 The total static settlement of the caisson footing is not expected to exceed 1 inch. Differential settlement should be less than ½ inch. Most of the settlement is expected to occur during construction as the loads are applied.
- 9.7.5 The drilled caissons may be designed for a lateral capacity of 350 pounds per square foot per foot of depth below the lowest adjacent grade to a maximum of 5,250 psf.
- 9.7.6 These values may be increased by one-third when using the alternative load combinations that include wind or earthquake loads. The lateral loading criteria is based on the assumption that the load application is applied at the ground level, flexible cap connections applied and a minimum embedment depth of 10 feet.
- 9.7.7 Sandy soils were encountered at the site. Casing of the drilled caisson will be required if seepage is encountered or the drilled hole has to be left open for an extended period of time.

#### 9.8 Concrete Slabs-on-Grade

- 9.8.1 Slab thickness and reinforcement should be determined by the structural engineer based on the anticipated loading. We recommend that non-structural slabs-on-grade be at least 4 inches thick and underlain by six (6) inches of compacted granular aggregate subbase material compacted to at least 95% relative compaction.
- 9.8.2 Granular aggregate subbase material shall conform to ASTM D-2940, Latest Edition (Table 1, bases) with at least 95 percent passing a 1½-inch sieve and not more than 8% passing a No. 200 sieve or its approved equivalent to prevent capillary moisture rise.



- 9.8.3 <u>The use of processed asphalt in the granular aggregate subbase material (i.e. recycled or miscellaneous base) will have to be approved by the owner.</u> Asphalt is a petroleum hydrocarbon with numerous components, including naphthalene and other semi-volatile constituents that are regulated by California. This material in the subsurface could become a potential vapor intrusion risk (naphthalene is a recent risk-driver that DTSC is actively pursuing).
- 9.8.4 We recommend reinforcing slabs, at a minimum, with No. 4 reinforcing bars placed 18 inches on center, each way.
- 9.8.5 Slabs subject to structural loading may be designed utilizing a modulus of subgrade reaction K of 150 pounds per square inch per inch. The K value was approximated based on interrelationship of soil classification and bearing values (Portland Cement Association, Rocky Mountain Northwest).
- 9.8.6 The spacing of crack control joints should be designed by the project structural engineer. In order to regulate cracking of the slabs, we recommend that construction joints or control joints be provided at a maximum spacing of 15 feet in each direction for 5-inch thick slabs and 12 feet for 4-inch thick slabs.
- 9.8.7 Crack control joints should extend a minimum depth of one-fourth the slab thickness and should be constructed using saw-cuts or other methods as soon as practical after concrete placement. The exterior floors should be poured separately in order to act independently of the walls and foundation system.
- 9.8.8 It is recommended that the utility trenches within the structure be compacted, as specified in our report, to minimize the transmission of moisture through the utility trench backfill. Special attention to the immediate drainage and irrigation around the structures is recommended.
- 9.8.9 Moisture within the structure may be derived from water vapors, which were transformed from the moisture within the soils. This moisture vapor penetration can affect floor coverings and produce mold and mildew in the structure. To minimize moisture vapor intrusion, it is recommended that a vapor retarder be installed in accordance with manufacturer's recommendations and/or ASTM guidelines, whichever is more stringent. In addition, ventilation of the structure is recommended to reduce the accumulation of interior moisture.
- 9.8.10 In areas where it is desired to reduce floor dampness where moisture-sensitive coverings are anticipated, construction should have a suitable waterproof vapor retarder (a minimum of 15 mils thick polyethylene vapor retarder sheeting, Raven Industries "VaporBlock 15, Stego Industries 15 mil "StegoWrap" or W.R. Meadows Sealtight 15 mil "Perminator") incorporated into the floor slab design. The water vapor retarder should be decay resistant material complying with ASTM E96 not exceeding 0.04 perms, ASTM E154 and ASTM E1745 Class A. The vapor barrier should be placed between the concrete slab and the compacted granular aggregate subbase material. The water vapor retarder (vapor barrier) should be installed in accordance with ASTM Specification E 1643-94.



- 9.8.11 The concrete may be placed directly on vapor retarder. The vapor retarder should be inspected prior to concrete placement. Cut or punctured retarder should be repaired using vapor retarder material lapped 6 inches beyond damaged areas and taped.
- 9.8.12 The recommendations of this report are intended to reduce the potential for cracking of slabs due to soil movement. However, even with the incorporation of the recommendations presented herein, foundations, stucco walls, and slabs-on-grade may exhibit some cracking due to soil movement. This is common for project areas that contain expansive soils since designing to eliminate potential soil movement is cost prohibitive. The occurrence of concrete shrinkage cracks is independent of the supporting soil characteristics. Their occurrence may be reduced and/or controlled by limiting the slump of the concrete, proper concrete placement and curing, and by the placement of crack control joints at periodic intervals, in particular, where re-entrant slab corners occur.
- 9.8.13 Proper finishing and curing should be performed in accordance with the latest guidelines provided by the American Concrete Institute, Portland Cement Association, and ASTM.

#### 9.9 Lateral Earth Pressures and Frictional Resistance

Lateral Pressure Level Backfill and Drained Conditions	Equivalent Fluid Pressure, pcf
Active Pressure	37
At-Rest Pressure	57
Passive Pressure	350
Related Parameters	
Allowable Coefficient of Friction	0.40
In-Place Soil Density (lbs/ft <sup>3</sup> )	120

9.9.1 Active, at-rest and passive unit lateral earth pressures against footings and walls are summarized in the table below:

- 9.9.2 Active pressure applies to walls, which are free to rotate. At-rest pressure applies to walls, which are restrained against rotation. The preceding lateral earth pressures assume sufficient drainage behind retaining walls to prevent the build-up of hydrostatic pressure.
- 9.9.3 The top one-foot of adjacent subgrade should be deleted from the passive pressure computation.
- 9.9.4 A safety factor consistent with the design conditions should be included when using the values in the above table.
- 9.9.5 For stability against lateral sliding, which is resisted solely by the passive pressure, we recommend a minimum safety factor of 1.5.



- 9.9.6 For stability against lateral sliding, which is resisted by the combined passive and frictional resistance, a minimum safety factor of 2.0 is recommended.
- 9.9.7 For lateral stability against seismic loading conditions, we recommend a minimum safety factor of 1.1.

Dynamic Seismic Lateral Loading Equation
Dynamic Seismic Lateral Load = $\frac{3}{8}\gamma K_{h}H^{2}$
Where: $\gamma$ = In-Place Soil Density
$K_h = Horizontal Acceleration = \frac{2}{3}PGA_M$
H = Wall Height

9.9.8 For dynamic seismic lateral loading the following equation shall be used:

#### 9.10 Retaining Walls

- 9.10.1 Retaining and/or below grade walls should be drained with either perforated pipe encased in freedraining gravel or a prefabricated drainage system. The gravel zone should have a minimum width of 12 inches wide and should extend upward to within 12 inches of the top of the wall. The upper 12 inches of backfill should consist of native soils, concrete, asphaltic-concrete or other suitable backfill to minimize surface drainage into the wall drain system. The gravel should conform to Class II permeable materials graded in accordance with the current CalTrans Standard Specifications.
- 9.10.2 Prefabricated drainage systems, such as Miradrain®, Enkadrain®, or an equivalent substitute, are acceptable alternatives in lieu of gravel provided they are installed in accordance with the manufacturer's recommendations. If a prefabricated drainage system is proposed, our firm should review the system for final acceptance prior to installation.
- 9.10.3 Drainage pipes should be placed with perforations down and should discharge in a non-erosive manner away from foundations and other improvements. The top of the perforated pipe should be placed at or below the bottom of the adjacent floor slab or pavements. The pipe should be placed in the center line of the drainage blanket and should have a minimum diameter of 4 inches. Slots should be no wider than 1/8-inch in diameter, while perforations should be no more than 1/4-inch in diameter.
- 9.10.4 If retaining walls are less than 5 feet in height, the perforated pipe may be omitted in lieu of weep holes on 4 feet maximum spacing. The weep holes should consist of 2-inch minimum diameter holes (concrete walls) or unmortared head joints (masonry walls) and placed no higher than 18 inches above the lowest adjacent grade. Two 8-inch square overlapping patches of geotextile fabric (conforming to the CalTrans Standard Specifications for "edge drains") should be affixed to the rear wall opening of each weep hole to retard soil piping.
- 9.10.5 During grading and backfilling operations adjacent to any walls, heavy equipment should not be allowed to operate within a lateral distance of 5 feet from the wall, or within a lateral distance



equal to the wall height, whichever is greater, to avoid developing excessive lateral pressures. Within this zone, only hand operated equipment ("whackers," vibratory plates, or pneumatic compactors) should be used to compact the backfill soils.

#### 9.11 Temporary Excavations

- 9.11.1 We anticipate that the majority of the sandy site soils will be classified as Cal-OSHA "Type C" soil when encountered in excavations during site development and construction. Excavation sloping, benching, the use of trench shields, and the placement of trench spoils should conform to the latest applicable Cal-OSHA standards. The contractor should have a Cal-OSHA-approved "competent person" onsite during excavation to evaluate trench conditions and make appropriate recommendations where necessary.
- 9.11.2 It is the contractor's responsibility to provide sufficient and safe excavation support as well as protecting nearby utilities, structures, and other improvements which may be damaged by earth movements. All onsite excavations must be conducted in such a manner that potential surcharges from existing structures, construction equipment, and vehicle loads are resisted. The surcharge area may be defined by a 1:1 projection down and away from the bottom of an existing foundation or vehicle load.
- 9.11.3 Temporary excavations and slope faces should be protected from rainfall and erosion. Surface runoff should be directed away from excavations and slopes.
- 9.11.4 Open, unbraced excavations in undisturbed soils should be made according to the slopes presented in the following table:

Depth of Excavation (ft)	Slope (Horizontal : Vertical)
0-5	1:1
5-10	2:1

#### **RECOMMENDED EXCAVATION SLOPES**

- 9.11.5 If, due to space limitation, excavations near property lines or existing structures are performed in a vertical position, slot cuts, cantilever shoring, braced shorings or shields may be used for supporting vertical excavations. Therefore, in order to comply with the local and state safety regulations, a properly designed and installed shoring system would be required to accomplish planned excavations and installation. A Specialty Shoring Contractor should be responsible for the design and installation of such a shoring system during construction.
- 9.11.6 Braced shorings should be designed for a maximum pressure distribution of 30H, (where H is the depth of the excavation in feet). The foregoing does not include excess hydrostatic pressure or surcharge loading. Fifty percent of any surcharge load, such as construction equipment weight, should be added to the lateral load given herein. Equipment traffic should concurrently be limited to an area at least 3 feet from the shoring face or edge of the slope.



9.11.7 The excavation and shoring recommendations provided herein are based on soil characteristics derived from the borings within the area. Variations in soil conditions will likely be encountered during the excavations. SALEM Engineering Group, Inc. should be afforded the opportunity to provide field review to evaluate the actual conditions and account for field condition variations not otherwise anticipated in the preparation of this recommendation. Slope height, slope inclination, or excavation depth should in no case exceed those specified in local, state, or federal safety regulation, (e.g. OSHA) standards for excavations, 29 CFR part 1926, or Assessor's regulations.

#### 9.12 Underground Utilities

- 9.12.1 Underground utility trenches should be backfilled with properly compacted material. The material excavated from the trenches should be adequate for use as backfill provided it does not contain deleterious matter, vegetation or rock larger than 3 inches in maximum dimension. Trench backfill should be placed in loose lifts not exceeding 8 inches and compacted to at least 95% (90% for fine grained, cohesive soils) relative compaction at or above optimum moisture content.
- 9.12.2 Bedding and pipe zone backfill typically extends from the bottom of the trench excavations to approximately 6 to 12 inches above the crown of the pipe. Pipe bedding and backfill material should conform to the requirements of the governing utility agency.
- 9.12.3 It is suggested that underground utilities crossing beneath new or existing structures be plugged at entry and exit locations to the buildings or structures to prevent water migration. Trench plugs can consist of on-site clay soils, if available, or sand cement slurry. The trench plugs should extend 2 feet beyond each side of individual perimeter foundations.
- 9.12.4 The contractor is responsible for removing all water-sensitive soils from the trench regardless of the backfill location and compaction requirements. The contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

#### 9.13 Surface Drainage

- 9.13.1 Proper surface drainage is critical to the future performance of the project. Uncontrolled infiltration of irrigation excess and storm runoff into the soils can adversely affect the performance of the planned improvements. Saturation of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change to important engineering properties. Proper drainage should be maintained at all times.
- 9.13.2 The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than 5 percent for a minimum distance of 10 feet.
- 9.13.3 Impervious surfaces within 10 feet of the building foundation shall be sloped a minimum of 2 percent away from the building and drainage gradients maintained to carry all surface water to collection facilities and off site. These grades should be maintained for the life of the project.



Ponding of water should not be allowed adjacent to the structure. Over-irrigation within landscaped areas adjacent to the structure should not be performed.

9.13.4 Roof drains should be installed with appropriate downspout extensions out-falling on splash blocks so as to direct water a minimum of 5 feet away from the structures or be connected to the storm drain system for the development.

#### 9.14 Pavement Design

- 9.14.1 Based on site soil conditions and laboratory test results, an R-value of 40 was used for the preliminary flexible asphaltic concrete pavement design. The R-value may be verified during grading of the pavement areas.
- 9.14.2 The pavement design recommendations provided herein are based on the State of California Department of Transportation (CALTRANS) design manual. The asphaltic concrete (flexible pavement) is based on a 20-year pavement life utilizing 1200 passenger vehicles, 10 single unit trucks, and 2 multi-unit trucks. The following table shows the recommended pavement sections for various traffic indices.

Traffic Index	Asphaltic Concrete	Class II Aggregate Base*	Compacted Subgrade**
5.0 (Parking and Vehicle Drive Areas)	3.0"	4.0"	12.0"
6.5 (Heavy Truck Areas)	4.0"	6.0"	12.0"

TABLE 9.14.2ASPHALT CONCRETE PAVEMENT THICKNESSES

\*95% compaction based on ASTM D1557-07 Test Method \*\*95% (90% for fine grained, cohesive soils) compaction based on ASTM D1557 Test Method

9.14.3 The following recommendations are for light-duty and heavy-duty Portland Cement Concrete pavement sections.

# TABLE 9.14.3 PORTLAND CEMENT CONCRETE PAVEMENT THICKNESSES

Traffic Index	Portland Cement Concrete*	Class II Aggregate Base**	Compacted Subgrade***		
5.0 (Light Duty)	5.0"	4.0"	12.0"		
6.5 (Heavy Duty)	6.0"	6.0"	12.0"		

\* Minimum Compressive Strength of 4,000 psi

\*\* 95% compaction based on ASTM D1557-07 Test Method

\*\*95% (90% for fine grained, cohesive soils) compaction based on ASTM D1557 Test Method



#### 9.15 Street Pavement Improvement

Based on our visual evaluation, the existing pavement of the half-width streets along the frontage of the subject property appears to be in a fair condition with minor to moderate cracking. The photos of the street conditions are shown below:





8<sup>th</sup> Street

Highland Springs Avenue

Based on the existing pavement conditions, it's recommended that a crack fill and slurry coat from street centerline to edge of gutter be completed in order to extend the pavement life by an additional one to three years.

#### 10. PLAN REVIEW, CONSTRUCTION OBSERVATION AND TESTING

#### 10.1 Plan and Specification Review

10.1.1 SALEM should review the project plans and specifications prior to final design submittal to assess whether our recommendations have been properly implemented and evaluate if additional analysis and/or recommendations are required.

#### 10.2 Construction Observation and Testing Services

- 10.2.1 The recommendations provided in this report are based on the assumption that we will continue as Geotechnical Engineer of Record throughout the construction phase. It is important to maintain continuity of geotechnical interpretation and confirm that field conditions encountered are similar to those anticipated during design. If we are not retained for these services, we cannot assume any responsibility for others interpretation of our recommendations, and therefore the future performance of the project.
- 10.2.2 SALEM should be present at the site during site preparation to observe site clearing, preparation of exposed surfaces after clearing, and placement, treatment and compaction of fill material.
- 10.2.3 SALEM's observations should be supplemented with periodic compaction tests to establish substantial conformance with these recommendations. Moisture content of footings and slab subgrade should be tested immediately prior to concrete placement. SALEM should observe foundation excavations prior to placement of reinforcing steel or concrete to assess whether the



actual bearing conditions are compatible with the conditions anticipated during the preparation of this report.

#### 11. LIMITATIONS AND CHANGED CONDITIONS

The analyses and recommendations submitted in this report are based upon the data obtained from the test borings drilled at the approximate locations shown on the Site Plan, Figure 2. The report does not reflect variations which may occur between borings. The nature and extent of such variations may not become evident until construction is initiated.

If variations then appear, a re-evaluation of the recommendations of this report will be necessary after performing on-site observations during the excavation period and noting the characteristics of such variations. The findings and recommendations presented in this report are valid as of the present and for the proposed construction.

If site conditions change due to natural processes or human intervention on the property or adjacent to the site, or changes occur in the nature or design of the project, or if there is a substantial time lapse between the submission of this report and the start of the work at the site, the conclusions and recommendations contained in our report will not be considered valid unless the changes are reviewed by SALEM and the conclusions of our report are modified or verified in writing.

The validity of the recommendations contained in this report is also dependent upon an adequate testing and observations program during the construction phase. Our firm assumes no responsibility for construction compliance with the design concepts or recommendations unless we have been retained to perform the onsite testing and review during construction. SALEM has prepared this report for the exclusive use of the owner and project design consultants.

SALEM does not practice in the field of corrosion engineering. It is recommended that a qualified corrosion engineer be consulted regarding protection of buried steel or ductile iron piping and conduit or, at a minimum, that manufacturer's recommendations for corrosion protection be closely followed. Further, a corrosion engineer may be needed to incorporate the necessary precautions to avoid premature corrosion of concrete slabs and foundations in direct contact with native soil.

The importation of soil and or aggregate materials to the site should be screened to determine the potential for corrosion to concrete and buried metal piping. The report has been prepared in accordance with generally accepted geotechnical engineering practices in the area. No other warranties, either express or implied, are made as to the professional advice provided under the terms of our agreement and included in this report.



If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (909) 980-6455.

Respectfully Submitted,

#### SALEM ENGINEERING GROUP, INC.

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Jared Christiansen, EIT Geotechnical Staff Engineer

Clarence Jiang, GE Senior Geotechnical Engineer RGE 2477



R. Sammy Salem, MS, PE, GE PROFESS Principal Engineer RCE 52762 / RGE 2549 REG/ GE 2549 EXP. 12-31-2020







APPENDIX





#### APPENDIX A FIELD EXPLORATION

Fieldwork for our investigation (drilling) was conducted on January 17, 2020 and included a site visit, subsurface exploration, and soil sampling. Percolation tests were performed on January 18, 2020. The locations of the exploratory borings and percolation tests are shown on the Site Plan, Figure 2. Boring logs for our exploration are presented in figures following the text in this appendix. Borings were located in the field using existing reference points. Therefore, actual boring locations may deviate slightly.

In general, our borings were performed using truck-mounted Mobile B-61 and CME 45 drill rigs equipped with an 8-inch hollow-stem auger and a 4-inch diameter solid flight auger. Sampling in the borings was accomplished using a hydraulic 140-pound hammer with a 30-inch drop. Samples were obtained with a 3-inch outside-diameter (OD), split spoon (California Modified) sampler, and a 2-inch OD, Standard Penetration Test (SPT) sampler. The number of blows required to drive the sampler the last 12 inches (or fraction thereof) of the 18-inch sampling interval were recorded on the boring logs. The blow counts shown on the boring logs should not be interpreted as standard SPT "N" values; corrections have not been applied. Upon completion, the borings were backfilled with soil cuttings.

Subsurface conditions encountered in the exploratory borings were visually examined, classified and logged in general accordance with the American Society for Testing and Materials (ASTM) Practice for Description and Identification of Soils (Visual-Manual Procedure D2488). This system uses the Unified Soil Classification System (USCS) for soil designations. The logs depict soil and geologic conditions encountered and depths at which samples were obtained. The logs also include our interpretation of the conditions between sampling intervals. Therefore, the logs contain both observed and interpreted data. We determined the lines designating the interface between soil materials on the logs using visual observations, drill rig penetration rates, excavation characteristics and other factors. The transition between materials may be abrupt or gradual. Where applicable, the field logs were revised based on subsequent laboratory testing.





**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-1

Client: Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2599'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
	4/6 5/6 5/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	10	12.4	110.2	
2595 	6/6 9/6 9/6		Grades as above; medium dense; light brown.	18	8.2	104.8	
2590 - - 10 - -	4/6 6/6 7/6		Grades as above; brown; no clay.	13	9		
2585 - - 15 - -	5/6 9/6 15/6		Grades as above; trace clay.	24	12		
2580 - - 20 - -	11/6 16/6 23/6		Grades as above; dense; slightly moist; light brown; trace gravel; no clay.	39	4.6		
2575 — — 25 — —	$ \begin{bmatrix} 10/6 \\ 12/6 \\ 16/6 \end{bmatrix} $		Grades as above; medium dense; no gravel.	28	7.8		
† Notes:							

## Page 2 Of: 2

SALE Project Number: 3-220-0008

Date: 01/17/2020

engineering group, inc.

Test Boring: B-1





**Date:** 01/17/2020

**Test Boring:** B-2

Project: Proposed Multi-Tenant Development

**Client:** Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2599'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
	3/6 4/6 7/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	11	11.9	114.7	
2595 <del>-</del> - 5 - -	4/6 5/6 7/6		Grades as above.	12	10.8	115.5	
2590 — — 10 —	3/6 4/6 6/6		Grades as above.	10	11.6		
2585 - - 15 - -	6/6 9/6 12/6		Grades as above; medium dense; with clay.	21	12.7		
2580	14/6 17/6 19/6		Grades as above; dense; light brown; no clay.	36	5		
2575 — — 25 —	11/6 17/6 21/6		Grades as above; no gravel.	38	3.5		
T Notes:			End of boiling at 20.5 leet BGS.				

Figure Number A-2



**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-3

Client: Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2600'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks	
2600 - 0	3/6 4/6 4/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	8	13.1	112.6		
2595 — 5 - - -	5/6 6/6 7/6		Grades as above; light brown.	13	10.8	106.4		
2590 - 10 - - -	5/6 5/6 7/6		Grades as above; medium dense; brown.	12	10.8			
2585 — 15 - - -	7/6 10/6 11/6		Grades as above; with clay.	21	10.6			
2580 — 20 - -	7/6 11/6 16/6		Grades as above; no clay. End of boring at 21.5 feet BGS.	27	9.6			
2575 — 25 - - - - -								
Notes:								



**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-4

**Client:** Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2601'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATIO DEPTH (feet)	N/ SC SAMI AND F	DIL SYMBOLS PLER SYMBOLS TIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
2600	- 0	2/6 4/6 7/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	11	10.4	97.9	
2595 — - -	- 5	9/6 10/6 13/6		Grades as above; medium dense.	23	8	103.6	
2590 — - -	- 10	8/6 8/6 11/6		Grades as above; no clay.	19	8.4		
2585 — + +	- 15	11/6 18/6 24/6		Grades as above; dense; light brown; trace gravel.	42	5.7		
2580	- 20	10/6 12/6 14/6		Grades as above; no gravel. End of boring at 21.5 feet BGS.	26	6.6		
2575 — + +	- 25							
Notes:					·	Fig	ure Nur	nber A-4



**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-5

**Client:** Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2601'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION DEPTH (feet)	N/ SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
2600	0 3/6 5/6 7/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	12	5.7	99.0	
2595 — _ _ +	5 5 6/6 7/6 10/6		Grades as above; medium dense.	17	6.9	101.9	
2590	10		Grades as above; no clay.	11	8.2		
2585 — + +	15		Grades as above; trace clay.	21	8.1		
2580 — - -	20		Grades as above; dense; trace gravel; no clay. End of boring at 21.5 feet BGS.	47	3.6		
2575 - - -	25						
Notes:							

Figure Number A-5



**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-6

**Client:** Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2602'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
2600	3/6 4/6 8/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	12	5.9	100.6	
- 5 2595 - - -	8/6 9/6 10/6		Grades as above; medium dense.	19	6.1	93.7	
- 10 	9/6 12/6 16/6		Grades as above.	28	8		
- 15 	8/6 9/6 12/6		Grades as above; with clay.	21	13.1		
- 20 	16/6 23/6 31/6		Grades as above; very dense; with gravel; no clay. End of boring at 21.5 feet BGS.	54	3.5		
2575 – + Notes:							



**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-7

**Client:** Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2603'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH (feet)	ELEVATION/ SOIL SYMBOLS DEPTH SAMPLER SYMBOLS (feet) AND FIELD TEST DATA		Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
2600	3/6 5/6 8/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	13	5.5	94.1	
- 5	7/6 7/6 8/6		Grades as above.	15	6.5	100.2	
2595 10	7/6 7/6 9/6		Grades as above; medium dense; no clay.	16	7.6		
2590 — — — 15 —	5/6 8/6 10/6		Grades as above; with clay.	18	14.4		
2585 	6/6 7/6 8/6		Grades as above; no clay.	15	8.1		
2580 — - - 25 -		SP-SM	Poorly graded SAND with Silt Dense; slightly moist; light brown; fine to medium grain sand.	37	3.3		
 2575 —			End of boring at 26.5 feet BGS.				
Notes:		<b></b>		1			

Figure Number A-7





Figure Number A-9



Figure Number A-10



**Date:** 01/17/2020

**Project:** Proposed Multi-Tenant Development

Test Boring: B-11

**Client:** Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

**Drilled By: SALEM** 

Drill Type: CME 45C

Logged By: SK

Auger Type: 4 in. Solid Flight Auger

Elevation: 2601'

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A



	KEY TO SYMBOLS						
Symbol	Description						
Strata	symbols						
	Silty sand						
	Silt						
	Poorly graded sand with silt						
Misc. Symbols							
	Boring continues						
Soil Samplers							
	California sampler						
	Standard penetration test						

Percolation Test Worksheet													
Project:       Proposed Multi-Tenant Development Eight Street & Highland Spring Avenue Beaumont, California       Job No.: 3-220-0008 Date Drilled: 1/17/2020         Beaumont, California       Date Drilled: 1/17/2020         Soil Classification:       Silty SAND (SM)         Hole Radius:       4         Pipe Dia.:       3         In.       10         ft.       Pipe Stick up:         Pipe Stick up:       0										in. in. in. ft.			
Time Start	Time Finish	Depth of Test Hole (ft) <sup>#</sup>	Refill- Yes or No	Elapsed Time (hrs:min)	Initial Water Level <sup>#</sup> (ft)	Final Water Level <sup>#</sup> (ft)	Δ Water Level (in.)	Δ Min.	Meas. Perc Rate (min/in)	Initial Height of Water (in)	Final Height of Water (in)	Average Height of Water (in)	Infiltration Rate, It (in/hr)
9:30	10:00	10.0	Y	0:30	7.24	7.62	4.56	30	6.6	33.1	28.6	30.8	0.56
10:00	10:30	10.0	N	0:30	7.62	7.95	3.96	30	7.6	28.6	24.6	26.6	0.55
10:30	11:00	10.0	N	0:30	7.95	8.20	3.00	30	10.0	24.6	21.6	23.1	0.48
11:00	11:30	10.0	N	0:30	8.20	8.39	2.28	30	13.2	21.6	19.3	20.5	0.41
11:30	12:00	10.0	N	0:30	8.39	8.56	2.04	30	14.7	19.3	17.3	18.3	0.40
12:00	12:30	10.0	N	0:30	8.56	8.71	1.80	30	16.7	17.3	15.5	16.4	0.39
12:30	13:00	10.0	N	0:30	8.71	8.84	1.56	30	19.2	15.5	13.9	14.7	0.37
13:02	13:32	10.0	Y	0:30	7.30	7.55	3.00	30	10.0	32.4	29.4	30.9	0.36
13:32	14:02	10.0	N	0:30	7.55	7.77	2.64	30	11.4	29.4	26.8	28.1	0.35
14:02	14:32	10.0	N	0:30	7.77	7.97	2.40	30	12.5	26.8	24.4	25.6	0.35
14:32	15:02	10.0	N	0:30	7.97	8.16	2.28	30	13.2	24.4	22.1	23.2	0.36
15:02	15:32	10.0	N	0:30	8.16	8.33	2.04	30	14.7	22.1	20.0	21.1	0.35
Recommended for Design:										Infiltr	ration Rate		0.35



Percolation Test Worksheet													
Project:Proposed Multi-Tenant Development Eight Street & Highland Spring Avenue Beaumont, CaliforniaJob No.: 3-220-0008 Date Drilled: 1/17/2020Beaumont, CaliforniaDate Drilled: 1/17/2020 Soil Classification: Clayey SAND (SC)Hole Radius: 44in.Pipe Dia.:3in.Test Hole No.:P-2Presoaking Date: 1/17/2020 Total Depth of Hole:60in.Tested by:SKTest Date: 1/18/2020Total Depth of Hole:60in.Drilled Hole Depth:5ft.Pipe Stick up:0ft.										in. in. ft			
Time Start	Time Finish	Depth of Test Hole (ft) <sup>#</sup>	Refill- Yes or No	Elapsed Time (hrs:min)	Initial Water Level <sup>#</sup> (ft)	Final Water Level <sup>#</sup> (ft)	Δ Water Level (in.)	Δ Min.	Meas. Perc Rate (min/in)	Initial Height of Water (in)	Final Height of Water (in)	Average Height of Water (in)	Infiltration Rate, It (in/hr)
8:50	9:20	5.0	Y	0:30	2.73	2.78	0.60	30	50.0	27.2	26.6	26.9	0.08
9:20	9:50	5.0	N	0:30	2.78	2.81	0.36	30	83.3	26.6	26.3	26.5	0.05
9:50	10:20	5.0	N	0:30	2.81	2.83	0.24	30	125.0	26.3	26.0	26.2	0.03
10:20	10:50	5.0	N	0:30	2.83	2.85	0.24	30	125.0	26.0	25.8	25.9	0.03
10:50	11:20	5.0	N	0:30	2.85	2.86	0.12	30	250.0	25.8	25.7	25.7	0.02
11:20	11:50	5.0	N	0:30	2.86	2.87	0.12	30	250.0	25.7	25.6	25.6	0.02
11:50	12:20	5.0	N	0:30	2.87	2.88	0.12	30	250.0	25.6	25.4	25.5	0.02
12:20	12:50	5.0	N	0:30	2.88	2.89	0.12	30	250.0	25.4	25.3	25.4	0.02
12:50	13:20	5.0	N	0:30	2.89	2.90	0.12	30	250.0	25.3	25.2	25.3	0.02
13:20	13:50	5.0	N	0:30	2.90	2.91	0.12	30	250.0	25.2	25.1	25.1	0.02
13:50	14:20	5.0	N	0:30	2.91	2.92	0.12	30	250.0	25.1	25.0	25.0	0.02
14:20	14:50	5.0	N	0:30	2.92	2.93	0.12	30	250.0	25.0	24.8	24.9	0.02
Recommended for Design:									Infiltr	ation Rate		0.02	







#### APPENDIX B LABORATORY TESTING

Laboratory tests were performed in accordance with generally accepted test methods of the American Society for Testing and Materials (ASTM), Caltrans, or other suggested procedures. Selected samples were tested for in-situ dry density and moisture content, corrosivity, consolidation, shear strength, maximum density and optimum moisture content, expansion index, and grain size distribution. The results of the laboratory tests are summarized in the following figures.



## CONSOLIDATION - PRESSURE TEST DATA ASTM D2435



LOAD IN KIPS PER SQUARE FOOT

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 5'



## CONSOLIDATION - PRESSURE TEST DATA ASTM D2435



LOAD IN KIPS PER SQUARE FOOT

Project Name: Proposed Multi-Tenant Development - Beaumont, CA Project Number: 3-220-0008

Boring: B-4 @ 2'



## Direct Shear Test (ASTM D3080)

Project Name:	Commercial- Beaumont, CA
Project Number:	3-220-0008
Client:	0.00
Sample Location:	B-1 @ 2'
Sample Type:	Undisturbed Ring
Soil Classification:	SM/ML
Tested By:	M. Noorzay
Reviewed By:	CJ
Date:	1/22/2020
Equipment Used:	Geomatic Direct Shear Machine

	Sample 1	Sample 2	Sample 3	
Normal Stress (ksf)	1.000	2.000	3.000	
Shear Rate (in/min)	0.004			
Peak Shear Stress (ksf)	0.840	1.524	2.097	
Residual Shear Stress (ksf)	0.000	0.000	0.000	

Initial Height of Sample (in)	1.000	1.000 1.000			
Height of Sample before Shear (in.)	1	1	1		
Diameter of Sample (in)	2.416	2.416	2.416		
Initial Moisture Content (%)	11.9				
Final Moisture Content (%)	15.3	14.7	14.3		
Dry Density (pcf)	110.9	114.1	113.5		

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Peak Shear Strength Values							
<b>Slope</b> 0.63							
Friction Angle	32.1						
Cohesion (psf)	230.16						




# Direct Shear Test (ASTM D3080)

Project Name:	Commercial- Beaumont, CA
Project Number:	3-220-0008
Client:	0.00
Sample Location:	B-4 @ 5'
Sample Type:	Undisturbed Ring
Soil Classification:	SM/ML
Tested By:	M. Noorzay
Reviewed By:	CJ
Date:	1/23/2020
Equipment Used:	Geomatic Direct Shear Machine

	Sample 1	Sample 2	Sample 3
Normal Stress (ksf)	1.000	2.000	3.000
Shear Rate (in/min)	0.004		
Peak Shear Stress (ksf)	0.800	1.450	2.072
Residual Shear Stress (ksf)	0.000	0.000	0.000

Initial Height of Sample (in)	1.000 1.000		1.000
Height of Sample before Shear (in.)	1	1	1
Diameter of Sample (in) 2.416 2.416 2		2.416	
Initial Moisture Content (%)	7.7		
Final Moisture Content (%)	18.7	18.5	18.4
Dry Density (pcf)	101.8	102.4	108.5

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Peak Shear Strength Values			
<b>Slope</b> 0.64			
Friction Angle	32.5		
Cohesion (psf)	168.242133		





# Direct Shear Test (ASTM D3080)

Project Name:	Commercial- Beaumont, CA
Project Number:	3-220-0008
Client:	0.00
Sample Location:	B-6 @ 5'
Sample Type:	Undisturbed Ring
Soil Classification:	SM/ML
Tested By:	M. Noorzay
Reviewed By:	CJ
Date:	1/24/2020
Equipment Used:	Geomatic Direct Shear Machine

	Sample 1	Sample 2	Sample 3
Normal Stress (ksf)	1.000	2.000	3.000
Shear Rate (in/min)	0.004		
Peak Shear Stress (ksf)	0.710	1.541	2.015
Residual Shear Stress (ksf)	0.000	0.000	0.000

Initial Height of Sample (in)	1.000	1.000	1.000
Height of Sample before Shear (in.)	1	1	1
Diameter of Sample (in) 2.416 2.416		2.416	
Initial Moisture Content (%)	5.9		
Final Moisture Content (%)	18.0	16.1	15.6
Dry Density (pcf)	94.9	96.7	95.6

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Peak Shear Strength Values				
<b>Slope</b> 0.65				
Friction Angle	33.1			
Cohesion (psf)	117.1252			







Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	97.3%
#4	94.8%
#8	91.2%
#16	85.9%
#30	78.6%
#50	68.8%
#100	56.5%
#200	43.9%

Atterberg Limits					
PL=		LL=		PI=	
		Coefficient	s		
D85=		D60=		D50=	
D30=		D15=		D10=	
$C_u =$	N/A	$C_c =$	N/A		
-					
	USCS CLASSIFICATION				

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 2'





Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.4%
#8	93.9%
#16	86.6%
#30	77.7%
#50	66.8%
#100	51.5%
#200	37.3%

Atterberg Limits					
PL=		LL=		PI=	
		Coefficient	s		
D85=		D60=		D50=	
D30=		D15=		<b>D</b> 10=	
C <sub>u</sub> =	N/A	$C_c =$	N/A		
USCS CLASSIFICATION					

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 5'





Percent GraverPercent SaluPercent Salu2%65%33%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	98.2%
#8	95.8%
#16	91.7%
#30	82.9%
#50	67.3%
#100	48.7%
#200	33.4%

	Atterberg Limits					
PL=		LL=		PI=		
		Coefficient	s			
D85=		<b>D</b> 60=		D50=		
D30=		D15=		D10=		
C <sub>u</sub> =	N/A	$C_c =$	N/A			
USCS CLASSIFICATION						

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 10'





Percent Passing Sieve Size 3/4 inch 100.0% 1/2 inch 100.0% 100.0% 3/8 inch #4 98.0% 93.5% #8 86.2% #16 #30 70.6% #50 44.7% #100 25.5% #200 16.4%

	Atterberg Limits					
PL=		LL=		PI=		
-						
		Coefficient	s			
D85=		D60=		D50=		
D30=		D15=		D10=		
C <sub>u</sub> =	N/A	$C_c =$	N/A			
	USCS CLASSIFICATION					

0

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Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 20'





Percent Gravel	Percent Sand	Percent Silt/Clay
0%	70%	30%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.7%
#8	98.6%
#16	96.3%
#30	88.5%
#50	70.2%
#100	46.4%
#200	30.1%

	Atterberg Limits				
PL=		LL=		PI=	
		Coefficient	s		
D85=		D60=		D50=	
D30=		D15=		D10=	
$C_u =$	N/A	$C_c =$	N/A		
USCS CLASSIFICATION					

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 25'





Percent Gravel Percent Sand		Percent Silt/Clay
1%	64%	35%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.1%
#8	98.3%
#16	96.4%
#30	91.5%
#50	79.8%
#100	60.1%
#200	34.9%

	Atterberg Limits					
PL=		LL=		PI=		
		Coefficient	s			
D85=		D60=		D50=		
D30=		D15=		D10=		
$C_u =$	N/A	$C_c =$	N/A			
	USCS CLASSIFICATION					

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 35'





Percent Gravel	Percent Sand	Percent Silt/Clay		
0%	47%	53%		

Percent Passing
100.0%
100.0%
100.0%
100.0%
100.0%
100.0%
99.5%
94.9%
78.0%
53.2%

	Atterberg Limits					
PL=		LL=		PI=		
		Coefficient	s			
D85=		D60=		D50=		
D30=		D15=		<b>D</b> 10=		
C <sub>u</sub> =	N/A	$C_c =$	N/A			
	US	CS CLASSIFIC	CATION			

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 40'





Percent Gravel Percent Sand		Percent Silt/Clay	
1%	54%	44%	

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	98.9%
#8	97.9%
#16	95.3%
#30	90.2%
#50	80.6%
#100	64.0%
#200	44.4%

Atterberg Limits					
PL=		LL=		PI=	
		Coefficient	s		
D85=		D60=		D50=	
D30=		D15=		D10=	
$C_u =$	N/A	$C_c =$	N/A		
USCS CLASSIFICATION					

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 45'





Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	98.2%
#4	96.0%
#8	94.1%
#16	90.4%

81.6%

66.3%

48.5%

33.7%

#30

#50

#100

#200

Atterberg Limits					
PL=		LL=		PI=	
		Coefficient	s		
D85=		D60=		D50=	
D30=		D15=		D10=	
C <sub>u</sub> =	N/A	$C_c =$	N/A		

USCS CLASSIFICATION	-
0	

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-7 @ 10'





Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.9%
#8	98.6%
#16	94.9%
#30	83.6%
#50	59.6%
#100	32.9%
#200	18.2%

Atterberg Limits							
PL=	PL= LL= PI=						
		Coefficient	S				
D85=		D60=		D50=			
D30=		D15=		D10=			
C <sub>u</sub> =	N/A	$C_c =$	N/A				

USCS CLASSIFICATION	
0	

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-7 @ 20'



# EXPANSION INDEX TEST ASTM D4829

Project Name: Proposed Multi-Tenant Development - Beaumont, CA Project Number: 3-220-0008 Date Sampled: 1/17/2020 Date Tested: 1/24/2020 Sampled By: SK Tested By: MN Sample Location: B-1 @ 0'-3' Soil Description: Reddish brown Silty SAND (SM)

Trial #	1	2	3
Weight of Soil & Mold, g.	767.1		
Weight of Mold, g.	368.5		
Weight of Soil, g.	398.6		
Wet Density, pcf	120.2		
Weight of Moisture Sample (Wet), g.	800.0		
Weight of Moisture Sample (Dry), g.	730.6		
Moisture Content, %	9.5		
Dry Density, pcf	109.8		
Specific Gravity of Soil	2.7		
Degree of Saturation, %	48.0		

Time	Inital	30 min	1 hr	6 hrs	12 hrs	24 hrs
Dial Reading	0	0.002	0.002	0.003		0.003

2

Expansion Index measured	=	3
Expansion Index 50	=	2.2

**Expansion Index** =

<b>Expansion Potential Table</b>					
Exp. Index	Potential Exp.				
0 - 20	Very Low				
21 - 50	Low				
51 - 90	Medium				
91 - 130	High				
>130	Very High				



# CHEMICAL ANALYSIS SO<sub>4</sub> - Modified CTM 417 & Cl - Modified CTM 417/422

Project Name: Proposed Multi-Tenant Development - Beaumont, CA Project Number: 3-220-0008 Date Sampled: 1/17/2020 Date Tested: 1/22/2020 Sampled By: SK Tested By: MN Soil Description: Reddish brown Silty SAND (SM)

Sample	Sample	Soluble Sulfate	Soluble Chloride	рН
Number	Location	SO <sub>4</sub> -S	Cl	
1a.	B-1 @ 0'-3'	110 mg/kg	57 mg/kg	7.7
1b.	B-1 @ 0'-3'	120 mg/kg	58 mg/kg	7.7
1c.	B-1 @ 0'-3'	110 mg/kg	58 mg/kg	7.7
Average:		113 mg/kg	58 mg/kg	7.7



# Laboratory Compaction Curve ASTM D1557

Project Name: Proposed Multi-Tenant Development - Beaumont, CA Project Number: 3-220-0008 Date Sampled: 1/17/2020 Date Tested: 1/22/2020 Sampled By: SK Tested By: MN Sample Location: B-1 @ 0'-3' Soil Description: Reddish brown Silty SAND (SM) Test Method: Method A

1 2 3 4 4340.0 4274.8 Weight of Moist Specimen & Mold, (g) 4263.7 4349.2 Weight of Compaction Mold, (g) 2258.4 2258.4 2258.4 2258.4 Weight of Moist Specimen, (g) 2005.3 2090.8 2081.6 2016.4 0.0333 0.0333 0.0333 0.0333 Volume of Mold,  $(ft^3)$ 132.6 137.7 133.4 Wet Density, (pcf) 138.3 Weight of Wet (Moisture) Sample, (g) 100.0 100.0 100.0 100.0 Weight of Dry (Moisture) Sample, (g) 93.6 91.6 89.2 86.5 Moisture Content, (%) 9.2% 12.1% 6.8% 15.6% Dry Density, (pcf) 124.1 126.7 122.8 115.4





# <u>Resistance R-Value</u> and Expansion Pressure of Compacted Soils ASTM D2844, CTM 301

Project Name: Multi-Tenant Development - Beaumont, CAProject Number: 3-220-0008Sample Date: 01/17/2020Date Tested: 1/27/2020Sampled By: SKTested By: CMSample Location: B-1Soil Classification: Silty SAND



Specimen	1	2	3
Exudation Pressure, psi	510	288	123.6
Moisture at Test, %	9.2	9.7	10.2
Dry Density, pcf	120.9	120.0	119.4
Expansion Pressure, psf	13	9	4
Thickness by Stabilometer, in.	5.5	6.0	6.8
Thickness by Expansion Pressure, in	0.1	0.1	0.0
R-Value by Stabilometer	46	40	32
R-Value by Expansion Pressure		N/A	
R-Value at 300 psi Exudation Pressure		40	
R-Value at 300 psi Exudation Pressure		40	

Controlling R-Value	40





#### APPENDIX C GENERAL EARTHWORK AND PAVEMENT SPECIFICATIONS

When the text of the report conflicts with the general specifications in this appendix, the recommendations in the report have precedence.

**1.0 SCOPE OF WORK:** These specifications and applicable plans pertain to and include all earthwork associated with the site rough grading, including, but not limited to, the furnishing of all labor, tools and equipment necessary for site clearing and grubbing, stripping, preparation of foundation materials for receiving fill, excavation, processing, placement and compaction of fill and backfill materials to the lines and grades shown on the project grading plans and disposal of excess materials.

**2.0 PERFORMANCE:** The Contractor shall be responsible for the satisfactory completion of all earthwork in accordance with the project plans and specifications. This work shall be inspected and tested by a representative of SALEM Engineering Group, Incorporated, hereinafter referred to as the Soils Engineer and/or Testing Agency. Attainment of design grades, when achieved, shall be certified by the project Civil Engineer. Both the Soils Engineer and the Civil Engineer are the Owner's representatives. If the Contractor should fail to meet the technical or design requirements embodied in this document and on the applicable plans, he shall make the necessary adjustments until all work is deemed satisfactory as determined by both the Soils Engineer and the Civil Engineer. No deviation from these specifications shall be made except upon written approval of the Soils Engineer, Civil Engineer, or project Architect.

No earthwork shall be performed without the physical presence or approval of the Soils Engineer. The Contractor shall notify the Soils Engineer at least 2 working days prior to the commencement of any aspect of the site earthwork.

The Contractor shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineers harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except for liability arising from the sole negligence of the Owner or the Engineers.

**3.0 TECHNICAL REQUIREMENTS**: All compacted materials shall be densified to no less that 95 percent of relative compaction (90 percent for fine grained soils) based on ASTM D1557 Test Method (latest edition), UBC or CAL-216, or as specified in the technical portion of the Soil Engineer's report. The location and frequency of field density tests shall be determined by the Soils Engineer. The results of these tests and compliance with these specifications shall be the basis upon which satisfactory completion of work will be judged by the Soils Engineer.

**4.0 SOILS AND FOUNDATION CONDITIONS**: The Contractor is presumed to have visited the site and to have familiarized himself with existing site conditions and the contents of the data presented in the Geotechnical Engineering Report. The Contractor shall make his own interpretation of the data contained in the Geotechnical Engineering Report and the Contractor shall not be relieved of liability for any loss sustained as a result of any variance between conditions indicated by or deduced from said report and the actual conditions encountered during the progress of the work.



**5.0 DUST CONTROL:** The work includes dust control as required for the alleviation or prevention of any dust nuisance on or about the site or the borrow area, or off-site if caused by the Contractor's operation either during the performance of the earthwork or resulting from the conditions in which the Contractor leaves the site. The Contractor shall assume all liability, including court costs of codefendants, for all claims related to dust or wind-blown materials attributable to his work. Site preparation shall consist of site clearing and grubbing and preparation of foundation materials for receiving fill.

**6.0 CLEARING AND GRUBBING:** The Contractor shall accept the site in this present condition and shall demolish and/or remove from the area of designated project earthwork all structures, both surface and subsurface, trees, brush, roots, debris, organic matter and all other matter determined by the Soils Engineer to be deleterious. Such materials shall become the property of the Contractor and shall be removed from the site.

Tree root systems in proposed improvement areas should be removed to a minimum depth of 3 feet and to such an extent which would permit removal of all roots greater than 1 inch in diameter. Tree roots removed in parking areas may be limited to the upper 1½ feet of the ground surface. Backfill of tree root excavations is not permitted until all exposed surfaces have been inspected and the Soils Engineer is present for the proper control of backfill placement and compaction. Burning in areas which are to receive fill materials shall not be permitted.

**7.0 SUBGRADE PREPARATION:** Surfaces to receive Engineered Fill and/or building or slab loads shall be prepared as outlined above, scarified to a minimum of 12 inches, moisture-conditioned as necessary, and recompacted to 95 percent relative compaction (90 percent for fine grained soils).

Loose soil areas and/or areas of disturbed soil shall be moisture-conditioned as necessary and recompacted to 95 percent relative compaction (90 percent for fine grained soils). All ruts, hummocks, or other uneven surface features shall be removed by surface grading prior to placement of any fill materials. All areas which are to receive fill materials shall be approved by the Soils Engineer prior to the placement of any fill material.

**8.0 EXCAVATION:** All excavation shall be accomplished to the tolerance normally defined by the Civil Engineer as shown on the project grading plans. All over-excavation below the grades specified shall be backfilled at the Contractor's expense and shall be compacted in accordance with the applicable technical requirements.

**9.0 FILL AND BACKFILL MATERIAL:** No material shall be moved or compacted without the presence or approval of the Soils Engineer. Material from the required site excavation may be utilized for construction site fills, provided prior approval is given by the Soils Engineer. All materials utilized for constructing site fills shall be free from vegetation or other deleterious matter as determined by the Soils Engineer.

**10.0 PLACEMENT, SPREADING AND COMPACTION:** The placement and spreading of approved fill materials and the processing and compaction of approved fill and native materials shall be the responsibility of the Contractor. Compaction of fill materials by flooding, ponding, or jetting shall not be permitted unless specifically approved by local code, as well as the Soils Engineer. Both cut and fill shall be surface-compacted to the satisfaction of the Soils Engineer prior to final acceptance.



**11.0 SEASONAL LIMITS:** No fill material shall be placed, spread, or rolled while it is frozen or thawing, or during unfavorable wet weather conditions. When the work is interrupted by heavy rains, fill operations shall not be resumed until the Soils Engineer indicates that the moisture content and density of previously placed fill is as specified.

**12.0 DEFINITIONS** - The term "pavement" shall include asphaltic concrete surfacing, untreated aggregate base, and aggregate subbase. The term "subgrade" is that portion of the area on which surfacing, base, or subbase is to be placed.

The term "Standard Specifications": hereinafter referred to, is the most recent edition of the Standard Specifications of the State of California, Department of Transportation. The term "relative compaction" refers to the field density expressed as a percentage of the maximum laboratory density as determined by ASTM D1557 Test Method (latest edition) or California Test Method 216 (CAL-216), as applicable.

**13.0 PREPARATION OF THE SUBGRADE** - The Contractor shall prepare the surface of the various subgrades receiving subsequent pavement courses to the lines, grades, and dimensions given on the plans. The upper 12 inches of the soil subgrade beneath the pavement section shall be compacted to a minimum relative compaction of 95 percent (90 percent for find grained soils) based upon ASTM D1557. The finished subgrades shall be tested and approved by the Soils Engineer prior to the placement of additional pavement courses.

**14.0** AGGREGATE BASE - The aggregate base material shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate base material shall conform to the requirements of Section 26 of the Standard Specifications for Class II material, <sup>3</sup>/<sub>4</sub>-inch or 1<sup>1</sup>/<sub>2</sub>-inches maximum size. The aggregate base material shall be compacted to a minimum relative compaction of 95 percent based upon CAL-216. The aggregate base material shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

**15.0 AGGREGATE SUBBASE** - The aggregate subbase shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate subbase material shall conform to the requirements of Section 25 of the Standard Specifications for Class II Subbase material. The aggregate subbase material shall be compacted to a minimum relative compaction of 95 percent based upon CAL-216, and it shall be spread and compacted in accordance with the Standard Specifications. Each layer of aggregate subbase shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

**16.0 ASPHALTIC CONCRETE SURFACING** - Asphaltic concrete surfacing shall consist of a mixture of mineral aggregate and paving grade asphalt, mixed at a central mixing plant and spread and compacted on a prepared base in conformity with the lines, grades, and dimensions shown on the plans. The viscosity grade of the asphalt shall be PG 64-10, unless otherwise stipulated or local conditions warrant more stringent grade. The mineral aggregate shall be Type A or B, ½ inch maximum size, medium grading, and shall conform to the requirements set forth in Section 39 of the Standard Specifications. The drying, proportioning, and mixing of the materials shall conform to Section 39. The prime coat, spreading and compacting equipment, and spreading and compacting the mixture shall conform to the applicable chapters of Section 39, with the exception that no surface course shall be placed when the atmospheric temperature is below 50 degrees F. The surfacing shall be rolled with a combination steel-wheel and pneumatic rollers,



as described in the Standard Specifications. The surface course shall be placed with an approved self-propelled mechanical spreading and finishing machine.



# APPENDIX G PRELIMINARY DRAINAGE STUDY FEBRUARY 2020

# 8<sup>TH</sup> AND HIGHLAND SPRINGS Preliminary Drainage Study

FEBRUARY 2020 | DRAFT

Prepared By:

Kimley »Horn

This Drainage Report has been prepared by Kimley-Horn and Associates, Inc. under the direct supervision of the following Registered Civil engineer. The undersigned attests to the technical data contained in this study, and to the qualifications of technical specialists providing engineering computations upon which the recommendations and conclusions are based.



**Registered Civil Engineer** 

Date

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#### Appendices

- Appendix A Site Information
- Appendix B FEMA Flood Plain Map
- Appendix C Drainage Exhibits
- Appendix D AES Flood Routing Analysis
- Appendix E Geotechnical Report

# **1 INTRODUCTION**

The project consists of the development of a 2.08-acre parcel located on the southwest corner of the intersection of E 8<sup>th</sup> Street and N Highland Springs Avenue in Beaumont, California. The lot is currently undeveloped and proposes to develop a gasoline service station, convenience store and drive-thru restaurant with approximately 0.08 acres of right-of-way dedication. See the vicinity map in **Figure 1-1**.

This drainage report includes the hydrologic analysis for the existing and proposed onsite conditions.

#### Figure 1–1 Vicinity Map



#### 2 DESIGN CRITERIA

The project is located in the City of Beaumont in Riverside County. The site consists of Parcel 1 of underlying Parcel Map 5570. Drainage calculations comply with the requirements outlined in the Riverside County Flood Control and Water Conservation District's (RCFC & WCD) Hydrology Manual.

Overall boundaries were delineated for each drainage area with AutoCAD Civil 3D software. These hydrologic parameters are shown for existing conditions and proposed conditions in **Appendix C**. Percent impervious and pervious were calculated for each drainage area.

#### 2.1 PRECIPITATION

Rainfall intensity was determined from Plate D-4.1 of the RCFC & WCD Hydrology Manual for Beaumont. The Rational Method based on the RCFC & WCD manual has been utilized to analyze the existing and proposed hydrology for the project site.

Plate D-5.3 from the RCFC & WCD Hydrology Manual was utilized to determine runoff coefficients for each basin based hydrologic soil group, cover type, and Antecedent Moisture Condition. Hydrologic soil group C was used for the project site.

The hydrology project modeling controls are presented in **Appendix A**.

#### 2.2 WATERSHED DESCRIPTION

The project is moderately flat based on the regional topography generally sloping from the northwest to the southeast. The project site is part of the RCFC&WCD Master Drainage Plan for the Beaumont Area (Zone 5) tributary to the Santa Ana River, which is located approximately 24 miles west of the project site.

#### 2.3 SOIL TYPES

The type of soil and soil conditions are major factors affecting infiltration and resultant storm water runoff. The Natural Resources Conservation Service (NRCS) has classified soils into four general hydrologic soil groups for comparing infiltration and runoff rates. The groups are based on properties that influence runoff, such as water infiltration rate, texture, natural discharge and moisture condition. The runoff potential is based on the amount of runoff at the end of a long duration storm that occurs after wetting and swelling of the soil not protected by vegetation.

Using the NRCS GIS soil data, this site was identified as approximately 100% Ramona sandy loam (RaB2; HSG C) which varies from the hydrologic classifications per RCFC & WCD Plate C-1.19 (Type B). Group C soils have moderately high runoff potential when thoroughly wet with lower infiltration rates. HSG soil type C was used as a conservative measure for this analysis. **See Appendix A** for soil type classifications.

A preliminary geotechnical report performed by Salem Engineering Group, Inc. on January 31, 2020 is included as part of **Appendix E**.

#### 2.4 GROUNDWATER

Groundwater is not anticipated for this project. Geotechnical testing will be performed during final analysis.

#### 2.5 FEMA MAPPING

The project site is covered by Map Number 06065C0812G of the FEMA Flood Insurance Rate Map (FIRM) for Riverside County, California and Incorporated Areas. The City of Banning (060246), City of Beaumont (060247), and Riverside County (060245) are included in this map. The project is mostly within Other Areas Zone X, which is areas determined to be outside the 0.2% annual chance floodplain, with the eastern edge of the property within Other Flood Areas Zone X, which is areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas

less than 1 square mile; and areas protected by levees from 1% annual chance flood. The effective FEMA map is dated August 28, 2008, and is provided in **Appendix B**.

#### 2.6 METHODOLOGY

The Rational Method was performed to analyze the 100-year peak flows. The Rational Method Equation is as follows:

Q=CiA, where

Q = the peak discharge in cubic feet per second (cfs)

C = coefficient of runoff (unitless) (Plate D-5.3 per the RCFC & WCD Hydrology Manual)

i = the time-averaged rainfall intensity for a storm duration equal to the  $T_c$  (inches/hr) (Plate D-4.1 per RCFC & WCD Hydrology Manual)

A = drainage area (acres)

#### **3 EXISTING CONDITIONS**

#### Hydrologic Analysis

The site is currently undeveloped with a moderately flat terrain (<2%). The site generally sheet flows from the northwest to the southeast. See **Appendix C** for Existing Drainage Exhibit.

The site runoff sheet flows to Highland Springs Avenue where flows are conveyed southerly via curb and gutter. Runoff is captured via storm drain curb inlets along Highland Springs Avenue which connect directly into the Highland Springs Channel, a concrete RCFC & WCD facility. Runoff is conveyed southerly and discharges into the San Timoteo Creek which ultimately discharges into the Santa Ana River.

A 100-year storm intensity of 4.93 in/hr was determined from Plate D-4.1 per the RCFC & WCD Hydrology Manual. A pervious runoff coefficient of 0.8 was determined from Plate D-5.3 per the RCFC & WCD Hydrology Manual. A time of concentration (Tc) of 5 minutes was assumed for the existing conditions. See **Table 1** for a summary of the Rational Method results.

**Table 1** Summary of Existing Rational Method Flow Rate

Drainage Area	Area, A (ac)	Discharge, Q <sub>EX</sub> (cfs) 100 Year
DA1	2.03	8.01

#### 4 PROPOSED CONDITIONS

#### Hydrologic Analysis

The project proposes to develop a quick-service restaurant with a drive-thru and a gas station with associated parking and landscaped areas. The development will be approximately 80% impervious area and 20% landscape. Storm water runoff will sheet flow into various storm drain inlets via curb and gutter and ribbon gutter, which will ultimately connect to the existing RCFC & WCD curb inlet which discharges directly to the Highland Springs Channel.

Weighted runoff coefficients (C-values) were calculated for each drainage area based on the runoff coefficients determined from Plate D-5.3. A time of concentration of 5 minutes was assumed for the proposed conditions.

See Appendix C for Proposed Drainage Exhibit. See Table 2 for a summary of the results.

Drainage Areas	Area, A (ac)	Peak Discharge, QPR (cfs) 100 Year
DA 1	1.09	4.68
DA 2	0.67	2.90
DA 3	0.19	0.82
TOTAL	1.95	8.41

Table 2 Summary of Proposed Rational Method Flow Rate

Hydraulic design

Inlet sizing, pipe sizing, and pipe hydraulics will be provided during final design. Hydraulic calculations will utilize the peak flows determined from the rational method as a conservative approach.

# 5 DETENTION ANALYSIS

The project used AES Flood Routing Analysis in accordance with the RCFC&WCD Hydrology Manual to develop existing and post-development 100-year, 24-hour hydrographs. A manual lag time of 0.1 hours was utilized due to the small scale of the project watershed.

Plate E-6.1 was used to determine the pervious runoff index numbers based on cover type, quality of cover, and soil group. The runoff index numbers were applied to Plate E-6.2 to determine Fp, infiltration rate for pervious area.

The adjusted loss rate is defined by:

F=Fp (1-0.9Ai), where

F = Adjusted loss rate (in/hr) Fp= Loss rate for pervious area (in/hr; Plate E-6.2) Ai = % impervious area

Fm, minimum loss rate, is determined by:

Fm = F/2

Lastly, a low loss percentage of 80% was utilized per the RCFC&WCD Hydrology Manual.

**Table 3** below summarizes the pre and post development volumes based on the AES Flood Routing Analysis. Detailed analysis can be found in **Appendix D**.

Table 3 100-Year, 24-Hour AES Flood Routing Analysis Summary

Development Condition	Peak Volume (cubic feet)
Pre-development	27,264
Post-development	31,960
Delta Volume	4,696

The project proposes an underground detention system with a minimum storage volume of 4,700 cubic feet for peak attenuation. A detailed detention analysis will be provided during final design.

# APPENDICES

APPENDIX A

SITE INFORMATION

Precipitation Frequency Data Server



NOAA Atlas 14, Volume 6, Version 2 Location name: Beaumont, California, USA\* Latitude: 33.9319°, Longitude: -116.9478° Elevation: 2603.76 ft\*\* \* source: ESRI Maps \*\* source: USGS



#### POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF\_tabular | PF\_graphical | Maps\_&\_aerials

# PF tabular

PD	PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) <sup>1</sup>									
Duration		Average recurrence interval (years)								
Duration	1	2	5	10	25	50	100	200	500	1000
5-min	<b>0.124</b>	<b>0.161</b>	<b>0.218</b>	<b>0.271</b>	<b>0.355</b>	<b>0.429</b>	<b>0.516</b>	<b>0.617</b>	<b>0.776</b>	<b>0.921</b>
	(0.103-0.150)	(0.134-0.196)	(0.181-0.265)	(0.223-0.333)	(0.282-0.451)	(0.334-0.557)	(0.391-0.686)	(0.455-0.845)	(0.549-1.11)	(0.628-1.36)
10-min	<b>0.177</b>	<b>0.231</b>	<b>0.313</b>	<b>0.389</b>	<b>0.508</b>	<b>0.615</b>	<b>0.739</b>	<b>0.884</b>	<b>1.11</b>	<b>1.32</b>
	(0.148-0.215)	(0.192-0.281)	(0.259-0.380)	(0.320-0.477)	(0.404-0.646)	(0.479-0.799)	(0.561-0.984)	(0.652-1.21)	(0.786-1.59)	(0.900-1.95)
15-min	<b>0.215</b>	<b>0.279</b>	<b>0.378</b>	<b>0.470</b>	<b>0.615</b>	<b>0.744</b>	<b>0.894</b>	<b>1.07</b>	<b>1.35</b>	<b>1.60</b>
	(0.179-0.260)	(0.233-0.339)	(0.314-0.460)	(0.387-0.577)	(0.489-0.781)	(0.579-0.966)	(0.678-1.19)	(0.788-1.46)	(0.951-1.92)	(1.09-2.36)
30-min	<b>0.313</b>	<b>0.407</b>	<b>0.551</b>	<b>0.685</b>	<b>0.896</b>	<b>1.08</b>	<b>1.30</b>	<b>1.56</b>	<b>1.96</b>	<b>2.33</b>
	(0.261-0.379)	(0.339-0.494)	(0.457-0.670)	(0.563-0.840)	(0.712-1.14)	(0.844-1.41)	(0.988-1.73)	(1.15-2.13)	(1.39-2.80)	(1.59-3.44)
60-min	<b>0.461</b>	<b>0.600</b>	<b>0.811</b>	<b>1.01</b>	<b>1.32</b>	<b>1.60</b>	<b>1.92</b>	<b>2.30</b>	<b>2.89</b>	<b>3.43</b>
	(0.384-0.558)	(0.499-0.728)	(0.673-0.988)	(0.830-1.24)	(1.05-1.68)	(1.24-2.07)	(1.46-2.55)	(1.69-3.14)	(2.04-4.13)	(2.34-5.07)
2-hr	<b>0.660</b>	<b>0.822</b>	<b>1.06</b>	<b>1.29</b>	<b>1.63</b>	<b>1.93</b>	<b>2.27</b>	<b>2.66</b>	<b>3.26</b>	<b>3.80</b>
	(0.550-0.800)	(0.684-0.998)	(0.883-1.30)	(1.06-1.58)	(1.29-2.07)	(1.50-2.50)	(1.72-3.02)	(1.96-3.64)	(2.31-4.66)	(2.59-5.62)
3-hr	<b>0.809</b>	<b>0.995</b>	<b>1.27</b>	<b>1.52</b>	<b>1.89</b>	<b>2.21</b>	<b>2.57</b>	<b>2.98</b>	<b>3.61</b>	<b>4.15</b>
	(0.674-0.980)	(0.828-1.21)	(1.05-1.54)	(1.25-1.86)	(1.50-2.40)	(1.72-2.87)	(1.95-3.42)	(2.20-4.09)	(2.55-5.15)	(2.83-6.14)
6-hr	<b>1.18</b>	<b>1.44</b>	<b>1.81</b>	<b>2.13</b>	<b>2.62</b>	<b>3.02</b>	<b>3.46</b>	<b>3.94</b>	<b>4.65</b>	<b>5.26</b>
	(0.980-1.43)	(1.20-1.74)	(1.50-2.20)	(1.76-2.62)	(2.08-3.32)	(2.35-3.92)	(2.62-4.60)	(2.91-5.40)	(3.29-6.65)	(3.59-7.79)
12-hr	<b>1.61</b>	<b>2.01</b>	<b>2.56</b>	<b>3.02</b>	<b>3.67</b>	<b>4.19</b>	<b>4.74</b>	<b>5.31</b>	<b>6.13</b>	<b>6.78</b>
	(1.34-1.95)	(1.68-2.44)	(2.13-3.12)	(2.49-3.71)	(2.92-4.67)	(3.26-5.44)	(3.59-6.30)	(3.92-7.28)	(4.33-8.76)	(4.63-10.0)
24-hr	<b>2.15</b>	<b>2.78</b>	<b>3.62</b>	<b>4.31</b>	<b>5.25</b>	<b>5.98</b>	<b>6.73</b>	<b>7.50</b>	<b>8.55</b>	<b>9.37</b>
	(1.90-2.47)	(2.46-3.21)	(3.19-4.19)	(3.77-5.03)	(4.45-6.33)	(4.96-7.35)	(5.45-8.47)	(5.91-9.70)	(6.48-11.5)	(6.86-13.1)
2-day	<b>2.60</b>	<b>3.46</b>	<b>4.63</b>	<b>5.61</b>	<b>7.01</b>	<b>8.12</b>	<b>9.28</b>	<b>10.5</b>	<b>12.3</b>	<b>13.7</b>
	(2.30-3.00)	(3.06-3.99)	(4.08-5.36)	(4.91-6.55)	(5.93-8.44)	(6.74-9.98)	(7.52-11.7)	(8.30-13.6)	(9.30-16.5)	(10.0-19.1)
3-day	<b>2.82</b>	<b>3.79</b>	<b>5.15</b>	<b>6.33</b>	<b>8.05</b>	<b>9.46</b>	<b>11.0</b>	<b>12.6</b>	<b>15.0</b>	<b>17.0</b>
	(2.50-3.25)	(3.35-4.38)	(4.54-5.96)	(5.54-7.38)	(6.82-9.69)	(7.85-11.6)	(8.90-13.8)	(9.97-16.4)	(11.4-20.3)	(12.5-23.7)
4-day	<b>3.06</b> (2.71-3.53)	<b>4.14</b> (3.66-4.77)	<b>5.65</b> (4.99-6.54)	<b>6.98</b> (6.11-8.14)	<b>8.92</b> (7.56-10.7)	<b>10.5</b> (8.74-13.0)	<b>12.3</b> (9.95-15.5)	<b>14.2</b> (11.2-18.4)	<b>17.0</b> (12.9-22.9)	<b>19.3</b> (14.2-26.9)

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds\_printpage.html?lat=33.9319&lon=-116.9478&data=depth&units=english&series=pds

#### Precipitation Frequency Data Server

7-day	<b>3.56</b> (3.15-4.10)	<b>4.79</b> (4.24-5.53)	<b>6.53</b> (5.75-7.55)	<b>8.03</b> (7.02-9.37)	<b>10.2</b> (8.65-12.3)	<b>12.0</b> (9.97-14.8)	<b>13.9</b> (11.3-17.6)	<b>16.1</b> (12.7-20.8)	<b>19.1</b> (14.5-25.8)	<b>21.7</b> (15.9-30.2)
10-day	<b>3.91</b> (3.46-4.51)	<b>5.26</b> (4.65-6.08)	<b>7.15</b> (6.30-8.27)	<b>8.77</b> (7.67-10.2)	<b>11.1</b> (9.40-13.4)	<b>13.0</b> (10.8-16.0)	<b>15.1</b> (12.2-19.0)	<b>17.3</b> (13.6-22.3)	<b>20.4</b> (15.5-27.5)	<b>23.1</b> (16.9-32.1)
20-day	<b>4.89</b> (4.33-5.64)	<b>6.65</b> (5.88-7.68)	<b>9.04</b> (7.98-10.5)	<b>11.1</b> (9.68-12.9)	<b>13.9</b> (11.8-16.8)	<b>16.2</b> (13.5-19.9)	<b>18.6</b> (15.1-23.4)	<b>21.2</b> (16.7-27.4)	<b>24.8</b> (18.8-33.4)	<b>27.7</b> (20.3-38.6)
30-day	<b>5.77</b> (5.11-6.65)	<b>7.89</b> (6.98-9.11)	<b>10.7</b> (9.47-12.4)	<b>13.1</b> (11.5-15.3)	<b>16.4</b> (13.9-19.8)	<b>19.0</b> (15.8-23.4)	<b>21.7</b> (17.6-27.3)	<b>24.6</b> (19.4-31.8)	<b>28.5</b> (21.6-38.4)	<b>31.7</b> (23.2-44.2)
45-day	<b>6.96</b> (6.16-8.02)	<b>9.55</b> (8.44-11.0)	<b>13.0</b> (11.4-15.0)	<b>15.8</b> (13.8-18.4)	<b>19.6</b> (16.6-23.6)	<b>22.6</b> (18.7-27.8)	<b>25.6</b> (20.8-32.3)	<b>28.8</b> (22.7-37.3)	<b>33.2</b> (25.1-44.7)	<b>36.6</b> (26.8-51.0)
				1						

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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## PF graphical

#### PDS-based depth-duration-frequency (DDF) curves Latitude: 33.9319°, Longitude: -116.9478°







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#### Maps & aerials

Small scale terrain



Large scale terrain



Large scale map


Large scale aerial



Back to Top

US Department of Commerce National Oceanic and Atmospheric Administration National Weather Service National Water Center 1325 East West Highway Silver Spring, MD 20910 Questions?: HDSC.Questions@noaa.gov

**Disclaimer** 



NOAA Atlas 14, Volume 6, Version 2 Location name: Beaumont, California, USA\* Latitude: 33.9319°, Longitude: -116.9478° Elevation: 2603.76 ft\*\* \* source: ESRI Maps \*\* source: USGS



#### POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

PF\_tabular | PF\_graphical | Maps\_&\_aerials

## PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour) <sup>1</sup>											
Duration		Average recurrence interval (years)									
Duration	1	2	5	10	25	50	100	200	500	1000	
5-min	<b>1.49</b>	<b>1.93</b>	<b>2.62</b>	<b>3.25</b>	<b>4.26</b>	<b>5.15</b>	<b>6.19</b>	<b>7.40</b>	<b>9.31</b>	<b>11.1</b>	
	(1.24-1.80)	(1.61-2.35)	(2.17-3.18)	(2.68-4.00)	(3.38-5.41)	(4.01-6.68)	(4.69-8.23)	(5.46-10.1)	(6.59-13.3)	(7.54-16.4)	
10-min	<b>1.06</b>	<b>1.39</b>	<b>1.88</b>	<b>2.33</b>	<b>3.05</b>	<b>3.69</b>	<b>4.43</b>	<b>5.30</b>	<b>6.68</b>	<b>7.91</b>	
	(0.888-1.29)	(1.15-1.69)	(1.55-2.28)	(1.92-2.86)	(2.42-3.88)	(2.87-4.79)	(3.37-5.90)	(3.91-7.27)	(4.72-9.55)	(5.40-11.7)	
15-min	<b>0.860</b>	<b>1.12</b>	<b>1.51</b>	<b>1.88</b>	<b>2.46</b>	<b>2.98</b>	<b>3.58</b>	<b>4.28</b>	<b>5.38</b>	<b>6.38</b>	
	(0.716-1.04)	(0.932-1.36)	(1.26-1.84)	(1.55-2.31)	(1.96-3.12)	(2.32-3.86)	(2.71-4.76)	(3.15-5.86)	(3.80-7.70)	(4.35-9.45)	
30-min	<b>0.626</b>	<b>0.814</b>	<b>1.10</b>	<b>1.37</b>	<b>1.79</b>	<b>2.17</b>	<b>2.60</b>	<b>3.12</b>	<b>3.92</b>	<b>4.65</b>	
	(0.522-0.758)	(0.678-0.988)	(0.914-1.34)	(1.13-1.68)	(1.42-2.28)	(1.69-2.81)	(1.98-3.47)	(2.30-4.27)	(2.77-5.61)	(3.17-6.89)	
60-min	<b>0.461</b>	<b>0.600</b>	<b>0.811</b>	<b>1.01</b>	<b>1.32</b>	<b>1.60</b>	<b>1.92</b>	<b>2.30</b>	<b>2.89</b>	<b>3.43</b>	
	(0.384-0.558)	(0.499-0.728)	(0.673-0.988)	(0.830-1.24)	(1.05-1.68)	(1.24-2.07)	(1.46-2.55)	(1.69-3.14)	(2.04-4.13)	(2.34-5.07)	
2-hr	<b>0.330</b>	<b>0.411</b>	<b>0.532</b>	<b>0.642</b>	<b>0.814</b>	<b>0.964</b>	<b>1.13</b>	<b>1.33</b>	<b>1.63</b>	<b>1.90</b>	
	(0.275-0.400)	(0.342-0.499)	(0.442-0.648)	(0.529-0.788)	(0.647-1.03)	(0.750-1.25)	(0.860-1.51)	(0.980-1.82)	(1.15-2.33)	(1.29-2.81)	
3-hr	<b>0.269</b>	<b>0.331</b>	<b>0.422</b>	<b>0.504</b>	<b>0.629</b>	<b>0.737</b>	<b>0.857</b>	<b>0.993</b>	<b>1.20</b>	<b>1.38</b>	
	(0.224-0.326)	(0.276-0.402)	(0.351-0.514)	(0.415-0.619)	(0.500-0.799)	(0.573-0.956)	(0.650-1.14)	(0.732-1.36)	(0.848-1.72)	(0.942-2.05)	
6-hr	<b>0.196</b>	<b>0.240</b>	<b>0.302</b>	<b>0.357</b>	<b>0.437</b>	<b>0.504</b>	<b>0.577</b>	<b>0.658</b>	<b>0.777</b>	<b>0.878</b>	
	(0.164-0.238)	(0.200-0.291)	(0.251-0.368)	(0.293-0.438)	(0.347-0.555)	(0.392-0.654)	(0.438-0.768)	(0.485-0.901)	(0.549-1.11)	(0.599-1.30)	
12-hr	<b>0.134</b>	<b>0.167</b>	<b>0.213</b>	<b>0.251</b>	<b>0.305</b>	<b>0.348</b>	<b>0.393</b>	<b>0.441</b>	<b>0.509</b>	<b>0.563</b>	
	(0.111-0.162)	(0.139-0.203)	(0.176-0.259)	(0.206-0.308)	(0.242-0.387)	(0.271-0.452)	(0.298-0.523)	(0.325-0.604)	(0.359-0.727)	(0.384-0.834)	
24-hr	<b>0.089</b>	<b>0.116</b>	<b>0.151</b>	<b>0.180</b>	<b>0.219</b>	<b>0.249</b>	<b>0.280</b>	<b>0.312</b>	<b>0.356</b>	<b>0.391</b>	
	(0.079-0.103)	(0.103-0.134)	(0.133-0.175)	(0.157-0.210)	(0.185-0.264)	(0.207-0.306)	(0.227-0.353)	(0.246-0.404)	(0.270-0.480)	(0.286-0.544)	
2-day	<b>0.054</b>	<b>0.072</b>	<b>0.096</b>	<b>0.117</b>	<b>0.146</b>	<b>0.169</b>	<b>0.193</b>	<b>0.219</b>	<b>0.256</b>	<b>0.285</b>	
	(0.048-0.062)	(0.064-0.083)	(0.085-0.112)	(0.102-0.136)	(0.124-0.176)	(0.140-0.208)	(0.157-0.244)	(0.173-0.284)	(0.194-0.345)	(0.209-0.397)	
3-day	<b>0.039</b>	<b>0.053</b>	<b>0.072</b>	<b>0.088</b>	<b>0.112</b>	<b>0.131</b>	<b>0.152</b>	<b>0.176</b>	<b>0.209</b>	<b>0.237</b>	
	(0.035-0.045)	(0.047-0.061)	(0.063-0.083)	(0.077-0.103)	(0.095-0.135)	(0.109-0.162)	(0.124-0.192)	(0.138-0.227)	(0.158-0.281)	(0.173-0.330)	
4-day	<b>0.032</b> (0.028-0.037)	<b>0.043</b> (0.038-0.050)	<b>0.059</b> (0.052-0.068)	<b>0.073</b> (0.064-0.085)	<b>0.093</b> (0.079-0.112)	<b>0.110</b> (0.091-0.135)	<b>0.128</b> (0.104-0.161)	<b>0.148</b> (0.117-0.191)	<b>0.177</b> (0.134-0.238)	<b>0.201</b> (0.148-0.281)	

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds\_printpage.html?lat=33.9319&lon=-116.9478&data=intensity&units=english&series=pds

7-day	<b>0.021</b>	<b>0.029</b>	<b>0.039</b>	<b>0.048</b>	<b>0.061</b>	<b>0.071</b>	<b>0.083</b>	<b>0.096</b>	<b>0.114</b>	<b>0.129</b>
	(0.019-0.024)	(0.025-0.033)	(0.034-0.045)	(0.042-0.056)	(0.051-0.073)	(0.059-0.088)	(0.067-0.105)	(0.075-0.124)	(0.086-0.153)	(0.094-0.180)
10-day	<b>0.016</b>	<b>0.022</b>	<b>0.030</b>	<b>0.037</b>	<b>0.046</b>	<b>0.054</b>	<b>0.063</b>	<b>0.072</b>	<b>0.085</b>	<b>0.096</b>
	(0.014-0.019)	(0.019-0.025)	(0.026-0.034)	(0.032-0.043)	(0.039-0.056)	(0.045-0.067)	(0.051-0.079)	(0.057-0.093)	(0.065-0.115)	(0.070-0.134)
20-day	<b>0.010</b>	<b>0.014</b>	<b>0.019</b>	<b>0.023</b>	<b>0.029</b>	<b>0.034</b>	<b>0.039</b>	<b>0.044</b>	<b>0.052</b>	<b>0.058</b>
	(0.009-0.012)	(0.012-0.016)	(0.017-0.022)	(0.020-0.027)	(0.025-0.035)	(0.028-0.042)	(0.031-0.049)	(0.035-0.057)	(0.039-0.070)	(0.042-0.080)
30-day	<b>0.008</b>	<b>0.011</b>	<b>0.015</b>	<b>0.018</b>	<b>0.023</b>	<b>0.026</b>	<b>0.030</b>	<b>0.034</b>	<b>0.040</b>	<b>0.044</b>
	(0.007-0.009)	(0.010-0.013)	(0.013-0.017)	(0.016-0.021)	(0.019-0.027)	(0.022-0.032)	(0.024-0.038)	(0.027-0.044)	(0.030-0.053)	(0.032-0.061)
45-day	<b>0.006</b>	<b>0.009</b>	<b>0.012</b>	<b>0.015</b>	<b>0.018</b>	<b>0.021</b>	<b>0.024</b>	<b>0.027</b>	<b>0.031</b>	<b>0.034</b>
	(0.006-0.007)	(0.008-0.010)	(0.011-0.014)	(0.013-0.017)	(0.015-0.022)	(0.017-0.026)	(0.019-0.030)	(0.021-0.035)	(0.023-0.041)	(0.025-0.047)
60-day	<b>0.006</b>	<b>0.008</b>	<b>0.010</b>	<b>0.013</b>	<b>0.016</b>	<b>0.018</b>	<b>0.020</b>	<b>0.023</b>	<b>0.026</b>	<b>0.029</b>
	(0.005-0.007)	(0.007-0.009)	(0.009-0.012)	(0.011-0.015)	(0.013-0.019)	(0.015-0.022)	(0.016-0.026)	(0.018-0.029)	(0.020-0.035)	(0.021-0.040)
<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PE estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a										

given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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## PF graphical

#### PDS-based intensity-duration-frequency (IDF) curves Latitude: 33.9319°, Longitude: -116.9478°







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#### Maps & aerials

Small scale terrain



Large scale terrain



Large scale map



Large scale aerial



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USDA Natural Resources Conservation Service Web Soil Survey National Cooperative Soil Survey 1/31/2020 Page 1 of 3

MAI	PLEGEND	MAP INFORMATION		
Area of Interest (AOI) Area of Interest (AOI	Spoil Area	The soil surveys that comprise your AOI were mapped at 1:15,800.		
Soils	Nery Stony Spot	Warning: Soil Map may not be valid at this scale.		
Soil Map Unit Lines	Wet Spot	Enlargement of maps beyond the scale of mapping can ca misunderstanding of the detail of mapping and accuracy of		
Soil Map Unit Points	Special Line Features	contrasting soils that could have been shown at a more de scale.		
Blowout Borrow Pit	Water Features Streams and Canals	Please rely on the bar scale on each map sheet for map measurements.		
Clay Spot	Transportation +++ Rails	Source of Map: Natural Resources Conservation Service Web Soil Survey URL:		
Gravel Pit	<ul><li>Interstate Highways</li><li>US Routes</li></ul>	Coordinate System: Web Mercator (EPSG:3857) Maps from the Web Soil Survey are based on the Web Me		
<ul> <li>Gravelly Spot</li> <li>Landfill</li> </ul>	Major Roads       Local Roads	projection, which preserves direction and shape but distort distance and area. A projection that preserves area, such Albers equal-area conic projection, should be used if more		
🗼 Lava Flow	Background Aerial Photography	accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified of of the version date(s) listed below		
Mine or Quarry Miscellaneous Water		Soil Survey Area: Western Riverside Area, California Survey Area Data: Version 12, Sep 16, 2019		
<ul> <li>Perennial Water</li> <li>Rock Outcrop</li> </ul>		Soil map units are labeled (as space allows) for map scale 1:50,000 or larger.		
Saline Spot		Date(s) aerial images were photographed: Apr 1, 2018— 2018		
<ul> <li>Sandy Spot</li> <li>Severely Eroded Spot</li> </ul>	t	The orthophoto or other base map on which the soil lines compiled and digitized probably differs from the backgro imagery displayed on these maps. As a result, some min		
<ul> <li>Sinkhole</li> <li>Slide or Slip</li> </ul>		shifting of map unit boundaries may be evident.		
💋 Sodic Spot				

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
RaB2	Ramona sandy loam, 2 to 5 percent slopes, eroded	2.3	100.0%		
Totals for Area of Interest		2.3	100.0%		



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æ	IMESA	FREG 10 YEAR	3.57 3.57 2.97 2.76 2.58	2.44 2.31 2.21 2.03	1.95 1.88 1.88 1.82 1.75	1.67 1.58 1.51 1.44 1.38	1.33 1.29 1.24 1.21 1.17	1.14 1.07 1.01 .95 .91	.87 .84 .80 .75	и
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	9 N I I	FREGU 10 YEAR	3.32 3.02 2.59 2.43	2.30 2.19 2.09 2.92	1.86 1.79 1.74 1.68 1.68	1.59 1.51 1.45 1.39 1.33	1.29 1.24 1.20 1.17 1.13	1.10 1.04 1.04 1.98 1.93	- 4 6 - 4 6 - 4 6	я я
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	HYDROLOGY MANUAL INTENSITY - DURATION CURVES DATA									
PLATE D-4.1 (1 of 6)										



RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II							
		Quality of		Soil	Gro	up	
Cover Type (3)		Cover (2)	A	В	С	D	
NATURAL COVERS -							
Barren (Rockland, eroded and graded land)		78	86	91	93		
Chaparrel, Broadleaf		Poor	53	70	80	85	
(Manzonita, ceanothus and scrub oak)		Fair	40	63	75	81	
		GOOd	31	57	/1	/8	
Chaparrel, Narrowleaf		Poor	71	82	88	91	
(Chamise and redshank)		Fair	55	72	81	86	
Curren Janual en Demonsiel		Dalam		70			
Grass, Annual or Perennial		Foor	67 50	78 69	86 79	89 84	
		Good	38	61	74	80	
Meadows or Cienegas		Poor	63	77	85	88	
(Areas with seasonally high water ta	ble,	Fair	51	70	80	84	
principal vegetation is sod forming	grass)	Good	30	58	72	78	
Open Brush		Poor	62	76	84	88	
(Soft wood shrubs - buckwheat, sage,	etc.)	Fair	46	66	77	83	
		Good	41	63	75	81	
Mag 21 - m 3		_	4.5				
Woodland		Poor	45	66 C 0	77	83	
Canopy density is at least 50 perce	nt)	Good	28	55	73 70	79 77	
Woodland, Grass		Poor	57	73	82	86	
(Coniferous or broadleaf trees with	canopy	Fair	44	65	77	82	
density from 20 to 50 percent)		Good	33	58	72	79	
URBAN COVERS -							
Residential or Commercial Landscaping (Lawn, shrubs, etc.)		Good	32	56	69	75	
m C		_					
(Irrigated and moved grade)		Poor	58	74	83 77	87	
(IIIIgated and mowed grass)		Good	44 33	65 58	72	82 79	
		600u		50	12		
AGRICULTURAL COVERS -							
Fallow			76	85	90	92	
(Land plowed but not tilled or seede	d)						
	<b>.</b>		L	L	L		
RCFC & WCD	RUNOFF	INDEX		NUN	ABE	RS	
		FOR					
FIYDROLOGY MANUAL	PE	RVIOUS	AR	EAS	5		

RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II								
	Quality of	S	Soil	Grou	ıp			
Cover Type (3)	Cover (2)	A	В	С	D			
AGRICULTURAL COVERS (cont.) -								
Legumes, Close Seeded (Alfalfa, sweetclover, timothy, etc.)	Poor Good	66 58	77 72	85 81	89 85			
Orchards, Deciduous (Apples, apricots, pears, walnuts, etc.)		See	Note	e 4				
Orchards, Evergreen (Citrus, avocados, etc.)	Poor Fair Good	57 44 33	73 65 58	82 77 72	86 82 79			
Pasture, Dryland (Annual grasses)	Poor Fair Good	67 50 38	78 69 6 <b>1</b>	86 79 74	89 84 80			
Pasture, Irrigated (Legumes and perennial grass)	Poor Fair Good	58 44 33	74 65 58	83 77 72	87 82 79			
Row Crops (Field crops - tomatoes, sugar beets, etc.)	Poor Good	72 67	81 78	88 85	91 89			
Small Grain (Wheat, oats, barley, etc.)	Poor Good	65 63	76 75	84 83	88 87			
Vineyard		See	Not	e 4	, 1			
Notes:								
<ol> <li>All runoff index (RI) numbers are for Antecedent Moisture Condition (AMC) II.</li> <li>Quality of cover definitions:</li> </ol>								

- Poor-Heavily grazed or regularly burned areas. Less than 50 percent of the ground surface is protected by plant cover or brush and tree canopy.
  - Fair-Moderate cover with 50 percent to 75 percent of the ground surface protected.

Good-Heavy or dense cover with more than 75 percent of the ground surface protected.

- 3. See Plate C-2 for a detailed description of cover types.
- 4. Use runoff index numbers based on ground cover type. See discussion under "Cover Type Descriptions" on Plate C-2.
- 5. Reference Bibliography item 17.

R	С	F	С	8	W	С	D

HYDROLOGY MANUAL





APPENDIX B

FEMA FLOOD PLAIN MAP

# National Flood Hazard Layer FIRMette



### Legend



250 n

500

1,500

2,000

regulatory purposes.

APPENDIX C

DRAINAGE EXHIBITS



# **Kimley**»Horn



NTS



## NOTES

- 1. EXISTING SITE IS UNDEVELOPED
- 2. EXISTING SOILS ONSITE ARE HSG TYPE C PER NRCS WEB SOIL SURVEY. SOIL TYPE TO BE CONFIRMED WITH GEOTECHNICAL REPORT PRIOR TO FINAL DESIGN.
- 3. PROJECT 100-YEAR RAINFALL INTENSITY (4.93 IN/HR) DETERMINED FROM PLATE D-4.1 PER RĆFC&WCD HYDROLOGY MANUAL.
- 4. PROJECT PERVIOUS COEFFICIENT OF RUNOFF (C=0.8) DETERMINED FROM PLATE D-5.3 PER RCFC&WCD HYDROLOGY MANUAL.
- 5. PROJECT CALCULATIONS ASSUME A TIME OF CONCENTRATION OF 5 MINUTES.
- 6. PROJECT SITE IS LOCATED WITHIN THE RCFC&WCD MASTER DRAINAGE PLAN FOR THE BEAUMONT AREA.

## DATA SUMMARY

DA ID	AREA (AC)	PERVIOUS AREA (AC)	IMPERVIOUS AREA (AC)	WEIGHTED C VALUE	Q100
1	2.03	2.03	0	0.8	8.01





# **Kimley**»**Horn**





## NOTES

- 1. EXISTING SOILS ONSITE ARE HSG TYPE C PER NRCS WEB SOIL SURVEY. SOIL TYPE TO BE CONFIRMED WITH GEOTECHNICAL REPORT PRIOR TO FINAL DESIGN.
- PROJECT 100-YEAR RAINFALL INTENSITY (4.93 IN/HR) DETERMINED FROM PLATE D-4.1 PER RCFC&WCD HYDROLOGY MANUAL.
- 3. PROJECT PERVIOUS COEFFICIENT OF RUNOFF (C=0.80) AND IMPERVIOUS COEFFICIENT OF RUNOFF (C=0.89) DETERMINED FROM PLATE D-5.3 PER RCFC&WCD HYDROLOGY MANUAL.
- 4. PROJECT CALCULATIONS ASSUME A TIME OF CONCENTRATION OF 5 MINUTES.
- 5. PROJECT SITE IS LOCATED WITHIN THE RCFC&WCD MASTER DRAINAGE PLAN FOR THE BEAUMONT AREA.

## DATA SUMMARY

DA ID	AREA (AC)	PERVIOUS AREA (AC)	IMPERVIOUS AREA (AC)	WEIGHTED C VALUE	Q100		
1	1.09	0.22	0.87	0.87	4.68		
2	0.67	0.09	0.58	0.88	2.90		
3	0.19	0.02	0.17	0.88	0.82		
TOTAL							



APPENDIX D

AES FLOOD ROUTING ANALYSIS

FLOOD ROUTING ANALYSIS ACCORDING TO RIVERSIDE COUNTY FLOOD CONTORL AND WATER CONSERVATION DISTRICT (RCFC&WCD) 1978 HYDROLOGY MANUAL (c) Copyright 1989-2011 Advanced Engineering Software (aes) (Synthetic Unit Hydrograph Version 18.0) Release Date: 05/01/2011 License ID 1499 Analysis prepared by: \* 8TH AND HIGHLAND SPRINGS \* EXISTING 100 YEAR, 24 HOUR STORM HYDROGRAPH \* KA 2/10/2020 \*\*\*\* FILE NAME: EX100.DAT TIME/DATE OF STUDY: 17:47 02/11/2020 \*\*\*\*\* FLOW PROCESS FROM NODE 100.00 TO NODE 101.00 IS CODE = 1 \_\_\_\_\_ >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) <<<<< \_\_\_\_\_ (UNIT-HYDROGRAPH ADDED TO STREAM #1) 2.030 ACRES WATERSHED AREA = BASEFLOW = 0.000 CFS/SQUARE-MILE Warning: Watershed Area is less than 10 acres \*USER ENTERED "LAG" TIME = 0.100 HOURS CAUTION: LAG TIME IS LESS THAN 0.50 HOURS. THE 5-MINUTE PERIOD UH MODEL (USED IN THIS COMPUTER PROGRAM) MAY BE TOO LARGE FOR PEAK FLOW ESTIMATES. VALLEY S-GRAPH SELECTED UNIFORM MEAN SOIL-LOSS (INCH/HOUR) = 0.190 LOW SOIL-LOSS RATE PERCENT(DECIMAL) = 0.800 MINIMUM SOIL-LOSS RATE (INCH/HOUR) = 0.090 USER-ENTERED RAINFALL = 6.73 INCHES RCFC&WCD 24-Hour Storm (15-Minute period) SELECTED RCFC&WCD DEPTH-AREA ADJUSTMENT FACTOR(PLATE E-5.8) = 1.0000 UNIT HYDROGRAPH TIME UNIT = 15.000 MINUTES UNIT INTERVAL PERCENTAGE OF LAG-TIME = 250.000 \_\_\_\_\_ UNIT HYDROGRAPH DETERMINATION \_\_\_\_\_ UNIT HYDROGRAPH INTERVAL "S" Gigin MEAN VALUES "S" GRAPH NUMBER ORDINATES (CFS) \_\_\_\_\_ \_\_\_\_\_ 50.817 1 4.159 2 90.903 3.280 3 97.798 0.564 99.444 0.135

4

5

6

7

99.778

99.944

100.000

0.027

0.014

0.005

UNIT PERIOD (NUMBER)	UNIT RAINFALL (INCHES)	UNIT SOIL-LOSS (INCHES)	EFFECTIVE RAINFALL (INCHES)
1	0.0135	0.0108	0.0027
2	0.0202	0.0162	0.0040
- 3	0.0202	0.0162	0.0040
4	0.0269	0.0215	0.0054
5	0.0202	0.0162	0.0040
6	0.0202	0.0162	0.0040
7	0.0202	0.0162	0.0040
8	0.0269	0.0215	0.0054
9	0.0269	0.0215	0.0054
10	0.0269	0.0215	0.0054
11	0.0336	0.0269	0.0067
12	0.0336	0.0269	0.0067
13	0.0336	0.0269	0.0067
14	0.0336	0.0269	0.0067
15	0.0336	0.0269	0.0067
16	0.0404	0.0323	0.0081
17	0.0404	0.0323	0.0081
18	0.04/1	0.0377	0.0094
19	0.04/1	0.0377	0.0094
20	0.0538	0.0431	0.0108
22	0.0404	0.0323	0.0081
22	0.0471	0.0377	0.0108
23	0.0538	0.0431	0.0108
25	0.0550	0 0485	0 0121
25	0.0606	0.0485	0 0121
20	0.0673	0.0538	0.0135
2.8	0.0673	0.0538	0.0135
29	0.0673	0.0538	0.0135
30	0.0740	0.0586	0.0154
31	0.0808	0.0578	0.0230
32	0.0875	0.0569	0.0305
33	0.1009	0.0561	0.0448
34	0.1009	0.0553	0.0456
35	0.1077	0.0545	0.0532
36	0.1144	0.0537	0.0607
37	0.1279	0.0529	0.0750
38	0.1346	0.0521	0.0825
39	0.1413	0.0513	0.0900
40	0.1481	0.0506	0.0975
41	0.1009	0.0498	0.0512
42	0.1009	0.0490	0.0519
43	0.1346	0.0483	0.0863
44	0.1346	0.0475	0.0871
45	0.1279	0.0468	0.0811
46	0.12/9	0.0461	0.0818
47	0.1144	0.0454	0.0091
48	0.1211	0.0440	0.0765
49	0.1002	0.0439	0.1243
51	0.1884	0.0432	0.1317
52	0.1052	0.0420	0.1533
53	0.2288	0 0412	0 1876
54	0 2288	0 0405	0 1883
55	0.1548	0.0399	0.1149
56	0.1548	0.0392	0.1155
57	0.1817	0.0386	0.1431
58	0.1750	0.0380	0.1370
59	0.1750	0.0374	0.1376
60	0.1682	0.0368	0.1315
61	0.1615	0.0362	0.1254
62	0.1548	0.0356	0.1192
63	0.1279	0.0350	0.0929
64	0.1279	0.0344	0.0935
65	0.0269	0.0215	0.0054
66	0.0269	0.0215	0.0054

67	0.0202	0.0162	0.0040				
68	0.0202	0.0162	0.0040				
69	0.0336	0.0269	0.0067				
70	0.0336	0.0269	0.0067				
71	0.0336	0.0269	0.0067				
72	0.0269	0.0215	0.0054				
73	0.0269	0.0215	0.0054				
74	0.0269	0.0215	0.0054				
75	0.0202	0.0162	0.0040				
76	0.0135	0.0108	0.0027				
77	0.0202	0.0162	0.0040				
78	0.0269	0.0215	0.0054				
79	0.0202	0.0162	0.0040				
80	0.0135	0.0108	0.0027				
81	0.0202	0.0162	0.0040				
82	0.0202	0.0162	0.0040				
83	0.0202	0.0162	0.0040				
84	0.0135	0.0108	0.0027				
85	0.0202	0.0162	0.0040				
86	0.0135	0.0108	0.0027				
87	0.0202	0.0162	0.0040				
88	0.0135	0.0108	0.0027				
89	0.0202	0.0162	0.0040				
90	0.0135	0.0108	0.0027				
91	0.0135	0.0108	0.0027				
92	0.0135	0.0108	0.0027				
93	0.0135	0.0108	0.0027				
94	0.0135	0.0108	0.0027				
95	0.0135	0.0108	0.0027				
96	0.0135	0.0108	0.0027				
<u><u></u> <u></u></u>	ODM DATNEATT (TNOUES	- 6 73					
TOTAL SI TOTAL SO	TL = LOSS(TNCHES) =	3 03					
TOTAL SU	FECTIVE RAINFALL (INC	$^{2}$ HES) = 3 70					
IOIAD EF	FECTIVE RAINFALL(IN	511257 - 5.70					
		 0 5102					
IOIAL SOLL-LOSS VOLUME (ACKE-FEET) = 0.3123 TOTAL STORM RUNDEE VOLUME (ACRE-FEET) = 0.6259							
		, 0.0205					

24-HOUR STORM RUNOFF HYDROGRAPH

\_\_\_\_\_

\_\_\_\_\_

(N	HYDROGRA ote: Time inc	APH IN FI dicated i	VE-M s at	INUTE UNIT IN END of Each	NTERVALS(C Unit Inte	FS) rvals)	
TIME (HRS)	VOLUME (AF)	Q(CFS)	0.	2.5	5.0	7.5	10.0
0.083	0.0001	0.01	Q				
0.167	0.0002	0.01	Q				•
0.250	0.0002	0.01	Q	•	•	•	•
0.333	0.0004	0.03	Q	•	•	•	•
0.500	0.0008	0.03	õ	•	•	•	•
0.583	0.0010	0.03	õ				
0.667	0.0012	0.03	Q				
0.750	0.0014	0.03	Q		•		
0.833	0.0017	0.04	Q	•	•	•	
0.917	0.0019	0.04	Q	•	•	•	•
1 083	0.0022	0.04	Q O	•	•	•	·
1.167	0.0027	0.04	õ				-
1.250	0.0030	0.04	õ				
1.333	0.0032	0.03	Q		•		
1.417	0.0034	0.03	Q	•	•	•	•
1.500	0.0037	0.03	Q	•	•	•	•
1.583	0.0039	0.03	Q	•	•	•	•
1.750	0.0044	0.03	õ	•	•	•	•
1.833	0.0046	0.04	õ	•		•	
1.917	0.0049	0.04	Q				-
2.000	0.0052	0.04	Q				-
2.083	0.0055	0.04	Q	•	•	•	
2.167	0.0058	0.04	Q	•	•	•	•
2.230	0.0060	0.04	Q O	•	•	•	•
2.417	0.0067	0.04	õ				-
2.500	0.0070	0.04	õ				
2.583	0.0073	0.05	Q				
2.667	0.0076	0.05	Q	•		•	•
2.750	0.0080	0.05	Q	•	•	•	•
2.833	0.0084	0.05	Q	•	•	•	•
3.000	0.0091	0.05	õ	•	•	•	•
3.083	0.0095	0.05	õ			•	
3.167	0.0099	0.05	Q				-
3.250	0.0102	0.05	Q				•
3.333	0.0106	0.06	Q	•	•	•	•
3.41/	0.0110	0.06	Q	•	•	•	•
3.500	0.0114	0.06	Q O	•	•	•	•
3.667	0.0121	0.00	õ				
3.750	0.0125	0.06	õ	•	•	•	
3.833	0.0129	0.06	Q				
3.917	0.0133	0.06	Q	•	•	•	•
4.000	0.0138	0.06	Q	•	•	•	•
4.083 4 167	0.0142	0.07	Ŷ	•	•	•	•
4.250	0.0151	0.07	õ	•	•	•	•
4.333	0.0156	0.07	2			•	
4.417	0.0161	0.07	QV				
4.500	0.0166	0.07	QV				
4.583	0.0171	0.08	QV	•	•		•
4.667	0.0176	0.08	VQ OV	•	•	•	•
4./JU 4 833	0.0181	0.08	QV 017	•	•	•	•
4.917	0.0193	0.08	٧٧	•	•	•	•
5.000	0.0199	0.08	Ω̈́V	•	•	•	•

E 000	0 0 2 0 4	0 0 0	770				
5.005	0.0204	0.00	Qv	•	•	•	•
5.167	0.0209	0.08	QV	•	•	•	
5 250	0 0214	0 08	V/O				
5.250	0.0214	0.00	Q V	•	•	•	•
5.333	0.0219	0.07	QV	•	•	•	•
5.417	0.0224	0.07	OV				
5 500	0 0220	0 07	~				
5.500	0.0229	0.07	Qv	•	•	•	•
5.583	0.0235	0.08	QV				
5 667	0 0241	0 08	VIO				
5.007	0.0241	0.00	Q V	•	•	•	•
5.750	0.0246	0.08	QV	•	•	•	•
5.833	0.0252	0.09	OV				
5.000 F 017	0.0050	0.00	2.	•	•	•	•
5.91/	0.0258	0.09	QV	•	•	•	•
6.000	0.0264	0.09	OV				
6 000	0 0 0 7 1	0 00	~				
0.083	0.02/1	0.09	QV	•	•	•	•
6.167	0.0277	0.09	QV				
6 250	0 0284	0 09	VIO				
0.230	0.0204	0.05	Qv	•	•	•	•
6.333	0.0290	0.10	QV	•	•	•	•
6.417	0.0297	0.10	OV				
C E O O	0 0 2 0 4	0 1 0	017				
6.500	0.0304	0.10	QV	•	•	•	•
6.583	0.0311	0.10	OV				
6 667	0 0318	0 10	O V				
0.007	0.0510	0.10	Q V	•	•	•	•
6.750	0.0325	0.10	QV	•	•	•	•
6.833	0.0333	0.11	0 V				
C 017	0.0000	0.11	2 ·	•	•	•	•
6.91/	0.0340	0.11	QV	•	•	•	•
7.000	0.0348	0.11	ΟV				
7 002	0 0256	0 1 1	0 17				
1.085	0.0350	0.11	Q V	•	•	•	•
7.167	0.0363	0.11	QV	•		•	
7 250	0 0371	0 11	0 V				
7.230	0.0371	0.11	Q V	•	•	•	•
7.333	0.0379	0.12	QV	•	•	•	•
7.417	0.0387	0.12	0 V				
7.500	0.0007	0.10	2 ·	•	•	•	•
7.500	0.0395	0.12	QV	•	•	•	•
7.583	0.0406	0.16	ΟV				
7 667	0 0/17	0 16	Õ W				
1.001	0.0417	0.10	Q V	•	•	•	•
7.750	0.0427	0.16	QV			•	•
7 833	0 0442	0 21	ΟV				
7.000	0.0112	0.21	2 1	•	•	•	•
1.91/	0.045/	0.21	QV	•	•	•	•
8.000	0.0471	0.21	0 V				
0 000	0 0400	0 20	2 · ·	•	•	•	•
0.003	0.0492	0.30	·Q V	•	•	•	•
8.167	0.0513	0.30	.Q V	•	•	•	
8 250	0 0534	0 30	O V				
0.230	0.0334	0.50	• Q V	•	•	•	•
8.333	0.0559	0.36	.Q V	•	•	•	•
8.417	0.0583	0.36	. O V				
0 500	0.0000	0.20	0 17	•	•	•	•
8.500	0.0608	0.36	.ų v	•	•	•	•
8.583	0.0635	0.40	.Q V			•	•
8 667	0 0663	0 40	O V				
0.007	0.0005	0.40	• Q V	•	•	•	•
8.750	0.0691	0.40	.Q V	•	•	•	•
8.833	0.0722	0.46	.0 V				
0 017	0 0754	0 16	0 17				
0.91/	0.0734	0.40	·Q v	•	•	•	•
9.000	0.0786	0.46	.Q V	•	•	•	
9 083	0 0824	0 5 5	V O				
0.167		(1))					
9.10/	0.0001	0.55	• • •	•	•	•	·
	0.0861	0.55	. Q V	•		· ·	•
9.250	0.0861	0.55	. Q V . Q V . Q V	• •			
9.250	0.0861 0.0899	0.55	. Q V . Q V . Q V			• • •	
9.250	0.0861 0.0899 0.0943	0.55 0.55 0.63	. Q V . Q V . Q V				
9.250 9.333 9.417	0.0861 0.0899 0.0943 0.0986	0.55 0.55 0.63 0.63	. Q V . Q V . Q V . Q V . Q V				
9.250 9.333 9.417 9.500	0.0861 0.0899 0.0943 0.0986 0.1030	0.55 0.55 0.63 0.63 0.63	. Q V . Q V . Q V . Q V . Q V				
9.250 9.333 9.417 9.500	0.0861 0.0899 0.0943 0.0986 0.1030	0.55 0.55 0.63 0.63 0.63	. Q V . Q V . Q V . Q V . Q V . Q V			• • • •	
9.250 9.333 9.417 9.500 9.583	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078	0.55 0.55 0.63 0.63 0.63 0.70	. Q V . Q V . Q V . Q V . Q V . Q V . Q V			· · · ·	
9.250 9.333 9.417 9.500 9.583 9.667	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126	0.33 0.55 0.55 0.63 0.63 0.63 0.70 0.70	. Q V . Q V . Q V . Q V . Q V . Q V . Q V			• • • • •	
9.250 9.333 9.417 9.500 9.583 9.667 9.750	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174	0.33 0.55 0.55 0.63 0.63 0.63 0.70 0.70	. Q V . Q V				
9.250 9.333 9.417 9.500 9.583 9.667 9.750	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174	0.55 0.55 0.63 0.63 0.63 0.70 0.70 0.70	. Q V . Q V				
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226	0.55 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70	. Q V . Q V				
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279	0.55 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70 0.76 0.76	. Q V . Q V				
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279	0.55 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70 0.76 0.76	. Q V . Q V		· · · · · ·		
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331	0.35 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70 0.76 0.76	. Q V . Q V	· · · · · · ·	· · · · ·	· · · · ·	· · · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372	0.35 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70 0.76 0.76 0.76 0.60	. Q V . Q V	· · · · · · · ·	· · · · · ·	· · · · ·	· · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1412	0.35 0.55 0.63 0.63 0.70 0.70 0.70 0.76 0.76 0.76 0.60	. Q V . Q V	· · · · · ·	· · · · · ·	· · · · · ·	· · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413	0.35 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70 0.70 0.76 0.76 0.76	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·	· · · · · · ·	· · · · · ·	· · · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454	0.35 0.55 0.63 0.63 0.70 0.70 0.70 0.70 0.76 0.76 0.76 0.60 0.60	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·	· · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454 0.1486	0.55 0.55 0.63 0.63 0.70 0.70 0.70 0.76 0.76 0.76 0.60 0.60	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V		· · · · · ·	· · · · · ·	· · · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454 0.1455	0.35 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70 0.70 0.76 0.76 0.76	. Q V . Q V V V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·	· · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454 0.1486 0.1517	0.55 0.55 0.63 0.63 0.70 0.70 0.70 0.70 0.76 0.76 0.60 0.60	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454 0.1454 0.1517 0.1548	0.35 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70 0.70 0.70 0.76 0.76	. Q V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454 0.1486 0.1517 0.1548 0.1522	0.55 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70 0.70 0.76 0.76 0.60 0.60	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454 0.1454 0.1486 0.1517 0.1548 0.1588	0.55 0.55 0.63 0.63 0.70 0.70 0.70 0.70 0.76 0.76 0.76 0.60 0.60	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583 10.667	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454 0.1486 0.1517 0.1548 0.1588 0.1588	0.35 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70 0.70 0.70 0.76 0.76	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583 10.667 10.750	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454 0.1454 0.1486 0.1517 0.1548 0.1588 0.1667	0.35 0.55 0.63 0.63 0.70 0.70 0.70 0.70 0.76 0.76 0.76 0.60 0.60 0.60 0.45 0.45 0.45 0.58 0.58 0.58	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583 10.667 10.750	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454 0.1454 0.1486 0.1517 0.1548 0.1588 0.1628 0.1627	0.35 0.55 0.63 0.63 0.63 0.70 0.70 0.70 0.70 0.70 0.76 0.76 0.76	. Q V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · ·
9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583 10.667 10.750 10.833	0.0861 0.0899 0.0943 0.0986 0.1030 0.1078 0.1126 0.1174 0.1226 0.1279 0.1331 0.1372 0.1413 0.1454 0.1454 0.1548 0.1548 0.1588 0.1628 0.1667 0.1714	0.35 0.55 0.63 0.63 0.70 0.70 0.70 0.70 0.70 0.76 0.76 0.76	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·

11 000	0 1000	0 60	$\cap$	7.7		
TT.000	0.1808	0.69 .	Ŷ	V	•	• •
11.083	0.1856	0.68 .	0	.V		
11 167	0 1003	0 69	$\tilde{\circ}$			
11.10/	0.1903	0.00 .	Q	• V	•	• •
11.250	0.1950	0.68 .	Q	. V	•	
11.333	0.1996	0.67 .	0	. V		
11 117	0 2042	0 07	~		•	
11.41/	0.2042	0.6/ .	Q	• V	•	
11.500	0.2088	0.67 .	Q	. V		
11 583	0 2130	0 62	0	77		
11.000	0.2100	0.02 .	×	• •	•	• •
11.66/	0.21/3	0.62 .	Q	. V	•	
11.750	0.2215	0.62 .	0	. V		
11 033	0 2257	0 61	õ	7.7		
11.033	0.2257	0.01 .	Q	• v	•	• •
11.917	0.2299	0.61 .	Q	. V		
12.000	0.2340	0.61 .	0	. V		
10 000	0 0 0 0 0 7	0.02	~		•	
12.083	0.2397	0.82 .	Q	• V	•	• •
12.167	0.2454	0.82 .	Q	. V		
12 250	0 2510	0 82	$\cap$	77		
10,000	0.2010	1 01	×	• •	•	• •
12.333	0.2580	1.01 .	Q	• V	•	
12.417	0.2650	1.01 .	0	. V		
10 500	0 0710	1 01	$\tilde{\circ}$			
12.500	0.2/19	1.01 .	Q	• V	•	• •
12.583	0.2797	1.12 .	Q	. V		
12.667	0.2874	1.12	0	. V		
10 750	0 2051	1 1 0	×		•	•
12./30	U.2901	⊥.⊥∠ .	Q	• V	•	• •
12.833	0.3035	1.21 .	Q	. V	•	
12 917	0 3118	1 21	0	77		
12.022	0.0110	1 01 ·	¥	• v	•	• •
⊥3.000	0.3201	1.21 .	Q	•	V	
13.083	0.3297	1.39 .	0		.V	
10 107	0 2202	1 20	ž.	•		
13.10/	0.3392	1.39 .	Q	•	• V	• •
13.250	0.3488	1.39 .	Q	•	. V	
13.333	0.3592	1.51 .	0		. V	
10.000	0.0002	1 - 1	×	•		
13.41/	0.3696	1.51 .	Q	•	. V	
13.500	0.3800	1.51 .	0		. V	
13 583	0 3885	1 23			77	
13.303	0.3003	1.25 .	Q	•	• V	• •
13.667	0.3969	1.23 .	Q	•	. V	
13.750	0.4054	1.23 .	0		. V	
13 033	0 4122	1 00	$\sim$		77	
13.033	0.4122	1.00 .	Q	•	• v	• •
13.917	0.4191	1.00 .	Q	•	. V	
14 000	0 4260	1 00	0		V	
14 000	0.1200	1 07	×	•	• •	
14.083	0.4333	1.0/ .	Q	•	• V	• •
14.167	0.4407	1.07 .	Q		. V	
14 250	0 4481	1 07	0		77	
14.200	0.4401	1.07 .	×	•	• •	• •
14.333	0.4559	1.13 .	Q	•	• V	
14.417	0.4636	1.13 .	0		. V	
14 500	0 4714	1 1 2	<sup>2</sup>			7
14.300	0.4/14	1.15 .	Q	•	•	•
14.583	0.4792	1.12 .	Q	•	•	Ι.
14.667	0.4869	1.12 .	0			V .
1 4 7 5 0	0 4047	1 1 0	ž.	•	•	17
14.730	0.494/	1.12 .	Q	•	•	· .
14.833	0.5022	1.10 .	Q	•	•	. v .
14.917	0.5098	1.10 .	0			. V .
15 000	0 5174	1 10	~	-	-	
TJ.000	U.J1/4	T.TO .	Ŷ	•	•	• v •
15.083	0.5247	1.05 .	Q		•	. V .
15.167	0.5319	1.05	0			. V .
15 250	0 5302	1 05	$\tilde{\circ}$			
±J.2JU	0.0092	1.00 .	¥	•	•	• • •
15.333	0.5461	1.01 .	Q		•	. V .
15,417	0.5530	1.01	0			. V .
15 500	0 5600	1 01	~	-	-	
TJ.JUU	0.0000	T.OT .	Ŷ	•	•	• • •
15.583	0.5660	0.87 .	Q	•		. v .
15.667	0.5720	0.87	0			. V .
15 750	0 5700	0 07	×	-	-	
13.130	0.3/80	0.8/ .	Ŷ	•	•	· V ·
15.833	0.5834	0.78 .	Q		•	. v.
15 917	0 5888	0 78	0			77
10.011	0.0000	0.70 .	¥	•	•	• • •
16.000	0.5942	0.78 .	Q	•	•	. V.
16.083	0.5970	0.40	С			. V .
16 167		0.40		-	-	
ΤΟ.ΤΟ/		0.40 .(	Ž	•	•	· v ·
	0.5997					
16.250	0.5997 0.6025	0.40 .0	Q	•	•	. V.
16.250 16.333	0.5997 0.6025 0.6033	0.40 .0	2	•	•	. V . V .
16.250 16.333	0.5997 0.6025 0.6033	0.40 .0 0.11 Q	2	•	•	. V . . V .
16.250 16.333 16.417	0.5997 0.6025 0.6033 0.6040	0.40 .0 0.11 Q 0.11 Q	2		• •	. V. . V. . V.
16.250 16.333 16.417 16.500	0.5997 0.6025 0.6033 0.6040 0.6048	0.40 .0 0.11 Q 0.11 Q 0.11 Q	2		• • •	. V . . V . . V . . V .
16.250 16.333 16.417 16.500 16.583	0.5997 0.6025 0.6033 0.6040 0.6048 0.6052	0.40 .0 0.11 Q 0.11 Q 0.11 Q 0.11 Q	2	• • •	•	· V · · · · · · · · · · · · · · · · · ·
16.250 16.333 16.417 16.500 16.583	0.5997 0.6025 0.6033 0.6040 0.6048 0.6052	0.40 .0 0.11 Q 0.11 Q 0.11 Q 0.05 Q	2		• • •	· V · · · · · · · · · · · · · · · · · ·
16.250 16.333 16.417 16.500 16.583 16.667	0.5997 0.6025 0.6033 0.6040 0.6048 0.6052 0.6056	0.40 .0 0.11 Q 0.11 Q 0.11 Q 0.05 Q 0.05 Q	2		• • • •	V . V . V . V . V . V . V . V .
16.250 16.333 16.417 16.500 16.583 16.667 16.750	0.5997 0.6025 0.6033 0.6040 0.6048 0.6052 0.6055 0.6056 0.6059	0.40 .0 0.11 Q 0.11 Q 0.11 Q 0.05 Q 0.05 Q 0.05 Q	2			V . V . V . V . V . V . V . V .

16 917	0 6065	0 04	$\cap$				77
10.917	0.0005	0.04	Ŷ	•	•	•	· ·
17.000	0.6067	0.04	Q	•	•	•	v .
17 083	0 6070	0 05	$\cap$				77
17.005	0.0070	0.05	×	•	•	•	•••
17.167	0.6074	0.05	Q	•			v .
17 250	0 6077	0 05	$\cap$				17
17.230	0.0077	0.05	Ŷ	•	•	•	· ·
17.333	0.6080	0.05	Q	•			v .
17 417	0 6084	0 05	$\cap$				77
1,.11,	0.0004	0.05	¥	•	•	•	•••
17.500	0.6088	0.05	Q	•			v .
17 583	0 6092	0 05	$\cap$				77
17.303	0.0052	0.05	¥	•	•	•	•••
17.667	0.6095	0.05	Q	•	•	•	v .
17 750	0 6099	0 05	$\cap$				17
17.750	0.0000	0.05	Ŷ	•	•	•	· ·
17.833	0.6102	0.05	Q	•	•	•	v.
17 917	0 6106	0 05	$\cap$				17
11.511	0.0100	0.05	Ŷ	•	•	•	v •
18.000	0.6109	0.05	Q	•	•	•	v.
18 083	0 6112	0 05	$\cap$				17
10.005	0.0112	0.05	Ŷ	•	•	•	v •
18.167	0.6115	0.05	Q	•			v.
18 250	0 6119	0 05	$\cap$				77
10.230	0.0115	0.05	Ŷ	•	•	•	v •
18.333	0.6122	0.04	Q	•			v.
18 /17	0 6125	0 04	$\cap$				17
10.41/	0.0125	0.04	Ŷ	•	•	•	v •
18.500	0.6128	0.04	Q	•			v.
18 583	0 6130	0 04	0				V
10.000	0.0100	0.04	¥	•	•	•	v •
18.667	0.6133	0.04	Q	•	•	•	ν.
18 750	0 6136	0 04	0				V
10.700	0.0100	0.01	×	•	•	•	••
18.833	0.6138	0.03	Q	•	•	•	v.
18 917	0 6140	0 03	$\cap$				77
10.917	0.0140	0.05	Ŷ	•	•	•	v •
19.000	0.6142	0.03	Q	•	•	•	v.
19 083	0 6144	0 03	$\cap$				17
19.005	0.0144	0.05	¥	•	•	•	v •
19.167	0.6146	0.03	Q	•			v.
19 250	0 6148	0 03	$\cap$				77
19.200	0.0140	0.05	×	•	•	•	v •
19.333	0.6150	0.04	Q	•			v.
19 417	0 6153	0 04	$\cap$				77
10.117	0.0100	0.01	×	•	•	•	•••
19.500	0.6155	0.04	Q	•	•	•	ν.
19 583	0 6158	0 04	0				V
10.000	0.0100	0.01	×	•	•	•	
19.66/	0.6161	0.04	Q	•	•	•	ν.
19.750	0.6163	0.04	0				V.
10 000	0 0105	0 0 0	~	•	•	•	
19.833	0.6165	0.03	Q	•	•	•	ν.
19,917	0.6167	0.03	0				V.
20.027	0.0100	0.00	×	•	•	•	
20.000	0.6169	0.03	Q	•	•	•	ν.
20.083	0.6171	0.03	0				V.
00 1 67	0 (170	0 0 0	2	•	•	•	
20.167	0.61/3	0.03	Q	•	•	•	v .
20.250	0.6175	0.03	0				v.
20 222	0 (177	0 0 2	~				
20.333	0.01//	0.03	Q	•	•	•	v .
20.417	0.6179	0.03	0				v.
20 500	0 (100	0 0 2	$\tilde{\circ}$				
20.300	0.0102	0.03	Q	•	•	•	v .
20.583	0.6184	0.03	0				v.
20 667	0 6196	0 03	0				57
20.007	0.0100	0.05	Q	•	•	•	v .
20.750	0.6188	0.03	Q	•	•	•	v.
20 833	0 6190	0 03	$\cap$				17
20.033	0.0100	0.05	Ŷ	•	•	•	v •
20.917	0.6192	0.03	Q	•			v.
21 000	0 6194	0 03	0				V
21.000	0.0104	0.05	×	•	•	•	· ·
∠⊥.083	U.6196	0.03	Q	•	•	•	ν.
21.167	0.6198	0.03	0				v.
01 050	0 000	0 0 0	$\tilde{\circ}$				
21.23U	0.6200	0.03	Ŷ	•	•	•	ν.
21.333	0.6202	0.03	Q				v.
01 /17	0 6204	0 0 2	$\tilde{\circ}$				17
21.41/	0.0204	0.03	Q	•	•	•	v .
21.500	0.6205	0.03	Q				v.
21 503	0 6207	0 03	õ				5.7
21.303	0.0207	0.05	Q	•	•	•	v .
21.667	0.6209	0.03	Q	•	•	•	v.
21 750	0 6211	0 03	0				77
21.1JU	0.0211	0.03	×	•	•	•	v .
21.833	0.6213	0.03	Q			•	v.
21 917	0 6215	0 03	0				V
	0.0210	0.05	×	•	•	•	v •
22.000	0.6217	0.03	Q	•	•	•	v.
22.083	0.6219	0.03	0				V.
22.000	0 0001	0.00	×	•	•	•	* *
22.16/	0.6221	0.03	Q	•	•	•	ν.
22,250	0.6223	0.03	0				V.
	0 0005	0 00	~	-		-	
∠∠.JJJ	0.0220	0.03	Ŷ	•	•	•	۷.
22.417	0.6226	0.03	0				v.
22 500	0 6229	0 0 2	0				77
22.JUU	0.0220	0.03	X	•	•	•	v .
22.583	0.6230	0.02	Q		•	•	v.
22 667	0 6231	0 02	0				V
22.007	0.0201	0.02	×	•	•	•	••
22./50	0.6233	0.02	Q	•	•	•	ν.

22.833	0.6234	0.02	Q			V.
22.917	0.6236	0.02	Q			V.
23.000	0.6237	0.02	Q			V.
23.083	0.6239	0.02	Q			V.
23.166	0.6241	0.02	Q			V.
23.250	0.6242	0.02	Q			V.
23.333	0.6244	0.02	Q			V.
23.416	0.6245	0.02	Q			V.
23.500	0.6247	0.02	Q			V.
23.583	0.6248	0.02	Q	•		V.
23.666	0.6250	0.02	Q			V.
23.750	0.6251	0.02	Q			V.
23.833	0.6253	0.02	Q	•		V.
23.916	0.6254	0.02	Q	•		V.
24.000	0.6256	0.02	Q	•		V.
24.083	0.6256	0.01	Q	•		V.
24.166	0.6257	0.01	Q	•		V.
24.250	0.6258	0.01	Q		•	V.
24.333	0.6258	0.00	Q	•		V.
24.416	0.6258	0.00	Q	•	•	V.
24.500	0.6258	0.00	Q	•	•	v.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE: (Note: 100% of Peak Flow Rate estimate assumed to have an instantaneous time duration)

\_\_\_\_\_

Percentile of Estimated Peak Flow Rate	Duration (minutes) 	
0%	1470.0	
10%	525.0	
20%	495.0	
30%	435.0	
40%	360.0	
50%	255.0	
60%	195.0	
70%	135.0	
80%	60.0	
90%	30.0	

END OF FLOODSCx ROUTING ANALYSIS

FLOOD ROUTING ANALYSIS ACCORDING TO RIVERSIDE COUNTY FLOOD CONTORL AND WATER CONSERVATION DISTRICT (RCFC&WCD) 1978 HYDROLOGY MANUAL (c) Copyright 1989-2011 Advanced Engineering Software (aes) (Synthetic Unit Hydrograph Version 18.0) Release Date: 05/01/2011 License ID 1499 Analysis prepared by: \* 8TH AND HIGHLAND SPRINGS \* PROPOSED 100 YEAR HYDROGRAPH \* KA 2/10/2020 \*\*\*\* FILE NAME: PR100.DAT TIME/DATE OF STUDY: 17:53 02/11/2020 \*\*\*\*\* FLOW PROCESS FROM NODE 100.00 TO NODE 101.00 IS CODE = 1 \_\_\_\_\_ >>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) <<<<< \_\_\_\_\_ (UNIT-HYDROGRAPH ADDED TO STREAM #1) 1.950 ACRES WATERSHED AREA = BASEFLOW = 0.000 CFS/SQUARE-MILE Warning: Watershed Area is less than 10 acres \*USER ENTERED "LAG" TIME = 0.100 HOURS CAUTION: LAG TIME IS LESS THAN 0.50 HOURS. THE 5-MINUTE PERIOD UH MODEL (USED IN THIS COMPUTER PROGRAM) MAY BE TOO LARGE FOR PEAK FLOW ESTIMATES. VALLEY S-GRAPH SELECTED UNIFORM MEAN SOIL-LOSS (INCH/HOUR) = 0.110 LOW SOIL-LOSS RATE PERCENT (DECIMAL) = 0.800 MINIMUM SOIL-LOSS RATE(INCH/HOUR) = 0.060 USER-ENTERED RAINFALL = 6.73 INCHES RCFC&WCD 24-Hour Storm (15-Minute period) SELECTED RCFC&WCD DEPTH-AREA ADJUSTMENT FACTOR(PLATE E-5.8) = 1.0000 UNIT HYDROGRAPH TIME UNIT = 15.000 MINUTES UNIT INTERVAL PERCENTAGE OF LAG-TIME = 250.000 \_\_\_\_\_ UNIT HYDROGRAPH DETERMINATION \_\_\_\_\_ UNIT HYDROGRAPH INTERVAL "S" Gigin MEAN VALUES "S" GRAPH NUMBER ORDINATES (CFS) \_\_\_\_\_ ------50.817 3.995 1 2 90.903 3.151 3 97.798 0.542 99.444 4 0.129 99.778 5 0.026

6

7

99.944

100.000

0.013

0.004

INTE	TINTED		
UNIT	UNIT	UNIT	EFFECITVE
PERIOD	RAINFALL	SOIL-LOSS	RAINFALL
(NUMBER)	(INCHES)	(INCHES)	(INCHES)
1	0.0135	0.0108	0.0027
2	0.0202	0.0162	0.0040
3	0.0202	0.0162	0.0040
4	0.0269	0.0215	0.0054
5	0.0202	0.0162	0.0040
6	0.0202	0.0162	0.0040
7	0.0202	0.0162	0.0040
8	0.0269	0.0215	0.0054
9	0.0269	0.0215	0.0054
10	0.0269	0.0215	0.0054
11	0.0336	0.0269	0.0067
12	0.0336	0.0269	0.0067
13	0.0336	0.0269	0.0067
14	0.0336	0.0269	0.0067
15	0.0336	0.0269	0.0067
16	0.0404	0.0323	0.0081
17	0.0404	0.0323	0.0081
18	0.0471	0.0377	0.0094
19	0.0471	0.0377	0.0094
20	0.0538	0.0374	0.0164
21	0.0404	0.0323	0.0081
22	0.0471	0.0365	0.0106
23	0.0538	0.0361	0.0178
24	0.0538	0.0356	0.0182
25	0.0606	0.0352	0.0254
26	0.0606	0.0348	0.0258
27	0.0673	0.0343	0.0330
28	0.0673	0.0339	0.0334
29	0.0673	0.0335	0.0338
30	0.0740	0.0331	0.0410
31	0.0808	0.0326	0.0481
32	0.0875	0.0322	0.0553
33	0.1009	0.0318	0.0691
34	0.1009	0.0314	0.0695
35	0.1077	0.0310	0.0767
36	0.1144	0.0306	0.0838
37	0.1279	0.0302	0.0977
38	0.1346	0.0298	0.1048
39	0.1413	0.0294	0.1119
40	0.1481	0.0290	0.1190
41	0.1009	0.0286	0.0723
42	0.1009	0.0283	0.0727
43	0.1346	0.0279	0.1067
44	0.1346	0.0275	0.1071
45	0.1279	0.0272	0.1007
46	0.1279	0.0268	0.1011
47	0.1144	0.0264	0.0880
48	0.1211	0.0261	0.0951
49	0.1682	0.0257	0.1425
50	0.1750	0.0254	0.1496
51	0.1884	0.0250	0.1634
52	0.1952	0.0247	0.1705
53	0.2288	0.0244	0.2045
54	0.2288	0.0240	0.2048
55	0.1548	0.0237	0.1311
56	0.1548	0.0234	0.1314
57	0.1817	0.0231	0.1587
58	0.1750	0.0227	0.1522
59	0.1750	0.0224	0.1525
60	0.1682	0.0221	0.1461
61	0.1615	0.0218	0.1397
62	0.1548	0.0215	0.1333
63	0.1279	0.0212	0.1066
64	0.1279	0.0210	0.1069
65	0.0269	0.0207	0.0062
66	0.0269	0.0204	0.0065

67 68 69	0.0202	0.0162	0.0040
68 69	0.0202		0 00 10
69		0.0162	0.0040
	0.0336	0.0196	0.0141
70	0.0336	0.0193	0.0143
71	0.0336	0.0191	0.0146
72	0.0269	0.0188	0.0081
73	0.0269	0.0186	0.0083
74	0.0269	0.0184	0.0086
75	0.0202	0.0162	0.0040
76	0.0135	0.0108	0.0027
77	0.0202	0.0162	0.0040
78	0.0269	0.0175	0.0094
79	0.0202	0.0162	0.0040
80	0.0135	0.0108	0.0027
81	0.0202	0.0162	0.0040
82	0.0202	0.0162	0.0040
83	0.0202	0.0162	0.0040
84	0.0135	0.0108	0.0027
85	0.0202	0.0162	0.0040
86	0.0135	0.0108	0.0027
87	0.0202	0.0159	0.0043
88	0.0135	0.0108	0.0027
89	0.0202	0.0156	0.0046
90	0.0135	0.0108	0.0027
91	0.0135	0.0108	0.0027
92	0.0135	0.0108	0.0027
93	0.0135	0.0108	0.0027
94	0.0135	0.0108	0.0027
95	0.0135	0.0108	0.0027
96	0.0135	0.0108	0.0027
96 TOTAL STOF TOTAL SOII	0.0135 RM RAINFALL(INCHES) -LOSS(INCHES) = 2	0.0108 = 6.73 2.21	0.0027
TOTAL EFFF	CTIVE RAINFALL(ING	CHES) = 4.52	

24-HOUR STORM RUNOFF HYDROGRAPH

\_\_\_\_\_

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(N	HYDROGRA ote: Time inc	APH IN FI licated i	VE-M s at	INUTE UNIT IN END of Each	NTERVALS (C Unit Inte	FS) rvals)	
TIME (HRS)	VOLUME (AF)	Q(CFS)	0.	2.5	5.0	7.5	10.0
0.083	0.0001	0.01	Q				
0.167	0.0001	0.01	Q		•		•
0.250	0.0002	0.01	Q	•	•	•	•
0.333	0.0004	0.02	Q	•	•	•	•
0.500	0.0007	0.02	õ	•	•	•	•
0.583	0.0009	0.03	õ				
0.667	0.0011	0.03	Q				
0.750	0.0014	0.03	Q				
0.833	0.0016	0.04	Q	•		•	
0.917	0.0019	0.04	Q	•	•	•	•
1 083	0.0021	0.04	õ	•	·	•	·
1.167	0.0026	0.04	õ				-
1.250	0.0029	0.04	õ				
1.333	0.0031	0.03	Q	•	•	•	•
1.417	0.0033	0.03	Q	•		•	
1.500	0.0035	0.03	Q	•	•	•	•
1 667	0.0037	0.03	Q O	•	•	•	•
1.750	0.0042	0.03	õ				-
1.833	0.0044	0.04	õ	•	•	•	
1.917	0.0047	0.04	Q				
2.000	0.0050	0.04	Q	•	•	•	•
2.083	0.0052	0.04	Q	•	•	•	•
2.167	0.0055	0.04	Q	•	•	•	•
2.230	0.0053	0.04	õ	•	•	•	•
2.417	0.0064	0.04	õ				
2.500	0.0067	0.04	Q				
2.583	0.0070	0.05	Q		•		•
2.667	0.0073	0.05	Q	•	•	•	•
2./50	0.0077	0.05	Q	•	•	•	•
2.033	0.0084	0.05	õ	•	•	•	•
3.000	0.0087	0.05	õ				
3.083	0.0091	0.05	Q				
3.167	0.0095	0.05	Q		•		•
3.250	0.0098	0.05	Q	•	•	•	•
3.333	0.0102	0.05	Q	•	•	•	•
3.500	0.0109	0.05	õ	•	•	•	•
3.583	0.0113	0.05	õ				
3.667	0.0116	0.05	Q		-		-
3.750	0.0120	0.05	Q		•		-
3.833	0.0124	0.06	Q	•	•	•	•
3.917	0.0128	0.06	Q	•	•	•	•
4.083	0.0136	0.06	õ	•	•	•	•
4.167	0.0141	0.06	õ		•	•	•
4.250	0.0145	0.06	Q				
4.333	0.0150	0.07	Q		•		•
4.417	0.0155	0.07	Q	•	•	•	•
4.5UU 1 500	0.0159	0.07	Q O	•	•	•	•
4.667	0.0169	0.07	v O	•	•	•	•
4.750	0.0174	0.07	ž	•		•	
4.833	0.0181	0.10	õ	•	•	•	•
4.917	0.0188	0.10	QV				
5.000	0.0195	0.10	QV				

5 083	0 0202	0 09						
5.005	0.0202	0.09	Qv	•	•	·	•	
5.167	0.0208	0.09	OV					
5 250	0 0214	0 00	770					
5.250	0.0214	0.00	QV	•	•	•	•	
5.333	0.0219	0.08	QV		•			
5 / 1 7	0 0225	0 0 0	V70					
J. 417	0.0225	0.00	QV	•	•	•	•	
5.500	0.0230	0.08	QV	•	•	•		
5 5 9 3	0 0238	0 1 1	0W					
5.505	0.0200	0.11	QV	•	•	•	•	
5.667	0.0246	0.11	QV	•	•	•		
5 750	0 0253	0 1 1	ΩV					
5.750	0.0255	0.11	Q V	•	•	•	•	
5.833	0.0263	0.14	QV		•		•	
5 917	0 0272	0 1 /	0W					
5.517	0.0272	0.14	Q V	•	•	•	•	
6.000	0.0281	0.14	QV		•		•	
6 083	0 0293	0 17	OV					
0.000	0.0200	0.17	2.	•	•	•	•	
6.167	0.0305	0.17	QV	•	•	•	•	
6 250	0 0316	0 17	OV					
6.200	0.0010	0.17	2.	•	•	•	•	
6.333	0.0330	0.20	QV	•	•	•	•	
6 417	0 0343	0 20	OV					
6.500	0.0010	0.20	2.	•	•	•	•	
6.500	0.0357	0.20	QV	•	•	•	•	
6 583	0 0373	0 23	ΟV					
0.000	0.0070	0.20	× ·	•	•	•	•	
6.66/	0.0388	0.23	Q V	•	•	•	•	
6.750	0.0404	0.23	ΟV					
c. 000	0.0100	0.20	× ·	•	•	•	•	
6.833	0.0422	0.26	.QV	•	•	•	•	
6.917	0.0439	0.26	.OV					
7 0 0 0	0 0455		~ <del>~</del> ·	-	-	-	•	
/.000	0.045/	0.26	·QV	•	•	•	•	
7.083	0.0475	0.26	.OV					
7 1 7 7	0 0400	0.00	017	-	-	-	•	
1.10/	0.0493	0.26	•VV	•	•	•	•	
7.250	0.0511	0.26	. OV				_	
7 222	0 0 5 2 1	0 00	017	•	•	•	-	
1.333	0.0531	0.29	.QV	•	•	•	•	
7.417	0.0552	0.29	.0 V					
7 500	0 0 5 7 0	0 00	~ ~ ~					
1.500	0.05/2	0.29	.ų v	•	•	•	•	
7.583	0.0596	0.35	.0 V					
7 667	0 0620	0 25	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~					
1.001	0.0020	0.55	·Q V	•	•	•	•	
7.750	0.0643	0.35	.0 V					
7 0 2 2	0 0671	0 4 0	Õ 17					
1.033	0.00/1	0.40	·Q V	•	•	•	•	
7.917	0.0698	0.40	.Q V		•			
0 0 0 0	0 0726	0 4 0	0 17					
0.000	0.0720	0.40	·Q V	•	•	•	•	
8.083	0.0759	0.48	.0 V					
0 167	0 0703	0 1 9	V 0					
0.107	0.0795	0.40	•Q V	•	•	•	•	
8.250	0.0826	0.48	.Q V		•			
0 333	0 0963	0 53						
0.555	0.0005	0.05	• Q V	•	•	•	•	
8.417	0.0899	0.53	. Q V	•	•	•		
8 500	0 0936	0 53	O V					
0.000	0.0550	0.00	• Q v	•	•	•	•	
8.583	0.0975	0.57	.QV	•	•	•	•	
8 667	0 1015	0 57	O V					
0.007	0.1013	0.07	• <u>v</u> •	•	•	•	•	
8.750	0.1054							
8.833		0.57	.Q V			•		
0.000	0 1097	0.57	. Q V		•	•	•	
0 01 5	0.1097	0.57	. Q V . Q V		•		•	
8.917	0.1097	0.57 0.63 0.63	.QV .QV .QV			• • •		
8.917 9.000	0.1097 0.1140 0.1183	0.57 0.63 0.63 0.63	. Q V . Q V . Q V			• • •		
8.917 9.000	0.1097 0.1140 0.1183	0.57 0.63 0.63 0.63	. Q V . Q V . Q V . Q V					
8.917 9.000 9.083	0.1097 0.1140 0.1183 0.1232	0.57 0.63 0.63 0.63 0.71	. Q V . Q V . Q V . Q V . Q V					
8.917 9.000 9.083 9.167	0.1097 0.1140 0.1183 0.1232 0.1281	0.57 0.63 0.63 0.63 0.71 0.71	. Q V . Q V . Q V . Q V . Q V . Q V		• • • •	• • • •		
8.917 9.000 9.083 9.167	0.1097 0.1140 0.1183 0.1232 0.1281 0.1232	0.57 0.63 0.63 0.63 0.71 0.71	. Q V . Q V . Q V . Q V . Q V . Q V				• • • •	
8.917 9.000 9.083 9.167 9.250	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330	0.57 0.63 0.63 0.63 0.71 0.71 0.71	. Q V . Q V			• • • • •	• • • • •	
8.917 9.000 9.083 9.167 9.250 9.333	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384	0.57 0.63 0.63 0.63 0.71 0.71 0.71 0.71	. Q V . Q V				• • • • •	
8.917 9.000 9.083 9.167 9.250 9.333 9.417	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1439	0.57 0.63 0.63 0.71 0.71 0.71 0.78	. Q V . Q V				• • • • •	
8.917 9.000 9.083 9.167 9.250 9.333 9.417	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78	. Q V . Q V			· · · · ·	· · · · ·	
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500	0.1097 0.1140 0.1183 0.1232 0.1281 0.1384 0.1384 0.1438 0.1492	0.57 0.63 0.63 0.71 0.71 0.71 0.71 0.78 0.78 0.78	. Q V . Q V				· · · ·	
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78 0.78	. Q V . Q V	•				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78 0.78 0.78 0.84	. Q V . Q V			· · · · ·	· · · · ·	
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84	. Q V . Q V	•			· · · · ·	
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1438 0.1492 0.1550 0.1608 0.1666	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78 0.78 0.84 0.84	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·	- - - - - - - - - - - - - -			
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1438 0.1492 0.1550 0.1608 0.1666	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.84	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.84	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.84 0.90 0.90 0.90	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90 0.90 0.74	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1904	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.90 0.90 0.90 0.90 0.74	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90 0.90 0.74 0.74	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006	0.57 0.63 0.63 0.71 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90 0.90 0.74 0.74 0.74	. Q V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1438 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90 0.90 0.74 0.74 0.74 0.74	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006 0.2047	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90 0.90 0.90 0.74 0.74 0.60	. Q V . Q V V V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006 0.2047 0.2089	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.90 0.90 0.90 0.74 0.74 0.74 0.60	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006 0.2047 0.2089 0.2130	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90 0.74 0.74 0.74 0.60 0.60	. Q V . Q V V V . Q V V V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006 0.2047 0.2089 0.2130	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90 0.90 0.74 0.74 0.60 0.60	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006 0.2047 0.2089 0.2130 0.2130	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90 0.74 0.74 0.74 0.60 0.60 0.71	. Q V . Q V V V . Q V V V . Q V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583 10.67	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006 0.2047 0.2089 0.2130 0.2179 0.2222	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.78 0.84 0.84 0.90 0.90 0.90 0.74 0.74 0.60 0.60 0.60 0.60 0.71 0.71	. Q V . Q V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583 10.667	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006 0.2047 0.2089 0.2130 0.2179 0.2228	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.84 0.84 0.90 0.90 0.90 0.74 0.74 0.74 0.74 0.60 0.60 0.60 0.71 0.71	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583 10.667 10.750	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006 0.2047 0.2089 0.2130 0.2179 0.2228 0.2278	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.78 0.78 0.84 0.84 0.90 0.90 0.90 0.74 0.74 0.74 0.74 0.60 0.60 0.60 0.71 0.71 0.71	. Q V . Q V V V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583 10.667 10.750 10.833	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006 0.2047 0.2089 0.2130 0.2179 0.2228 0.2278 0.2334	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.78 0.78 0.84 0.84 0.84 0.90 0.90 0.90 0.74 0.74 0.60 0.60 0.60 0.60 0.71 0.71 0.72 0.74 0.74 0.60 0.60 0.71 0.71 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.74 0.90 0.90 0.74 0.74 0.74 0.90 0.90 0.74 0.74 0.74 0.90 0.90 0.74 0.74 0.74 0.90 0.90 0.74 0.71 0.71 0.71 0.71 0.72 0.74 0.74 0.74 0.71	. Q V . Q V V V . Q V V V . Q V V V V V V V V V V V V V V V V V V	· · · · · · · · · · · · · · · · · · ·				
8.917 9.000 9.083 9.167 9.250 9.333 9.417 9.500 9.583 9.667 9.750 9.833 9.917 10.000 10.083 10.167 10.250 10.333 10.417 10.500 10.583 10.667 10.750 10.833	0.1097 0.1140 0.1183 0.1232 0.1281 0.1330 0.1384 0.1438 0.1492 0.1550 0.1608 0.1666 0.1728 0.1790 0.1852 0.1904 0.1955 0.2006 0.2047 0.2089 0.2130 0.2179 0.2228 0.2278 0.2278 0.2334	0.57 0.63 0.63 0.71 0.71 0.78 0.78 0.78 0.78 0.78 0.84 0.84 0.90 0.90 0.90 0.74 0.74 0.74 0.60 0.60 0.60 0.71 0.71 0.71 0.72 0.90 0.74 0.74 0.74 0.60 0.60 0.71 0.71 0.72 0.72 0.90 0.74 0.76 0.74 0.74 0.74 0.74 0.74 0.72 0.74 0.74 0.74 0.74 0.75 0.75 0.75 0.74	$\begin{array}{c} Q & V \\ \cdot & Q & Q \\ \cdot &$	· · · · · · · · · · · · · · · · · · ·				
11.000	0.2447	0.82		Q		V		
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11.083	0.2503	0.81		Q		V		
11.167	0.2558	0.81		õ		V		
11.250	0.2614	0.81		õ		V		
11.333	0.2669	0.80		õ		V		
11.417	0.2724	0.80		õ		V	•	
11.500	0.2779	0.80		õ		V	•	
11.583	0.2830	0.74	. (	<b>)</b>		V		
11.667	0.2881	0.74	. (	2 )		V		
11.750	0.2932	0.74	. (	2 )		V		
11.833	0.2982	0.73	. (	~ )		V		
11.917	0.3033	0.73	. (	2 )		V		
12.000	0.3083	0.73	. (	2 )		V		
12.083	0.3147	0.93		0		v		
12.167	0.3212	0.93	÷	õ		v		
12.250	0.3276	0.93		Õ		V		
12.333	0.3353	1.11		0		v		
12.417	0.3429	1.11		Õ		V		
12,500	0.3506	1.11		õ		V		
12.583	0.3590	1.22		Õ		v		
12.667	0.3674	1.22		õ			V	
12.750	0.3758	1.22		õ			V	
12.833	0.3847	1.30		õ			V	
12.917	0.3937	1.30		õ			V	
13.000	0.4026	1.30		Õ			V	
13.083	0.4127	1.47		Õ			. V	
13.167	0.4228	1.47		Õ			. V	
13.250	0.4329	1.47		õ			. V	
13.333	0.4438	1.58		~0			. V	
13.417	0.4547	1.58		Õ			. V	
13.500	0.4656	1.58	÷	õ			. V	
13.583	0.4746	1.31		0			. V	
13.667	0.4836	1.31	÷	õ			. V	
13.750	0.4927	1.31	÷	õ			. V	
13.833	0.5001	1.08		0			. V	
13.917	0.5076	1.08		Õ			. V	
14.000	0.5150	1.08	·	Õ				
14.083	0.5230	1.15	÷	Õ			. V	
14.167	0.5309	1.15		Õ			. V	
14.250	0.5389	1.15		Õ			. V	· · · · · · · · · · · · · · · · · · ·
14.333	0.5472	1.21		õ			. V	· · ·
14.417	0.5555	1.21		õ			•	V .
14.500	0.5638	1.21		õ			•	V .
14.583	0.5720	1.20		õ			•	.v .
14.667	0.5803	1.20		õ			•	.v .
14.750	0.5885	1.20		õ				. V .
14.833	0.5966	1.17		Q			•	. V .
14.917	0.6047	1.17		0				. V .
15.000	0.6128	1.17		õ			•	. V .
15.083	0.6206	1.13		Q				. V .
15.167	0.6283	1.13		Q				. V .
15.250	0.6361	1.13		Q			•	. V .
15.333	0.6435	1.08		Q				. V .
15.417	0.6509	1.08		Q				. V .
15.500	0.6584	1.08		Q				. V .
15.583	0.6649	0.95		Q				. V .
15.667	0.6714	0.95		Q			•	. V .
15.750	0.6779	0.95		Q			•	. V .
15.833	0.6839	0.86		Q			•	. V .
15.917	0.6898	0.86		Q				. V .
16.000	0.6957	0.86		Q				. V .
16.083	0.6987	0.44	.Q					. V .
16.167	0.7018	0.44	.Q					. V .
16.250	0.7049	0.44	.Q		•		•	. V .
16.333	0.7057	0.12	Q		•		•	. V .
16.417	0.7066	0.12	Q					. V .
16.500	0.7074	0.12	Q					. V .
16.583	0.7078	0.06	Q					. V .
16.667	0.7082	0.06	Q					. V .
16.750	0.7086	0.06	Q					. V .
16.833	0.7089	0.04	Q					. V.

16.917	0.7091	0.04	Q	•	•		v .
17.000	0.7094	0.04	0				V.
17.000	0 7000	0.07	~	•	•	•	
1/.083	0.7099	0.07	Q	•	•	•	v .
17.167	0.7104	0.07	0				ν.
17 250	0 7100	0 07	$\tilde{\circ}$				5.7
17.230	0.7109	0.07	Q	•	•	•	v .
17.333	0.7117	0.10	Q				ν.
17 /17	0 7124	0 1 0	0				77
1/.41/	0.7124	0.10	Q	•	•	•	v .
17.500	0.7131	0.10	Q	•	•		ν.
17 583	0 7139	0 11	0				V
17.000	0.7100	0.11	×	•	•	•	
1/.66/	0./146	0.11	Q	•	•	•	v .
17 750	0 7154	0 11	0				V
17.000	0.7100	0.11	×	•	•	•	
1/.833	0./160	0.09	Q	•	•	•	v.
17.917	0.7166	0.09	0		-		V.
10 000	0 7170	0 00	2				
18.000	0./1/2	0.09	Q	•	•	•	v .
18.083	0.7177	0.07	Q				v.
18 167	0 7182	0 07	$\cap$				77
10.107	0.7102	0.07	Ŷ	•	•	•	v .
18.250	0.7186	0.07	Q	•	•		v.
18 333	0 7191	0 07	0				V
10.000	0.7101	0.07	*	•	•	•	
18.417	0.7196	0.07	Q	•	•	•	v.
18.500	0.7200	0.07	0		-		V.
10 500	0 7004	0 0 5	$\tilde{\circ}$				<b>T</b> 7
10.000	0.7204	0.05	Q	•	•	•	v .
18.667	0.7207	0.05	Q				v.
10 750	0 7211	0 05	õ				77
10.730	0.7211	0.05	Q	•	•	•	v .
18.833	0.7213	0.03	Q	•	•		v.
18 917	0 7215	0 03	$\cap$				77
10.017	0.7215	0.05	Ŷ	•	•	•	v .
19.000	0.7217	0.03	Q	•	•		v.
19 083	0 7219	0 03	0				V
10 1 00	0.7219	0.00	×	•	•	•	
19.16/	0./221	0.03	Q	•	•	•	v.
19.250	0.7223	0.03	0				V.
10 222	0 7000	0 0 5	2	•	•	•	
19.333	0.7226	0.05	Q	•	•	•	v .
19.417	0.7230	0.05	Q				v.
10 500	0 7233	0 05	õ				77
19.000	0.7255	0.05	Q	•	•	•	v .
19.583	0.7237	0.05	Q	•	•		v.
19 667	0 7240	0 05	0				V
19.007	0.7210	0.00	×	•	•	•	•••
19.750	0./243	0.05	Q	•	•	•	v.
19.833	0.7245	0.03	0				V.
10 017	0.7210	0.00	×	•	•	•	
19.91/	0.7248	0.03	Q	•	•	•	v.
20.000	0.7250	0.03	0				v.
20 003	0 7251	0 03	õ				77
20.005	0.7251	0.05	Q	•	•	•	v .
20.167	0.7253	0.03	Q		•		v.
20 250	0 7255	0 03	$\cap$				77
20.230	0.7255	0.05	Ŷ	•	•	•	v .
20.333	0.7257	0.03	Q	•	•		v.
20.417	0.7260	0.03	0				V.
20.500	0 7000	0.00	~	•	•	•	
20.500	0.7262	0.03	Q	•	•	•	v.
20.583	0.7264	0.03	0				v.
20 667	0 7266	0 0 2	$\tilde{\circ}$				7.7
20.007	0.7200	0.05	Q	•	•	•	v .
20.750	0.7268	0.03	Q	•	•		v.
20 833	0 7270	0 03	$\cap$				77
20.000	0.7270	0.05	Ŷ	•	•	•	•••
20.917	0.7272	0.03	Q	•	•	•	v.
21.000	0.7274	0.03	0				V.
21 002	0 7070	0 0 2	2	•	•	•	
21.083	0.7276	0.03	Q	•	•	•	v .
21.167	0.7278	0.03	0				v.
21 250	0 7270	0 03	0				77
21.200	0.1213	0.03	×	•	•	•	۷.
21.333	0.7281	0.03	Q	•	•		v.
21 417	0 7283	0 03	$\cap$				77
21.11/	0.7205	0.05	Ŷ	•	•	•	•••
21.500	0.7285	0.03	Q	•	•	•	v.
21.583	0.7287	0.03	0				V.
01 667	0 7000	0.00	~	•	•	•	
21.00/	0.7289	0.03	Q	•	•	•	v.
21.750	0.7291	0.03	Q				v.
21 032	0 7202	0 0 3	õ				77
21.000	0.1292	0.03	$\checkmark$	•	•	•	v .
21.917	0.7294	0.03	Q				v.
22 000	0 7296	0 03	0				V
22.000	0.7200	0.00	×	•	•	•	v .
22.083	0.7298	0.03	Q	•	•	•	v.
22.167	0.7300	0.03	0				V.
22.257	0 7200	0.00	~	-	-	-	· · ·
22.230	0./302	0.03	Ŷ	•	•	•	۷.
22.333	0.7304	0.03	Q				v.
22 /17	0 7306	0 03	0				77
∠∠.4⊥/	0./300	0.03	$\checkmark$	•	•	•	v .
22.500	0.7308	0.03	Q				v.
22.583	0.7309	0.02	0				V.
22.000	0 7011	0.02	×	•	•	•	× • • •
22.66/	∪./3⊥⊥	0.02	Q	•		•	۷.
22.750	0.7312	0.02	Q				v.

22.833	0.7314	0.02	Q				V.
22.917	0.7315	0.02	Q				V.
23.000	0.7317	0.02	Q				V.
23.083	0.7318	0.02	Q	•	•	•	V.
23.166	0.7320	0.02	Q				V.
23.250	0.7321	0.02	Q				V.
23.333	0.7323	0.02	Q				V.
23.416	0.7324	0.02	Q				V.
23.500	0.7326	0.02	Q				V.
23.583	0.7327	0.02	Q	•	•	•	V.
23.666	0.7329	0.02	Q				V.
23.750	0.7330	0.02	Q	•	•	•	V.
23.833	0.7331	0.02	Q	•	•	•	V.
23.916	0.7333	0.02	Q	•	•	•	V.
24.000	0.7334	0.02	Q				V.
24.083	0.7335	0.01	Q	•			V.
24.166	0.7336	0.01	Q	•			V.
24.250	0.7337	0.01	Q	•			V.
24.333	0.7337	0.00	Q				V.
24.416	0.7337	0.00	Q				V.
24.500	0.7337	0.00	Q	•	•	•	v.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE: (Note: 100% of Peak Flow Rate estimate assumed to have an instantaneous time duration)

\_\_\_\_\_

Percentile of Estimated Peak Flow Rate	Duration (minutes) ========	
0%	1470.0	
10%	615.0	
20%	525.0	
30%	480.0	
40%	405.0	
50%	315.0	
60%	195.0	
70%	165.0	
80%	60.0	
90%	30.0	
		:=

END OF FLOODSCx ROUTING ANALYSIS

APPENDIX E

GEOTECHNICAL REPORT



# GEOTECHNICAL ENGINEERING INVESTIGATION

PROPOSED MULTI-TENANT DEVELOPMENT 8<sup>TH</sup> STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

> SALEM PROJECT NO. 3-220-0008 JANUARY 31, 2020

> > **PREPARED FOR:**

MS. KAYTLIN FOX EVERGREEN DEVCO, INC. 2390 EAST CAMELBACK ROAD, SUITE 410 PHOENIX, AZ 85016

PREPARED BY:

SALEM ENGINEERING GROUP, INC. 8711 MONROE COURT, SUITE A RANCHO CUCAMONGA, CA 91730 P: (909) 980-6455 F: (909) 980-6435 www.salem.net



8711 Monroe Court, Suite A Rancho Cucamonga, CA 91730 Phone (909) 980-6455 Fax (909) 980-6435

January 31, 2020

Project No. 3-220-0008

Ms. Kaytlin Fox Development Manager **Evergreen Devco, Inc.** 2390 East Camelback Road, Suite 410 Phoenix, AZ 85016

SUBJECT:GEOTECHNICAL ENGINEERING INVESTIGATION<br/>PROPOSED MULTI-TENANT DEVELOPMENT<br/>8<sup>TH</sup> STREET AND HIGHLAND SPRINGS AVENUE<br/>BEAUMONT, CALIFORNIA

Dear Ms. Fox:

At your request and authorization, SALEM Engineering Group, Inc. (SALEM) has prepared this Geotechnical Engineering Investigation report for the Proposed Multi-Tenant Development to be located at the subject site.

The accompanying report presents our findings, conclusions, and recommendations regarding the geotechnical aspects of designing and constructing the project as presently proposed. In our opinion, the proposed project is feasible from a geotechnical viewpoint provided our recommendations are incorporated into the design and construction of the project.

We appreciate the opportunity to assist you with this project. Should you have questions regarding this report or need additional information, please contact the undersigned at (909) 980-6455.

Respectfully Submitted,

SALEM ENGINEERING GROUP, INC.

Clarence Jiang, GE Geotechnical Division Manager RGE 2477

R. Sammy Salem, MS, PE, GE Principal Engineer RCE 52762 / RGE 2549

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APPENDIX B – LABORATORY TESTING

Consolidation Test Results Direct Shear Test Results Gradation Curves Expansion Index Test Results Corrosivity Test Results Maximum Density and Optimum Moisture Proctor Test Results R-Value Test Results

APPENDIX C - GENERAL EARTHWORK AND PAVEMENT SPECIFICATIONS



## GEOTECHNICAL ENGINEERING INVESTIGATION PROPSOED MULTI-TENANT DEVELOPMENT 8<sup>TH</sup> STREET AND HIGHLAND SPRINGS AVENUE BEAUMONT, CALIFORNIA

#### 1. PURPOSE AND SCOPE

This report presents the results of our Geotechnical Engineering Investigation for the site of the Proposed Multi-Tenant Development to be located at the southwest corner of 8<sup>th</sup> Street and Highland Springs Avenue in Beaumont, California (see Figure 1, Vicinity Map).

The purpose of our geotechnical engineering investigation was to observe and sample the subsurface conditions encountered at the site, and provide conclusions and recommendations relative to the geotechnical aspects of constructing the project as presently proposed.

The scope of this investigation included a field exploration, percolation testing, laboratory testing, engineering analysis and the preparation of this report. Our field exploration was performed on January 17, 2020 and included the drilling of eleven (11) small-diameter soil borings to a maximum depth of 50 feet at the site. Additionally, two (2) percolation tests were performed at depths of approximately 5 and 10 feet below existing grade for the determination of the infiltration rate. The locations of the soil borings and percolation tests are depicted on Figure 2, Site Plan. A detailed discussion of our field investigation, percolation tests, and exploratory boring logs are presented in Appendix A.

Laboratory tests were performed on selected soil samples obtained during the investigation to evaluate pertinent physical properties for engineering analyses. Appendix B presents the laboratory test results in tabular and graphic format.

The recommendations presented herein are based on analysis of the data obtained during the investigation and our experience with similar soil and geologic conditions. If project details vary significantly from those described herein, SALEM should be contacted to determine the necessity for review and possible revision of this report. Earthwork and Pavement Specifications are presented in Appendix C. If text of the report conflict with the specifications in Appendix C, the recommendations in the text of the report have precedence.

#### 2. **PROJECT DESCRIPTION**

Based on the Site Plan provided to us, we understand that the proposed development will include construction of a 3,500 square-foot quick service restaurant (QSR) with a drive-thru, a 4,088 square-foot convenience store (7-Eleven), a 6-MPD canopy, and underground storage tanks. Parking, trash enclosures, and landscaping are planned to be associated with the proposed development. Maximum wall





load is expected to be on the order of 5 kips per linear foot. Maximum column load is expected to be on the order of 100 kips. Floor slab soil bearing pressure is expected to be on the order of 150 psf.

A site grading plan was not available at the time of preparation of this report. As the existing project area is essentially level, we anticipate that cuts and fills during earthwork will be minimal and limited to providing a level pad and positive site drainage. In the event that changes occur in the nature or design of the project, the conclusions and recommendations contained in this report will not be considered valid unless the changes are reviewed and the conclusions of our report are modified. The site configuration and locations of proposed improvements are shown on the Site Plan, Figure 2.

# 3. SITE LOCATION AND DESCRIPTION

The subject site is rectangular in shape and encompasses approximately 2.07 acres. The site is located on the southwest corner of 8<sup>th</sup> Street and Highland Springs Avenue in the City of Beaumont, California (see Vicinity Map, Figure 1).

The site is currently a vacant lot with miscellaneous grasses and weeds throughout the site. Overhead power lines run along the western portion of the site and are grounded at the power line pole in the northwest corner of the site. The site is relatively flat with no major changes in grade. The average elevation of the site is approximately 2,600 feet above mean sea level based on Google Earth imagery.

# 4. FIELD EXPLORATION

Our field exploration consisted of site surface reconnaissance and subsurface exploration. The exploratory test borings (B-1 through B-11) were drilled on January 17, 2020 in the area shown on the Site Plan, Figure 2. The test borings were advanced with 4-inch diameter solid flight augers rotated by a truck-mounted CME 45 drill rig. The test borings were extended to a maximum depth of 50 feet below existing grade.

The materials encountered in the test borings were visually classified in the field, and logs were recorded by a field engineer and stratification lines were approximated on the basis of observations made at the time of drilling. Visual classification of the materials encountered in the test borings were generally made in accordance with the Unified Soil Classification System (ASTM D2487). A soil classification chart and key to sampling is presented on the Unified Soil Classification Chart, in Appendix "A." The logs of the test borings are presented in Appendix "A." The Boring Logs include the soil type, color, moisture content, dry density, and the applicable Unified Soil Classification System symbol.

The location of the test borings were determined by measuring from features shown on the Site Plan, provided to us. Hence, accuracy can be implied only to the degree that this method warrants. The actual boundaries between different soil types may be gradual and soil conditions may vary. For a more detailed description of the materials encountered, the Boring Logs in Appendix "A" should be consulted.

Soil samples were obtained from the test borings at the depths shown on the logs of borings. The MCS samples were recovered and capped at both ends to preserve the samples at their natural moisture content; SPT samples were recovered and placed in a sealed bag to preserve their natural moisture content. The borings were backfilled with soil cuttings after completion of the drilling.



## 5. LABORATORY TESTING

Laboratory tests were performed on selected soil samples to evaluate their physical characteristics and engineering properties. The laboratory-testing program was formulated with emphasis on the evaluation of natural moisture, in-situ density, shear strength, consolidation potential, expansion index, maximum density and optimum moisture determination, R-Value and gradation of the materials encountered.

In addition, chemical tests were performed to evaluate the corrosivity of the soils to buried concrete and metal. Details of the laboratory test program and the results of laboratory test are summarized in Appendix "B." This information, along with the field observations, was used to prepare the final boring logs in Appendix "A."

## 6. GEOLOGIC SETTING

The subject site is located near the eastern portion of the Inland Valley, within the Peninsular Ranges Geomorphic Province of California. The Inland Valley is situated between the San Bernardino Mountains to the northeast, the San Gabriel Mountains to the north, the Chino Hills to the southwest, and to the southeast by the hilly uplands that separate it from the San Jacinto Basin. These mountain ranges are part of the Transverse Ranges Geomorphic Province of California.

The Inland Valley is dominated by northwest-trending faults and adjacent anticlinal uplifts. The intervening deep synclinal troughs are filled with poorly consolidated Upper Pleistocene and unconsolidated Holocene sediments. Tectonism of the region is dominated by the interaction of the East Pacific Plate and the North American Plate along a transform boundary. The Inland Valley has been filled with a variable thickness of relatively young, heterogeneous alluvial deposits. The Inland Valley, in the vicinity of the project site, is drained by minor tributaries toward the Santa Ana River. This drainage system trends towards the southwest in the vicinity of the subject site. Soil deposits encountered on the subject site during exploratory drilling are discussed in detail in this report

# 7. GEOLOGIC HAZARDS

# 7.1 Faulting and Seismicity

The Peninsular Range has historically been a province of relatively high seismic activity. The nearest faults to the project site are associated with the San Andreas Fault system located approximately 6.8 miles from the site. There are no known active fault traces in the project vicinity. Based on mapping and historical seismicity, the seismicity of the Peninsular Range has been generally considered high by the scientific community.

The project area is not within an Alquist-Priolo Earthquake Fault (Special Studies) Zone and will not require a special site investigation by an Engineering Geologist. Soils on site are classified as Site Class D in accordance with Chapter 16 of the California Building Code. The proposed structures are determined to be in Seismic Design Category D.

To determine the distance of known active faults within 100 miles of the site, we used the United States Geological Survey (USGS) web-based application 2008 National Seismic Hazard Maps - Fault Parameters.

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Site latitude is 33.9322° North; site longitude is 116.9475° West. The ten closest active faults are summarized below in Table 7.1.

Fault Name	Distance to Site (miles)	Max. Earthquake Magnitude, M <sub>w</sub>
S. San Andreas; PK+CH+CC+BB+NM+SM+NSB+SSB+BG+CO	6.8	8.2
San Jacinto; SBV+SJV	6.8	7.4
San Jacinto; SBV+SJV+A+CC+B+SM	7.5	7.9
S. San Andreas; BG+CO	8.5	7.4
San Jacinto; A+CC+B	8.7	7.6
Pinto Mtn	15.5	7.3
San Jacinto; SBV	17.7	7.1
S. San Andreas; PK+CH+CC+BB+NM+SM+NSB	21.8	8.0
Helendale-So Lockhart	28.1	7.4
Elsinore; W+GI	28.3	7.3

# TABLE 7.1REGIONAL FAULT SUMMARY

The faults tabulated above and numerous other faults in the region are sources of potential ground motion. However, earthquakes that might occur on other faults throughout California are also potential generators of significant ground motion and could subject the site to intense ground shaking.

## 7.2 Surface Fault Rupture

The site is not within a currently established State of California Earthquake Fault Zone for surface fault rupture hazards. No active faults with the potential for surface fault rupture are known to pass directly beneath the site. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed development is considered low.

## 7.3 Ground Shaking

Seismic coefficients and spectral response acceleration values were developed based on the 2019 California Building Code (CBC). The CBC methodology for determining design ground motion values is based on the Office of Statewide Health Planning and Development (OSHPD) Seismic Design Maps, which incorporate both probabilistic and deterministic seismic ground motion.

Based on the 2019 CBC, a Site Class D represents the on-site soil conditions with standard penetration resistance, N-values, averaging between 15 and 50 blows per foot in the upper 100 feet below site grade. A table providing the recommended design acceleration parameters for the project site, based on the Site Class D designation, is included in Section 9.2.1 of this report.

Based on Office of Health Planning and Development (OSHPD) Seismic Design Maps, the estimated design peak ground acceleration adjusted for site class effects (PGA<sub>M</sub>) was determined to be 0.926g (based on both probabilistic and deterministic seismic ground motion).

## 7.4 Liquefaction

Soil liquefaction is a state of soil particles suspension caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional. Primary factors that trigger liquefaction are: moderate to strong ground shaking (seismic source), relatively clean, loose granular soils (primarily poorly graded sands and silty sands), and saturated soil conditions (shallow groundwater). Due to the increasing overburden pressure with depth, liquefaction of granular soils is generally limited to the upper 50 feet of a soil profile. However, liquefaction has occurred in soils other than clean sand.

The soils encountered within the depth of 50 feet on the project site consisted predominately of medium dense to dense silty sand. The historically highest groundwater is estimated to be at a depth of more than 50 feet below ground surface according regional groundwater well data. Low to very low cohesion strength is associated with the sandy soil. A seismic hazard, which could cause damage to the proposed development during seismic shaking, is the post-liquefaction settlement of the liquefied sands. The liquefaction potential of the site is considered to be low due the absence of shallow groundwater. The Riverside County Office of Information Technology GIS website shows the subject site to be in a low liquefaction potential area. Therefore, no mitigation measures are warranted.

# 7.5 Lateral Spreading

Lateral spreading is a phenomenon in which soils move laterally during seismic shaking and is often associated with liquefaction. The amount of movement depends on the soil strength, duration and intensity of seismic shaking, topography, and free face geometry. Due to the relatively flat site topography and low liquefaction potential, we judge the likelihood of lateral spreading to be low.

# 7.6 Landslides

There are no known landslides at the site, nor is the site in the path of any known or potential landslides. We do not consider the potential for a landslide to be a hazard to this project.

# 7.7 Tsunamis and Seiches

The site is not located within a coastal area. Therefore, tsunamis (seismic sea waves) are not considered a significant hazard at the site. Seiches are large waves generated in enclosed bodies of water in response to ground shaking. No major water-retaining structures are located immediately up gradient from the project site. Flooding from a seismically-induced seiche is considered unlikely.

# 8. SOIL AND GROUNDWATER CONDITIONS

## 8.1 Subsurface Conditions

The subsurface conditions encountered appear typical of those found in the geologic region of the site. In general, the soils within the depth of exploration consisted of loose to dense silty sand with lenses of sandy silt and sand.

Fill soils may be present on site between our boring locations. Verification of the extent of fill should be determined during site grading. Field and laboratory tests suggest that the deeper native soils are



moderately strong and slightly compressible. These soils extended to the termination depth of our borings.

The soils were classified in the field during the drilling and sampling operations. The stratification lines were approximated by the field engineer on the basis of observations made at the time of drilling. The actual boundaries between different soil types may be gradual and soil conditions may vary. For a more detailed description of the materials encountered, the Boring Logs in Appendix "A" should be consulted.

The Boring Logs include the soil type, color, moisture content, dry density, and the applicable Unified Soil Classification System symbol. The locations of the test borings were determined by measuring from feature shown on the Site Plan, provided to us. Hence, accuracy can be implied only to the degree that this method warrants.

## 8.2 Groundwater

The test boring locations were checked for the presence of groundwater during and after the drilling operations. Free groundwater was not encountered during this investigation. The historically highest groundwater is estimated to be at a depth of more than 50 feet below ground surface according to regional groundwater well data.

It should be recognized that water table elevations may fluctuate with time, being dependent upon seasonal precipitation, irrigation, land use, localized pumping, and climatic conditions as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report.

# 8.3 Soil Corrosion Screening

Excessive sulfate in either the soil or native water may result in an adverse reaction between the cement in concrete and the soil. The 2014 Edition of ACI 318 (ACI 318) has established criteria for evaluation of sulfate and chloride levels and how they relate to cement reactivity with soil and/or water.

A soil sample was obtained from the project site and was tested for the evaluation of the potential for concrete deterioration or steel corrosion due to attack by soil-borne soluble salts and soluble chloride. The water-soluble sulfate concentration in the saturation extract from the soil sample was detected to be 113 mg/kg. ACI 318 Tables 19.3.1.1 and 19.3.2.1 outline exposure categories, classes, and concrete requirements by exposure class. ACI 318 requirements for site concrete based upon soluble sulfate are summarized in Table 8.3 below.

Water Soluble Sulfate (SO <sub>4</sub> ) in Soil, Percentage by Weight	Exposure Severity	Exposure Class	Maximum w/cm Ratio	Minimum Concrete Compressive Strength	Cementitious Materials Type
0.0113	Not Applicable	S0	N/A	2,500 psi	No Restriction

TABLE 8.3WATER SOLUBLE SULFATE EXPOSURE REQUIREMENTS



The water-soluble chloride concentration detected in saturation extract from the soil samples was 58 mg/kg. This level of chloride concentration is considered to be mildly corrosive.

It is recommended that a qualified corrosion engineer be consulted regarding protection of buried steel or ductile iron piping and conduit or, at a minimum, applicable manufacturer's recommendations for corrosion protection of buried metal pipe be closely followed.

## 8.4 Percolation Testing

Two percolation tests (P-1 and P-2) were performed within assumed infiltration areas and were conducted in accordance with in accordance with the guidelines established by the County of Riverside. The approximate locations of the percolation tests are shown on the attached Site Plan, Figure 2. The boreholes were advanced to the depths shown on the percolation test worksheets. The holes were pre-saturated before percolation testing commenced.

Percolation rates were measured by filling the test holes with clean water and measuring the water drops at a certain time interval. The percolation rate data are presented in tabular format at the end of this Report. The difference in the percolation rates are reflected by the varied type of soil materials at the bottom of the test holes. The test results are shown on the table below.

Test No.	Depth (feet)	Measured Percolation Rate (min/inch)	Infiltration Rate* (inch/hour)	Soil Type
P-1	10	19.2	0.35	Silty SAND (SM)
P-2	5	250.0	0.02	Clayey SAND (SC)

PERCOLATION TEST RESULTS

\* Tested infiltration Rate = ( $\Delta H 60 r$ ) / ( $\Delta t(r + 2H_{avg})$ )

The soil infiltration or percolation rates are based on tests conducted with clear water. The infiltration/percolation rates may vary with time as a result of soil clogging from water impurities. The infiltration/percolation rates will deteriorate over time due to the soil conditions.

The soils may also become less permeable to impermeable if the soil is compacted. Thus, periodic maintenance consisting of clearing the bottom of the drainage system of clogged soils should be expected. The infiltration/percolation rate may become slower if the surrounding soil is wet or saturated due to prolonged rainfalls. Additional percolation tests should be conducted at bottom of the infiltration system during construction to verify the infiltration/percolation rate. Groundwater, if closer to the bottom of the drainage system, will also reduce the infiltration/percolation rate.

The scope of our services did not include a groundwater study and was limited to the performance of percolation testing and soil profile description, and the submitted data only. Our services did not include those associated with septic system design. Neither did services include an Environmental Site Assessment for the presence or absence of hazardous and/or toxic materials in the soil, groundwater, or atmosphere; or the presence of wetlands.



Any statements, or absence of statements, in this report or on any boring logs regarding odors, unusual or suspicious items, or conditions observed, are strictly for descriptive purposes and are not intended to convey engineering judgment regarding potential hazardous and/or toxic assessment.

The geotechnical engineering information presented herein is based upon professional interpretation utilizing standard engineering practices. The work conducted through the course of this investigation, including the preparation of this report, has been performed in accordance with the generally accepted standards of geotechnical engineering practice, which existed in the geographic area at the time the report was written. No other warranty, express or implied, is made.

Please be advised that when performing percolation testing services in relatively small diameter borings, that the testing may not fully model the actual full scale long term performance of a given site. This is particularly true where percolation test data is to be used in the design of large infiltration system such as may be proposed for the site. The measured percolation rate includes dispersion of the water at the sidewalls of the boring as well as into the underlying soils. Subsurface conditions, including percolation rates, can change over time as fine-grained soils migrate. It is not warranted that such information and interpretation cannot be superseded by future geotechnical engineering developments. We emphasize that this report is valid for the project outlined above and should not be used for any other sites.

## 9. CONCLUSIONS AND RECOMMENDATIONS

## 9.1 General

- 9.1.1 Based upon the data collected during this investigation, and from a geotechnical engineering standpoint, it is our opinion that the site is suitable for the proposed construction of improvements at the site as planned, provided the recommendations contained in this report are incorporated into the project design and construction. Conclusions and recommendations provided in this report are based on our review of available literature, analysis of data obtained from our field exploration and laboratory testing program, and our understanding of the proposed development at this time.
- 9.1.2 The primary geotechnical constraints identified in our investigation is the presence of upper loose and potentially compressible material at the site. Recommendations to mitigate the effects of these soils are provided in this report.
- 9.1.3 Fill soils may be present on-site between our test boring locations. Undocumented fill materials are not suitable to support any future structures and should be replaced with Engineered Fill. Prior to fill placement, Salem Engineering Group, Inc. should inspect the bottom of the excavation to verify the fill condition.
- 9.1.4 Site demolition activities shall include removal of all surface obstructions not intended to be incorporated into final site design. In addition, underground buried structures and/or utility lines encountered during demolition and construction should be properly removed and the resulting excavations backfilled with Engineered Fill. It is suspected that possible demolition activities of the existing structures may disturb the upper soils. After demolition activities, it is recommended that disturbed soils be removed and/or recompacted.



- 9.1.5 The near-surface onsite soils are moisture-sensitive and are moderately to highly compressible (collapsible soil) under saturated conditions. Structures within the project vicinity have experienced excessive post-construction settlement, when the foundation soils become near saturated. The collapsible or weak soils should be removed and recompacted according to the recommendations in the Grading section of this report (Section 9.5).
- 9.1.6 Surface vegetation consisting of grasses and other similar vegetation should be removed by stripping to a sufficient depth to remove organic-rich topsoil. The upper 2 to 4 inches of the soils containing, vegetation, roots and other objectionable organic matter encountered at the time of grading should be stripped and removed from the surface. Deeper stripping may be required in localized areas. The stripped vegetation, will not be suitable for use as Engineered Fill or within 5 feet of building pads or within pavement areas. However, stripped topsoil may be stockpiled and reused in landscape or non-structural areas or exported from the site.
- 9.1.7 Based on the subsurface conditions at the site and the anticipated structural loading, we anticipate that the proposed building may be supported using conventional shallow foundations provided that the recommendations presented herein are incorporated in the design and construction of the project.
- 9.1.8 Provided the site is graded in accordance with the recommendations of this report and foundations constructed as described herein, we estimate that total settlement due to static loads utilizing conventional shallow foundations for the proposed building will be within 1 inch and corresponding differential settlement will be less than ½ inch.
- 9.1.9 All references to relative compaction and optimum moisture content in this report are based on ASTM D 1557 (latest edition).
- 9.1.10 SALEM shall review the project grading and foundation plans prior to final design submittal to assess whether our recommendations have been properly implemented and evaluate if additional analysis and/or recommendations are required. If SALEM is not provided plans and specifications for review, we cannot assume any responsibility for the future performance of the project.
- 9.1.11 SALEM shall be present at the site during site demolition and preparation to observe site clearing/demolition, preparation of exposed surfaces after clearing, and placement, treatment and compaction of fill material.
- 9.1.12 SALEM's observations should be supplemented with periodic compaction tests to establish substantial conformance with these recommendations. Moisture content of footings and slab subgrade should be tested immediately prior to concrete placement. SALEM should observe foundation excavations prior to placement of reinforcing steel or concrete to assess whether the actual bearing conditions are compatible with the conditions anticipated during the preparation of this report.



#### 9.2 Seismic Design Criteria

9.2.1 For seismic design of the structures, and in accordance with the seismic provisions of the 2019 CBC, our recommended parameters are shown below. These parameters were determined using California's Office of Statewide Health Planning and Development (OSHPD) Seismic Design Map Tool Website (https://seismicmaps.org/) in accordance with the 2019 CBC. The Site Class was determined based on the soils encountered during our field exploration.

Seismic Item	Symbol	Value	2016 ASCE 7 or 2019 CBC Reference
Site Coordinates (Datum = NAD 83)		33.9322 Lat -116.9475 Lon	
Site Class		D	ASCE 7 Table 20.3-1
Soil Profile Name		Stiff Soil	ASCE 7 Table 20.3-1
Risk Category		II	Table 1604.5
Site Coefficient for PGA	F <sub>PGA</sub>	1.1	ASCE 7 Table 11.8-1
Peak Ground Acceleration (adjusted for Site Class effects)	PGA <sub>M</sub>	0.926	ASCE 7 Equation 11.8-1
Seismic Design Category	SDC	D	CBC Table 1613.2.5
Mapped Spectral Acceleration (Short period - 0.2 sec)	$S_S$	2.064 g	CBC Figure 1613.2.1(1-8)
Mapped Spectral Acceleration (1.0 sec. period)	$\mathbf{S}_1$	0.708 g	CBC Figure 1613.2.1(1-8)
Site Class Modified Site Coefficient	$F_{a}$	1.000	CBC Figure 1613.2.3(1)
Site Class Modified Site Coefficient	$F_{v}$	* 1.700	CBC Figure 1613.2.3(2)
MCE Spectral Response Acceleration (Short period - 0.2 sec) $S_{MS} = F_a S_S$	S <sub>MS</sub>	2.064 g	CBC Equation 16-36
MCE Spectral Response Acceleration (1.0 sec. period) $S_{M1} = F_v S_1$	$S_{M1}$	* 1.204 g	CBC Equation 16-37
Design Spectral Response Acceleration $S_{DS}=^{2}_{3}S_{MS}$ (short period - 0.2 sec)	$\mathbf{S}_{\mathrm{DS}}$	1.376 g	CBC Equation 16-38
Design Spectral Response Acceleration $S_{D1}=\frac{2}{3}S_{M1}$ (1.0 sec. period)	$\mathbf{S}_{\mathrm{D1}}$	* 0.802 g	CBC Equation 16-39
Short Term Transition Period (S <sub>D1</sub> /S <sub>DS</sub> ), Seconds	Ts	0.583	ASCE 7-16, Section 11.4.6
Long Period Transition Period (seconds)	T <sub>L</sub>	8	ASCE 7-16, Figure 22-14

TABLE 9.2.1SEISMIC DESIGN PARAMETERS

Note: \* Determined per ASCE Table 11.4-2 for use in calculating Ts only

Site Specific Ground Motion Analysis was not included in the scope of this investigation. Per ASCE 11.4.8, structures on Site Class D with S<sub>1</sub> greater than or equal to 0.2 may require Site Specific Ground Motion Analysis. However, a site specific motion analysis may not be required based on Exceptions listed in ASCE 11.4.8. The Structural Engineer should verify whether Exception No. 2 of ASCE 7-16, Section 11.4.8, is valid for the site. In the event that a site specific ground motion analysis is required, SALEM should be contacted for these services.



9.2.2 Conformance to the criteria in the above table for seismic design does not constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur if a large earthquake occurs. The primary goal of seismic design is to protect life, not to avoid all damage, since such design may be economically prohibitive.

#### 9.3 Soil and Excavation Characteristics

- 9.3.1 Based on the soil conditions encountered in our soil borings, the onsite soils can be excavated with moderate effort using conventional earthmoving equipment.
- 9.3.2 It is the responsibility of the contractor to ensure that all excavations and trenches are properly shored and maintained in accordance with applicable Occupational Safety and Health Administration (OSHA) rules and regulations to maintain safety and maintain the stability of adjacent existing improvements. Temporary excavations are further discussed in a later Section of this report.
- 9.3.3 The upper soils are moisture-sensitive and moderately collapsible under saturated conditions. These soils, in their present condition, possess moderate risk to construction in terms of possible post-construction movement of the foundations and floor systems if no mitigation measures are employed. Accordingly, measures are considered necessary to reduce anticipated expansion and collapse potential. As recommended in Section 9.5, the collapsible soils should be overexcavated and recompacted. Mitigation measures will not eliminate post-construction soil movement, but will reduce the soil movement. Success of the mitigation measures will depend on the thoroughness of the contractor in dealing with the soil conditions.
- 9.3.4 The near surface soils identified as part of our investigation are, generally, slightly moist to moist due to the absorption characteristics of the soil. Earthwork operations may encounter very moist unstable soils which may require removal to a stable bottom. Exposed native soils exposed as part of site grading operations shall not be allowed to dry out and should be kept continuously moist prior to placement of subsequent fill.

## 9.4 Materials for Fill

- 9.4.1 Excavated soils generated from cut operations at the site are suitable for use as general Engineered Fill in structural areas, provided they do not contain deleterious matter, organic material, or rock material larger than 3 inches in maximum dimension.
- 9.4.2 The preferred materials specified for Engineered Fill are suitable for most applications with the exception of exposure to erosion. Project site winterization and protection of exposed soils during the construction phase should be the sole responsibility of the Contractor, since they have complete control of the project site.
- 9.4.3 Import soil shall be well-graded, slightly cohesive silty fine sand or sandy silt, with relatively impervious characteristics when compacted. A clean sand or very sandy soil is not acceptable for this purpose. This material should be approved by the Engineer prior to use and should typically possess the soil characteristics summarized below in Table 9.4.3.

Minimum Percent Passing No. 200 Sieve	20
Maximum Percent Passing No. 200 Sieve	50
Minimum Percent Passing No. 4 Sieve	80
Maximum Particle Size	3"
Maximum Plasticity Index	12
Maximum CBC Expansion Index	20

# TABLE 9.4.3IMPORT FILL REQUIREMENTS

- 9.4.4 Environmental characteristics and corrosion potential of import soil materials should also be considered.
- 9.4.5 Proposed import materials should be sampled, tested, and approved by SALEM prior to its transportation to the site.

#### 9.5 Grading

- 9.5.1 A representative of our firm should be present during all site clearing and grading operations to test and observe earthwork construction. This testing and observation is an integral part of our service as acceptance of earthwork construction is dependent upon compaction of the material and the stability of the material. The Geotechnical Engineer may reject any material that does not meet compaction and stability requirements. Further recommendations of this report are predicated upon the assumption that earthwork construction will conform to recommendations set forth in this section as well as other portions of this report.
- 9.5.2 A preconstruction conference should be held at the site prior to the beginning of grading operations with the owner, contractor, civil engineer and geotechnical engineer in attendance.
- 9.5.3 Site preparation should begin with removal of existing surface/subsurface structures, underground utilities (as required), any existing uncertified fill, and debris. Excavations or depressions resulting from site clearing operations, or other existing excavations or depressions, should be restored with Engineered Fill in accordance with the recommendations of this report.
- 9.5.4 Surface vegetation consisting of grasses and other similar vegetation should be removed by stripping to a sufficient depth to remove organic-rich topsoil. The upper 2 to 4 inches of the soils containing, vegetation, roots and other objectionable organic matter encountered at the time of grading should be stripped and removed from the surface. Deeper stripping may be required in localized areas. In addition, existing concrete and asphalt materials shall be removed from areas of proposed improvements and stockpiled separately from excavated soil material. The stripped vegetation, asphalt and concrete materials will not be suitable for use as Engineered Fill or within 5 feet of building pads or within pavement areas. However, stripped topsoil may be stockpiled and reused in landscape or non-structural areas or exported from the site.



- 9.5.5 Any undocumented fill materials encountered during grading should be removed and replaced with engineered fill. The actual depth of the overexcavation and recompaction should be determined by our field representative during construction.
- 9.5.6 Structural building pad areas should be considered as areas extending a minimum of 5 feet horizontally beyond the outside dimensions of building, including footings and non-cantilevered overhangs carrying structural loads.
- 9.5.7 To minimize post-construction soil movement and provide uniform support for the proposed building, overexcavation and recompaction within the proposed building areas should be performed to a minimum depth of **four (4) feet** below existing grade or **two (2) feet** below proposed shallow footing bottom, whichever is deeper. The overexcavation and recompaction should also extend laterally to a minimum of 5 feet beyond the outer edges of the proposed footings.
- 9.5.8 Within pavement and canopy areas, it is recommended that the overexcavation and recompaction be performed to a minimum depth of **one (1) foot** below existing grade or proposed grade, whichever is deeper. The overexcavation and recompaction should also extend laterally to a minimum of 2 feet beyond the pavement area.
- 9.5.9 Prior to placement of fill soils, the upper 10 to 12 inches of native subgrade soils should be scarified, moisture-conditioned to <u>no less</u> than the optimum moisture content and recompacted to a minimum of 95% (90% for fine grained, cohesive soils) of the maximum dry density based on ASTM D1557 Test Method.
- 9.5.10 All Engineered Fill (including scarified ground surfaces and backfill) should be placed in thin lifts which will allow for adequate bonding and compaction (typically 6 to 8 inches in loose thickness).
- 9.5.11 Engineered Fill soils should be moisture conditioned to near optimum moisture content and compacted to at least 95% (90% for fine grained, cohesive soils) of the maximum dry density based on ASTM D1557-07 Test Method.
- 9.5.12 An integral part of satisfactory fill placement is the stability of the placed lift of soil. If placed materials exhibit excessive instability as determined by a SALEM field representative, the lift will be considered unacceptable and shall be remedied prior to placement of additional fill material. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil conditions are not stable.
- 9.5.13 Final pavement subgrade should be finished to a smooth, unyielding surface. We further recommend proof-rolling the subgrade with a loaded water truck (or similar equipment with high contact pressure) to verify the stability of the subgrade prior to placing aggregate base.
- 9.5.14 The most effective site preparation alternatives will depend on site conditions prior to grading. We should evaluate site conditions and provide supplemental recommendations immediately prior to grading, if necessary.







9.5.15 We do not anticipate groundwater or seepage to adversely affect construction if conducted during the drier moths of the year (typically summer and fall). However, groundwater and soil moisture conditions could be significantly different during the wet season (typically winter and spring) as surface soil becomes wet; perched groundwater conditions may develop. Grading during this time period will likely encounter wet materials resulting in possible excavation and fill placement difficulties.

Project site winterization consisting of placement of aggregate base and protecting exposed soils during construction should be performed. If the construction schedule requires grading operations during the wet season, we can provide additional recommendations as conditions warrant.

9.5.16 The wet soils may become non conducive to site grading as the upper soils yield under the weight of the construction equipment. Therefore, mitigation measures should be performed for stabilization.

Typical remedial measures include: discing and aerating the soil during dry weather; mixing the soil with dryer materials; removing and replacing the soil with an approved fill material or placement of slurry, crushed rocks or aggregate base material; or mixing the soil with an approved lime or cement product.

The most common remedial measure of stabilizing the bottom of the excavation due to wet soil condition is to reduce the moisture of the soil to near the optimum moisture content by having the subgrade soils scarified and aerated or mixed with drier soils prior to compacting. However, the drying process may require an extended period of time and delay the construction operation.

To expedite the stabilizing process, slurry or crushed rock may be utilized for stabilization provided this method is approved by the owner for the cost purpose. If the use of slurry or crushed rock is considered, it is recommended that the upper soft and wet soils be replaced by 6 to 24 inches of 2-sack slurry or <sup>3</sup>/<sub>4</sub>-inch to 1-inch crushed rocks. The thickness of the slurry or rock layer depends on the severity of the soil instability.

The recommended 6 to 24 inches of slurry or crushed rock material will provide a stable platform. It is further recommended that lighter compaction equipment be utilized for compacting the crushed rock. A layer of geofabric is recommended to be placed on top of the compacted crushed rock to minimize migration of soil particles into the voids of the crushed rock, resulting in soil movement. Although it is not required, the use of geogrid (e.g. Tensar TX7) below the crushed rock will enhance stability and reduce the required thickness of crushed rock necessary for stabilization.

Our firm should be consulted prior to implementing remedial measures to provide appropriate recommendations.



#### 9.6 Shallow Foundations

- 9.6.1 The site is suitable for use of conventional shallow foundations consisting of continuous footings and isolated pad footings bearing in properly compacted Engineered Fill.
- 9.6.2 The bearing wall footings considered for the structure should be continuous with a minimum width of 18 inches and extend to a minimum depth of 18 inches below the lowest adjacent grade. Isolated column footings should have a minimum width of 24 inches and extend a minimum depth of 18 inches below the lowest adjacent grade.
- 9.6.3 The bottom of footing excavations should be maintained free of loose and disturbed soil. Footing concrete should be placed into a neat excavation.
- 9.6.4 Footings proportioned as recommended above may be designed for the maximum allowable soil bearing pressures shown in the table below.

Loading Condition	Allowable Bearing
Dead Load Only	2,000 psf
Dead-Plus-Live Load	2,500 psf
Total Load, Including Wind or Seismic Loads	3,325 psf

- 9.6.5 For design purposes, total settlement due to static loadings on the order of 1 inch may be assumed for shallow footings. Differential settlement due to static loadings, along a 20-foot exterior wall footing or between adjoining column footings, should be ½ inch, producing an angular distortion of 0.002. Most of the settlement is expected to occur during construction as the loads are applied. However, additional post-construction settlement may occur if the foundation soils are flooded or saturated. The footing excavations should not be allowed to dry out any time prior to pouring concrete.
- 9.6.6 Resistance to lateral footing displacement can be computed using an allowable coefficient of friction factor of 0.40 acting between the base of foundations and the supporting native subgrade.
- 9.6.7 Lateral resistance for footings can alternatively be developed using an equivalent fluid passive pressure of 350 pounds per cubic foot acting against the appropriate vertical native footing faces. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance. An increase of one-third is permitted when using the alternate load combination that includes wind or earthquake loads.
- 9.6.8 Minimum reinforcement for continuous footings should consist of four No. 5 steel reinforcing bars; two placed near the top of the footing and two near the bottom. Reinforcement for spread footings should be designed by the project structural engineer.
- 9.6.9 Underground utilities running parallel to footings should not be constructed in the zone of influence of footings. The zone of influence may be taken to be the area beneath the footing and within a 1:1 plane extending out and down from the bottom edge of the footing.



9.6.10 The foundation subgrade should be sprinkled as necessary to maintain a moist condition without significant shrinkage cracks as would be expected in any concrete placement. Prior to placing rebar reinforcement, foundation excavations should be evaluated by a representative of SALEM for appropriate support characteristics and moisture content. Moisture conditioning may be required for the materials exposed at footing bottom, particularly if foundation excavations are left open for an extended period.

#### 9.7 Caisson Foundations

- 9.7.1 It is recommended that the caisson foundation should have a minimum depth of 10 feet below the lowest adjacent grade.
- 9.7.2 The caissons may be designed using an allowable sidewall friction of 200 psf. This value is for dead-plus-live loads. An allowable end bearing capacity of 4,500 psf may be used provided that the bottom of the caisson is cleaned with the use of a clean-out bucket or equivalent and inspected by our representative prior to placement of reinforcement and concrete. An increase of one-third is permitted when using the alternate load combination that includes wind or earthquake loads.
- 9.7.3 Uplift loads can be resisted by caissons using an allowable sidewall friction of 150 psf of the surface area and the weight of the caisson.
- 9.7.4 The total static settlement of the caisson footing is not expected to exceed 1 inch. Differential settlement should be less than ½ inch. Most of the settlement is expected to occur during construction as the loads are applied.
- 9.7.5 The drilled caissons may be designed for a lateral capacity of 350 pounds per square foot per foot of depth below the lowest adjacent grade to a maximum of 5,250 psf.
- 9.7.6 These values may be increased by one-third when using the alternative load combinations that include wind or earthquake loads. The lateral loading criteria is based on the assumption that the load application is applied at the ground level, flexible cap connections applied and a minimum embedment depth of 10 feet.
- 9.7.7 Sandy soils were encountered at the site. Casing of the drilled caisson will be required if seepage is encountered or the drilled hole has to be left open for an extended period of time.

#### 9.8 Concrete Slabs-on-Grade

- 9.8.1 Slab thickness and reinforcement should be determined by the structural engineer based on the anticipated loading. We recommend that non-structural slabs-on-grade be at least 4 inches thick and underlain by six (6) inches of compacted granular aggregate subbase material compacted to at least 95% relative compaction.
- 9.8.2 Granular aggregate subbase material shall conform to ASTM D-2940, Latest Edition (Table 1, bases) with at least 95 percent passing a 1½-inch sieve and not more than 8% passing a No. 200 sieve or its approved equivalent to prevent capillary moisture rise.



- 9.8.3 <u>The use of processed asphalt in the granular aggregate subbase material (i.e. recycled or miscellaneous base) will have to be approved by the owner.</u> Asphalt is a petroleum hydrocarbon with numerous components, including naphthalene and other semi-volatile constituents that are regulated by California. This material in the subsurface could become a potential vapor intrusion risk (naphthalene is a recent risk-driver that DTSC is actively pursuing).
- 9.8.4 We recommend reinforcing slabs, at a minimum, with No. 4 reinforcing bars placed 18 inches on center, each way.
- 9.8.5 Slabs subject to structural loading may be designed utilizing a modulus of subgrade reaction K of 150 pounds per square inch per inch. The K value was approximated based on interrelationship of soil classification and bearing values (Portland Cement Association, Rocky Mountain Northwest).
- 9.8.6 The spacing of crack control joints should be designed by the project structural engineer. In order to regulate cracking of the slabs, we recommend that construction joints or control joints be provided at a maximum spacing of 15 feet in each direction for 5-inch thick slabs and 12 feet for 4-inch thick slabs.
- 9.8.7 Crack control joints should extend a minimum depth of one-fourth the slab thickness and should be constructed using saw-cuts or other methods as soon as practical after concrete placement. The exterior floors should be poured separately in order to act independently of the walls and foundation system.
- 9.8.8 It is recommended that the utility trenches within the structure be compacted, as specified in our report, to minimize the transmission of moisture through the utility trench backfill. Special attention to the immediate drainage and irrigation around the structures is recommended.
- 9.8.9 Moisture within the structure may be derived from water vapors, which were transformed from the moisture within the soils. This moisture vapor penetration can affect floor coverings and produce mold and mildew in the structure. To minimize moisture vapor intrusion, it is recommended that a vapor retarder be installed in accordance with manufacturer's recommendations and/or ASTM guidelines, whichever is more stringent. In addition, ventilation of the structure is recommended to reduce the accumulation of interior moisture.
- 9.8.10 In areas where it is desired to reduce floor dampness where moisture-sensitive coverings are anticipated, construction should have a suitable waterproof vapor retarder (a minimum of 15 mils thick polyethylene vapor retarder sheeting, Raven Industries "VaporBlock 15, Stego Industries 15 mil "StegoWrap" or W.R. Meadows Sealtight 15 mil "Perminator") incorporated into the floor slab design. The water vapor retarder should be decay resistant material complying with ASTM E96 not exceeding 0.04 perms, ASTM E154 and ASTM E1745 Class A. The vapor barrier should be placed between the concrete slab and the compacted granular aggregate subbase material. The water vapor retarder (vapor barrier) should be installed in accordance with ASTM Specification E 1643-94.



- 9.8.11 The concrete may be placed directly on vapor retarder. The vapor retarder should be inspected prior to concrete placement. Cut or punctured retarder should be repaired using vapor retarder material lapped 6 inches beyond damaged areas and taped.
- 9.8.12 The recommendations of this report are intended to reduce the potential for cracking of slabs due to soil movement. However, even with the incorporation of the recommendations presented herein, foundations, stucco walls, and slabs-on-grade may exhibit some cracking due to soil movement. This is common for project areas that contain expansive soils since designing to eliminate potential soil movement is cost prohibitive. The occurrence of concrete shrinkage cracks is independent of the supporting soil characteristics. Their occurrence may be reduced and/or controlled by limiting the slump of the concrete, proper concrete placement and curing, and by the placement of crack control joints at periodic intervals, in particular, where re-entrant slab corners occur.
- 9.8.13 Proper finishing and curing should be performed in accordance with the latest guidelines provided by the American Concrete Institute, Portland Cement Association, and ASTM.

#### 9.9 Lateral Earth Pressures and Frictional Resistance

Lateral Pressure Level Backfill and Drained Conditions	Equivalent Fluid Pressure, pcf
Active Pressure	37
At-Rest Pressure	57
Passive Pressure	350
Related Parameters	
Allowable Coefficient of Friction	0.40
In-Place Soil Density (lbs/ft <sup>3</sup> )	120

9.9.1 Active, at-rest and passive unit lateral earth pressures against footings and walls are summarized in the table below:

- 9.9.2 Active pressure applies to walls, which are free to rotate. At-rest pressure applies to walls, which are restrained against rotation. The preceding lateral earth pressures assume sufficient drainage behind retaining walls to prevent the build-up of hydrostatic pressure.
- 9.9.3 The top one-foot of adjacent subgrade should be deleted from the passive pressure computation.
- 9.9.4 A safety factor consistent with the design conditions should be included when using the values in the above table.
- 9.9.5 For stability against lateral sliding, which is resisted solely by the passive pressure, we recommend a minimum safety factor of 1.5.





- 9.9.6 For stability against lateral sliding, which is resisted by the combined passive and frictional resistance, a minimum safety factor of 2.0 is recommended.
- 9.9.7 For lateral stability against seismic loading conditions, we recommend a minimum safety factor of 1.1.

Dynamic Seismic Lateral Loading Equation			
Dynamic Seismic Lateral Load = $\frac{3}{8}\gamma K_h H^2$			
Where: $\gamma =$ In-Place Soil Density			
$K_h$ = Horizontal Acceleration = $\frac{2}{3}PGA_M$			
H = Wall Height			

9.9.8 For dynamic seismic lateral loading the following equation shall be used:

#### 9.10 Retaining Walls

- 9.10.1 Retaining and/or below grade walls should be drained with either perforated pipe encased in freedraining gravel or a prefabricated drainage system. The gravel zone should have a minimum width of 12 inches wide and should extend upward to within 12 inches of the top of the wall. The upper 12 inches of backfill should consist of native soils, concrete, asphaltic-concrete or other suitable backfill to minimize surface drainage into the wall drain system. The gravel should conform to Class II permeable materials graded in accordance with the current CalTrans Standard Specifications.
- 9.10.2 Prefabricated drainage systems, such as Miradrain®, Enkadrain®, or an equivalent substitute, are acceptable alternatives in lieu of gravel provided they are installed in accordance with the manufacturer's recommendations. If a prefabricated drainage system is proposed, our firm should review the system for final acceptance prior to installation.
- 9.10.3 Drainage pipes should be placed with perforations down and should discharge in a non-erosive manner away from foundations and other improvements. The top of the perforated pipe should be placed at or below the bottom of the adjacent floor slab or pavements. The pipe should be placed in the center line of the drainage blanket and should have a minimum diameter of 4 inches. Slots should be no wider than 1/8-inch in diameter, while perforations should be no more than 1/4-inch in diameter.
- 9.10.4 If retaining walls are less than 5 feet in height, the perforated pipe may be omitted in lieu of weep holes on 4 feet maximum spacing. The weep holes should consist of 2-inch minimum diameter holes (concrete walls) or unmortared head joints (masonry walls) and placed no higher than 18 inches above the lowest adjacent grade. Two 8-inch square overlapping patches of geotextile fabric (conforming to the CalTrans Standard Specifications for "edge drains") should be affixed to the rear wall opening of each weep hole to retard soil piping.
- 9.10.5 During grading and backfilling operations adjacent to any walls, heavy equipment should not be allowed to operate within a lateral distance of 5 feet from the wall, or within a lateral distance



equal to the wall height, whichever is greater, to avoid developing excessive lateral pressures. Within this zone, only hand operated equipment ("whackers," vibratory plates, or pneumatic compactors) should be used to compact the backfill soils.

#### 9.11 Temporary Excavations

- 9.11.1 We anticipate that the majority of the sandy site soils will be classified as Cal-OSHA "Type C" soil when encountered in excavations during site development and construction. Excavation sloping, benching, the use of trench shields, and the placement of trench spoils should conform to the latest applicable Cal-OSHA standards. The contractor should have a Cal-OSHA-approved "competent person" onsite during excavation to evaluate trench conditions and make appropriate recommendations where necessary.
- 9.11.2 It is the contractor's responsibility to provide sufficient and safe excavation support as well as protecting nearby utilities, structures, and other improvements which may be damaged by earth movements. All onsite excavations must be conducted in such a manner that potential surcharges from existing structures, construction equipment, and vehicle loads are resisted. The surcharge area may be defined by a 1:1 projection down and away from the bottom of an existing foundation or vehicle load.
- 9.11.3 Temporary excavations and slope faces should be protected from rainfall and erosion. Surface runoff should be directed away from excavations and slopes.
- 9.11.4 Open, unbraced excavations in undisturbed soils should be made according to the slopes presented in the following table:

Depth of Excavation (ft)	Slope (Horizontal : Vertical)
0-5	1:1
5-10	2:1

**RECOMMENDED EXCAVATION SLOPES** 

- 9.11.5 If, due to space limitation, excavations near property lines or existing structures are performed in a vertical position, slot cuts, cantilever shoring, braced shorings or shields may be used for supporting vertical excavations. Therefore, in order to comply with the local and state safety regulations, a properly designed and installed shoring system would be required to accomplish planned excavations and installation. A Specialty Shoring Contractor should be responsible for the design and installation of such a shoring system during construction.
- 9.11.6 Braced shorings should be designed for a maximum pressure distribution of 30H, (where H is the depth of the excavation in feet). The foregoing does not include excess hydrostatic pressure or surcharge loading. Fifty percent of any surcharge load, such as construction equipment weight, should be added to the lateral load given herein. Equipment traffic should concurrently be limited to an area at least 3 feet from the shoring face or edge of the slope.



9.11.7 The excavation and shoring recommendations provided herein are based on soil characteristics derived from the borings within the area. Variations in soil conditions will likely be encountered during the excavations. SALEM Engineering Group, Inc. should be afforded the opportunity to provide field review to evaluate the actual conditions and account for field condition variations not otherwise anticipated in the preparation of this recommendation. Slope height, slope inclination, or excavation depth should in no case exceed those specified in local, state, or federal safety regulation, (e.g. OSHA) standards for excavations, 29 CFR part 1926, or Assessor's regulations.

#### 9.12 Underground Utilities

- 9.12.1 Underground utility trenches should be backfilled with properly compacted material. The material excavated from the trenches should be adequate for use as backfill provided it does not contain deleterious matter, vegetation or rock larger than 3 inches in maximum dimension. Trench backfill should be placed in loose lifts not exceeding 8 inches and compacted to at least 95% (90% for fine grained, cohesive soils) relative compaction at or above optimum moisture content.
- 9.12.2 Bedding and pipe zone backfill typically extends from the bottom of the trench excavations to approximately 6 to 12 inches above the crown of the pipe. Pipe bedding and backfill material should conform to the requirements of the governing utility agency.
- 9.12.3 It is suggested that underground utilities crossing beneath new or existing structures be plugged at entry and exit locations to the buildings or structures to prevent water migration. Trench plugs can consist of on-site clay soils, if available, or sand cement slurry. The trench plugs should extend 2 feet beyond each side of individual perimeter foundations.
- 9.12.4 The contractor is responsible for removing all water-sensitive soils from the trench regardless of the backfill location and compaction requirements. The contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

#### 9.13 Surface Drainage

- 9.13.1 Proper surface drainage is critical to the future performance of the project. Uncontrolled infiltration of irrigation excess and storm runoff into the soils can adversely affect the performance of the planned improvements. Saturation of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change to important engineering properties. Proper drainage should be maintained at all times.
- 9.13.2 The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than 5 percent for a minimum distance of 10 feet.
- 9.13.3 Impervious surfaces within 10 feet of the building foundation shall be sloped a minimum of 2 percent away from the building and drainage gradients maintained to carry all surface water to collection facilities and off site. These grades should be maintained for the life of the project.



Ponding of water should not be allowed adjacent to the structure. Over-irrigation within landscaped areas adjacent to the structure should not be performed.

9.13.4 Roof drains should be installed with appropriate downspout extensions out-falling on splash blocks so as to direct water a minimum of 5 feet away from the structures or be connected to the storm drain system for the development.

#### 9.14 Pavement Design

- 9.14.1 Based on site soil conditions and laboratory test results, an R-value of 40 was used for the preliminary flexible asphaltic concrete pavement design. The R-value may be verified during grading of the pavement areas.
- 9.14.2 The pavement design recommendations provided herein are based on the State of California Department of Transportation (CALTRANS) design manual. The asphaltic concrete (flexible pavement) is based on a 20-year pavement life utilizing 1200 passenger vehicles, 10 single unit trucks, and 2 multi-unit trucks. The following table shows the recommended pavement sections for various traffic indices.

Traffic Index	Asphaltic Concrete	Class II Aggregate Base*	Compacted Subgrade**
5.0 (Parking and Vehicle Drive Areas)	3.0"	4.0"	12.0"
6.5 (Heavy Truck Areas)	4.0"	6.0"	12.0"

TABLE 9.14.2ASPHALT CONCRETE PAVEMENT THICKNESSES

\*95% compaction based on ASTM D1557-07 Test Method \*\*95% (90% for fine grained, cohesive soils) compaction based on ASTM D1557 Test Method

9.14.3 The following recommendations are for light-duty and heavy-duty Portland Cement Concrete pavement sections.

# TABLE 9.14.3 PORTLAND CEMENT CONCRETE PAVEMENT THICKNESSES

Traffic Index	Portland Cement Concrete*	Class II Aggregate Base**	Compacted Subgrade***
5.0 (Light Duty)	5.0"	4.0"	12.0"
6.5 (Heavy Duty)	6.0"	6.0"	12.0"

\* Minimum Compressive Strength of 4,000 psi

\*\* 95% compaction based on ASTM D1557-07 Test Method

\*\*95% (90% for fine grained, cohesive soils) compaction based on ASTM D1557 Test Method



## 10. PLAN REVIEW, CONSTRUCTION OBSERVATION AND TESTING

#### 10.1 Plan and Specification Review

10.1.1 SALEM should review the project plans and specifications prior to final design submittal to assess whether our recommendations have been properly implemented and evaluate if additional analysis and/or recommendations are required.

#### **10.2** Construction Observation and Testing Services

- 10.2.1 The recommendations provided in this report are based on the assumption that we will continue as Geotechnical Engineer of Record throughout the construction phase. It is important to maintain continuity of geotechnical interpretation and confirm that field conditions encountered are similar to those anticipated during design. If we are not retained for these services, we cannot assume any responsibility for others interpretation of our recommendations, and therefore the future performance of the project.
- 10.2.2 SALEM should be present at the site during site preparation to observe site clearing, preparation of exposed surfaces after clearing, and placement, treatment and compaction of fill material.
- 10.2.3 SALEM's observations should be supplemented with periodic compaction tests to establish substantial conformance with these recommendations. Moisture content of footings and slab subgrade should be tested immediately prior to concrete placement. SALEM should observe foundation excavations prior to placement of reinforcing steel or concrete to assess whether the actual bearing conditions are compatible with the conditions anticipated during the preparation of this report.

## 11. LIMITATIONS AND CHANGED CONDITIONS

The analyses and recommendations submitted in this report are based upon the data obtained from the test borings drilled at the approximate locations shown on the Site Plan, Figure 2. The report does not reflect variations which may occur between borings. The nature and extent of such variations may not become evident until construction is initiated.

If variations then appear, a re-evaluation of the recommendations of this report will be necessary after performing on-site observations during the excavation period and noting the characteristics of such variations. The findings and recommendations presented in this report are valid as of the present and for the proposed construction. If site conditions change due to natural processes or human intervention on the property or adjacent to the site, or changes occur in the nature or design of the project, or if there is a substantial time lapse between the submission of this report and the start of the work at the site, the conclusions and recommendations contained in our report will not be considered valid unless the changes are reviewed by SALEM and the conclusions of our report are modified or verified in writing.

The validity of the recommendations contained in this report is also dependent upon an adequate testing and observations program during the construction phase. Our firm assumes no responsibility for construction compliance with the design concepts or recommendations unless we have been retained to perform the on-



site testing and review during construction. SALEM has prepared this report for the exclusive use of the owner and project design consultants.

SALEM does not practice in the field of corrosion engineering. It is recommended that a qualified corrosion engineer be consulted regarding protection of buried steel or ductile iron piping and conduit or, at a minimum, that manufacturer's recommendations for corrosion protection be closely followed. Further, a corrosion engineer may be needed to incorporate the necessary precautions to avoid premature corrosion of concrete slabs and foundations in direct contact with native soil.

The importation of soil and or aggregate materials to the site should be screened to determine the potential for corrosion to concrete and buried metal piping. The report has been prepared in accordance with generally accepted geotechnical engineering practices in the area. No other warranties, either express or implied, are made as to the professional advice provided under the terms of our agreement and included in this report.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (909) 980-6455.

Respectfully Submitted,

#### SALEM ENGINEERING GROUP, INC.

Jared Christiansen, EIT Geotechnical Staff Engineer

Clarence Jiang, GE Senior Geotechnical Engineer RGE 2477



R. Sammy Salem, MS, PE, G









APPENDIX





#### APPENDIX A FIELD EXPLORATION

Fieldwork for our investigation (drilling) was conducted on January 17, 2020 and included a site visit, subsurface exploration, and soil sampling. Percolation tests were performed on January 18, 2020. The locations of the exploratory borings and percolation tests are shown on the Site Plan, Figure 2. Boring logs for our exploration are presented in figures following the text in this appendix. Borings were located in the field using existing reference points. Therefore, actual boring locations may deviate slightly.

In general, our borings were performed using truck-mounted Mobile B-61 and CME 45 drill rigs equipped with an 8-inch hollow-stem auger and a 4-inch diameter solid flight auger. Sampling in the borings was accomplished using a hydraulic 140-pound hammer with a 30-inch drop. Samples were obtained with a 3-inch outside-diameter (OD), split spoon (California Modified) sampler, and a 2-inch OD, Standard Penetration Test (SPT) sampler. The number of blows required to drive the sampler the last 12 inches (or fraction thereof) of the 18-inch sampling interval were recorded on the boring logs. The blow counts shown on the boring logs should not be interpreted as standard SPT "N" values; corrections have not been applied. Upon completion, the borings were backfilled with soil cuttings.

Subsurface conditions encountered in the exploratory borings were visually examined, classified and logged in general accordance with the American Society for Testing and Materials (ASTM) Practice for Description and Identification of Soils (Visual-Manual Procedure D2488). This system uses the Unified Soil Classification System (USCS) for soil designations. The logs depict soil and geologic conditions encountered and depths at which samples were obtained. The logs also include our interpretation of the conditions between sampling intervals. Therefore, the logs contain both observed and interpreted data. We determined the lines designating the interface between soil materials on the logs using visual observations, drill rig penetration rates, excavation characteristics and other factors. The transition between materials may be abrupt or gradual. Where applicable, the field logs were revised based on subsequent laboratory testing.


Page 1 **Of:** 2



**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-1

Client: Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2599'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
	4/6 5/6 5/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	10	12.4	110.2	
2595 <del>-</del> - 5 - -	6/6 9/6 9/6		Grades as above; medium dense; light brown.	18	8.2	104.8	
2590 10  	4/6 6/6 7/6		Grades as above; brown; no clay.	13	9		
2585 	5/6 9/6 15/6		Grades as above; trace clay.	24	12		
2580 + + 20 +	$ \begin{bmatrix} 11/6 \\ 16/6 \\ 23/6 \end{bmatrix} $		Grades as above; dense; slightly moist; light brown; trace gravel; no clay.	39	4.6		
2575 	10/6 12/6 16/6		Grades as above; medium dense; no gravel.	28	7.8		
Notes:		<u> </u>					

Figure Number A-1

## Page 2 Of: 2

SALEM Project Number: 3-220-0008 engineering group, inc.

Date: 01/17/2020

Test Boring: B-1



**Of:** 1 Page 1



**Date:** 01/17/2020

**Project:** Proposed Multi-Tenant Development

**Test Boring:** B-2

**Client:** Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

**Drilled By: SALEM** 

**Drill Type:** CME 45C

Logged By: SK

Elevation: 2599'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH Dry Density, PCF SOIL SYMBOLS SAMPLER SYMBOLS N-Values Moisture USCS Soil Description Remarks blows/ft. Content % (feet) AND FIELD TEST DATA 0 SM Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay. 3/6 11 11.9 114.7 4/6 7/6 2595 5 10.8 115.5 4/6 Grades as above. 12 5/6 7/6 2590 10 3/6 11.6 10 Grades as above. 4/6 6/6 2585 15 6/6 12.7 Grades as above; medium dense; 21 9/6 12/6 with clay. 2580 20 14/6 36 5 Grades as above; dense; light 17/6 19/6 brown; no clay. 2575 25 38 3.5 11/6 Grades as above; no gravel. 17/6 21/6 End of boring at 26.5 feet BGS. Notes:

Page 1 **Of:** 1



**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-3

Client: Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2600'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
2600 - 0	3/6 4/6 4/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	8	13.1	112.6	
2595 - 5 - - -	5/6 6/6 7/6		Grades as above; light brown.	13	10.8	106.4	
2590 — 10 - - -	5/6 5/6 7/6		Grades as above; medium dense; brown.	12	10.8		
2585 — 15 - - -	7/6 10/6 11/6		Grades as above; with clay.	21	10.6		
2580 <sup>+</sup> + + 20	7/6		Grades as above; no clay.	27	9.6		
+			End of boring at 21.5 feet BGS.				
2575 — 25 							
+							
NULUES.					Fig	ure Nur	nber A-3

Page 1 **Of:** 1



**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-4

Client: Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2601'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
2600	2/6 4/6 7/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	11	10.4	97.9	
- 5 2595	9/6 10/6 13/6		Grades as above; medium dense.	23	8	103.6	
2590 - - - -	8/6 8/6 11/6		Grades as above; no clay.	19	8.4		
- 15 2585	11/6 18/6 24/6		Grades as above; dense; light brown; trace gravel.	42	5.7		
2580 - 	10/6 12/6 14/6		Grades as above; no gravel. End of boring at 21.5 feet BGS.	26	6.6		
2575 - - - -							
Notes:							

Figure Number A-4

**Of:** 1 Page 1



**Date:** 01/17/2020

**Project:** Proposed Multi-Tenant Development

**Test Boring:** B-5

**Client:** Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

**Drilled By: SALEM** 

**Drill Type:** CME 45C

Logged By: SK

Elevation: 2601'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA Dry Density, PCF N-Values Moisture USCS **Soil Description** Remarks blows/ft. Content % (feet) 0 SM Silty SAND 2600 Loose; moist; brown; fine to medium grain sand; trace clay. 3/6 12 5.7 99.0 5/6 7/6 5 6/6 6.9 101.9 Grades as above; medium dense. 17 7/6 2595 10/6 10 8.2 4/6 11 Grades as above; no clay. 5/6 6/6 2590 15 6/6 Grades as above; trace clay. 21 8.1 9/6 12/6 2585 20 13/6 47 3.6 Grades as above; dense; trace 19/6 2580 gravel; no clay. 28/6 End of boring at 21.5 feet BGS. 25 2575 Notes:

Figure Number A-5

Page 1 **Of:** 1

Figure Number A-6



**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-6

Client: Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2602'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
2600	3/6 4/6 8/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	12	5.9	100.6	
	8/6 9/6 10/6		Grades as above; medium dense.	19	6.1	93.7	
- 10 	9/6 12/6 16/6		Grades as above.	28	8		
- - 15 - 2585 - - -	8/6 9/6 12/6		Grades as above; with clay.	21	13.1		
2580 - - - -	16/6 23/6 31/6		Grades as above; very dense; with gravel; no clay. End of boring at 21.5 feet BGS.	54	3.5		
+ 25 - 2575 - - -							
Notes:							

Page 1 **Of:** 1



**Date:** 01/17/2020

Project: Proposed Multi-Tenant Development

**Test Boring:** B-7

Client: Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

Drilled By: SALEM

Drill Type: CME 45C

Logged By: SK Elevation: 2603'

Auger Type: 4 in. Solid Flight Auger

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	uscs Soil Description N-bl			Dry Density, PCF	Remarks
2600	3/6 5/6 8/6	SM	Silty SAND Loose; moist; brown; fine to medium grain sand; trace clay.	13	5.5	94.1	
	7/6 7/6 8/6		Grades as above.	15	6.5	100.2	
2595	7/6 7/6 9/6		Grades as above; medium dense; no clay.	16	7.6		
2590	5/6 8/6 10/6		Grades as above; with clay.	18	14.4		
- 20 - 20	6/6 7/6 8/6		Grades as above; no clay.	15	8.1		
2580	11111 11111 11111 11111 12/6 14/6 14/6 23/6	SP-SM	Poorly graded SAND with Silt Dense; slightly moist; light brown; fine to medium grain sand.	37	3.3		
2575			0. 50g at 20.0 100t 2000.				

Figure Number A-7

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Figure Number A-9

**Page 1 Of: 1** 



Notes:

Figure Number A-10

Page 1 **Of:** 1



**Date:** 01/17/2020

**Project:** Proposed Multi-Tenant Development

Test Boring: B-11

**Client:** Evergreen Devco, Inc.

Location: 8th Street and Highland Springs Avenue, Beaumont, California

**Drilled By: SALEM** 

Drill Type: CME 45C

Logged By: SK

Auger Type: 4 in. Solid Flight Auger

Elevation: 2601'

Hammer Type: Automatic Trip - 140 lb/30 in Depth to Groundwater: N/A



	KEY TO SYMBOLS							
Symbol	Description							
<u>Strata</u>	symbols							
	Silty sand							
	Silt							
1.6370.00 1.6370.13 1.6370.13 1.6330.00 1.6430.13	Poorly graded sand with silt							
Misc. S	Symbols							
	Description Boring continues							
<u>Soil Sa</u>	Soil Samplers							
	California sampler							
	Standard penetration test							

	Percolation Test Worksheet												
Project:       Proposed Multi-Tenant Development Eight Street & Highland Spring Avenue Beaumont, California       Job No.: 3-220-0008 Date Drilled: 1/17/2020         Beaumont, California       Date Drilled: 1/17/2020       Hole Radius: 4 in. Pipe Dia.: 3 in.         Test Hole No.:       P-1       Presoaking Date: 1/17/2020         Tested by:       SK       Test Date: 1/18/2020         Drilled Hele Depth       10 ft									in. in. in.				
Drilled I	Iole Depth:	10	ft.						1	Р	ipe Stick up:	0	ft.
Time Start	Time Finish	Depth of Test Hole (ft) <sup>#</sup>	Refill- Yes or No	Elapsed Time (hrs:min)	Initial Water Level <sup>#</sup> (ft)	Final Water Level <sup>#</sup> (ft)	Δ Water Level (in.)	Δ Min.	Meas. Perc Rate (min/in)	Initial Height of Water (in)	Final Height of Water (in)	Average Height of Water (in)	Infiltration Rate, It (in/hr)
9:30	10:00	10.0	Y	0:30	7.24	7.62	4.56	30	6.6	33.1	28.6	30.8	0.56
10:00	10:30	10.0	Ν	0:30	7.62	7.95	3.96	30	7.6	28.6	24.6	26.6	0.55
10:30	11:00	10.0	Ν	0:30	7.95	8.20	3.00	30	10.0	24.6	21.6	23.1	0.48
11:00	11:30	10.0	Ν	0:30	8.20	8.39	2.28	30	13.2	21.6	19.3	20.5	0.41
11:30	12:00	10.0	N	0:30	8.39	8.56	2.04	30	14.7	19.3	17.3	18.3	0.40
12:00	12:30	10.0	N	0:30	8.56	8.71	1.80	30	16.7	17.3	15.5	16.4	0.39
12:30	13:00	10.0	Ν	0:30	8.71	8.84	1.56	30	19.2	15.5	13.9	14.7	0.37
13:02	13:32	10.0	Y	0:30	7.30	7.55	3.00	30	10.0	32.4	29.4	30.9	0.36
13:32	14:02	10.0	N	0:30	7.55	7.77	2.64	30	11.4	29.4	26.8	28.1	0.35
14:02	14:32	10.0	N	0:30	7.77	7.97	2.40	30	12.5	26.8	24.4	25.6	0.35
14:32	15:02	10.0	N	0:30	7.97	8.16	2.28	30	13.2	24.4	22.1	23.2	0.36
15:02	15:32	10.0	N	0:30	8.16	8.33	2.04	30	14.7	22.1	20.0	21.1	0.35
Recommen	ded for De	sign:								Infiltr	ation Rate		0.35



	Percolation Test Worksheet												
Project:       Proposed Multi-Tenant Development Eight Street & Highland Spring Avenue Beaumont, California       Job No.: 3-220-0008 Date Drilled: 1/17/2020         Beaumont, California       Date Drilled: 1/17/2020         Test Hole No.:       P-2         Presoaking Date:       1/17/2020         Test Hole No.:       P-2         Presoaking Date:       1/17/2020         Total Depth of Hole:       60         in.         Test Hole No.:       SK         Test Date:       1/18/2020									in. in. in.				
Drilled H	Iole Depth:	5	ft.	1	<b>I</b>				1	Р	ipe Stick up:	0	ft.
Time Start	Time Finish	Depth of Test Hole (ft) <sup>#</sup>	Refill- Yes or No	Elapsed Time (hrs:min)	Initial Water Level <sup>#</sup> (ft)	Final Water Level <sup>#</sup> (ft)	Δ Water Level (in.)	Δ Min.	Meas. Perc Rate (min/in)	Initial Height of Water (in)	Final Height of Water (in)	Average Height of Water (in)	Infiltration Rate, It (in/hr)
8:50	9:20	5.0	Y	0:30	2.73	2.78	0.60	30	50.0	27.2	26.6	26.9	0.08
9:20	9:50	5.0	N	0:30	2.78	2.81	0.36	30	83.3	26.6	26.3	26.5	0.05
9:50	10:20	5.0	N	0:30	2.81	2.83	0.24	30	125.0	26.3	26.0	26.2	0.03
10:20	10:50	5.0	N	0:30	2.83	2.85	0.24	30	125.0	26.0	25.8	25.9	0.03
10:50	11:20	5.0	N	0:30	2.85	2.86	0.12	30	250.0	25.8	25.7	25.7	0.02
11:20	11:50	5.0	N	0:30	2.86	2.87	0.12	30	250.0	25.7	25.6	25.6	0.02
11:50	12:20	5.0	N	0:30	2.87	2.88	0.12	30	250.0	25.6	25.4	25.5	0.02
12:20	12:50	5.0	N	0:30	2.88	2.89	0.12	30	250.0	25.4	25.3	25.4	0.02
12:50	13:20	5.0	N	0:30	2.89	2.90	0.12	30	250.0	25.3	25.2	25.3	0.02
13:20	13:50	5.0	N	0:30	2.90	2.91	0.12	30	250.0	25.2	25.1	25.1	0.02
13:50	14:20	5.0	N	0:30	2.91	2.92	0.12	30	250.0	25.1	25.0	25.0	0.02
14:20	14:50	5.0	N	0:30	2.92	2.93	0.12	30	250.0	25.0	24.8	24.9	0.02
Recommen	ded for De	sign:								Infiltr	ation Rate		0.02







#### APPENDIX B LABORATORY TESTING

Laboratory tests were performed in accordance with generally accepted test methods of the American Society for Testing and Materials (ASTM), Caltrans, or other suggested procedures. Selected samples were tested for in-situ dry density and moisture content, corrosivity, consolidation, shear strength, maximum density and optimum moisture content, expansion index, and grain size distribution. The results of the laboratory tests are summarized in the following figures.



### CONSOLIDATION - PRESSURE TEST DATA ASTM D2435



LOAD IN KIPS PER SQUARE FOOT

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 5'



### CONSOLIDATION - PRESSURE TEST DATA ASTM D2435



LOAD IN KIPS PER SQUARE FOOT

Project Name: Proposed Multi-Tenant Development - Beaumont, CA Project Number: 3-220-0008

Boring: B-4 @ 2'



# Direct Shear Test (ASTM D3080)

Project Name:	Commercial- Beaumont, CA
Project Number:	3-220-0008
Client:	0.00
Sample Location:	B-1 @ 2'
Sample Type:	Undisturbed Ring
Soil Classification:	SM/ML
Tested By:	M. Noorzay
Reviewed By:	CJ
Date:	1/22/2020
Equipment Used:	Geomatic Direct Shear Machine

	Sample 1	Sample 2	Sample 3		
Normal Stress (ksf)	1.000	2.000	3.000		
Shear Rate (in/min)	0.004				
Peak Shear Stress (ksf)	0.840	1.524	2.097		
Residual Shear Stress (ksf)	0.000	0.000	0.000		

Initial Height of Sample (in)	1.000	1.000	1.000			
Height of Sample before Shear (in.)	1	1	1			
Diameter of Sample (in)	2.416 2.416 2.416					
Initial Moisture Content (%)	11.9					
Final Moisture Content (%)	15.3	14.7	14.3			
Dry Density (pcf)	110.9	114.1	113.5			

Peak Shear Strength Values						
<b>Slope</b> 0.63						
Friction Angle	32.1					
Cohesion (psf)	230.16					





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# Direct Shear Test (ASTM D3080)

Project Name:	Commercial- Beaumont, CA
Project Number:	3-220-0008
Client:	0.00
Sample Location:	B-4 @ 5'
Sample Type:	Undisturbed Ring
Soil Classification:	SM/ML
Tested By:	M. Noorzay
Reviewed By:	CJ
Date:	1/23/2020
Equipment Used:	Geomatic Direct Shear Machine

	Sample 1	Sample 2	Sample 3
Normal Stress (ksf)	1.000	2.000	3.000
Shear Rate (in/min)		0.004	
Peak Shear Stress (ksf)	0.800	1.450	2.072
Residual Shear Stress (ksf)	0.000	0.000	0.000

Initial Height of Sample (in)	1.000	1.000	1.000
Height of Sample before Shear (in.)	1	1	1
Diameter of Sample (in)	2.416	2.416	2.416
Initial Moisture Content (%)		7.7	
Final Moisture Content (%)	18.7	18.5	18.4
Dry Density (pcf)	101.8	102.4	108.5

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Peak Shear Strength Values			
<b>Slope</b> 0.64			
Friction Angle	32.5		
Cohesion (psf)	168.242133		





# Direct Shear Test (ASTM D3080)

Project Name:	Commercial- Beaumont, CA
Project Number:	3-220-0008
Client:	0.00
Sample Location:	B-6 @ 5'
Sample Type:	Undisturbed Ring
Soil Classification:	SM/ML
Tested By:	M. Noorzay
Reviewed By:	CJ
Date:	1/24/2020
Equipment Used:	Geomatic Direct Shear Machine

	Sample 1	Sample 2	Sample 3
Normal Stress (ksf)	1.000	2.000	3.000
Shear Rate (in/min)		0.004	
Peak Shear Stress (ksf)	0.710	1.541	2.015
Residual Shear Stress (ksf)	0.000	0.000	0.000

Initial Height of Sample (in)	1.000	1.000	1.000
Height of Sample before Shear (in.)	1	1	1
Diameter of Sample (in)	2.416	2.416	2.416
Initial Moisture Content (%)		5.9	
Final Moisture Content (%)	18.0	16.1	15.6
Dry Density (pcf)	94.9	96.7	95.6

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Peak Shear Strength Values			
Slope	0.65		
Friction Angle	33.1		
Cohesion (psf)	117.1252		







Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	97.3%
#4	94.8%
#8	91.2%
#16	85.9%
#30	78.6%
#50	68.8%
#100	56.5%
#200	43.9%

	1	Atterberg Lin	nits		
PL=		LL=		PI=	
		Coefficient	s		
D85=		D60=		D50=	
D30=		D15=		D10=	
C <sub>u</sub> =	N/A	C <sub>c</sub> =	N/A		
	USCS	S CLASSIFIC	CATION		

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 2'





Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.4%
#8	93.9%
#16	86.6%
#30	77.7%
#50	66.8%
#100	51.5%
#200	37.3%

		Atterberg Li	mus		
PL=		LL=		PI=	
		Coefficient	s		
D85=		D60=		D50=	
D30=		D15=		D10=	
C <sub>u</sub> =	N/A	C <sub>c</sub> =	N/A		
	USC	S CLASSIFIC	CATION		

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 5'





Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	98.2%
#8	95.8%
#16	91.7%
#30	82.9%
#50	67.3%
#100	48.7%
#200	33.4%

Atterberg Limits							
PL=		LL=		PI=			
		Coefficient	s				
D85=		D60=		D50=			
D30=		D15=		D10=			
C <sub>u</sub> =	N/A	C <sub>c</sub> =	N/A				
USCS CLASSIFICATION							

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 10'





Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	98.0%
#8	93.5%
#16	86.2%
#30	70.6%
#50	44.7%
#100	25.5%
#200	16.4%

PL=         LL=         PI=           Coefficients           D85=         D60=         D50=           D30=         D15=         D10=	Atterberg Limits							
Coefficients           D85=         D60=         D50=           D30=         D15=         D10=	PI=		LL=		PL=			
Coefficients           D85=         D60=         D50=           D30=         D15=         D10=								
D85= D60= D50= D30= D15= D10=		S	Coefficient					
D85=         D60=         D50=           D30=         D15=         D10=								
D30= D15= D10=	D50=		D60=		D85=			
	D10=		D15=		D30=			
$C_u = N/A$ $C_c = N/A$		N/A	C <sub>c</sub> =	N/A	C <sub>u</sub> =			
USCS CLASSIFICATION	USCS CLASSIFICATION							

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 20'





Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.7%
#8	98.6%
#16	96.3%
#30	88.5%
#50	70.2%
#100	46.4%
#200	30.1%

		Atterberg Lir	nits		
PL=		LL=		PI=	
		Coefficient	s		
D85=		D60=		D50=	
D30=		D15=		D10=	
C <sub>u</sub> =	N/A	C <sub>c</sub> =	N/A		

USCS CLASSIFICATION	
0	

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 25'





Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.1%
#8	98.3%
#16	96.4%
#30	91.5%
#50	79.8%
#100	60.1%
#200	34.9%

Atterberg Limits							
PL=		LL=		PI=			
		Coefficient	s				
D85=		D60=		D50=			
D30=		D15=		D10=			
C <sub>u</sub> =	N/A	C <sub>c</sub> =	N/A				
	USCS	S CLASSIFIC	CATION				

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 35'





i creent Gruver	1 er een	t Sunu	rereen	i bha Ciuy
0%	47	%	5	3%
~ ~ ~			A	~

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	100.0%
#8	100.0%
#16	100.0%
#30	99.5%
#50	94.9%
#100	78.0%
#200	53.2%

Atterberg Limits					
PL=		LL=		PI=	
		Coefficient	s		
D85=		D60=		D50=	
D30=		D15=		D10=	
C <sub>u</sub> =	N/A	C <sub>c</sub> =	N/A		
-	USC	S CLASSIFIC	TATION		

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 40'





	Percent Gravel         Percent Sand           1%         54%		Percent Silt/Clay	
			44%	

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	98.9%
#8	97.9%
#16	95.3%
#30	90.2%
#50	80.6%
#100	64.0%
#200	44.4%

	LL=		PL=
	Coefficients		
D50=	D60=		D85=
D10=	D15=		D30=
	C <sub>c</sub> =	N/A	C <sub>u</sub> =
	C <sub>c</sub> =	N/A	C <sub>u</sub> =

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-1 @ 45'





Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	98.2%
#4	96.0%
#8	94.1%
#16	90.4%
#30	81.6%
#50	66.3%
#100	48.5%
#200	33.7%

Atterberg Limits						
PL=		LL=		PI=		
		Coefficient	S			
D85=		D60=		D50=		
D30=		D15=		D10=		
C <sub>u</sub> =	N/A	C <sub>c</sub> =	N/A			
USCS CLASSIFICATION						

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-7 @ 10'





Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.9%
#8	98.6%
#16	94.9%
#30	83.6%
#50	59.6%

32.9%

18.2%

#100

#200

Atterberg Limits								
PL=		LL=		PI=				
		Coefficient	s					
D85=		D60=		D50=				
D30=		D15=		D10=				
C <sub>u</sub> =	N/A	C <sub>c</sub> =	N/A					
USCS CLASSIFICATION								

0

Project Name: Proposed Multi-Tenant Development - Beaumont, CA

Project Number: 3-220-0008

Boring: B-7 @ 20'



## EXPANSION INDEX TEST ASTM D4829

Project Name: Proposed Multi-Tenant Development - Beaumont, CA Project Number: 3-220-0008 Date Sampled: 1/17/2020 Date Tested: 1/24/2020 Sampled By: SK Tested By: MN Sample Location: B-1 @ 0'-3' Soil Description: Reddish brown Silty SAND (SM)

Trial #	1	2	3
Weight of Soil & Mold, g.	767.1		
Weight of Mold, g.	368.5		
Weight of Soil, g.	398.6		
Wet Density, pcf	120.2		
Weight of Moisture Sample (Wet), g.	800.0		
Weight of Moisture Sample (Dry), g.	730.6		
Moisture Content, %	9.5		
Dry Density, pcf	109.8		
Specific Gravity of Soil	2.7		
Degree of Saturation, %	48.0		

Time	Inital	30 min	1 hr	6 hrs	12 hrs	24 hrs
Dial Reading	0	0.002	0.002	0.003		0.003

Expansion Index =	2		
Expansion Index 50	=	2.2	
Expansion Index measured	=	3	

<b>Expansion Potential Table</b>				
Exp. Index	Potential Exp.			
0 - 20	Very Low			
21 - 50	Low			
51 - 90	Medium			
91 - 130	High			
>130	Very High			



# CHEMICAL ANALYSIS SO<sub>4</sub> - Modified CTM 417 & Cl - Modified CTM 417/422

Project Name: Proposed Multi-Tenant Development - Beaumont, CAProject Number: 3-220-0008Date Sampled: 1/17/2020Date Tested: 1/22/2020Sampled By: SKTested By: MNSoil Description: Reddish brown Silty SAND (SM)

Sample Sample		Soluble Sulfate	Soluble Chloride	рН
Number Location		SO <sub>4</sub> -S	Cl	
1a.	B-1 @ 0'-3'	110 mg/kg	57 mg/kg	7.7
1b.	B-1 @ 0'-3'	120 mg/kg	58 mg/kg	7.7
1c.	B-1 @ 0'-3'	110 mg/kg	58 mg/kg	7.7
Average:		113 mg/kg	58 mg/kg	7.7



## Laboratory Compaction Curve ASTM D1557

Project Name: Proposed Multi-Tenant Development - Beaumont, CA Project Number: 3-220-0008 Date Sampled: 1/17/2020 Date Tested: 1/22/2020 Sampled By: SK Tested By: MN Sample Location: B-1 @ 0'-3' Soil Description: Reddish brown Silty SAND (SM) Test Method: Method A

1 2 3 4 4263.7 4349.2 4340.0 4274.8 Weight of Moist Specimen & Mold, (g) Weight of Compaction Mold, (g) 2258.4 2258.4 2258.4 2258.4 Weight of Moist Specimen, (g) 2005.3 2090.8 2081.6 2016.4 0.0333 0.0333 0.0333 0.0333 Volume of Mold,  $(ft^3)$ 132.6 138.3 137.7 133.4 Wet Density, (pcf) Weight of Wet (Moisture) Sample, (g) 100.0 100.0 100.0 100.0 Weight of Dry (Moisture) Sample, (g) 93.6 91.6 89.2 86.5 Moisture Content, (%) 6.8% 9.2% 12.1% 15.6% 124.1 122.8 Dry Density, (pcf) 126.7 115.4





# <u>Resistance R-Value</u> and Expansion Pressure of Compacted Soils ASTM D2844, CTM 301

Project Name: Multi-Tenant Development - Beaumont, CAProject Number: 3-220-0008Sample Date: 01/17/2020Date TeSampled By: SKTested ISample Location: B-1Soil Classification: Silty SAND

Date Tested: 1/27/2020 Tested By: CM



Specimen	1	2	3
Exudation Pressure, psi	510	288	123.6
Moisture at Test, %	9.2	9.7	10.2
Dry Density, pcf	120.9	120.0	119.4
Expansion Pressure, psf	13	9	4
Thickness by Stabilometer, in.	5.5	6.0	6.8
Thickness by Expansion Pressure, in	0.1	0.1	0.0
R-Value by Stabilometer	46	40	32
R-Value by Expansion Pressure	N/A		
R-Value at 300 psi Exudation Pressure		40	
		-	

Controlling R-Value	40




#### APPENDIX C GENERAL EARTHWORK AND PAVEMENT SPECIFICATIONS

When the text of the report conflicts with the general specifications in this appendix, the recommendations in the report have precedence.

**1.0 SCOPE OF WORK:** These specifications and applicable plans pertain to and include all earthwork associated with the site rough grading, including, but not limited to, the furnishing of all labor, tools and equipment necessary for site clearing and grubbing, stripping, preparation of foundation materials for receiving fill, excavation, processing, placement and compaction of fill and backfill materials to the lines and grades shown on the project grading plans and disposal of excess materials.

**2.0 PERFORMANCE:** The Contractor shall be responsible for the satisfactory completion of all earthwork in accordance with the project plans and specifications. This work shall be inspected and tested by a representative of SALEM Engineering Group, Incorporated, hereinafter referred to as the Soils Engineer and/or Testing Agency. Attainment of design grades, when achieved, shall be certified by the project Civil Engineer. Both the Soils Engineer and the Civil Engineer are the Owner's representatives. If the Contractor should fail to meet the technical or design requirements embodied in this document and on the applicable plans, he shall make the necessary adjustments until all work is deemed satisfactory as determined by both the Soils Engineer and the Civil Engineer. No deviation from these specifications shall be made except upon written approval of the Soils Engineer, Civil Engineer, or project Architect.

No earthwork shall be performed without the physical presence or approval of the Soils Engineer. The Contractor shall notify the Soils Engineer at least 2 working days prior to the commencement of any aspect of the site earthwork.

The Contractor shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineers harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except for liability arising from the sole negligence of the Owner or the Engineers.

**3.0 TECHNICAL REQUIREMENTS**: All compacted materials shall be densified to no less that 95 percent of relative compaction (90 percent for fine grained soils) based on ASTM D1557 Test Method (latest edition), UBC or CAL-216, or as specified in the technical portion of the Soil Engineer's report. The location and frequency of field density tests shall be determined by the Soils Engineer. The results of these tests and compliance with these specifications shall be the basis upon which satisfactory completion of work will be judged by the Soils Engineer.

**4.0 SOILS AND FOUNDATION CONDITIONS**: The Contractor is presumed to have visited the site and to have familiarized himself with existing site conditions and the contents of the data presented in the Geotechnical Engineering Report. The Contractor shall make his own interpretation of the data contained in the Geotechnical Engineering Report and the Contractor shall not be relieved of liability for any loss sustained as a result of any variance between conditions indicated by or deduced from said report and the actual conditions encountered during the progress of the work.



**5.0 DUST CONTROL:** The work includes dust control as required for the alleviation or prevention of any dust nuisance on or about the site or the borrow area, or off-site if caused by the Contractor's operation either during the performance of the earthwork or resulting from the conditions in which the Contractor leaves the site. The Contractor shall assume all liability, including court costs of codefendants, for all claims related to dust or wind-blown materials attributable to his work. Site preparation shall consist of site clearing and grubbing and preparation of foundation materials for receiving fill.

**6.0 CLEARING AND GRUBBING:** The Contractor shall accept the site in this present condition and shall demolish and/or remove from the area of designated project earthwork all structures, both surface and subsurface, trees, brush, roots, debris, organic matter and all other matter determined by the Soils Engineer to be deleterious. Such materials shall become the property of the Contractor and shall be removed from the site.

Tree root systems in proposed improvement areas should be removed to a minimum depth of 3 feet and to such an extent which would permit removal of all roots greater than 1 inch in diameter. Tree roots removed in parking areas may be limited to the upper 1½ feet of the ground surface. Backfill of tree root excavations is not permitted until all exposed surfaces have been inspected and the Soils Engineer is present for the proper control of backfill placement and compaction. Burning in areas which are to receive fill materials shall not be permitted.

**7.0 SUBGRADE PREPARATION:** Surfaces to receive Engineered Fill and/or building or slab loads shall be prepared as outlined above, scarified to a minimum of 12 inches, moisture-conditioned as necessary, and recompacted to 95 percent relative compaction (90 percent for fine grained soils).

Loose soil areas and/or areas of disturbed soil shall be moisture-conditioned as necessary and recompacted to 95 percent relative compaction (90 percent for fine grained soils). All ruts, hummocks, or other uneven surface features shall be removed by surface grading prior to placement of any fill materials. All areas which are to receive fill materials shall be approved by the Soils Engineer prior to the placement of any fill material.

**8.0 EXCAVATION:** All excavation shall be accomplished to the tolerance normally defined by the Civil Engineer as shown on the project grading plans. All over-excavation below the grades specified shall be backfilled at the Contractor's expense and shall be compacted in accordance with the applicable technical requirements.

**9.0 FILL AND BACKFILL MATERIAL:** No material shall be moved or compacted without the presence or approval of the Soils Engineer. Material from the required site excavation may be utilized for construction site fills, provided prior approval is given by the Soils Engineer. All materials utilized for constructing site fills shall be free from vegetation or other deleterious matter as determined by the Soils Engineer.

**10.0 PLACEMENT, SPREADING AND COMPACTION:** The placement and spreading of approved fill materials and the processing and compaction of approved fill and native materials shall be the responsibility of the Contractor. Compaction of fill materials by flooding, ponding, or jetting shall not be permitted unless specifically approved by local code, as well as the Soils Engineer. Both cut and fill shall be surface-compacted to the satisfaction of the Soils Engineer prior to final acceptance.



**11.0 SEASONAL LIMITS:** No fill material shall be placed, spread, or rolled while it is frozen or thawing, or during unfavorable wet weather conditions. When the work is interrupted by heavy rains, fill operations shall not be resumed until the Soils Engineer indicates that the moisture content and density of previously placed fill is as specified.

**12.0 DEFINITIONS** - The term "pavement" shall include asphaltic concrete surfacing, untreated aggregate base, and aggregate subbase. The term "subgrade" is that portion of the area on which surfacing, base, or subbase is to be placed.

The term "Standard Specifications": hereinafter referred to, is the most recent edition of the Standard Specifications of the State of California, Department of Transportation. The term "relative compaction" refers to the field density expressed as a percentage of the maximum laboratory density as determined by ASTM D1557 Test Method (latest edition) or California Test Method 216 (CAL-216), as applicable.

**13.0 PREPARATION OF THE SUBGRADE** - The Contractor shall prepare the surface of the various subgrades receiving subsequent pavement courses to the lines, grades, and dimensions given on the plans. The upper 12 inches of the soil subgrade beneath the pavement section shall be compacted to a minimum relative compaction of 95 percent (90 percent for find grained soils) based upon ASTM D1557. The finished subgrades shall be tested and approved by the Soils Engineer prior to the placement of additional pavement courses.

**14.0** AGGREGATE BASE - The aggregate base material shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate base material shall conform to the requirements of Section 26 of the Standard Specifications for Class II material, <sup>3</sup>/<sub>4</sub>-inch or 1<sup>1</sup>/<sub>2</sub>-inches maximum size. The aggregate base material shall be compacted to a minimum relative compaction of 95 percent based upon CAL-216. The aggregate base material shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

**15.0 AGGREGATE SUBBASE** - The aggregate subbase shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate subbase material shall conform to the requirements of Section 25 of the Standard Specifications for Class II Subbase material. The aggregate subbase material shall be compacted to a minimum relative compaction of 95 percent based upon CAL-216, and it shall be spread and compacted in accordance with the Standard Specifications. Each layer of aggregate subbase shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

**16.0 ASPHALTIC CONCRETE SURFACING** - Asphaltic concrete surfacing shall consist of a mixture of mineral aggregate and paving grade asphalt, mixed at a central mixing plant and spread and compacted on a prepared base in conformity with the lines, grades, and dimensions shown on the plans. The viscosity grade of the asphalt shall be PG 64-10, unless otherwise stipulated or local conditions warrant more stringent grade. The mineral aggregate shall be Type A or B, ½ inch maximum size, medium grading, and shall conform to the requirements set forth in Section 39 of the Standard Specifications. The drying, proportioning, and mixing of the materials shall conform to Section 39. The prime coat, spreading and compacting equipment, and spreading and compacting the mixture shall conform to the applicable chapters of Section 39, with the exception that no surface course shall be placed when the atmospheric temperature is below 50 degrees F. The surfacing shall be rolled with a combination steel-wheel and pneumatic rollers,



as described in the Standard Specifications. The surface course shall be placed with an approved self-propelled mechanical spreading and finishing machine.



# APPENDIX H NOISE IMPACT ANALYSIS MAY 4, 2020



# Highland Springs and 8th Retail

NOISE IMPACT ANALYSIS CITY OF BEAUMONT

PREPARED BY:

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Sama Shami sshami@urbanxroads.com (714) 389-6609

May 4, 2020

13073-02 Noise Study



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# LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
ANSI	American National Standards Institute
Calveno	California Vehicle Noise
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
Hz	Hertz
INCE	Institute of Noise Control Engineering
L <sub>eq</sub>	Equivalent continuous (average) sound level
L <sub>max</sub>	Maximum level measured over the time interval
L <sub>min</sub>	Minimum level measured over the time interval
mph	Miles per hour
OPR	Office of Planning and Research
PPV	Peak particle velocity
Project	Highland Springs and 8th Retail
REMEL	Reference Energy Mean Emission Level
RMS	Root-mean-square
VdB	Vibration Decibels

# **EXECUTIVE SUMMARY**

Urban Crossroads, Inc. has prepared this noise study to determine the potential noise impacts and the necessary noise mitigation measures, if any, for the proposed Highland Springs and 8th Retail development ("Project"). The Project site is located on the southwest corner of Highland Springs Avenue and 8<sup>th</sup> Street in the City of Beaumont. The Project is proposed to consist of 3,500 square feet of Fast-Food Restaurant with Drive-Through Window use and 12 vehicle fueling position gasoline service station. This study has been prepared to satisfy applicable City of Beaumont standards and thresholds of significance based on guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1)

## OFF-SITE TRAFFIC NOISE ANALYSIS

Traffic generated by the operation of the Project will influence the traffic noise levels in surrounding off-site areas. To quantify the off-site traffic noise increases on the surrounding off-site areas, the changes in traffic noise levels on 16 study-area roadway segments were calculated using the transportation related twenty-four hour community noise equivalent levels (CNEL) based on the change in the average daily traffic (ADT) volumes. The traffic noise levels provided in this analysis are based on the traffic forecasts found in the *Highland Springs and 8th Retail Traffic Impact Analysis* prepared by Urban Crossroads, Inc. (2) To assess the off-site noise level impacts associated with the proposed Project, noise contour boundaries were developed for Existing 2020, and Opening Year Cumulative (OYC) 2021 conditions. The analysis shows that the unmitigated Project-related traffic noise level increases under all with Project traffic scenarios are considered *less than significant* impacts at receiving land uses adjacent to the study area roadway segments.

## **OPERATIONAL NOISE ANALYSIS**

Using reference noise levels to represent the expected noise sources from the Highland Springs and 8th Retail site, the operational analysis estimates the Project-related stationary-source noise hourly average  $L_{eq}$  levels at nearby sensitive receiver locations. The typical activities associated with the proposed Highland Springs and 8th Retail are anticipated to include roof-top air conditioning units, trash enclosure activity, drive-thru speakerphone and gas station activity. The operational noise analysis shows that the Project will satisfy the City of Beaumont stationarysource exterior hourly average  $L_{eq}$  noise levels of 55 dBA  $L_{eq}$  daytime and 45 dBA  $L_{eq}$  nighttime noise level standards at all nearby receiver locations. Therefore, the Project-related operational noise level impacts are considered *less than significant*.

## **CONSTRUCTION NOISE ANALYSIS**

Using sample reference noise levels to represent the planned construction activities of the Highland Springs and 8th Retail site, this analysis estimates the Project-related construction noise levels at nearby sensitive receiver locations. The Project-related short-term construction noise levels are expected to range from 53.2 to 70.8 dBA  $L_{eq}$  and will satisfy the acceptable 75 dBA  $L_{eq}$  threshold at all receiver locations. Therefore, based on the results of this analysis, all nearby





sensitive receiver locations will experience *less than significant* impacts due to Project construction noise levels.

#### **CONSTRUCTION VIBRATION ANALYSIS**

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Based on this analysis it is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. This analysis shows the highest construction vibration levels are estimated at 73.4 VdB, which is below the FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria of 78 VdB for daytime residential uses at all receiver locations. Therefore, the Project-related vibration impacts are considered *less than significant* during the construction activities at the Project site. Moreover, the impacts at the site of the closest sensitive receivers are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

#### SUMMARY OF CEQA SIGNIFICANCE FINDINGS

The results of this Highland Springs and 8th Retail Noise Impact Analysis are summarized below based on the significance criteria in Section 4 of this report consistent with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1). Table ES-1 shows the findings of significance for each potential noise and/or vibration impact. All impacts would be less than significant, and no mitigation measures are required.

Analusia	Report	Significance Findings		
Analysis	Section	Unmitigated	Mitigated	
Off-Site Traffic Noise	7	Less Than Significant	-	
Operational Noise	9	Less Than Significant	-	
Construction Noise	10	Less Than Significant	-	
Construction Vibration	10	Less Than Significant	-	



# 1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the proposed Highland Springs and 8th Retail ("Project"). This noise study briefly describes the proposed Project, provides information regarding noise fundamentals, describes the local regulatory setting, presents the study methods and procedures for transportation related CNEL traffic noise analysis, and evaluates the future exterior noise environment. In addition, this study includes an analysis of the potential Project-related long-term stationary-source operational noise and short-term construction noise impacts.

#### **1.1** SITE LOCATION

The proposed Highland Springs and 8th Retail site is located on the southwest corner of Highland Springs Avenue and 8<sup>th</sup> Street in the City of Beaumont, as shown on Exhibit 1-A. The Project site is currently vacant. Existing land uses near the site consist mostly of medical office land use and vacant land to the north of the Project site with some nearby multi-family residential communities located west of the Project site.

### **1.2 PROJECT DESCRIPTION**

As shown in Exhibit 1-B, the Project is proposed to consist of the following uses:

- 3,500 square feet of Fast-Food Restaurant with Drive-Through Window use
- 12 vehicle fueling position gasoline service station

The on-site Project-related noise sources are expected to include: roof-top air conditioning units, trash enclosure activity, drive-thru speakerphone and gas station activity. This noise analysis is intended to describe noise level impacts associated with the expected typical operational activities at the Project site. To present a conservative approach, this report assumes the Project will operate 24-hours daily for seven days per week.

Per the *Highland Springs and 8th Retail Traffic Impact Analysis* prepared by Urban Crossroads, Inc. the Project is expected to generate a total of approximately 1,100 trip-ends per day. (2) The Project opening year is 2021.





#### EXHIBIT 1-A: LOCATION MAP



EXHIBIT 1-B: SITE PLAN

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# 2 FUNDAMENTALS

Noise is simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE	
THRESHOLD OF PAIN		140			
NEAR JET ENGINE		130	INTOLERABLE OR DEAFENING		
		120		HEARING LOSS	
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110			
LOUD AUTO HORN		100			
GAS LAWN MOWER AT 1m (3 ft)		90	VERY NOISY		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80			
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70		SPEECH INTERFERENCE	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60			
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50		CLEED	
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		DISTURBANCE	
QUIET SUBURBAN NIGHTTIME	LIBRARY	30			
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20	FAINT		
	BROADCAST/RECORDING STUDIO	10		NO EFFECT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0			

#### EXHIBIT 2-A: TYPICAL NOISE LEVELS

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

## 2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (3) The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA



at approximately 100 feet, which can cause serious discomfort. (4) Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

# 2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most commonly used figure is the equivalent level ( $L_{eq}$ ). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level ( $L_{eq}$ ) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period (typically one hour) and is commonly used to describe the "average" noise levels within the environment.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time of day corrections require the addition of 5 decibels to dBA  $L_{eq}$  sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Beaumont relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

## 2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the following factors.

## 2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (3)

## 2.3.2 GROUND ABSORPTION

The propagation path of noise from a highway to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually



sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (5)

#### 2.3.3 ATMOSPHERIC EFFECTS

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects. (3)

#### 2.3.4 SHIELDING

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an "out of sight, out of mind" effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby residents. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The FHWA does not consider the planting of vegetation to be a noise abatement measure. (5)

## 2.4 NOISE CONTROL

Noise control is the process of obtaining an acceptable noise environment for an observation point or receiver by controlling the noise source, transmission path, receiver, or all three. This concept is known as the source-path-receiver concept. In general, noise control measures can be applied to these three elements.

## **2.5** Noise Barrier Attenuation

Effective noise barriers can reduce noise levels by up to 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receiver. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source. (5)



### 2.6 LAND USE COMPATIBILITY WITH NOISE

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. (6)

#### 2.7 COMMUNITY RESPONSE TO NOISE

Community responses to noise may range from registering a complaint by telephone or letter, to initiating court action, depending upon everyone's susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance including:

- Fear associated with noise producing activities;
- Socio-economic status and educational level;
- Perception that those affected are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity;
- Belief that the noise source can be controlled.

Approximately ten percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints will occur. Twenty-five percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment. (7) Surveys have shown that about ten percent of the people exposed to traffic noise of 60 dBA will report being highly annoyed with the noise, and each increase of one dBA is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 dBA or aircraft noise exceeds 55 dBA, people may begin to complain. (7) Despite this variability in behavior on an individual level, the population can be expected to exhibit the following responses to changes in noise levels as shown on Exhibit 2-B. A change of 3 dBA are considered *barely perceptible*, and changes of 5 dBA are considered *readily perceptible*. (5)





EXHIBIT 2-B: NOISE LEVEL INCREASE PERCEPTION

#### 2.8 EXPOSURE TO HIGH NOISE LEVELS

The Occupational Safety and Health Administration (OSHA) sets legal limits on noise exposure in the workplace. The permissible exposure limit (PEL) for a worker over an eight-hour day is 90 dBA. The OSHA standard uses a 5 dBA exchange rate. This means that when the noise level is increased by 5 dBA, the amount of time a person can be exposed to a certain noise level to receive the same dose is cut in half. The National Institute for Occupational Safety and Health (NIOSH) has recommended that all worker exposures to noise should be controlled below a level equivalent to 85 dBA for eight hours to minimize occupational noise induced hearing loss. NIOSH also recommends a 3 dBA exchange rate so that every increase by 3 dBA doubles the amount of the noise and halves the recommended amount of exposure time. (8)

OSHA has implemented requirements to protect all workers in general industry (e.g. the manufacturing and the service sectors) for employers to implement a Hearing Conservation Program where workers are exposed to a time weighted average noise level of 85 dBA or higher over an eight-hour work shift. Hearing Conservation Programs require employers to measure noise levels, provide free annual hearing exams and free hearing protection, provide training, and conduct evaluations of the adequacy of the hearing protectors in use unless changes to tools, equipment and schedules are made so that they are less noisy and worker exposure to noise is less than the 85 dBA. This noise study does not evaluate the noise exposure of workers within a project or construction site based on CEQA requirements, and instead, evaluates Project-related operational and construction noise levels at the nearby sensitive receiver locations in the Project study area.

#### 2.9 VIBRATION

Per the Federal Transit Administration (FTA) *Transit Noise Impact and Vibration Assessment* (9), vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.



There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment and/or activities

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-C illustrates common vibration sources and the human and structural response to ground-borne vibration.





#### EXHIBIT 2-C: TYPICAL LEVELS OF GROUND-BORNE VIBRATION

\* RMS Vibration Velocity Level in VdB relative to 10<sup>-6</sup> inches/second

Source: Federal Transit Administration (FTA) Transit Noise Impact and Vibration Assessment.



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# **3 REGULATORY SETTING**

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

### 3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared per guidelines adopted by the Governor's Office of Planning and Research (OPR). (10) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

#### 3.2 STATE OF CALIFORNIA GREEN BUILDING STANDARDS CODE

The State of California's Green Building Standards Code contains mandatory measures for nonresidential building construction in Section 5.507 on Environmental Comfort. (11) These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other areas where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. For those developments in areas where noise contours are not readily available and the noise level exceeds 65 dBA L<sub>eq</sub> for any hour of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required (Section 5.507.4.1).

## 3.3 CITY OF BEAUMONT GENERAL PLAN SAFETY ELEMENT

The City of Beaumont has adopted a Safety Element of the General Plan (12) to control and abate environmental noise, and to protect the citizens of Beaumont from excessive noise exposure. However, the Safety Element does not identify specific noise level thresholds defining the maximum allowable unmitigated exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports and railroads.



The noise standards used by the City of Beaumont General Plan are guidelines to evaluate the acceptability of the transportation related noise level impacts. These standards are based on the Governor's Office of Planning and Research and are used to assess the long-term traffic noise impacts on land uses. For noise sensitive land uses such as single-family residences the Safety Element identifies a desirable maximum exterior noise level 55 dBA and a maximum acceptable exterior noise level of 65 dBA CNEL. For the Project commercial land use, the Safety Element identifies a desirable maximum exterior noise level of 65 dBA CNEL and maximum acceptable 75 dBA exterior noise level compatibility standard. To protect City of Beaumont residents from excessive noise, the Safety Element contains the following policies related to the Project:

- Policy 24: The City of Beaumont will protect public health and welfare by eliminating existing noise problems and by preventing significant degradation of the future acoustic environment.
- Policy 25: The City of Beaumont will incorporate noise considerations into land use planning decisions.
- Policy 26: The City of Beaumont shall require the inclusion of noise mitigation measures, as may be necessary to meet standards, in the design of new roadway projects in Beaumont.
- Policy 27: The City of Beaumont shall promote the effective enforcement of City, State and Federal noise standards by all appropriate City divisions.

#### 3.4 CITY OF BEAUMONT MUNICIPAL CODE STANDARDS

To analyze noise impacts originating from a designated fixed location or private property such as the Highland Springs and 8th Retail Project, stationary-source (operational) noise levels such as the expected roof-top air conditioning units, trash enclosure activity, drive-thru speakerphone and gas station activity, and noise from construction activities are typically evaluated against standards established under the City's Municipal Code.

#### 3.4.1 OPERATIONAL NOISE STANDARDS

For noise-sensitive residential properties, the City of Beaumont Municipal Code, Section 9.02.050, identifies base ambient noise level (BANL) stationary-source noise level limits for the daytime (7:00 a.m. to 10:00 p.m.) hours of 55 dBA Leq and 45 dBA Leq during the nighttime (10:00 p.m. to 7:00 a.m.) hours. For industrial and commercial land uses, the BANL is 75 dBA Leq for the daytime hours and of 50 dBA Leq during the nighttime hours. Section 9.40.050 states *that actual decibel measurements exceeding the levels set forth hereinabove at the times and within the zones corresponding thereto shall be employed as the "base ambient noise level.* In effect, when the ambient noise levels exceed the base exterior noise level limits, the noise level standard shall be adjusted as appropriate to encompass or reflect the ambient noise level. The noise level limit adjustments for the City of Beaumont noise standards are shown on Table 3-1.



	Exterior Noise Levels <sup>1</sup>		
Land Use	Daytime (7am-10pm)	Nighttime (10pm-7am)	
Residential	55 dBA L <sub>eq</sub>	45 dBA L <sub>eq</sub>	
Industrial and Commercial	75 dBA L <sub>eq</sub>	50 dBA L <sub>eq</sub>	

 $^1$  Source: Section 9.02.050 base ambient noise level of the City of Beaumont Municipal Code (Appendix 3.1).  $L_{eq}$  represents a steady state sound level containing the same total energy as a time varying signal over a given period.

#### **3.4.2** CONSTRUCTION NOISE STANDARDS

The City of Beaumont has set restrictions to control noise impacts associated with the construction of the proposed Project. Section 9.02.110(F) of the City's Municipal Code states: *It shall be unlawful for any person to engage in or permit the generation of noise related to landscape maintenance, construction including erection, excavation, demolition, alteration or repair of any structure or improvement, at such sound levels, as measured at the property line of the nearest adjacent occupied property, as to be in excess of the sound levels permitted under this Chapter, at other times than between the hours of 7:00 a.m. and 6:00 p.m. The person engaged in such activity is hereby permitted to exceed sound levels otherwise set forth in this Chapter for the duration of the activity during the above described hours for purposes of construction. However, nothing contained herein shall permit any person to cause sound levels to at any time exceed 55 dB(A) for intervals of more than 15 minutes per hour as measured in the interior of the nearest occupied residence or school.* 

Project construction noise level standards are typically described as exterior noise level limits in order to assess the potential impacts. Therefore, to describe the Project construction noise levels at off-site sensitive receiver locations, an exterior construction-related noise level threshold of 75 dBA  $L_{eq}$  is used. Since typical building construction will provide a Noise Reduction (NR) of approximately 20 dBA with "windows closed" (5 p. 31), an unmitigated exterior noise level standard of 75 dBA  $L_{eq}$  when measured at the building façade is used to describe the for noise sensitive residential uses. This exterior construction noise level standard represents the combination of the City of Beaumont 55 dBA  $L_{eq}$  interior noise level limit and the 20 dBA noise reduction associated with typical building construction.

#### **3.5 CONSTRUCTION VIBRATION STANDARDS**

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. (9) Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. (9) Occasionally large bulldozers and loaded trucks can cause perceptible vibration levels at close proximity.



To analyze vibration impacts originating from the operation and construction of the Highland Springs and 8th Retail, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code, if such standards exist. However, the City of Beaumont does not identify specific vibration level limits and instead relies on the Federal Transit Administration (FTA) methodology (9). The FTA *Transit Noise and Vibration Impact Assessment* methodology provides guidelines for the maximum-acceptable vibration criteria for different types of land uses. These guidelines allow 90 VdB for industrial (workshop) use, 84 VdB for office use and 78 VdB for daytime residential uses and 72 VdB for nighttime uses in buildings where people normally sleep. (9)



# 4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

- A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- B. Generation of excessive ground-borne vibration or ground-borne noise levels?
- C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

While the City of Beaumont General Plan Guidelines provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts, they do not define the levels at which increases are considered substantial for use under Guideline A. CEQA Appendix G Guideline C applies to nearby public and private airports, if any, and the Project's land use compatibility.

#### 4.1 CEQA GUIDELINES NOT FURTHER ANALYZED

The Project site is not located within two miles of a public airport or within an airport land use plan. The closest airport is the Banning Municipal Airport located over 5 miles east of the Project site. As such, the Project site would not be exposed to excessive noise levels from airport operations, and therefore, impacts are considered *less than significant*, and no further noise analysis is conducted in relation to Guideline C.

#### 4.2 Noise-Sensitive Receivers

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant.* (13)

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding human reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called *ambient* environment. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged. The Federal Interagency Committee on Noise (FICON) (14) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L<sub>eq</sub>).

As previously stated, the approach used in this noise study recognizes *that there is no single noise increase that renders the noise impact significant*, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (13) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, a *readily perceptible* 5 dBA or greater project-related noise level increase is considered a significant impact when the without project noise levels are below 60 dBA. Per the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance. Table 4-1 below provides a summary of the potential noise impact significance criteria, based on guidance from FICON.

Without Project Noise Level	Potential Significant Impact
< 60 dBA	5 dBA or more
60 - 65 dBA	3 dBA or more
> 65 dBA	1.5 dBA or more

TABLE 4-1: SIGNIFICANCE OF NOISE IMPACTS AT NOISE-SENSITIVE RECEIVERS

Federal Interagency Committee on Noise (FICON), 1992.

The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with guidance provided by both the Federal Highway Administration (5 p. 9) and Caltrans (15 p. 2\_48).

#### 4.3 NON-NOISE-SENSITIVE RECEIVERS

The City of Beaumont General Plan Safety Element, Table 5-1, *Noise and Land Use Compatibility Standards (Ambient Exterior Noise Exposure)* was used to establish the satisfactory noise levels of significance for non-noise-sensitive land uses in the Project study area. The *desirable maximum* exterior noise levels for non-noise-sensitive land uses is 70 dBA CNEL. (12)



To determine if Project-related traffic noise level increases are significant at off-site non-noisesensitive land uses, a *readily perceptible* 5 dBA and *barely perceptible* 3 dBA criteria were used. When the without Project noise levels at the non-noise-sensitive land uses are below the *desirable maximum* 70 dBA CNEL compatibility criteria, a *readily perceptible* 5 dBA or greater noise level increase is considered a significant impact. When the without Project noise levels are greater than the *desirable maximum* 70 dBA CNEL land use compatibility criteria, a *barely perceptible* 3 dBA or greater noise level increase is considered a significant impact since the noise level criteria is already exceeded. The noise level increases used to determine significant impacts for non-noise-sensitive land uses is generally consistent with the FICON noise level increase thresholds for noise-sensitive land uses but instead rely on the City of Beaumont General Plan Safety Element, Table 5-1, *Noise and Land Use Compatibility Standards (Ambient Exterior Noise Exposure) desirable maximum* 70 dBA CNEL exterior noise level criteria.

#### 4.4 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed development. Table 4-2 shows the significance criteria summary matrix.

#### OFF-SITE TRAFFIC NOISE

- When the noise levels at existing and future noise-sensitive land uses (e.g. residential, etc.):
  - are less than 60 dBA CNEL and the Project creates a *readily perceptible* 5 dBA CNEL or greater Project-related noise level increase; or
  - range from 60 to 65 dBA CNEL and the Project creates a *barely perceptible* 3 dBA CNEL or greater Project-related noise level increase; or
  - already exceed 65 dBA CNEL, and the Project creates a community noise level increase of greater than 1.5 dBA CNEL (FICON, 1992).
- When the noise levels at existing and future non-noise-sensitive land uses (e.g., office, commercial, industrial):
  - are less than the City of Beaumont General Plan Safety Element, Table 5-1, *desirable maximum* 70 dBA CNEL and the Project creates a *readily perceptible* 5 dBA CNEL or greater Project related noise level increase; or
  - are greater than the City of Beaumont General Plan Safety Element, Table 5-1, desirable maximum 70 dBA CNEL and the Project creates a barely perceptible 3 dBA CNEL or greater Project noise level increase.

#### **OPERATIONAL NOISE**

- If Project-related operational (stationary-source) noise levels exceed the exterior 55 dBA L<sub>eq</sub> daytime or 45 dBA L<sub>eq</sub> nighttime noise level standards at nearby sensitive receiver locations (City of Beaumont Municipal Code, 9.02.050)
- If the existing ambient noise levels at the nearby noise-sensitive receivers near the Project site:
  - $\circ~$  are less than 60 dBA  $L_{eq}$  and the Project creates a readily perceptible 5 dBA  $L_{eq}$  or greater Project-related noise level increase; or



- $\circ$  range from 60 to 65 dBA  $L_{eq}$  and the Project creates a *barely perceptible* 3 dBA  $L_{eq}$  or greater Project-related noise level increase; or
- $\circ~$  already exceed 65 dBA  $L_{eq}$  and the Project creates a community noise level increase of greater than 1.5 dBA  $L_{eq}$  (FICON, 1992).

#### **CONSTRUCTION NOISE & VIBRATION**

- If Project-related construction activities take place during the restricted hours between 7:00 a.m. and 6:00 p.m. (City of Beaumont Municipal Code Section 9.02.110(F).
- If Project-related construction activities create noise levels which exceed the 75 dBA  $L_{eq}$  acceptable exterior construction noise threshold based on the City of Beaumont 55 dBA  $L_{eq}$  interior noise level limit and the 20 dBA noise reduction associated with typical building construction.
- If Project generated operational vibration levels exceed the FTA's acceptable vibration thresholds of 78 VdB for daytime residential use and buildings where people normally sleep. (FTA Transit Noise and Vibration Impact Assessment).

Analysia	Receiving Land Use	Condition(c)	Significance Criteria		
Analysis		Condition(s)	Daytime	Nighttime	
Off-Site Traffic <sup>1</sup>	Noise- Sensitive <sup>1,2</sup>	If ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase		
		If ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase		
		If ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase		
	Non-Noise- Sensitive <sup>1,2</sup>	If ambient is < 70 dBA CNEL	≥ 5 dBA CNEL Project increase		
		If ambient is > 70 dBA CNEL	≥ 3 dBA CNEL Project increase		
Operational	Residential <sup>3</sup>	Exterior Noise Level Standards	See Table 3-1		
		If ambient is < 60 dBA $L_{eq}^1$	$\geq$ 5 dBA L <sub>eq</sub> Project increase		
		If ambient is 60 - 65 dBA $L_{eq}^1$	≥ 3 dBA L <sub>eq</sub> Project increase		
		If ambient is > 65 dBA $L_{eq}^1$	$\geq$ 1.5 dBA L <sub>eq</sub> Project increase		
Construction	Noise- Sensitive	Permitted between 7:00 a.m. to 6:00 p.m. <sup>4</sup>			
		Noise Level Threshold <sup>5</sup>	75 dBA L <sub>eq</sub>	n/a	
		Vibration Level Threshold <sup>6</sup>	78 VdB	n/a	

#### TABLE 4-2: SIGNIFICANCE CRITERIA SUMMARY

<sup>1</sup> Source: FICON, 1992.

<sup>2</sup> Source: City of Beaumont General Plan Safety Element.

<sup>4</sup> Source: City of Beaumont General Plan Municipal Code, Section 9.02.110(F)



<sup>&</sup>lt;sup>3</sup> Source: City of Beaumont General Plan Municipal Code, Section 9.02.050

<sup>&</sup>lt;sup>5</sup> Acceptable exterior construction noise level threshold based on the City of Beaumont 55 dBA Leq interior noise level limit and the 20 dBA noise reduction associated with typical building construction.

<sup>&</sup>lt;sup>6</sup> Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment.

<sup>&</sup>quot;Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

# 5 EXISTING NOISE LEVEL MEASUREMENTS

To assess the existing noise level environment, 24-hour noise level measurements were taken at four locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit 5-A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Thursday, December 12<sup>th</sup>, 2019. Appendix 5.1 includes study area photos.

#### 5.1 MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (16)

## 5.2 NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent every part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines which indicate that, *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources. (3) Further, FTA guidance states, that it is not necessary nor recommended that existing noise exposure be determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community. (9)* 

Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence. (9) In other words, the area represented by the receiver shares similar shielding, terrain, and geometric relationship to the reference noise source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels



and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

#### 5.3 NOISE MEASUREMENT RESULTS

The noise measurements presented below focus on the average or equivalent sound levels ( $L_{eq}$ ). The equivalent sound level ( $L_{eq}$ ) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 5-1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. Table 5-1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions.

Location <sup>1</sup>	Description	Energy Average Noise Level (dBA L <sub>eq</sub> ) <sup>2</sup>		CNEL
		Daytime	Nighttime	
L1	Located east of the Project site near the San Gregorio Memorial Hospital.	65.6	64.2	71.1
L2	Located by the southern border of the Project site by Medical and Dental Offices.	58.6	56.6	63.7
L3	Located southwest of the Project site on Allegheny Street near the Tuscany Villas apartment complex.	58.5	56.4	63.5
L4	Located northwest of the Project site on East 8th Street near Palm Grove Health Care.	68.5	62.2	70.5

 TABLE 5-1: 24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS

<sup>1</sup> See Exhibit 5-A for the noise level measurement locations.

<sup>2</sup> Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.

"Day" = 7:00 a.m. to 10:00 p.m.; "Night" = 10:00 p.m. to 7:00 a.m.

These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix 5.2 provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, L<sub>1</sub>, L<sub>2</sub>, L<sub>5</sub>, L<sub>8</sub>, L<sub>25</sub>, L<sub>50</sub>, L<sub>90</sub>, L<sub>95</sub>, and L<sub>99</sub> percentile noise levels observed during the daytime and nighttime periods. The background ambient noise levels in the Project study area are dominated by the transportation-related noise associated with Highland Springs Avenue and E 8<sup>th</sup> Street.




#### **EXHIBIT 5-A: NOISE MEASUREMENT LOCATIONS**

LEGEND: A Measurements



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# 6 METHODS AND PROCEDURES

The following section outlines the methods and procedures used to model and analyze the future traffic noise environment. Consistent with the City of Beaumont General Plan Safety Element, Table 5-1, *Noise and Land Use Compatibility Standards (Ambient Exterior Noise Exposure)* all transportation related noise levels are presented in terms of the 24-hour CNEL's.

## 6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The expected roadway noise level increases from vehicular traffic were calculated by Urban Crossroads, Inc. using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (17) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (18)

Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. Research conducted by Caltrans has shown that the use of soft site conditions is appropriate for the application of the FHWA traffic noise prediction model used in this analysis. (19) This methodology is consistent with the County of Riverside Office of Industrial Hygiene *Requirements for Determining and Mitigating Traffic Noise Impacts to Residential Structures*, which specifically requires the FHWA RD-77-108 model to be used in analysis within the County's jurisdiction. (20)

# 6.2 OFF-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

Table 6-1 presents the roadway parameters used to assess the Project's off-site dBA CNEL transportation noise impacts. Table 6-1 identifies the 16 study area roadway segments, the distance from the centerline to adjacent land use based on the functional roadway classifications per the City of Beaumont General Plan Circulation Element, and the posted vehicle speeds. Where posted vehicle speeds are unavailable, the 40-mph speed identified in the County of Riverside Office of Industrial Hygiene Noise Study Guidelines is used. The ADT volumes used in this study area presented on Table 6-2 are based on the *Highland Springs and 8th Retail Traffic Impact Analysis*, prepared by Urban Crossroads, Inc. for the following traffic scenarios under both Without and With Project alternatives: Existing 2020 and Opening Year Cumulative 2021 conditions. (2)



The ADT volumes vary for each roadway segment based on the existing traffic volumes and the combination of project traffic distributions. In addition, the off-site traffic noise analysis maintains a peak hour to average daily traffic (peak-to-daily) relationship of approximately 7.37%. (2) Table 6-3 provides the time of day (daytime, evening, and nighttime) vehicle splits. Table 6-4 shows the traffic flow by vehicle type (vehicle mix) used for all traffic conditions.

ID	Roadway	Segment	Receiving Land Use <sup>1</sup>	Roadway Classification <sup>1</sup>	Distance from Centerline to Receiving Land Use (Feet) <sup>2</sup>	Vehicle Speed (mph)
1	Pennsylvania Ave.	n/o 8th St.	MFR/SFR	Collector	33'	30
2	Pennsylvania Ave.	s/o 8th St.	MFR/GC	Divided Collector	39'	30
3	Xenia Ave.	n/o 8th St.	SFR	Major	50'	45
4	Allegheny St.	s/o 8th St.	MFR/GC	Collector	33'	35
5	Highland Springs Ave.	n/o Wilson St.	SFR/GC/LDR	Arterial	55'	35
6	Highland Springs Ave.	s/o Wilson St.	CC/GC/PF/PO	Arterial	55'	35
7	Highland Springs Ave.	n/o Ramsey St.	GC/PO/GC	Arterial	55'	30
8	Highland Springs Ave.	s/o Ramsey St.	GC/PFRI	Urban Arterial	67'	35
9	Highland Springs Ave.	s/o I-10	CC/GC/PFRI	Urban Arterial	67'	35
10	8th St.	w/o Pennsylvania Ave.	MFR	Collector	33'	30
11	8th St.	e/o Pennsylvania Ave.	SFR/MFR	Secondary	44'	35
12	8th St.	e/o Xenia Ave.	SFR/MFR	Secondary	44'	35
13	8th St.	e/o Driveway 1	SFR/CC	Major	50'	45
14	Wilson St.	e/o Highland Springs Ave.	GC/HDR/MHP	Major	50'	45
15	6th St.	w/o Highland Springs Ave.	GC	Arterial	55'	35
16	Ramsey St.	e/o Highland Springs Ave.	GC/PO	Arterial	55'	45

TABLE 6-1: OFF-SITE ROADWAY PARAMETERS

<sup>1</sup> Source: City of Beaumont General Plan.

<sup>2</sup> Distance to receiving land use is based upon the right-of-way distances by roadway classification.

"MFR"= Multi-Family Residential; "SFR"= Single-Family Residential; "GC"= General Commercial; "LDR"= Low Density Residential; "CC"= Community Commercial; "PF"= Public Facilities; "PO"= Professional Office; "PFRI"= Public Facilities- Railroad/Interstate; "HDR"= High Density Residential; "MHP"= Mobile Home Parks.



			Ave	rage Daily T	raffic Volun	nes1
ID	Roadway	Segment	Exis	ting	Openir Cumu	ng Year lative
			Without Project	With Project	Without Project	With Project
1	Pennsylvania Ave.	n/o 8th St.	10,808	10,918	11,202	11,312
2	Pennsylvania Ave.	s/o 8th St.	10,753	10,809	11,388	11,444
3	Xenia Ave.	n/o 8th St.	6,342	6,398	6,863	6,919
4	Allegheny St.	s/o 8th St.	767	932	782	947
5	Highland Springs Ave.	n/o Wilson St.	19,602	19,768	23,862	24,028
6	Highland Springs Ave.	s/o Wilson St.	21,342	21,756	25,663	26,077
7	Highland Springs Ave.	n/o Ramsey St.	21,684	22,015	26,014	26,345
8	Highland Springs Ave.	s/o Ramsey St.	31,684	31,960	35,531	35,807
9	Highland Springs Ave.	s/o I-10	40,286	40,342	43,164	43,220
10	8th St.	w/o Pennsylvania Ave.	3,890	4,000	5,274	5,384
11	8th St.	e/o Pennsylvania Ave.	4,452	4,728	6,241	6,517
12	8th St.	e/o Xenia Ave.	4,616	4,948	6,803	7,135
13	8th St.	e/o Driveway 1	5,205	5,618	7,401	7,814
14	Wilson St.	e/o Highland Springs Ave.	12,780	13,056	14,420	14,696
15	6th St.	w/o Highland Springs Ave.	17,780	17,946	18,762	18,928
16	Ramsey St.	e/o Highland Springs Ave.	16,356	16,577	17,467	17,688

#### TABLE 6-2: AVERAGE DAILY TRAFFIC VOLUMES

<sup>1</sup> Source: Highland Springs and 8th Retail Traffic Impact Analysis.

#### TABLE 6-3: TIME OF DAY VEHICLE SPLITS

) (abiala Tuma		Total of Time of		
venicie Type	Daytime	Evening	Nighttime	Day Splits
Autos	75.55%	13.96%	10.49%	100.00%
Medium Trucks	48.91%	2.17%	48.91%	100.00%
Heavy Trucks	47.30%	5.41%	47.30%	100.00%

<sup>1</sup> Source: County of Riverside Office of Industrial Hygiene, 2017.

"Daytime" = 7:00 a.m. to 7:00 p.m.; "Evening" = 7:00 p.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

#### TABLE 6-4: WITHOUT PROJECT VEHICLE MIX

	т	Total % Traffic Flow				
Classification	Autos	Medium Trucks	Heavy Trucks	Total		
All Roadways	97.42%	1.84%	0.74%	100.00%		

<sup>1</sup> Source: County of Riverside Office of Industrial Hygiene, 2017.



## 6.3 VIBRATION ASSESSMENT

This analysis focuses on the potential ground-borne vibration associated with vehicular traffic and construction activities. Ground-borne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. However, due to the rapid drop-off rate of ground-borne vibration and the short duration of the associated events, vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. Ground vibration levels associated with various types of construction equipment are summarized on Table 6-5. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by the FTA. To describe the human response (annoyance) associated with vibration impacts the FTA provides the following equation:  $L_{VdB}(D) = L_{VdB}(25 \text{ ft}) - 30\log(D/25)$ 

Equipment	Vibration Decibels (VdB) at 25 feet
Small bulldozer	58
Jackhammer	79
Loaded Trucks	86
Large bulldozer	87

TABLE 6-5:	VIBRATION	SOURCE	LEVELS FOR	CONSTRUCTION	EQUIPMENT
	-				

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment



# 7 OFF-SITE TRANSPORTATION NOISE IMPACTS

To assess the off-site transportation CNEL noise level impacts associated with the proposed Project, noise contours were developed based on the *Highland Springs and 8th Retail Traffic Impact Analysis*. (2) Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway.

## 7.1 TRAFFIC NOISE CONTOURS

Noise contours were used to assess the Project's incremental 24-hour dBA CNEL traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, and 60 dBA CNEL noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. In addition, because the noise contours reflect modeling of vehicular noise on area roadways, they appropriately do not reflect noise contributions from the surrounding stationary noise sources within the Project study area.

Tables 7-1 through 7-4 present a summary of the exterior dBA CNEL traffic noise levels without barrier attenuation. Roadway segments are analyzed from the without Project to the with Project conditions in each of the following timeframes: Existing 2020, and Opening Year Cumulative (OYC) 2021. Appendix 7.1 includes a summary of the dBA CNEL traffic noise level contours for each of the traffic scenarios.



			Dessising	CNEL at Nearest	Distance to Contour from Centerline (Feet)		
D	Road	Segment	Land Use <sup>1</sup>	Receiving Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Pennsylvania Ave.	n/o 8th St.	MFR/SFR	68.5	RW	57	123
2	Pennsylvania Ave.	s/o 8th St.	MFR/GC	66.8	RW	51	110
3	Xenia Ave. n/o 8th St. 5		SFR	67.6	RW	74	160
4	Allegheny St. s/o 8th St.		MFR/GC	58.5	RW	RW	RW
5	Highland Springs Ave.	nd Springs Ave. n/o Wilson St.		69.4	RW	107	231
6	Highland Springs Ave.	s/o Wilson St.	CC/GC/PF/PO	69.7	RW	114	245
7	Highland Springs Ave.	n/o Ramsey St.	GC/PO/GC	68.3	RW	92	198
8	Highland Springs Ave.	s/o Ramsey St.	GC/PFRI	70.4	72	155	333
9	Highland Springs Ave.	s/o I-10	CC/GC/PFRI	71.5	84	181	391
10	8th St.	w/o Pennsylvania Ave.	MFR	64.1	RW	RW	62
11	8th St.	e/o Pennsylvania Ave.	SFR/MFR	63.9	RW	RW	80
12	8th St.	e/o Xenia Ave.	SFR/MFR	64.1	RW	RW	82
13	8th St.	e/o Driveway 1	SFR/CC	66.7	RW	65	140
14	Wilson St.	e/o Highland Springs Ave.	GC/HDR/MHP	70.4	53	114	245
15	6th St.	w/o Highland Springs Ave.	GC	68.9	RW	101	217
16	Ramsey St.	e/o Highland Springs Ave.	GC/PO	71.0	64	139	299

TABLE 7-1: EXISTING 2020 WITHOUT PROJECT NOISE CONTOURS

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.

"RW" = Location of the respective noise contour falls within the right-of-way of the road. "MFR"= Multi-Family Residential; "SFR"= Single-Family

Residential; "GC"= General Commercial; "LDR"= Low Density Residential; "CC"= Community Commercial; "PF"= Public Facilities; "PO"= Professional Office; "PFRI"= Public Facilities- Railroad/Interstate; "HDR"= High Density Residential; "MHP"= Mobile Home Parks.



			Dessision	CNEL at Nearest	Distance to Contour from Centerline (Feet)			
D	Road	Segment	Land Use <sup>1</sup>	Receiving Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	
1	Pennsylvania Ave.	n/o 8th St.	MFR/SFR	68.6	RW	57	123	
2	Pennsylvania Ave.	s/o 8th St.	MFR/GC	66.8	RW	51	111	
3	Xenia Ave. n/o 8th St.		SFR	67.6	RW	75	161	
4	Allegheny St. s/o 8th St.		MFR/GC	59.4	RW	RW	RW	
5	Highland Springs Ave. n/o Wilson St.		SFR/GC/LDR	69.4	RW	108	233	
6	Highland Springs Ave.	s/o Wilson St.	CC/GC/PF/PO	69.8	RW	115	248	
7	Highland Springs Ave.	n/o Ramsey St.	GC/PO/GC	68.4	RW	93	200	
8	Highland Springs Ave.	s/o Ramsey St.	GC/PFRI	70.5	72	155	335	
9	Highland Springs Ave.	s/o I-10	CC/GC/PFRI	71.5	84	182	391	
10	8th St.	w/o Pennsylvania Ave.	MFR	64.2	RW	RW	63	
11	8th St.	e/o Pennsylvania Ave.	SFR/MFR	64.2	RW	RW	83	
12	8th St.	e/o Xenia Ave.	SFR/MFR	64.4	RW	RW	86	
13	8th St.	e/o Driveway 1	SFR/CC	67.1	RW	69	148	
14	Wilson St.	e/o Highland Springs Ave.	GC/HDR/MHP	70.5	54	115	249	
15	6th St.	w/o Highland Springs Ave.	GC	69.0	RW	101	218	
16	Ramsey St.	e/o Highland Springs Ave.	GC/PO	71.1	65	140	301	

TABLE 7-2: EXISTING 2020 WITH PROJECT NOISE CONTOURS

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.

"RW" = Location of the respective noise contour falls within the right-of-way of the road. "MFR"= Multi-Family Residential; "SFR"= Single-Family

Residential; "GC"= General Commercial; "LDR"= Low Density Residential; "CC"= Community Commercial; "PF"= Public Facilities; "PO"= Professional Office; "PFRI"= Public Facilities- Railroad/Interstate; "HDR"= High Density Residential; "MHP"= Mobile Home Parks.



			Dessiving	CNEL at Nearest	Distano Ce	Distance to Contour from Centerline (Feet)			
D	Road	Segment	Land Use <sup>1</sup>	Receiving Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL		
1	Pennsylvania Ave.	n/o 8th St.	MFR/SFR	68.7	RW	58	126		
2	Pennsylvania Ave.	. s/o 8th St. M		67.0	RW	53	115		
3	Xenia Ave. n/o 8th St.		SFR	67.9	RW	78	169		
4	4 Allegheny St. s/o 8th St.		MFR/GC	58.6	RW	RW	RW		
5	Highland Springs Ave. n/o Wilson St.		SFR/GC/LDR	70.2	57	122	264		
6	Highland Springs Ave.	s/o Wilson St.	CC/GC/PF/PO	70.5	60	128	277		
7	Highland Springs Ave.	n/o Ramsey St.	GC/PO/GC	69.1	RW	104	223		
8	Highland Springs Ave.	s/o Ramsey St.	GC/PFRI	70.9	77	167	360		
9	Highland Springs Ave.	s/o I-10	CC/GC/PFRI	71.8	88	190	409		
10	8th St.	w/o Pennsylvania Ave.	MFR	65.4	RW	35	76		
11	8th St.	e/o Pennsylvania Ave.	SFR/MFR	65.4	RW	47	100		
12	8th St.	e/o Xenia Ave.	SFR/MFR	65.7	RW	49	106		
13	8th St.	e/o Driveway 1	SFR/CC	68.3	RW	82	178		
14	Wilson St.	e/o Highland Springs Ave.	GC/HDR/MHP	70.9	57	123	266		
15	6th St.	w/o Highland Springs Ave.	GC	69.2	RW	104	225		
16	Ramsey St.	e/o Highland Springs Ave.	GC/PO	71.3	67	145	312		

 TABLE 7-3: OYC 2021 WITHOUT PROJECT NOISE CONTOURS

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.

"RW" = Location of the respective noise contour falls within the right-of-way of the road. "MFR"= Multi-Family Residential; "SFR"= Single-Family

Residential; "GC"= General Commercial; "LDR"= Low Density Residential; "CC"= Community Commercial; "PF"= Public Facilities; "PO"= Professional Office; "PFRI"= Public Facilities- Railroad/Interstate; "HDR"= High Density Residential; "MHP"= Mobile Home Parks.



			Dessising	CNEL at Nearest	Distance to Contour from Centerline (Feet)			
D	Road	Segment	Land Use <sup>1</sup>	Receiving Land Use (dBA) <sup>2</sup>	70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	
1	Pennsylvania Ave.	n/o 8th St.	MFR/SFR	68.7	RW	59	126	
2	Pennsylvania Ave.	s/o 8th St.	MFR/GC	67.1	RW	53	115	
3	Xenia Ave.	nia Ave. n/o 8th St. S		68.0	RW	79	170	
4	Allegheny St. s/o 8th St.		MFR/GC	59.4	RW	RW	RW	
5	Highland Springs Ave.	hland Springs Ave. n/o Wilson St.		70.2	57	123	265	
6	Highland Springs Ave.	s/o Wilson St.	CC/GC/PF/PO	70.6	60	130	280	
7	Highland Springs Ave.	n/o Ramsey St.	GC/PO/GC	69.2	RW	105	225	
8	Highland Springs Ave.	s/o Ramsey St.	GC/PFRI	71.0	78	168	361	
9	Highland Springs Ave.	s/o I-10	CC/GC/PFRI	71.8	88	190	410	
10	8th St.	w/o Pennsylvania Ave.	MFR	65.5	RW	36	77	
11	8th St.	e/o Pennsylvania Ave.	SFR/MFR	65.6	RW	48	103	
12	8th St.	e/o Xenia Ave.	SFR/MFR	65.9	RW	51	110	
13	8th St.	e/o Driveway 1	SFR/CC	68.5	RW	85	184	
14	Wilson St.	e/o Highland Springs Ave.	GC/HDR/MHP	71.0	58	125	269	
15	6th St.	w/o Highland Springs Ave.	GC	69.2	RW	105	226	
16	Ramsey St.	e/o Highland Springs Ave.	GC/PO	71.4	68	146	315	

TABLE 7-4: OYC 2021 WITH PROJECT NOISE CONTOURS

<sup>2</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest receiving land use.

"RW" = Location of the respective noise contour falls within the right-of-way of the road. "MFR"= Multi-Family Residential; "SFR"= Single-Family

Residential; "GC"= General Commercial; "LDR"= Low Density Residential; "CC"= Community Commercial; "PF"= Public Facilities; "PO"= Professional Office; "PFRI"= Public Facilities- Railroad/Interstate; "HDR"= High Density Residential; "MHP"= Mobile Home Parks.



## 7.2 EXISTING 2020 PROJECT TRAFFIC NOISE LEVEL INCREASES

An analysis of existing traffic noise levels plus traffic noise generated by the proposed Project has been included in this report to fully analyze all the existing traffic scenarios identified in the *Highland Springs and 8th Retail Traffic Impact Analysis* prepared by Urban Crossroads, Inc. This condition is provided solely for informational purposes and will not occur since the Project will not be fully developed and occupied under Existing conditions. Therefore, no mitigation measures are considered to reduce the Existing Plus Project traffic noise level increases. The future OYC traffic noise conditions that include all cumulative projects are used to determine the significance of the Project off-site traffic noise level increases on the study area roadway segments. Table 7-1 shows the Existing without Project conditions CNEL noise levels. The Existing without Project exterior noise attenuation features such as noise barriers or topography. Table 7-2 shows the Existing with Project conditions will range from 59.4 to 71.5 dBA CNEL. Table 7-5 shows that the Project off-site traffic noise level impacts will range from 0.0 to 0.9 dBA CNEL.

## 7.3 OYC 2021 PROJECT TRAFFIC NOISE LEVEL INCREASES

Table 7-3 presents the OYC without Project conditions CNEL noise levels. The OYC without Project exterior noise levels are expected to range from 58.6 to 71.8 dBA CNEL, without accounting for any noise attenuation features such as noise barriers or topography. Table 7-4 shows that the OYC with Project conditions will range from 59.4 to 71.8 dBA CNEL. Table 7-6 shows that the Project off-site traffic noise level increases will range from 0.0 to 0.8 dBA CNEL. Based on the significance criteria for off-site traffic noise presented in Table 4-2, land uses adjacent to the study area roadway segments would experience *less than significant* noise level increases due to unmitigated Project-related traffic noise levels.



ID	Road	Segment	Receiving	Noise- Sensitive	CNEL at Receiving Land Use (dBA) <sup>1</sup>			Noise Level Increase Significance Criteria <sup>2</sup>	
			Land Use-	Land Use?	No Project	With Project	Project Increase	Criteria	Exceeded?
1	Pennsylvania Ave.	n/o 8th St.	MFR/SFR	Yes	68.5	68.6	0.1	1.5	No
2	Pennsylvania Ave.	s/o 8th St.	MFR/GC	Yes	66.8	66.8	0.0	1.5	No
3	Xenia Ave.	n/o 8th St.	SFR	Yes	67.6	67.6	0.0	1.5	No
4	Allegheny St.	s/o 8th St.	MFR/GC	Yes	58.5	59.4	0.9	5.0	No
5	Highland Springs Ave.	n/o Wilson St.	SFR/GC/LDR	Yes	69.4	69.4	0.0	1.5	No
6	Highland Springs Ave.	s/o Wilson St.	CC/GC/PF/PO	No	69.7	69.8	0.1	5.0	No
7	Highland Springs Ave.	n/o Ramsey St.	GC/PO/GC	No	68.3	68.4	0.1	5.0	No
8	Highland Springs Ave.	s/o Ramsey St.	GC/PFRI	No	70.4	70.5	0.1	3.0	No
9	Highland Springs Ave.	s/o I-10	CC/GC/PFRI	No	71.5	71.5	0.0	3.0	No
10	8th St.	w/o Pennsylvania Ave.	MFR	Yes	64.1	64.2	0.1	3.0	No
11	8th St.	e/o Pennsylvania Ave.	SFR/MFR	Yes	63.9	64.2	0.3	3.0	No
12	8th St.	e/o Xenia Ave.	SFR/MFR	Yes	64.1	64.4	0.3	3.0	No
13	8th St.	e/o Driveway 1	SFR/CC	Yes	66.7	67.1	0.4	1.5	No
14	Wilson St.	e/o Highland Springs Ave.	GC/HDR/MHP	Yes	70.4	70.5	0.1	1.5	No
15	6th St.	w/o Highland Springs Ave.	GC	No	68.9	69.0	0.1	5.0	No
16	Ramsey St.	e/o Highland Springs Ave.	GC/PO	No	71.0	71.1	0.1	3.0	No

#### TABLE 7-5: EXISTING 2020 WITH PROJECT TRAFFIC NOISE LEVEL INCREASES

<sup>1</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

<sup>2</sup> Does the Project create an off-site transportation related noise level increase exceeding the significance criteria (Table 4-2)?

"RW" = Location of the respective noise contour falls within the right-of-way of the road. "MFR"= Multi-Family Residential; "SFR"= Single-Family Residential; "GC"= General Commercial; "LDR"= Low Density Residential; "CC"= Community Commercial; "PF"= Public Facilities; "PO"= Professional Office; "PFRI"= Public Facilities- Railroad/Interstate; "HDR"= High Density Residential; "MHP"= Mobile Home Parks.



ID	Road	Segment	Receiving	Noise- Sensitive	CN La	IEL at Receivi and Use (dBA	Noise Level Increase Significance Criteria <sup>2</sup>		
			Land Use	Use?	No Project	With Project	Project Increase	Criteria	Exceeded?
1	Pennsylvania Ave.	n/o 8th St.	MFR/SFR	Yes	68.7	68.7	0.0	1.5	No
2	Pennsylvania Ave.	s/o 8th St.	MFR/GC	Yes	67.0	67.1	0.1	1.5	No
3	Xenia Ave.	n/o 8th St.	SFR	Yes	67.9	68.0	0.1	1.5	No
4	Allegheny St.	s/o 8th St.	MFR/GC	Yes	58.6	59.4	0.8	5.0	No
5	Highland Springs Ave.	n/o Wilson St.	SFR/GC/LDR	Yes	70.2	70.2	0.0	1.5	No
6	Highland Springs Ave.	s/o Wilson St.	CC/GC/PF/PO	No	70.5	70.6	0.1	3.0	No
7	Highland Springs Ave.	n/o Ramsey St.	GC/PO/GC	No	69.1	69.2	0.1	5.0	No
8	Highland Springs Ave.	s/o Ramsey St.	GC/PFRI	No	70.9	71.0	0.1	3.0	No
9	Highland Springs Ave.	s/o I-10	CC/GC/PFRI	No	71.8	71.8	0.0	3.0	No
10	8th St.	w/o Pennsylvania Ave.	MFR	Yes	65.4	65.5	0.1	1.5	No
11	8th St.	e/o Pennsylvania Ave.	SFR/MFR	Yes	65.4	65.6	0.2	1.5	No
12	8th St.	e/o Xenia Ave.	SFR/MFR	Yes	65.7	65.9	0.2	1.5	No
13	8th St.	e/o Driveway 1	SFR/CC	Yes	68.3	68.5	0.2	1.5	No
14	Wilson St.	e/o Highland Springs Ave.	GC/HDR/MHP	Yes	70.9	71.0	0.1	1.5	No
15	6th St.	w/o Highland Springs Ave.	GC	No	69.2	69.2	0.0	5.0	No
16	Ramsey St.	e/o Highland Springs Ave.	GC/PO	No	71.3	71.4	0.1	3.0	No

#### TABLE 7-6: OYC 2021 WITH PROJECT TRAFFIC NOISE INCREASES

<sup>1</sup> The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the receiving land use.

<sup>2</sup> Does the Project create an off-site transportation related noise level increase exceeding the significance criteria (Table 4-2)?

"RW" = Location of the respective noise contour falls within the right-of-way of the road. "MFR"= Multi-Family Residential; "SFR"= Single-Family Residential; "GC"= General Commercial; "LDR"= Low Density Residential; "CC"= Community Commercial; "PF"= Public Facilities; "PO"= Professional Office; "PFRI"= Public Facilities- Railroad/Interstate; "HDR"= High Density Residential; "MHP"= Mobile Home Parks.

# 8 **RECEIVER LOCATIONS**

To assess the potential for long-term operational and short-term construction noise impacts, the following receiver locations, as shown on Exhibit 8-A, were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

Receiver locations are located in outdoor living areas (e.g., backyards) at 10 feet from any existing or proposed barriers or at the building façade, whichever is closer to the Project site, based on FHWA guidance, and consistent with additional guidance provided by Caltrans and the FTA, as previously described in Section 5.2. Distance is measured in a straight line from the project boundary to each receiver location.

- R1: Located approximately 114 feet north of the Project site, R1 represents vacant land. Traffic noise from 8<sup>th</sup> Street represents the primary noise source at this location. A 24hour noise measurement was taken near this location, L4, to describe the existing ambient noise environment.
- R2: Location R2 represents the existing San Gorgonio Memorial Hospital located approximately 196 feet east of the Project site and Highland Springs Avenue. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.
- R3: Location R3 represents the existing Westco Medical Supplies office use. The medical office use is located approximately 103 feet south of the Project site. The 24-hour noise level measurement L2 is used to describe the existing ambient noise environment.
- R4: Location R4 represents the existing single-family residence located at 720 Allegheny Street approximately 296 feet south west of the Project site. The 24-hour noise level measurement L3 is used to describe the existing ambient noise environment.
- R5: Location R5 represents the existing Palm Grove Health Care Center skilled nursing facility located at 1665 E 8th Street approximately 71 feet south west of the Project site. The 24-hour noise level measurement L3 is used to describe the existing ambient noise environment.



#### **EXHIBIT 8-A: RECEIVER LOCATIONS**

#### **LEGEND:**

Receiver Locations

- Distance from receiver to Project site boundary (in feet)
- Existing 6-Foot High Barrier

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# 9 OPERATIONAL NOISE IMPACTS

This section analyzes the potential stationary-source operational noise impacts at the nearby receiver locations, identified in Section 8, resulting from the operation of the proposed Highland Springs and 8th Retail Project. Exhibit 9-A identifies the representative receiver locations and noise source locations used to assess the hourly average  $L_{eq}$  operational noise levels consistent with the City of Beaumont Municipal Code Section 9.02.050.

## 9.1 OPERATIONAL NOISE SOURCES

At the time this noise analysis was prepared the future tenants of the proposed Project were unknown. Therefore, this operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the Project site. To present the potential worst-case noise conditions, this analysis assumes the Project would be operational 24 hours per day, seven days per week. The on-site Project-related noise sources are expected to include: roof-top air conditioning units, trash enclosure activity, drive-thru speakerphone and gas station activity.

## 9.2 **REFERENCE NOISE LEVELS**

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. This section provides a detailed description of the reference noise level measurements shown on Table 9-1 used to estimate the Project operational noise impacts. It is important to note that the following projected noise levels assume the worst-case noise environment with the roof-top air conditioning units, trash enclosure activity, drive-thru speakerphone and gas station activity all operating continuously. These sources of noise activity will likely vary throughout the day.



EXHIBIT 9-A: OPERATIONAL NOISE SOURCE LOCATIONS

🗙 Drive-Through Speakerphone

Gast Station Activity

Naise Course	Duration	Ref.	Noise Source	Min./	Hour⁵	Referen Level (d	ce Noise JBA L <sub>eq</sub> )	Sound Power
Noise Source	(hh:mm:ss)	(Feet)	Height (Feet)	Day	Night	@ Ref. Dist.	@ 50 Feet	Level (dBA) <sup>6</sup>
Air Conditioning Units <sup>1</sup>	96:00:00	5'	5'	39	28	77.2	57.2	88.9
Trash Enclosure Activity <sup>2</sup>	00:00:32	5'	5'	5	0	77.3	57.3	94.0
Drive-Thru Speakerphone <sup>3</sup>	00:02:00	15'	3'	30	30	62.0	51.5	83.2
Gas Station Activity <sup>4</sup>	00:03:00	5'	5'	60	60	68.2	48.2	79.9

TABLE 9-1: REFERENCE NOISE LEVEL MEASUREMENTS

<sup>1</sup> As measured by Urban Crossroads, Inc. at the Santee Walmart located at 170 Town Center Parkway.

<sup>2</sup> As measured by Urban Crossroads, Inc. at a commercial and office park trash enclosure in the City of Costa Mesa.

<sup>3</sup> As measured by Urban Crossroads, Inc. at a Panera Bread drive-thru in the City of Brea.

<sup>4</sup>As measured by Urban Crossroads, Inc. at the ARCO gas station located at 6501 Quail Hill Parkway in Irvine.

<sup>5</sup> Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Day" = 7:00 a.m. to 10:00 p.m.; "Night" = 10:00 p.m. to 7:00 a.m.

<sup>6</sup> Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source. Numbers may vary due to size differences between point and area noise sources.

### 9.2.1 MEASUREMENT PROCEDURES

The reference noise level measurements presented in this section were collected using a Larson Davis LxT Type 1 precisions sound level meter (serial number 01146). The LxT sound level meter was calibrated using a Larson-Davis calibrator, Model CAL 200, was programmed in "slow" mode to record noise levels in "A" weighted form and was located at approximately five feet above the ground elevation for each measurement. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (16)

### 9.2.2 TRASH ENCLOSURE ACTIVITY

To describe the noise levels associated with a trash enclosure, Urban Crossroads collected a reference noise level measurement at an existing commercial and office park trash enclosure within a parking lot on the northeast corner of Baker Street and Red Hill Avenue. The measured reference noise level at the uniform 50-foot reference distance is 57.3 dBA  $L_{eq}$  for the trash enclosure activity. The trash enclosure activity noise levels include two metal gates opening and closing, metal scraping against concrete floor sounds, dumpster movement on metal wheels, trash dropping into the metal dumpster, and background parking lot vehicle movements. Noise associated with trash enclosure activities is conservatively expected to occur for 5 minutes per hour.

### 9.2.3 DRIVE-THRU SPEAKERPHONE

To describe the potential noise level impacts associated with potential drive-thru speakerphones and vehicle activities, a reference noise level measurement was collected at a Panera Bread restaurant located at 423 South Associated Road in the City of Brea. The reference noise levels collected at the Panera Bread restaurant are expected to reflect potential drive-thru speakerphone noise level activities at the Project site, since the reference measurement includes both drive-thru speakerphone and vehicle activity noise. The noise sources included in the reference noise level measurement consist of voices of the Panera Bread employees over the speakerphone, customers' voices ordering food, car engines idling, car radios playing music, and cars queuing in the drive-thru lane. At 50 feet from the speakerphone, a reference noise level of 51.5 dBA L<sub>eq</sub> was measured. This reference noise level measurement overstates the actual average noise levels since it represents the average of 28 speakerphone menu board ordering events observed over a two-hour period. In other words, the Panera Bread speakerphone menu board reference noise level describes continuous drive-thru operations and does not include any periods of inactivity.

### 9.2.4 GAS STATION ACTIVITY

To describe the potential noise level impacts created by the gas station of the Project, a reference noise level measurement was collected at an ARCO gas station located at 6501 Quail Hill Parkway in the City of Irvine. The reference noise level measurement includes six cars fueling at once, car doors closing, engines starting, fuel pump TV sounds and background car pass-by events within a 3-minute period. At 50 feet from the gas station, a reference noise level of 48.2 dBA L<sub>eq</sub> was measured.

## 9.3 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze the noise level of multiple types of noise sources and calculates the noise levels at any location using the spatially accurate Project site plan and includes the effects of topography, buildings, and multiple barriers in its calculations using the latest standards to predict outdoor noise impacts. Appendix 9.1 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section. Using the spatially accurate Project site plan and flown aerial imagery from Nearmap, a CadnaA noise prediction model of the Project study area was developed. The noise model provides a three-dimensional representation of the Project study area using the following key data inputs:

- Ground absorption;
- Multiple reflections at buildings and barriers;
- Reference noise level sources by type (area, point, etc.) and noise source height;
- Multiple noise receiver locations and heights;
- Topography and earthen berms;
- Barrier and building heights.

Using the ISO 9613 protocol, the CadnaA noise prediction model will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level calculations at each receiver location and the partial noise level contributions by noise source. The reference sound power level (PWL) for the highest noise source expected at the Project site was input into the

CadnaA noise prediction model. While sound pressure levels (e.g.  $L_{eq}$ ) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (PWL) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish as a result of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment.

The operational noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. Hard site conditions are used in the operational noise analysis which result in noise levels that attenuate (or decrease) at a rate of 6.0 dBA for each doubling of distance from a point source, based on existing conditions in the Project study area. A default ground attenuation factor of 1.0 was used in the CadnaA noise analysis to account for hard site conditions.

## 9.4 **PROJECT OPERATIONAL NOISE LEVELS**

Using the reference noise levels to represent the proposed Project operations that include rooftop air conditioning units, trash enclosure activity, drive-thru speakerphone and gas station activity, Urban Crossroads, Inc. calculated the operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Tables 9-2 shows the Project operational noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 42.3 to 48.5 dBA L<sub>eq</sub>.

Noise Course <sup>12</sup>	Operat	tional Noise Le	vels by Receiv	er Location (dl	BA Leq)
	R1	R2	R3	R4	R5
Air Conditioning Units	42.6	39.5	42.9	38.4	44.5
Trash Enclosure Activity	35.8	37.6	43.9	38.4	45.2
Drive-Thru Speakerphone	17.3	27.2	35.3	32.1	39.3
Gas Station Activity	42.2	42.2 37.9		31.3	24.7
Total (All Noise Sources)	45.9	43.3	47.0	42.3	48.5

### TABLE 9-2: DAYTIME PROJECT OPERATIONAL NOISE LEVELS

<sup>1</sup> See Exhibit 9-A for the noise source locations.

<sup>2</sup> CadnaA noise model calculations are included in Appendix 9.1.

Tables 9-3 shows the Project operational noise levels during the nighttime hours of 10:00 p.m. to 7:00 a.m. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 38.2 to 44.3 dBA  $L_{eq}$ . The differences between the daytime and nighttime noise levels is largely related to the duration of noise activity (Table 9-1). For the purpose of this analysis, the trash enclosure activity was limited to the daytime operating hours with no nighttime activity. Appendix 9.1 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

Naine Course12	Operat	ional Noise Le	vels by Receive	er Location (dB	BA Leq)
Noise Source	R1	R2	R3	R4	R5
Air Conditioning Units	40.2	37.1	40.5	36.0	42.0
Trash Enclosure Activity	_3	_3	_3	_3	_3
Drive-Thru Speakerphone	16.3	26.2	34.4	31.2	38.3
Gas Station Activity	42.2	37.9	33.8	31.3	24.7
Total (All Noise Sources)	44.3	40.7	42.1	38.2	43.6

#### TABLE 9-3: NIGHTTIME PROJECT OPERATIONAL NOISE LEVELS

<sup>1</sup> See Exhibit 9-A for the noise source locations.

<sup>2</sup> CadnaA noise model calculations are included in Appendix 9.1.

<sup>3</sup> No nighttime activities associated with this noise source.

### 9.5 PROJECT OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Beaumont exterior noise level standards at nearby noise-sensitive receiver locations. Table 9-4 shows the operational noise levels associated with Highland Springs and 8th Retail Project will satisfy the City of Beaumont 55 dBA L<sub>eq</sub> daytime and 45 dBA L<sub>eq</sub> nighttime exterior noise level standards at all nearby receiver locations. Therefore, the operational noise impacts are considered *less than significant* at the nearby noise-sensitive receiver locations.

TABLE 9-4:	OPFRATIONAL	NOISE LEVEL	COMPLIANCE
	OLENATIONAL		

Receiver	Project O Noise Level	perational s (dBA Leq) <sup>2</sup>	Noise Leve (dBA	l Standards Leq) <sup>3</sup>	Noise Level Standards Exceeded? <sup>4</sup>		
Location	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime	
R1	45.9	44.3	55	45	No	No	
R2	43.3	40.7	55	45	No	No	
R3	47.0	42.1	2.1 55 45		No	No	
R3	42.3	38.2	55	45	No	No	
R4	48.5 43.6		55	45	No	No	

<sup>1</sup> See Exhibit 8-A for the receiver locations.

<sup>2</sup> Proposed Project operational noise levels as shown on Tables 9-2 and 9-3.

<sup>3</sup> Exterior noise level standards for noise sensitive residential land use, as shown on Table 4-2.

<sup>4</sup> Do the estimated Project operational noise source activities exceed the noise level standards?

"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

### 9.6 PROJECT OPERATIONAL NOISE LEVEL INCREASES

To describe the Project operational noise level increases, the Project operational noise levels are combined with the existing ambient noise levels measurements for the nearby receiver locations potentially impacted by Project operational noise sources. Since the units used to measure noise, decibels (dB), are logarithmic units, the Project-operational and existing ambient noise levels

cannot be combined using standard arithmetic equations. (3) Instead, they must be logarithmically added using the following base equation:

$$SPL_{Total} = 10log_{10}[10^{SPL1/10} + 10^{SPL2/10} + \dots 10^{SPLn/10}]$$

Where "SPL1," "SPL2," etc. are equal to the sound pressure levels being combined, or in this case, the Project-operational and existing ambient noise levels. The difference between the combined Project and ambient noise levels describe the Project noise level increases to the existing ambient noise environment. Noise levels that would be experienced at receiver locations when Project-source noise is added to the daytime and nighttime ambient conditions are presented on Tables 9-5 and 9-6, respectively. As indicated on Tables 9-5 and 9-6, the Project will generate an unmitigated daytime and nighttime operational noise level increases ranging from 0.0 to 0.4 dBA L<sub>eq</sub> at the nearby receiver locations. Project-related operational noise level increases will satisfy the operational noise level increase significance criteria presented in Table 4-2 the increases at the sensitive receiver locations will be *less than significant*.

Receiver Location <sup>1</sup>	Total Project Operational Noise Level <sup>2</sup>	Measurement Location <sup>3</sup>	Reference Ambient Noise Levels⁴	Combined Project and Ambient⁵	Project Increase <sup>6</sup>	Noise Sensitive Land Use?	Increase Criteria <sup>7</sup>	Increase Criteria Exceeded? <sup>7</sup>
R1	45.9	L4	68.5	68.5	0.0	Yes	1.5	No
R2	43.3	L1	65.6	65.6	0.0	Yes	1.5	No
R3	47.0	L2	58.6	58.9	0.3	Yes	5.0	No
R4	42.3	L3	58.5	58.6	0.1	Yes	5.0	No
R5	48.5	L3	58.5	58.9	0.4	Yes	5.0	No

TABLE 9-5: DAYTIME PROJECT OPERATIONAL NOISE LEVEL INCREASES

<sup>1</sup> See Exhibit 8-A for the receiver locations.

<sup>2</sup> Total Project daytime operational noise levels as shown on Table 9-3.

<sup>3</sup> Reference noise level measurement locations as shown on Exhibit 5-A.

<sup>4</sup> Observed daytime ambient noise levels as shown on Table 5-1.

<sup>5</sup> Represents the combined ambient conditions plus the Project activities.

<sup>6</sup> The noise level increase expected with the addition of the proposed Project activities.

<sup>7</sup> Significance increase criteria as shown on Table 4-2.



Receiver Location <sup>1</sup>	Total Project Operational Noise Level <sup>2</sup>	Measurement Location <sup>3</sup>	Reference Ambient Noise Levels⁴	Combined Project and Ambient <sup>5</sup>	Project Increase <sup>6</sup>	Noise Sensitive Land Use?	Increase Criteria <sup>7</sup>	Increase Criteria Exceeded? <sup>7</sup>
R1	44.3	L4	62.2	62.3	0.1	Yes	3.0	No
R2	40.7	L1	64.2	64.2	0.0	Yes	3.0	No
R3	42.1	L2	56.6	56.8	0.2	Yes	5.0	No
R4	38.2	L3	56.4	56.5	0.1	Yes	5.0	No
R5	43.6	L3	56.4	56.6	0.2	Yes	5.0	No

TABLE 9-6: NIGHTTIME OPERATIONAL NOISE LEVEL INCREASES

<sup>1</sup> See Exhibit 8-A for the receiver locations.

<sup>2</sup> Total Project nighttime operational noise levels as shown on Table 9-3.

<sup>3</sup> Reference noise level measurement locations as shown on Exhibit 5-A.

<sup>4</sup> Observed nighttime ambient noise levels as shown on Table 5-1.

<sup>5</sup> Represents the combined ambient conditions plus the Project activities.

<sup>6</sup> The noise level increase expected with the addition of the proposed Project activities.

<sup>7</sup> Significance increase criteria as shown on Table 4-2.



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# **10 CONSTRUCTION IMPACTS**

This section analyzes potential average dBA  $L_{eq}$  impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 10-A shows the construction noise source locations in relation to the nearby sensitive receiver locations previously described in Section 8.

## **10.1** CONSTRUCTION NOISE LEVELS

Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment is expected to occur in the following stages, based on the *Highland Springs and 8th Retail Air Quality Impact Analysis* (21) for the Project:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

This construction noise analysis was prepared using reference noise level measurements taken by Urban Crossroads, Inc. to describe the typical construction activity noise levels for each stage of Project construction. The construction reference noise level measurements represent a list of typical construction activity noise levels.

## **10.2** CONSTRUCTION REFERENCE NOISE LEVELS

To describe the Project construction noise levels, measurements were collected for similar activities at several construction sites. Table 10-1 provides a summary of the construction reference noise level measurements. Since the reference noise levels were collected at varying distances of 30 feet and 50 feet, all construction noise level measurements presented on Table 10-1 have been adjusted for consistency to describe a uniform reference distance of 50 feet.



**EXHIBIT 10-A: CONSTRUCTION NOISE SOURCE LOCATIONS** 

#### LEGEND:

Receiver Locations

- Distance from receiver to Project site boundary (in feet)
- Existing 6-Foot High Barrier
- Construction Activity



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Construction Stage	Reference Construction Activity <sup>1</sup>	Reference Noise Level @ 50 Feet (dBA L <sub>eq</sub> )	Highest Reference Noise Level (dBA L <sub>eq</sub> )	
	Scraper, Water Truck, & Dozer Activity	75.3		
Site	Backhoe	64.2	75.3	
Preparation	Water Truck Pass-By & Backup Alarm	71.9		
	Rough Grading Activities	73.5		
Grading	Water Truck Pass-By & Backup Alarm	71.9	73.5	
	Construction Vehicle Maintenance Activities	67.5		
	Foundation Trenching	68.2		
Building	Framing	62.3	71.6	
construction	Concrete Mixer Backup Alarms & Air Brakes	71.6		
	Concrete Mixer Truck Movements	71.2		
Paving	Concrete Paver Activities	65.6	71.2	
	Concrete Mixer Pour & Paving Activities	65.9		
	Air Compressors	65.2		
Architectural	Generator	64.9	65.2	
coating	Crane	62.3		

TABLE 10-1: CONSTRUCTION REFERENCE NOISE LEVELS

<sup>1</sup> Reference construction noise level measurements taken by Urban Crossroads, Inc.

### **10.3** CONSTRUCTION NOISE ANALYSIS

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearby sensitive receiver locations were completed. To assess the worst-case construction noise levels, the Project construction noise analysis relies on the highest noise level impacts when the equipment with the highest reference noise level is operating at the closest point from the edge of primary construction activity (Project site boundary) to each receiver location. As shown on Table 10-2, the construction noise levels are expected to range from 53.2 to 70.8 dBA L<sub>eq</sub> at the nearby receiver locations. Appendix 10.1 includes the detailed CadnaA construction noise model inputs.



Receiver Location <sup>1</sup>		Construction Noise Levels (dBA L <sub>eq</sub> )										
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels <sup>2</sup>						
R1	69.2	67.4	65.5	65.1	59.1	69.2						
R2	65.9	64.1	62.2	61.8	55.8	65.9						
R3	69.3	67.5	65.6	65.2	59.2	69.3						
R4	63.3	61.5	59.6	59.2	53.2	63.3						
R5	70.8	69.0	67.1	66.7	60.7	70.8						

#### TABLE 10-2: CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

<sup>1</sup>Noise receiver locations are shown on Exhibit 10-A.

<sup>2</sup> Construction noise level calculations based on distance from the project site boundaries (construction activity area) to nearby receiver locations. CadnaA construction noise model inputs are included in Appendix 10.1.

### **10.3** CONSTRUCTION NOISE LEVEL COMPLIANCE

To evaluate whether the Project will generate potentially significant short-term noise levels at nearby receiver locations, a construction-related noise level threshold of 75 dBA  $L_{eq}$  is used as acceptable thresholds to assess construction noise level impacts. The construction noise analysis shows that the nearby receiver locations will satisfy the 75 dBA  $L_{eq}$  significance threshold during Project construction activities as shown on Table 10-3. Therefore, the noise impacts due to Project construction noise is considered *less than significant* at all receiver locations

#### TABLE 10-3: CONSTRUCTION NOISE LEVEL COMPLIANCE

<b>.</b> .	Const	truction Noise Levels (dB	A L <sub>eq</sub> )
Receiver Location <sup>1</sup>	Highest Construction Noise Levels <sup>2</sup>	Threshold <sup>3</sup>	Threshold Exceeded? <sup>4</sup>
R1	69.2	75	No
R2	65.9	75	No
R3	69.3	75	No
R4	63.3	75	No
R5	70.8	75	No

<sup>1</sup>Noise receiver locations are shown on Exhibit 10-A.

<sup>2</sup> Highest construction noise level calculations based on distance from the construction noise source activity to nearby receiver locations as shown on Table 10-2.

 $^{3}$  Exterior construction noise level standard represents the combination of the City of Beaumont 55 dBA L<sub>eq</sub> interior noise level limit and the 20 dBA noise reduction associated with typical building construction.

<sup>4</sup> Do the estimated Project construction noise levels exceed the construction noise level threshold?

### **10.5** CONSTRUCTION VIBRATION IMPACTS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent,

localized intrusion. The proposed Project's construction activities most likely to cause vibration impacts are:

- Heavy Construction Equipment: Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to buildings, the vibration is usually short-term and is not of sufficient magnitude to cause building damage.
- Trucks: Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem.

Ground-borne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA). Construction activities that would have the potential to generate low levels of ground-borne vibration within the Project site include grading. Using the vibration source level of construction equipment provided on Table 6-5 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts.

Table 10-4 presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 71 feet (at location R5) to 296 feet (at location R4) from Project construction activities (at the Project site boundary), construction vibration levels are estimated to range from 54.8 to 73.4 VdB and will remain below the FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria of 78 VdB for daytime residential uses at all receiver locations. Therefore, the Project-related vibration impacts are considered *less than significant* during the construction activities at the Project site.

Moreover, the vibration levels reported at the sensitive receiver locations are unlikely to be sustained during the entire construction period but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

	Distance to		Receiver V					
Receiver Location <sup>1</sup>	ceiver Construction action <sup>1</sup> Activity (Feet)	Small Bulldozer	Jack- hammer	Loaded Trucks	Large Bulldozer	Highest Vibration Levels	Threshold VdB <sup>3</sup>	Threshold Exceeded? <sup>4</sup>
R1	114'	38.2	59.2	66.2	67.2	67.2	78	No
R2	196'	31.2	52.2	59.2	60.2	60.2	78	No
R3	103'	39.6	60.6	67.6	68.6	68.6	78	No
R4	296'	25.8	46.8	53.8	54.8	54.8	78	No
R5	71'	44.4	65.4	72.4	73.4	73.4	78	No

TABLE 10-4: PROJECT CONSTRUCTION VIBRATION LEVELS

<sup>1</sup>Noise receiver locations are shown on Exhibit 10-A.

<sup>2</sup> Based on the Vibration Source Levels of Construction Equipment included on Table 6-5.

<sup>3</sup> Source: FTA Transit Noise and Vibration Impact Assessment maximum acceptable vibration criteria.

4 Does the vibration level exceed the maximum acceptable vibration threshold?



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## **11 REFERENCES**

- 1. State of California. California Environmental Quality Act, Appendix G. 2018.
- 2. Urban Crossroads, Inc. Highland Springs and 8th Retail Traffic Impact Analysis. March 2020.
- 3. California Department of Transportation Environmental Program. *Technical Noise Supplement A Technical Supplement to the Traffic Noise Analysis Protocol.* Sacramento, CA : s.n., September 2013.
- 4. Environmental Protection Agency Office of Noise Abatement and Control. Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. March 1974. EPA/ONAC 550/9/74-004.
- 5. U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch. *Highway Traffic Noise Analysis and Abatement Policy and Guidance.* December 2011.
- 6. U.S. Department of Transportation, Federal Highway Administration. *Highway Traffic Noise in the United States, Problem and Response.* April 2000. p. 3.
- 7. U.S. Environmental Protection Agency Office of Noise Abatement and Control. *Noise Effects Handbook-A Desk Reference to Health and Welfare Effects of Noise.* October 1979 (revised July 1981). EPA 550/9/82/106.
- 8. Occupational Safety and Health Administration. Standard 29 CRF, Part 1910.
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- 10. Office of Planning and Research. State of California General Plan Guidelines. October 2017.
- 11. State of California. 2016 California Green Building Standards Code. January 2017.
- 12. City of Beaumont. General Plan Saftey Element. March 2007.
- 13. California Court of Appeal. *Gray v. County of Madera, F053661.* 167 Cal.App.4th 1099; Cal.Rptr.3d, October 2008.
- 14. Federal Interagency Committee on Noise. Federal Agency Review of Selected Airport Noise Analysis Issues. August 1992.
- 15. California Department of Transportation. Technical Noise Supplement. November 2009.
- 16. American National Standards Institute (ANSI). Specification for Sound Level Meters ANSI S1.4-2014/IEC 61672-1:2013.
- 17. U.S. Department of Transportation, Federal Highway Administration. FHWA Highway Traffic Noise Prediction Model. December 1978. FHWA-RD-77-108.
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- 19. **California Department of Transportation.** *Traffic Noise Attenuation as a Function of Ground and Vegetation Final Report.* June 1995. FHWA/CA/TL-95/23.
- 20. **County of Riverside, Office of Industrial Hygiene.** *Requirements for Determining and Mitigating Traffic Noise Impacts to Residential Structures.* April 2015.
- 21. Urban Crossroads, Inc. Highland Springs and 8th Retail Air Quality Impact Analysis. March 2020.





# 12 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Highland Springs and 8th Retail Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5979.

Bill Lawson, P.E., INCE Principal URBAN CROSSROADS, INC. 260 E. Baker Street, Suite 200 Costa Mesa, CA 92626 (949) 336-5979 blawson@urbanxroads.com



### EDUCATION

Master of Science in Civil and Environmental Engineering California Polytechnic State University, San Luis Obispo • December, 1993

Bachelor of Science in City and Regional Planning California Polytechnic State University, San Luis Obispo • June, 1992

### **PROFESSIONAL REGISTRATIONS**

PE – Registered Professional Traffic Engineer – TR 2537 • January, 2009
AICP – American Institute of Certified Planners – 013011 • June, 1997–January 1, 2012
PTP – Professional Transportation Planner • May, 2007 – May, 2013
INCE – Institute of Noise Control Engineering • March, 2004

### **PROFESSIONAL AFFILIATIONS**

ASA – Acoustical Society of America ITE – Institute of Transportation Engineers

### **PROFESSIONAL CERTIFICATIONS**

Certified Acoustical Consultant – County of Orange • February, 2011 FHWA-NHI-142051 Highway Traffic Noise Certificate of Training • February, 2013



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APPENDIX 3.1:

CITY OF BEAUMONT MUNICIPAL CODE



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#### Chapter 9.02 - NOISE CONTROL<sup>[1]</sup>

#### Footnotes:

### --- (1) ---

Editor's note— Ord. No. 1067, § 1(Exh. A), adopted Jan. 19, 2016, amended Ch. 9.02 in its entirety to read as herein set out. Former Ch. 9.02, §§ 9.02.010—9.02.110, pertained to similar subject matter, and derived from Ord. No. 914, § 1, adopted July 3, 2007; Ord. 997, adopted May 3, 2011.

#### 9.02.010 - Purpose.

The purpose of this Chapter is to establish criteria and standards for the regulation of noise levels within the City and to implement the noise provisions contained in the City's General Plan.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

#### 9.02.020 - Findings.

It is hereby found and declared that:

- A. The making, creation or maintenance of excessive, unnecessary, unnatural or unusually loud noises which are prolonged, unusual and unnatural in their time, place and use, affect and are a detriment to public health, comfort, convenience, safety, welfare and prosperity of the residents of the City; and
- B. The necessity for the provisions and prohibitions hereinafter contained and enacted is hereby declared as a matter of legislative determination and public policy. It is further declared that the provisions and prohibitions hereinafter contained and enacted are in pursuance of and for the purpose of securing and promoting the public health, comfort, convenience, safety, welfare and prosperity and the peace and quiet of the City.

(<u>Ord. No. 1067, § 1(Exh. A), 1-19-2016</u>)

#### 9.02.030 - Definitions.

"Ambient noise" shall mean the all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding any intrusive noise.

"Capital improvement" shall mean major construction, acquisition or maintenance/repair projects. Examples of capital improvements include street improvements, park development and construction of public buildings or structures, treatment plants. Structures include lighting, sewer and water pipelines and other related utility structures including treatment plants, gas, electric and other infrastructure, landscaping and drainage facilities and all other public infrastructure. "Acquisitions" include the acquisition of land or interest in land. Major maintenance/repairs may include street resurfacing and modifications to public buildings and structures.

*"Commercial purpose"* shall mean the use, operation or maintenance of any sound-amplifying equipment for the purpose of advertising any business, goods or services and/or for the purpose of advertising or attracting the attention of the public to or soliciting patronage for any performance, entertainment, exhibition or event, or for the purpose of demonstrating any such sound equipment.

"Cumulative time period" shall mean a period of time composed of individual time segments which may be continuous or interrupted.

"Decibel (dB)" shall mean a measurement unit of sound pressure level which denotes the ratio between two quantities which are proportional to power; the number of decibels corresponding to the ratio of two amounts of power is ten times the logarithm to the base ten of this ratio.

"Governmental agency" shall mean the United States (federal government), the State of California, the County of Riverside, the City of Beaumont, the school district and any special district within Riverside County or any combination of these agencies.

*"Impact noise"* shall mean the sound produced by the impact or collision of one moving object or mass with a second object or mass that is stationary or moving.

"*Intrusive noise*" shall mean a sound which intrudes over and above the existing ambient noise level at a given location.

"Motor-driven vehicle" shall include, but not be limited to, any automobile, truck, van, bus, motorcycle, minibike, go-cart or other self-propelled vehicle, on or off road, and aircraft.

"Noise" shall mean any sound that is loud or disturbing or that interferes with one's ability to hear some other sound.

"Noise level" shall mean the "A" weighted sound pressure level in decibels audible to humans obtained by using a sound level meter. The unit of noise level measurement shall be designated as dB(A).

"Person" shall mean a person, firm, association, partnership, joint venture, corporation or any entity, public or private in nature.

"Public property" shall mean property that is owned by any governmental agency as indicated in this section or held by the public, including, but not limited to, parks, streets, sidewalks, and alleys.

"Simple tone noise" shall mean a noise characterized by a predominant frequency or frequencies so that other frequencies cannot be readily distinguished.

"Sound pressure level of a sound, in decibels" shall mean 20 times the logarithm to the base ten of the ratio of the pressure of this sound to the reference pressure, which reference pressure shall be explicitly stated.

As used in Section 9.02.110(H), "public nuisance" is defined by Civil Code Section 3479.

(<u>Ord. No. 1067, § 1(Exh. A), 1-19-2016</u>)

9.02.040 - Noise level measurement criteria.

- A. Any noise level measurement, made pursuant to the provisions of this Chapter, shall be determined by using a sound level meter that meets the minimum requirements of the American National Standard Institute for sound level meters, or by using an instrument with associated recording and analyzing equipment that will provide equivalent data.
- B. The factors which shall be considered in determining whether a violation of the provisions of this section exists shall include, but not be limited to, the following:
  - 1. The sound level of the objectionable noise;
  - 2. The sound level of the ambient noise;
  - 3. The proximity of the noise to residential sleeping facilities;
  - 4. The nature and zoning of the area within which the noise emanates;
  - 5. The number of persons affected by the noise source;
  - 6. The time of day or night the noise occurs;
  - 7. The duration of the noise and its tonal, informational or musical content;

- 8. Whether the noise is produced by a commercial or noncommercial activity.
- C. The above factors shall be considered in addition to the noise levels set forth in this section in determining a violation. However, noises do not necessarily need to exceed those noise level limits to be considered unnecessary or unusual so as to cause discomfort or annoyance to persons in the area.

(<u>Ord. No. 1067, § 1(Exh. A), 1-19-2016</u>)

9.02.050 - Base ambient noise level.

All ambient noise measurements shall commence at the base ambient noise levels in decibels within the respective times and zones as follows:

Decibels	Time	Zone Use
45 dB(A)	10:00 p.m. — 7:00 a.m.	Residential
55 dB(A)	7:00 a.m. — 10:00 p.m.	Residential
50 dB(A)	10:00 p.m. — 7:00 a.m.	Industrial and Commercial
75 dB(A)	7:00 a.m. — 10:00 p:m.	Industrial and Commercial

Actual decibel measurements exceeding the levels set forth hereinabove at the times and within the zones corresponding thereto shall be employed as the "base ambient noise level" referred to in this Chapter. Otherwise, no ambient noise shall be deemed to be less than the above specified levels.

#### (Ord. No. 1067, § 1(Exh. A), 1-19-2016)

9.02.060 - Exterior noise level measurement.

Except as otherwise specifically provided herein, all reference to "exterior noise" or "exterior noise levels" as used in this Chapter shall be as measured at any point relative to the closest point of the source of the noise at the property line of the complaining party. Measurements will not be made during extraordinary times, such as during the movement of a nearby train or airplane.

(<u>Ord. No. 1067, § 1(Exh. A), 1-19-2016</u>)

9.02.070 - Maximum residential noise levels.

No noise level shall exceed the following for the duration periods specified:

Noise Level Exceeded	Maximum Duration Period

5 dB(A) above BANL	15 minutes any hour
10 dB(A) above BANL	5 minutes any hour
15 dB(A) above BANL	1 minute any hour
20 dB(A) above BANL	Not permitted

## (<u>Ord. No. 1067, § 1(Exh. A), 1-19-2016</u>)

9.02.080 - Maximum interior noise levels.

A. No person shall operate or cause to be operated, any source of sound which causes the noise level, when measured inside another dwelling unit, school or hospital, to exceed:

Decibels	Time	Land Use
35 dB(A)	10:00 p.m. — 7:00 a.m.	Residential
45 dB(A)	7:00 a.m. — 10:00 p.m.	Residential
45 dB(A)	7:00 a.m. — 10:00 p.m. (while school is in session)	School
45 dB(A)	Anytime	Hospital

B. No person shall operate or cause to be operated, any source of sound which causes the noise level, when measured inside another dwelling unit, school or hospital, to exceed:

Noise Level Exceeded	Maximum Duration Period
5 dB(A) above interior BANL	5 minutes any hour
10 dB(A) above interior BANL	1 minutes any hour
Over 10 dB(A) above interior BANL	Not permitted

C. If the measured interior ambient noise level exceeds that permissible within the first two noise limit categories in this section, the allowable noise exposure standard shall be increased in five decibel increments in each category as appropriate to reflect the interior ambient noise level. In the event the interior ambient noise level exceeds the third noise limit category, the maximum allowable interior noise level under said category shall be increased to reflect the maximum interior ambient noise level.

#### (<u>Ord. No. 1067, § 1(Exh. A), 1-19-2016</u>)

9.02.090 - Maximum nonresidential noise levels.

Any provision contained herein to the contrary notwithstanding, no exterior noise level shall exceed the base ambient noise levels (BANL) for nonresidential land uses set forth in any development agreement applicable to such development or as otherwise specifically set forth in any development standard which is by its terms enforceable by the City against the noise maker.

#### (Ord. No. 1067, § 1(Exh. A), 1-19-2016)

#### 9.02.100 - Exemptions.

Sound emanating from the following sources is exempt from the provisions of this Chapter:

- A. Capital improvement projects of a governmental agency.
- B. Maintenance and repair of public properties by a governmental agency.
- C. Utility and street repairs, street sweepers, garbage services, emergency response warning noises, emergency generators and fire alarm systems are exempt from this Chapter.
- D. Other public/governmental services or operations including, but not limited to trains and railway or airplanes and helicopter machinery, equipment or vehicles.

## (<u>Ord. No. 1067, § 1(Exh. A), 1-19-2016</u>)

9.02.110 - Special provisions.

- A. Sound Performances and Special Events. Sound performances and special events not exceeding 95 dB measured at a distance of 50 feet from the loudest source are exempt from this Chapter when approval therefore has been obtained from the appropriate governmental entity.
- B. *Vehicle Horns*. Vehicle horns, back-up warning devices, or other devices primarily intended to create a loud noise for warning purposes, shall be used only when the vehicle is in a situation where life, health or property are endangered or as required by law.
- C. *Alarm System.* An audible alarm system affixed to a motor vehicle shall be equipped with an automatic shutoff, which shuts off the alarm within a maximum of 15 minutes from the time of activation. Such alarm may not emit a sound similar to the sound emitted by sirens in use on emergency vehicles or to those used for civil defense purposes. For purposes of this section, any variable tone, as opposed to one steady pitch, shall be considered similar to the sound emitted by an emergency vehicle siren. The Police Department is authorized to abate the nuisance of an audible alarm system affixed to a motor vehicle, which sounds beyond 15 minutes by using any means necessary to disconnect the vehicle alarm. The expense of disconnecting the alarm shall be a lien against the motor vehicle and shall be the personal obligation of the owner thereof.

- D. *Radios, Televisions, Stereos, Speakers, etc.* It shall be unlawful for any person, without special permit or as may otherwise be provided in this Chapter, to play, use, operate or permit to be played, used or operated, any radio, television, musical instrument, stereo equipment, or other machine or device used for producing, reproducing or amplifying sound at such sound levels as to cause the sound level to exceed 40 dB(A) as measured within the residence of any complaining person.
- E. Animals, Fowl, etc. It shall be unlawful to keep or harbor any animal which emits, between the hours of 11:00 p.m. and 7:00 a.m., any unreasonable sound or cry which disturbs or may disturb the peace and comfort or repose of a reasonable person of normal sensitiveness who resides in the neighborhood or area in which such animal is located or kept. For barking dog, see limitations set forth in Section 6.04.080. This provision shall not apply to farm animals within any zone in which such farm animals are permitted under the Municipal Code.
- F. Construction, Landscape, Maintenance or Repair.
  - 1. It shall be unlawful for any person to engage in or permit the generation of noise related to landscape maintenance, construction including erection, excavation, demolition, alteration or repair of any structure or improvement, at such sound levels, as measured at the property line of the nearest adjacent occupied property, as to be in excess of the sound levels permitted under this Chapter, at other times than between the hours of 7:00 a.m. and 6:00 p.m. The person engaged in such activity is hereby permitted to exceed sound levels otherwise set forth in this Chapter for the duration of the activity during the above described hours for purposes of construction. However, nothing contained herein shall permit any person to cause sound levels to at any time exceed 55 dB(A) for intervals of more than 15 minutes per hour as measured in the interior of the nearest occupied residence or school.
  - 2. Whenever a construction site is within one-quarter of a mile of an occupied residence or residences, no construction activities shall be undertaken between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May. Exceptions to these standards shall be allowed only with the written consent of the building official.
  - 3. Construction related noise as defined in subsection (F)(1) and (2) above may take place outside the time period set forth therein and above the relative sound levels in case of urgent necessity in the interest of public health and safety, and then only with the prior permission of the building inspector. Such permit may be granted for a period not to exceed three days or until the emergency ends, whichever is less. The permit may be renewed for periods of three days while the emergency continues.
  - 4. Unless exempted by this Chapter, if the building official should determine that the public health and safety will not be impaired by the construction related noise, the building inspector may issue a permit for construction within the hours of 6:00 p.m. and 7:00 a.m., upon application being made at the time the permit for the work is awarded or during the progress of the work. The building official may place such conditions on the issuance of the permit that are appropriate to maintain the public health and safety, as determined by the building official.
- G. *Machinery, Equipment, Fans and Air Conditioning.* It shall be unlawful for any person to operate, cause to operate or permit the operation of any machinery, equipment, device, pump, fan, compressor, air conditioning apparatus or similar mechanical device, including but not limited to the use of any steam shovel, pneumatic hammer, derrick, steam or electric hoist, blower or power fan, or any internal combustion engine, the operation of which causes noise due to the explosion of operating gases or fluids, or other appliance, in any manner so as to create any noise which would cause the noise level at the property line of the property upon which the equipment or machinery is operated to exceed the base ambient noise level by five dB(A).
- H. *Motor Driven Vehicles.* It shall be unlawful for any person to operate any motor driven vehicle within the City that, due to the nature of the operation of the vehicle, or due to the operating condition of the vehicle, or due to any modification made to the vehicle, in such manner as to exceed noise levels set forth in Section 9.02.050 hereof.

- 1. Exhaust. It shall be unlawful for any person to discharge into the open air the exhaust of any steam engine, stationary internal combustion engine, motorboat or motor driven vehicle except through a muffler or other device which will effectively prevent loud or explosive noises there from.
- 2. No person shall use or operate a stereo system, radio, electronic music device, television or similar device in a vehicle on a public street which is audible to a person of normal hearing sensitivity, more than 50 feet from said vehicle.
- I. Notwithstanding any other provisions of this Chapter and in addition thereto, it shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary and unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or creates a public nuisance. The standard which may be considered in determining whether a violation of the provisions of this section exists may include, but not be limited to, the following:
  - 1. The level of noise;
  - 2. Whether the nature of the noise is usual or unusual;
  - 3. Whether the origin of the noise is natural or unnatural;
  - 4. The level and intensity of the background noise, if any;
  - 5. The proximity of the noise to residential sleeping facilities;
  - 6. The nature of the zoning of the area within which the noise emanates;
  - 7. The density of the inhabitation of the area within which the noise emanates;
  - 8. The time of the day and night the noise occurs;
  - 9. Whether the noise is recurrent, intermittent, or constant;
  - 10. The duration of the noise; and
  - 11. Whether the noise is produced by a commercial or noncommercial activity.

#### (<u>Ord. No. 1067, § 1(Exh. A), 1-19-2016</u>)

#### 9.02.120 - Exception permits.

If the applicant can show to the City manager or designee, that a diligent investigation of available noise abatement techniques indicates that immediate compliance with the requirements of this Chapter would be impractical or unreasonable, a permit to allow exception from the provisions contained in this Chapter may be issued, with appropriate conditions to minimize the public detriment caused by such exceptions. Any such permit shall be of as short duration as possible, but in no case for longer than six months. These permits are renewable upon a showing of good cause, and shall be conditioned by a schedule for compliance and details of compliance methods in appropriate cases.

#### (<u>Ord. No. 1067, § 1(Exh. A), 1-19-2016</u>)

#### 9.02.130 - Application between zones.

In applying the regulations set forth in this Chapter, each source of noise shall be subject only to such regulation as shall apply to the zone, including any designated truck route, within which it is located. A use lying adjacent to a zone with a more restrictive noise requirement hereunder shall not be required to conform to that more restrictive requirement. For purposes of this subsection, "zone" shall be as utilized in Title 17 of the Beaumont Municipal Code.

(<u>Ord. No. 1067, § 1(Exh. A), 1-19-2016</u>)

9.02.140 - Penalty for violation.

In the discretion of the Enforcement Officer, any person violating the provisions of this Chapter may be issued an Administrative Citation pursuant to Beaumont Municipal Code Chapter 1.17 or shall be guilty of an infraction pursuant to Beaumont Municipal Code Chapter 1.16. In either case, the amount of the fine shall be the appropriate amount set forth in Section 1.16.030 of this Code. Each such violation shall be deemed a separate offense as specified in Section 1.16.040.

Notwithstanding the foregoing, a first offense may be charged and prosecuted as a misdemeanor, punishable by a fine of \$1,000.00, or six months in jail, or both

#### (Ord. No. 1067, § 1(Exh. A), 1-19-2016)

9.02.150 - Additional remedy—Injunction.

As an additional remedy, the operation or maintenance of any device, instrument, vehicle or machinery in violation of any provision hereof and which causes discomfort or annoyance to reasonable persons of normal sensitiveness or which endangers the comfort, repose, health or peace of residents in the area shall be deemed, and is declared to be a public nuisance and may be subject to abatement summarily by a restraining order or injunction issued by a court of competent jurisdiction.

( Ord. No. 1067, § 1(Exh. A), 1-19-2016 )

9.02.160 - No mandatory duty created.

No section of this Chapter shall impose a mandatory duty on the City, or on any officer, official, agent, employee, board, council, or commission of the City. Instead, if any section purports to impose a mandatory duty of enforcement, that section shall be deemed to invest the City, and the appropriate officer, official, agent, employee, board, council, or commission with discretion to enforce the section or not to enforce it. A police officer, for example, shall have the discretion to quiet a nuisance without applying standards detailed herein.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

APPENDIX 5.1:

**STUDY AREA PHOTOS** 



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# JN: 13073 Study Area Photos



L1\_E 33, 55' 56.790000", 116, 56' 47.600000"



L1\_N 33, 55' 56.910000", 116, 56' 47.960000"



L1\_S 33, 55' 56.710000", 116, 56' 47.520000"



L1\_W 33, 55' 56.820000", 116, 56' 47.600000"



L2\_E 33, 55' 55.020000", 116, 56' 51.060000"



L2\_N 33, 55' 54.980000", 116, 56' 51.090000"

# JN: 13073 Study Area Photos



L2\_S 33, 55' 54.990000", 116, 56' 51.090000"



L2\_W 33, 55' 55.060000", 116, 56' 51.040000"



L3\_E 33, 55' 52.380000", 116, 56' 57.760000"



L3\_N 33, 57' 35.150000", 116, 57' 40.090000"



L3\_S 33, 55' 52.380000", 116, 56' 57.760000"



L3\_W 33, 55' 52.480000", 116, 56' 57.900000"

# JN: 13073 Study Area Photos



L4\_E 33, 55' 57.420000", 116, 56' 54.660000"



L4\_N 33, 55' 57.450000", 116, 56' 54.720000"



L4\_S 33, 55' 57.450000", 116, 56' 54.720000"

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APPENDIX 5.2:

**NOISE LEVEL MEASUREMENT WORKSHEETS** 



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24-Hour Noise Level Measurement Summary																
Date:	Thursday, D	ecember 12,	, 2019		Location:	L1 - Located	east of the l	Project site r	ear the San	Gregorio	Meter:	Piccolo II			JN:	13073
Project:	Highland Sp	orings and str	n Retall				llowhul	IDA Doudinas	(						Analyst:	P. Mara
							Houriy L <sub>eq</sub> (	iBA Redaings	(unaajustea)							
	5															
<b>5</b> 70.0						<u> </u>										
<b>_</b> 60.0	) <b>-</b> -		6	.3		69. 5.9		<del>d</del> 00	- <mark>.</mark>	<u>, </u> ,	6.3		.1		<mark>.6</mark>	~
<b>1</b> 50.0	ŏ <b>– ö</b> –	60.1	61.	6		9		61.	<mark>03</mark>	<u> </u>	9	9	64	9	_ 6 <sup>_</sup>	61.
<b>보</b> 45.0 40.0	5 = =															
35.0	) + <b></b> + C						+				45 46	47	10 10			
	0	1 2	3	4 5	6	/ 8	9 1	U II Hour Be	12 1 ginning	.3 14	15 16	17	18 19	20	21 22	23
Timeframe	Hour	/	1	1.	11%	17%	15%	18%	125%	150%	190%	195%	100%	1	٨di	Adi I
Timejrume		62 1	69 0	57.5	68.8	68.4	66.8	65.5	62.5	60.6	58.3	57.9	57.6	€ eq	10.0	72 1
	1	59.7	65.9	55.1	65.6	65.3	64.3	63.3	60.2	58.3	56.0	55.6	55.3	59.7	10.0	69.7
	2	60.5	66.5	56.5	66.2	65.8	64.6	63.7	61.0	59.3	57.3	57.0	56.6	60.5	10.0	70.5
Night	3	61.9	68.1	57.8	67.8	67.5	66.3	65.4	62.1	60.5	58.6	58.3	57.9	61.9	10.0	71.9
	4	63.3	67.5	60.1	67.2	67.0	66.2	65.7	64.1	62.6	60.9	60.5	60.2	63.3	10.0	73.3
	5	66.2	72.0	62.7	71.8	71.4	70.1	69.1	66.5	65.2	63.4	63.1	62.8	66.2	10.0	76.2
	0 7	69.6	75.6	62.5	75.3	74.8	76.5	72.3	68.6	65.8	63.5	63.0	62.6	69.6	0.0	78.8 69.6
	8	65.9	73.8	59.7	73.4	73.0	71.8	70.5	65.9	63.9	60.8	60.2	59.8	65.9	0.0	65.9
	9	64.5	74.0	57.1	73.5	72.8	70.9	69.5	63.7	61.3	58.4	57.9	57.2	64.5	0.0	64.5
	10	61.4	68.6	55.9	68.1	67.6	66.2	65.2	62.1	59.5	56.9	56.4	56.0	61.4	0.0	61.4
	11	61.8	68.8	55.8	68.5	68.0	66.6	65.7	62.6	59.9	56.8	56.3	55.9	61.8	0.0	61.8
Day	12	63.0	70.4	56.7	70.0	69.5	68.3	67.1	63.6	61.0	57.8	57.3	56.9	63.0	0.0	63.0
	13	64.7	73.7	56.8	72.9 74.4	72.3	09.9 71.3	69.6	63.6	60.8	57.8	57.5	56.9	63.9 64.7	0.0	64.7
	15	68.5	78.9	57.8	78.5	78.1	76.4	74.3	66.1	62.1	59.2	58.6	58.0	68.5	0.0	68.5
	16	66.3	75.7	58.0	75.2	74.7	72.9	71.4	66.0	62.4	59.1	58.6	58.1	66.3	0.0	66.3
	17	65.8	75.2	58.9	74.7	74.0	72.1	70.4	65.3	63.2	60.0	59.5	59.0	65.8	0.0	65.8
	18	66.5	76.3	58.0	76.0	75.5	73.9	72.6	65.1	62.5	59.2	58.7	58.1	66.5	0.0	66.5
Evening	19	64.1	73.6	57.1	73.1	72.2	69.8	68.3	63.9	61.3	58.1	57.7	57.2	64.1	5.0	69.1
Evening	20	63.6	70.0	57.0	76.0	75.2	70.1	68.0	63 A	60.8	58.5	56.0	57.7	63.6	5.0	70.5 68.6
A.1. 1.1	22	64.5	74.1	54.6	73.3	72.8	71.4	69.9	64.9	58.9	55.7	55.2	54.8	64.5	10.0	74.5
Night	23	61.8	70.5	55.6	70.1	69.6	67.9	66.1	61.7	58.9	56.4	56.0	55.7	61.8	10.0	71.8
Timeframe	Hour	L <sub>eq</sub>	L <sub>max</sub>	L <sub>min</sub>	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%		L <sub>eq</sub> (dBA)	
Day	Min	61.4	68.6	55.8	68.1	67.6	66.2	65.2	62.1	59.5	56.8	56.3	55.9	24-Hour	Daytime	Nighttime
Energy	Average	65.8	78.9 Ave	oz.5	78.5	78.1	76.5	74.9	64.7	61.9	58.9	58.4	58.0			
	Min	63.6	72.4	56.3	72.0	71.4	69.8	68.0	63.4	60.8	57.4	56.9	56.4	65.1	65.6	64.2
Evening	Max	65.5	76.6	57.6	76.0	75.2	71.7	69.9	64.3	61.6	58.5	58.1	57.7	24-	Hour CNEL (a	IBA)
Energy	Average	64.5	Ave	erage:	73.7	72.9	70.5	68.7	63.9	61.2	58.0	57.5	57.1			
Night	Min	59.7	65.9	54.6	65.6	65.3	64.3	63.3	60.2	58.3	55.7	55.2	54.8		71.1	
Energy	Average	64.2	75.6 Ave	erage:	69.6	69.2	67.9	72.3 66.8	63.5	61.3	59.1	58.8	58.4		<i>,</i>	
- 81				<u> </u>												



24-Hour Noise Level Measurement Summary																
Date: Project:	Thursday, D	ecember 12,	, 2019 h Rotail		Location:	L2 - Located Medical and	l by the sout I Dental Offi	hern border ces.	of the Projec	ct site by	Meter:	Piccolo II			JN: Anglyst:	13073 B. Mara
FIOJECI.	Tinginanu Sp	nings and ou	il Netali				Hourly I	dRA Readinas	(unadiusted)						Anuiyst.	F. Iviala
								aba neuulings	(unuujusteu)							
85.0																
<b>a</b> 75.0	ž															
<b>5</b> ,0.0	5															
60.0 <b>ت</b> 60.0						<u>о</u>										
<b>5</b> 50.0	Ď <b>– n</b> –	က် တံ		57.8		<u> </u>	<b>6.1</b>	6.3	.7.3		59.4		60. 58.0	26.	7.0	<u> </u>
<b>£</b> 43.0	2 <b>– 2</b> –	51	23				- <u>0</u>			" — " –						
35.0	) + <b></b> +	1 2	2		6	7 0		10 11	12 1	2 14	15 16	17	19 10	20	21 22	22
	0	1 2	3	4 J	D	/ 0	9	Hour Be	IZ I Pginning	5 14	15 10	17	10 19	20	21 22	25
Timeframe	Hour	<i>L</i>	1	l	11%	12%	15%	18%	125%	150%	190%	195%	199%	<i>L</i>	Adi	Adi. L
liniejranie	0	- eq	- max	- min 49.7	58.7	58.4	57.4	56.6	53.6	52.2	50.4	50.1	49.8	- 24	10.0	63.3
	1	52.6	59.1	48.8	58.3	57.8	56.6	55.8	53.2	51.2	49.4	49.2	48.9	52.6	10.0	62.6
	2	51.8	57.3	48.9	56.8	56.4	55.3	54.6	52.0	50.8	49.5	49.2	48.9	51.8	10.0	61.8
Night	3	53.1	58.6	49.9	58.4	58.1	57.1	56.3	53.2	52.0	50.5	50.3	50.0	53.1	10.0	63.1
	4	54.7	59.2	51.8	58.9	58.5	57.7	57.1	55.3	54.2	52.5	52.2	51.9	54.7	10.0	64.7
	6	62.1	72.9	55.7	71.9	71.0	68.7	66.5	60.6	58.7	56.5	56.1	55.8	62.1	10.0	72.1
	7	60.9	70.0	55.8	69.4	68.2	66.4	65.2	60.6	58.3	56.6	56.2	55.9	60.9	0.0	60.9
	8	60.5	72.7	53.0	71.8	70.7	66.8	64.6	57.8	55.8	53.9	53.5	53.1	60.5	0.0	60.5
	9	56.1	63.3	50.9	62.8	62.3	61.0	59.9	56.5	54.3	51.9	51.5	51.1	56.1	0.0	56.1
	10	55.6	62.5	50.5	62.1	61.6	60.4	59.4	56.0	53.9	51.5	51.0	50.6	55.6	0.0	55.6
	11	50.3	64.4	50.8 52.5	63.9	62.3	61.2	60.2 60.7	56.9	54.4 55.8	51.7	51.3 53.0	50.9 52 7	56.3	0.0	50.3
Day	13	58.3	66.2	51.5	65.8	65.3	64.0	62.9	58.7	55.4	52.4	52.0	51.6	58.3	0.0	58.3
	14	57.9	67.9	51.6	67.3	66.7	63.7	61.3	57.3	55.2	52.7	52.2	51.7	57.9	0.0	57.9
	15	58.6	67.8	52.2	67.2	66.4	64.6	62.5	58.3	55.7	53.2	52.8	52.3	58.6	0.0	58.6
	16	59.4	68.8	52.6	68.3	67.7	65.3	63.5	59.5	56.2	53.5	53.2	52.8	59.4	0.0	59.4
	17	59.4 60.1	67.5 60.6	54.1	67.0 60.2	66.4	64.7 66.4	63.6 62.0	59.3	57.2	55.0	54.6 54.1	54.2	59.4 60.1	0.0	59.4 60.1
	19	58.0	65.2	53.7	64.8	64.2	62.9	62.0	58.0	56.3	54.4	54.2	53.8	58.0	5.0	63.0
Evening	20	59.2	69.8	53.2	69.1	68.2	65.0	62.7	58.5	56.2	54.1	53.7	53.3	59.2	5.0	64.2
	21	57.5	65.4	52.2	64.9	64.5	63.3	61.6	57.2	55.5	53.1	52.7	52.3	57.5	5.0	62.5
Night	22	57.0	64.4	50.6	64.2	63.9	63.3	62.2	57.1	54.4	51.4	51.1	50.7	57.0	10.0	67.0
Timeframe	23 Hour	55.6	63.5	50.9	62.9	62.5	60.9	60.2	55.2	53.4	51.7	51.4	51.1	55.6	I (dBA)	65.6
Timejrume	Min	55.6	62.5	50.5	62.1	61.6	60.4	59.4	56.0	53.9	51.5	51.0	50.6			
Day	Max	60.9	72.7	55.8	71.8	70.7	66.8	65.2	60.6	58.3	56.6	56.2	55.9	24-Hour	Daytime	Nighttime
Energy	Average	58.7	Ave	erage:	66.5	65.8	63.9	62.3	58.2	55.8	53.4	53.0	52.6	58 0	58 6	56.6
Evening	Min	57.5	65.2	52.2	64.8	64.2	62.9	61.6	57.2	55.5	53.1	52.7	52.3	50.0		
Energy	Max	59.2	69.8 Avr	53.7 erage	69.1	65.6	65.0	62.7	58.5	56.0	54.4	54.2	53.8	24-	HOUP CNEL (d	іва)
Lifergy	Min	51.8	57.3	48.8	56.8	56.4	55.3	54.6	52.0	50.8	49.4	49.2	48.9	1	<b>C 7</b>	
Night	Max	62.1	72.9	55.7	71.9	71.0	68.7	66.5	60.6	58.7	56.5	56.1	55.8		63./	
Energy	Average	56.6	Ave	erage:	61.7	61.2	60.0	59.0	55.3	53.7	51.8	51.5	51.2			



	24-Hour Noise Level Measurement Summary															
Date: Project:	Thursday, D Highland Sp	December 12, prings and 8th	, 2019 n Retail		Location:	L3 - Locatec near the Tu	l southwest o scany Villas a	of the Projec apartment co	t site on Alle omplex.	gheny Street	t Meter:	Piccolo I			JN: Analyst:	13073 P. Mara
							Hourly L <sub>eq</sub>	dBA Readings	(unadjusted)							
85.0	)															
₹ <sup>80.0</sup>																
<b>e</b> 75.0																
- 65.0																
≥ 55.0	į́ +- <b>_</b> +				- LO	0 <u>6.</u>	6	N 4	م م	x 0	- N - N	4	<u>v</u> 6	4	0	1.3
<b>5</b> 50.0 <b>0</b> 45.0	5 — <u>6</u> —	4.3	3.2	3.6	57.	<mark>9 9</mark>	20.5	57.	3 <u>28</u> 2	<mark>- 59</mark>	282		<mark>57.</mark>		57.	
<b>±</b> 40.0		- · · ·	ii	- N - N												
55.0	0	1 2	3	4 5	6	7 8	9	10 11	12 1	3 14	15 16	5 17	18 19	20	21 22	23
								Hour Be	eginning							
Timeframe	Hour	L <sub>eg</sub>	L max	L <sub>min</sub>	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L <sub>eq</sub>	Adj.	Adj. L <sub>ea</sub>
	0	56.1	75.7	48.3	60.0	59.0	58.0	57.0	56.0	54.0	51.0	51.0	49.0	56.1	10.0	66.1
	1	54.3	63.3	47.0	58.0	57.0	57.0	56.0	55.0	53.0	51.0	50.0	49.0	54.3	10.0	64.3
	2	55.8	65.5	49.3	61.0	60.0	58.0	58.0	56.0	55.0	52.0	51.0	50.0	55.8	10.0	65.8
Night	3	53.2	73.1	45.1	64.0	60.0	57.0	55.0	51.0	49.0	47.0	46.0	45.0	53.2	10.0	63.2
	4	53.0	74.8	47.0	57.0	57.0	56.0	55.0	53.0	52.0	50.0	49.0	48.0	53.0	10.0	63.0
	5	57.5	82.7	47.7	58.0 66.0	64.0	50.0 60.0	58.0	54.0	52.0	51.0	50.0	49.0	57.5	10.0	67.5
	7	60.0	74.6	51.3	66.0	65.0	63.0	62.0	60.0	59.0	56.0	54.0	52.0	60.0	0.0	60.0
	8	60.3	88.3	50.5	65.0	63.0	62.0	60.0	57.0	55.0	52.0	52.0	51.0	60.3	0.0	60.3
	9	56.9	69.8	50.7	65.0	64.0	62.0	61.0	56.0	54.0	52.0	52.0	51.0	56.9	0.0	56.9
	10	57.2	76.6	50.9	65.0	63.0	61.0	59.0	56.0	54.0	53.0	52.0	52.0	57.2	0.0	57.2
	11	58.4	75.6	52.0	67.0	66.0	63.0	61.0	57.0	55.0	53.0	53.0	52.0	58.4	0.0	58.4
Day	12	58.9	79.7 75.1	50.3	67.0 67.0	65.0	63.0 61.0	61.0 59.0	57.0	56.0	54.0 54.0	53.0	53.0	58.9 57.8	0.0	58.9
	13	59.8	79.2	52.9	70.0	68.0	64.0	62.0	57.0	56.0	54.0	54.0	53.0	59.8	0.0	59.8
	15	58.2	73.4	52.0	68.0	66.0	63.0	61.0	56.0	55.0	53.0	53.0	52.0	58.2	0.0	58.2
	16	58.7	76.9	52.7	67.0	66.0	63.0	61.0	57.0	56.0	54.0	54.0	53.0	58.7	0.0	58.7
	17	57.4	72.3	52.1	66.0	63.0	60.0	59.0	57.0	55.0	54.0	53.0	53.0	57.4	0.0	57.4
	18	59.2	73.8	53.8	68.0	66.0	63.0	61.0	58.0	57.0	55.0	55.0	54.0	59.2	0.0	59.2
Evening	19	57.9	75.1	53.4	64.0	62.0	60.0 50.0	59.0	57.0	56.0	55.0	54.0	54.0	57.9	5.0	62.9
Lvening	20	57.4	73.8	50.7	65.0 66.0	64.0	59.0	58.0	56.0	55.0	53.0	53.0	52.0	57.4	5.0	62.4
	22	54.9	70.5	49.2	61.0	58.0	57.0	56.0	55.0	54.0	52.0	51.0	50.0	54.9	10.0	64.9
Night	23	61.3	84.4	51.9	71.0	65.0	60.0	59.0	57.0	56.0	54.0	54.0	53.0	61.3	10.0	71.3
Timeframe	Hour	L <sub>eq</sub>	L max	L <sub>min</sub>	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	-	L <sub>eq</sub> (dBA)	
Day	Min	56.9	69.8	50.3	65.0	63.0	60.0	59.0	56.0	54.0	52.0	52.0	51.0	24-Hour	Daytime	Nighttime
Enormy	Max	60.3	88.3	53.8	70.0	68.0	64.0	62.0	60.0	59.0	56.0	55.0	54.0			
Lifergy	Min	57.3	73.8	50.7	63.0	61.0	59.0	58.0	56.0	55.0	53.0	53.0	52.0	57.8	58.5	56.4
Evening	Max	57.9	77.7	53.4	66.0	64.0	60.0	59.0	57.0	56.0	55.0	54.0	54.0	24-	Hour CNEL (d	IBA)
Energy	Average	57.5	Ave	erage:	64.3	62.3	59.3	58.3	56.7	55.7	54.0	53.7	53.0			
Night	Min	53.0	63.3	45.1	57.0	57.0	56.0	55.0	51.0	49.0	47.0	46.0	45.0		63 5	
	Max	61.3	84.4	51.9	71.0	65.0	60.0	59.0	57.0	56.0	54.0	54.0	53.0	4	0	
Energy	Average	56.4	Ave	erage:	61.8	59.7	57.7	56.6	54.6	53.1	51.0	50.2	49.1			



24-Hour Noise Level Measurement Summary																
Date:	Thursday, D	ecember 12,	2019		Location:	L4 - Located	l northwest o Grove Health	of the Project Care.	t site on East	8th Street	Meter:	Piccolo II			JN:	13073
Project:	Highland Sp	rings and 8tr	i Retall				Hourbul	dRA Roadinas	(unadiustod)						Analyst:	P. Mara
							Houriy L <sub>eq</sub> (	aba Reddings	(unaajustea)							
85.0	<u> </u>															
₹ 80.0 ₹ 75.0																
<b>5</b> 70.0						m .										
<b>_</b> 60.0	í <u>-</u>			N 9		2	7.5	0. 8.7	- <mark></mark>	8.3	8.7				0 4	+
<b>→</b> 55.0 <b>→</b> 50.0	) - 9.6	ю. С.		64	9			° °	<u> </u>	5 °					<u>8</u> .	
<b>9</b> 45.0		5.56	<sup>22</sup>													
35.0	δ <b>↓</b> ↓															
	0	1 2	3	4 5	6	7 8	9 1	10 11	12 1	3 14	15 16	17	18 19	20	21 22	23
								Hour Be	eginning							
Timeframe	Hour	L <sub>eq</sub>	L max	L min	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L <sub>eq</sub>	Adj.	Adj. L <sub>eq</sub>
	0	59.6	70.3	50.8	69.9	69.2	66.4	64.3	58.8	55.0	51.6	51.3	50.9	59.6	10.0	69.6
	1	50.3	60 F	49.2	60.1	68.4	62.8	59.7 62.0	54.8	52.5	50.1	49.7	49.4	50.3	10.0	68.0
Night	2	58.0	68.6	49.2 51.2	68.2	67.5	64.6	62.0	57.1	54.0	49.7 51.8	49.5 51.6	51.3	58.0	10.0	68.0
0	4	62.2	73.3	53.4	72.8	72.1	69.0	66.8	60.9	57.1	54.3	53.9	53.5	62.2	10.0	72.2
	5	64.0	75.0	55.2	74.5	73.7	70.9	68.8	62.6	58.6	56.0	55.7	55.3	64.0	10.0	74.0
	6	67.1	76.7	58.4	76.3	75.6	73.6	72.1	66.9	63.1	59.4	58.9	58.5	67.1	10.0	77.1
	7	70.3	78.5	61.6	78.1	77.5	75.8	74.7	71.2	67.9	62.7	62.2	61.7	70.3	0.0	70.3
	8	/1./	81.1	61.0 E4.2	80.6 78.4	80.0	78.2 74.1	77.0	/1.6	67.8 61.4	62.4 EE 6	61.8 FF 0	61.2 54.4	/1./	0.0	/1./
	9 10	67.0	76.8	56.3	76.4	75.8	73.6	72.0	66.8	62.3	57.5	57.0	56.4	67.0	0.0	67.0
	11	68.7	79.5	58.2	78.6	77.3	74.7	73.6	68.5	64.1	59.7	59.0	58.4	68.7	0.0	68.7
Dav	12	66.7	76.1	54.3	75.8	75.2	73.7	72.4	66.8	61.6	55.6	54.9	54.4	66.7	0.0	66.7
Day	13	66.7	75.7	55.1	75.2	74.6	73.1	72.1	67.4	62.2	56.5	55.8	55.2	66.7	0.0	66.7
	14	68.3	76.3	56.5	75.9	75.1	73.4	72.5	69.5	66.3	59.4	57.9	56.7	68.3	0.0	68.3
	15	68.2	77.6	54.5	76.9	76.3 76.5	74.4	73.1	69.2	63.9	56.4	55.5	54.6	68.2	0.0	68.2
	10	69.7	77.8	55.4 56.1	77.8	76.5	74.5 75.1	73.4	69.9 70.2	65.4	57.2 57.8	57.0	55.0	69.7	0.0	69.7
	18	68.8	78.4	56.3	77.9	77.0	75.0	73.5	69.5	64.9	58.2	57.0	56.5	68.8	0.0	68.8
	19	66.1	75.7	54.7	75.3	74.6	72.8	71.5	66.3	61.4	55.9	55.3	54.8	66.1	5.0	71.1
Evening	20	64.7	74.6	53.4	74.2	73.5	71.4	70.2	64.6	59.1	54.5	54.0	53.5	64.7	5.0	69.7
	21	63.0	73.1	52.2	72.8	72.2	70.1	68.4	62.2	57.3	53.2	52.7	52.3	63.0	5.0	68.0
Night	22	63.4 60.0	74.9	51.2	74.1 69.8	/3.3	70.6 67.0	68.8 65.2	62.0 58.7	56.7 55.4	52.3 52.1	51.8 51.6	51.4	63.4 60.0	10.0	73.4
Timeframe	Hour	L <sub>og</sub>	L max	L min	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	00.0	L <sub>og</sub> (dBA)	70.0
Dav	Min	66.7	75.7	54.3	75.2	74.6	73.1	71.8	66.8	61.4	55.6	54.9	54.4	24 Hour	Dautimo	Nighttingo
Day	Max	71.7	81.1	61.6	80.6	80.0	78.2	77.0	71.6	67.9	62.7	62.2	61.7	24-Hour	Daytime	Nighttime
Energy	Average	68.7	Ave	rage:	77.4	76.7	74.6	73.3	68.9	64.4	58.2	57.5	56.8	66.8	68.2	62.2
Evening	Min	63.0 66.1	73.1	52.2	72.8	72.2	70.1	68.4 71 E	62.2	57.3	53.2	52.7	52.3	24	Hour CNEL /	
Energy	Average	64.8	Ave	rage:	75.5	73.4	72.8	70.0	64.4	59.2	54.5	54.0	53.5	24-	HOUF CIVEL (U	DAJ
Nickt	Min	56.3	67.7	49.2	67.2	66.4	62.8	59.7	54.8	51.9	49.7	49.5	49.2	1	70 F	
Night	Max	67.1	76.7	58.4	76.3	75.6	73.6	72.1	66.9	63.1	59.4	58.9	58.5		70.5	
Energy	Average	62.2	Ave	rage:	71.3	70.6	67.8	65.6	59.7	56.0	53.0	52.7	52.3			



APPENDIX 7.1:

**OFF-SITE TRAFFIC NOISE CONTOURS** 



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	FH	WA-RD-77-108	HIGHW	AY NO	DISE P	REDICTIO	ом мо	DEL						
Scenar Road Nam Road Segme	io: Existing (2 ne: Pennsylvar nt: n/o 8th St.	020) nia Ave.			Project Name: Highland Springs and 8th Job Number: 13073									
SITE	SPECIFIC IN	NPUT DATA			NOISE MODEL INPUTS									
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)									
Average Daily	Traffic (Adt):	10.808 vehicle	s		Autos: 15									
Peak Hour	Percentage:	7.37%			Medium Trucks (2 Axles): 15									
Peak H	lour Volume:	797 vehicle	s		Heavy Trucks (3+ Axles): 15									
Ve	hicle Speed:	30 mph		- 1- 1 - 1 -										
Near/Far La	ne Distance:	34 feet		V	enicie			D	Guardian	Manhat	D-it.			
011 0		-		ver	iicie i ype		Day	Evening	Night	Daily				
Site Data				_		A Tari	utos:	/5.5%	6 14.0%	10.5%	% 97.42%			
Ba	rrier Height:	0.0 feet			IM	eaium Tru	JCKS:	48.9%	6 2.2%	48.9%	% 1.84%			
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy In	JCKS:	47.3%	5.4%	47.3%	% 0.74%			
Centerline Di	st. to Barrier:	33.0 feet		N	oise S	ource Ele	vation	s (in f	eet)					
Centerline Dist.	to Observer:	33.0 feet			Autos: 0.000									
Barrier Distance	Barrier Distance to Observer: 0.0 feet						Medium Trucks: 2.297							
Observer Height (	Observer Height (Above Pad): 5.0 feet						: 8.	006	Grade Ad	justmer	nt: 0.0			
Pa	Pad Elevation: 0.0 feet									·				
Roa	ad Elevation:	0.0 feet		Li	ane Eq	uivalent	Distan	ce (in	feet)					
1	Road Grade:	0.0%				Autos	: 28.	723						
	Left View:	-90.0 degre	es		Mediu	m Trucks	: 28.	413						
	Right View:	90.0 degre	es		Hea	vy Trucks	: 28.	444						
FHWA Noise Mode	el Calculation	IS												
VehicleType	REMEL	Traffic Flow	Distar	ice	Finite	Road	Fresr	nel	Barrier Att	en Be	erm Atten			
Autos:	61.75	-1.18		3.51		-1.20		-4.52	0.0	000	0.000			
Medium Trucks:	73.48	-18.42		3.58		-1.20		-4.86	0.0	000	0.000			
Heavy Trucks:	79.92	-22.37		3.57		-1.20		-5.69	0.0	000	0.000			
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenu	ation)									
VehicleType	Leq Peak Ho	ur Leq Day	/ L	eq Eve	ening	Leq N	light		Ldn	(	CNEL			
Autos:	62	2.9	62.2		60.9		54.9	9	63.3	3	63.9			
Medium Trucks:	57	7.4	54.9		47.4		56.1		62.3	3	62.3			
Heavy Trucks:		53.8		58.5	5	64.	7	64.7						
Vehicle Noise: 65.4 64.0					61.8		61.5	5	68.3	3	68.5			
Centerline Distant	Centerline Distance to Noise Contour (in feet)													
				70 dł	BA	65 dBA		60 dBA		55 dBA				
	Ldn:			25 55			118			254				
	CNEL:						26 57 123 2							

	FHV	A-RD-77-108	HIGHW	AT NU	JISE PR	EDICTIC		EL						
Scenari	o: Existing (20	20)			Project Name: Highland Springs and 8th									
Road Nam	e: Pennsylvani	a Ave.				Job Nu	mber: 1	3073						
Road Segmer	nt: s/o 8th St.													
SITE S	SPECIFIC IN	PUT DATA			NOISE MODEL INPUTS									
Highway Data				Si	Site Conditions (Hard = 10, Soft = 15)									
Average Daily	Traffic (Adt): 1	0,753 vehicles			Autos: 15									
Peak Hour	Percentage:	7.37%			Medium Trucks (2 Axles): 15									
Peak H	our Volume:	792 vehicles			Heavy Trucks (3+ Axles): 15									
Vei	hicle Speed:	30 mph		V	Vobiolo Mix									
Near/Far Lar	ne Distance:	24 feet		Ē	VehicleType Day Evening Night D									
Site Data						A	itos:	75.5%	14.0%	10.5%	97.42%			
Bar	rior Hoight:	0.0 feet			Me	dium Tru	icks:	48.9%	2.2%	48.9%	1.84%			
Barrier Type (0-W	all 1-Berm)	0.0			Heavy Trucks: 47.3% 5.4% 47.3% 0.74									
Centerline Dis	t. to Barrier:	39.0 feet						() -	- 41					
Centerline Dist.	to Observer:	39.0 feet		N	oise so	urce Ele	vations	(IN TE	et)					
Barrier Distance	to Observer:	0.0 feet			Autos: 0.000									
Observer Height (.	Above Pad):		Hoove	Trucks.	2.2	97	Grada Ad	liustmon	H 0 0					
Pa	d Elevation:		neav	y mucks.	0.0	00	Grade Au	jusunen	. 0.0					
Roa	d Elevation:	Lá	ane Equ	ivalent	Distanc	e (in f	feet)							
ŀ	Road Grade:	0.0%				Autos.	37.4	43						
	Left View:	-90.0 degree	s		Medium Trucks: 37.206									
	Right View:	90.0 degree	s		Heav	y Trucks.	37.2	30						
FHWA Noise Mode	l Calculations	6												
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite I	Road	Fresn	ə/	Barrier Att	en Bei	m Atten			
Autos:	61.75	-1.20		1.78		-1.20		4.58	0.0	000	0.000			
Medium Trucks:	73.48	-18.44		1.82		-1.20		4.87	0.0	000	0.000			
Heavy Trucks:	79.92	-22.39		1.82		-1.20		5.57	0.0	000	0.000			
Unmitigated Noise	Levels (with	out Topo and I	barrier	attenu	ation)									
VehicleType	Leq Peak Hou	r Leq Day	L	.eq Eve	ening	Leq N	light		Ldn	С	NEL			
Autos:	61.	.1 (	50.4		59.1		53.1		61.	5	62.2			
Medium Trucks:	55.	.7	53.1		45.6		54.3		60.	5	60.			
Heavy Trucks:		52.0		56.7		62.	9	63.0						
Vehicle Noise:	63.	.7 (	52.2		60.1		59.7		66.	5	66.8			
Centerline Distanc	e to Noise Co	ntour (in feet)		70.0		05					10.4			
				70 dE	3A	65 d	BA	6	U dBA	55	aBA			
Ldn:			23 49 106			2	29							
				~ 4					440		200			

	FH	WA-RD-77-108	HIGHW	AY NO	DISE PI	REDICT	ION MC	DEL						
Scenari Road Nam Road Segmer	o: Existing (2 e: Xenia Ave. nt: n/o 8th St.	020)			Project Name: Highland Springs and 8th Job Number: 13073									
SITE S	SPECIFIC IN	NPUT DATA			NOISE MODEL INPUTS									
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)									
Average Daily	Traffic (Adt):	6,342 vehicles	6		Autos: 15									
Peak Hour	Percentage:	7.37%			Medium Trucks (2 Axles): 15									
Peak H	our Volume:	467 vehicles	6		He	avy Tru	cks (3+	Axles):	15					
Vel	Vehicle Speed: 45 mph													
Near/Far Lar	Near/Far Lane Distance: 54 feet							Dav	Evenina	Niaht	Daily			
Site Data						,	Autos:	75.5%	14.0%	10.5	% 97.42%			
Bar	rior Hoiaht	0.0 feet		М	edium T	rucks:	48.9%	5 2.2%	48.9	% 1.84%				
Barrier Type (0-W	all, 1-Berm):	0.0			1	Heavy T	rucks:	47.3%	5.4%	47.3	% 0.74%			
Centerline Dis	st. to Barrier:	50.0 feet		N	Noise Source Elevations (in feet)									
Centerline Dist.	to Observer:	50.0 feet		-	0.00 00	Auto	s' 0	000						
Barrier Distance	to Observer:	0.0 feet			Modiu	m Truck	e 2	297						
Observer Height (J	Above Pad):	5.0 feet			Hoo	n Truck	o. ≞ ∘e∙ 8	006	Grade Ad	liustme	nt: 0.0			
Pa	ad Elevation:	0.0 feet			near	ly much	3. 0	000		,				
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distan	ce (in	feet)					
F	Road Grade:	0.0%				Auto	s: 42	.379						
	Left View:	-90.0 degrees			Mediu	m Truck	's: 42	170						
	Right View:	90.0 degree	es.		Heav	ry Truck	's: 42	190						
FHWA Noise Mode	el Calculation	IS												
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fres	nel	Barrier Att	ten B	erm Atten			
Autos:	68.46	-5.25		0.97		-1.20		-4.65	0.	000	0.00			
Medium Trucks:	79.45	-22.49		1.01		-1.20		-4.87	0.	000	0.00			
Heavy Trucks:	84.25	-26.45		1.00		-1.20		-5.43	0.	000	0.00			
Unmitigated Noise	Levels (with	out Topo and	barrier a	ttenu	ation)									
VehicleType	Leq Peak Ho	ur Leq Day	Le	eq Ev	ening	Leq	Night		Ldn		CNEL			
Autos:	63	3.0	62.3		61.0		55.	D	63.4	4	64.			
Medium Trucks:	56	3.8	54.2		46.7		55.	4	61.	6	61.			
Heavy Trucks:	57	7.6	54.9		51.5		56.	1	62.	3	62.4			
Vehicle Noise:	64	1.8	63.6		61.6		60.	3	67.	3	67.			
Centerline Distance	Centerline Distance to Noise Contour (in feet)													
					70 dBA 65 dBA			60 dBA			55 dBA			
	Ldn:			33	33 71			153			329			
	CNEL:						35 74 160 3							

	FH	WA-R	D-//-108	HIG	HWAYI	NOISE	PREDIC		JDEL				
Scena	rio: Existing (2	020)					Projec	ct Name.	Highla	and Springs	and	8th	-
Road Nar	ne: Allegheny	St.					Job	Number.	13073	3			
Road Segme	ent: s/o 8th St.												
SITE	SPECIFIC II	NPUT	DATA					NOISE	MODI	EL INPUT	s		-
Highway Data						Site Co	ondition	s (Hard :	= 10, S	oft = 15)			
Average Daily	Traffic (Adt):	76	7 vehicle	s					Autos	: 15			
Peak Hou	r Percentage:	7.3	7%			٨	/ledium T	rucks (2	Axles)	: 15			
Peak I	Hour Volume:	5	7 vehicle	s		ŀ	leavy Tr	ucks (3+	Axles)	: 15			
Ve	ehicle Speed:	3	5 mph		ŀ	Vehicl	Mix						
Near/Far La	ane Distance:	3	4 feet		-	Ve	ehicleTvc	e	Dav	Evenina	Nic	aht	Dailv
Site Data								Autos:	75.5%	6 14.0%	10	, ).5%	97.42%
Ba	arrier Height	0	0 feet				Medium	Trucks:	48.99	% 2.2%	48	3.9%	1.84%
Barrier Type (0-V	Vall. 1-Berm):	0	0				Heavy	Trucks:	47.39	% 5.4%	47	7.3%	0.74%
Centerline D	ist. to Barrier:	33	.0 feet		ŀ	Noiso	Sourco	Iovatio	ne (in i	(aat)			
Centerline Dist.	to Observer:	33	.0 feet		ŀ	NUISE	Source L		000	eel)			
Barrier Distance	to Observer:	0	.0 feet			Mag	nui ium Truo	us. (	207				
Observer Height	(Above Pad):	5	.0 feet			Ivieu		KS. 4		Grade A	liucti	mont	.00
F	Pad Elevation:	0	.0 feet			110	avy muc	no. (	.000	0/000/10	ijuoti	morra.	0.0
Ro	ad Elevation:	0	.0 feet			Lane E	quivaler	nt Distai	nce (in	feet)			
	Road Grade:	0	.0%				Aut	os: 28	3.723				
	Left View:	-90	.0 degre	es		Mea	ium Truc	ks: 28	8.413				
	Right View:	90	.0 degre	es		He	avy Truc	ks: 28	3.444				
FHWA Noise Moo	lel Calculatio	15											
VehicleType	REMEL	Traf	fic Flow	Di	stance	Fini	te Road	Free	nel	Barrier At	ten	Berr	m Atten
Autos.	64.30	)	-13.34		3.5	51	-1.20		-4.52	0.	000		0.000
Medium Trucks	75.75	5	-30.57		3.5	58	-1.20		-4.86	0.	000		0.000
Heavy Trucks	81.57	7	-34.53		3.5	57	-1.20		-5.69	0.	000		0.000
Unmitigated Nois	e Levels (with	nout T	opo and	barri	ier atter	nuation	)						
VehicleType	Leq Peak Ho	ur	Leq Day	1	Leq E	vening	Leo	q Night		Ldn		CI	VEL
Autos.	5	3.3		52.6		51	.3	45	.3	53.	7		54.3
Medium Trucks.	4	7.6		45.0		37	.5	46	.2	52.	4		52.4
Heavy Trucks	4	9.4		46.7		43	.3	47	.9	54.	1		54.2
Vehicle Noise.	5	5.5		54.1		52	.1	51	.4	58.	2		58.5
Centerline Distan	ce to Noise C	ontou	r (in feet	)									
					70	dBA	65	5 dBA		60 dBA		55	dBA
				Ldn:		5		12		25		5	54
			С	NEL:		6		12		26		5	57

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	FH	WA-RD-77-108	HIGH	WAY N	OISE P			=L			
Scenai Road Nan Road Segme	rio: Existing (2 ne: Highland S ent: n/o Wilson	020) Springs Ave. St.				Project I Job Nu	Vame: Hig mber: 13	ghland Sp 073	orings and	i 8th	
SITE	SPECIFIC II	VPUT DATA				N	DISE MO	DDEL IN	PUTS		
Highway Data				S	ite Cor	nditions (l	Hard = 10	<b>), Soft</b> = 1	15)		
Average Daily	Traffic (Adt):	19,602 vehicle	s				AL	itos: 1	5		
Peak Hour	Percentage:	7.37%			Me	edium Tru	cks (2 Ax	les): 1	5		
Peak H	- lour Volume:	1,445 vehicle	s		He	avy Truck	ks (3+ Ax	les): 1	5		
Ve	ehicle Speed:	35 mph			chiele	Mise					
Near/Far La	ane Distance:	58 feet			Vok		D	av Evo	ning Mi	aht	Daily
Sito Data					ver	iicie i ype Δι	utos: 75	55% 1/	1.0% 1	9/11 0.5%	07 A2%
Sile Dala		0.0.64			М	ledium Tri	icks: 48	3.9% 2	2% 4	3.9%	1.84%
Ba	rrier Height:	0.0 feet				Heavy Tri	icks: 47	7.3% 5	54% 4	7.3%	0.74%
Contorlino D	ist to Parriar	0.0 55.0 foot									
Contorlino Dist	to Obsonior:	55.0 feet		Λ	loise S	ource Ele	vations (	'in feet)			
Parriar Distance	to Observer.	0.0 feet				Autos.	0.00	0			
Observer Height	(Abovo Pad):	5.0 foot			Mediu	m Trucks.	2.29	7			
Disciver neight	ad Elevation:	0.0 feet			Hea	vy Trucks.	8.00	6 Grad	de Adjust	ment:	0.0
Ro	ad Elevation:	0.0 feet		L	ane Eo	uivalent l	Distance	(in feet)			
	Road Grade:	0.0%				Autos	47.00	0			
	Left View:	-90.0 deare	<b>es</b>		Mediu	m Trucks	46.81	1			
	Right View:	90.0 degre	es		Hea	vv Trucks	46.83	0			
	5	5000 5									
FHWA Noise Mod	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresnel	Barri	er Atten	Bern	Atten
Autos:	64.30	0.74		0.30		-1.20	-4	.67	0.000		0.000
Medium Trucks:	75.75	-16.50		0.33		-1.20	-4	.87	0.000		0.000
Heavy Trucks:	81.57	-20.46		0.32		-1.20	-5	i.38	0.000		0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r attenu	lation)						
VehicleType	Leq Peak Ho	ur Leq Daj	V	Leq Ev	ening	Leq N	light	Ldn		CN	EL
Autos:	64	4.1	63.5		62.1		56.1		64.6		65.2
Medium Trucks:	58	3.4	55.8		48.3		57.1		63.2		63.3
Heavy Trucks:	60	0.2	57.5		54.1		58.8		65.0		65.1
Vehicle Noise:	6	5.4	65.0		62.9		62.2		69.1		69.4
Centerline Distan	ce to Noise C	ontour (in feet	t)								
				70 d	BA	65 d	BA	60 dB	A	55 a	IBA
			Ldn:	48	3	10	3	222		47	7
		С	NEL:	50	)	10	7	231		49	8

Oceanorie: Evictica (	0000			Designed Man		ad Oneiner		
Scenario: Existing (2	2020) Paringo Aug			Project Nan	ne: Highia	na Springs	and 8th	
Road Name: Highland	Springs Ave.			JOD INUMD	er: 13073			
Road Segment. S/0 Wilson	131.							
SITE SPECIFIC I	NPUT DATA		0/4- 0	NOIS	E MODE	L INPUT	S	
Highway Data			Site Con	aitions (Har	a = 10, 50	$5\pi = 15)$		
Average Daily Traffic (Adt):	21,342 vehicles	6			Autos:	15		
Peak Hour Percentage:	7.37%		Me	dium Trucks	(2 Axles):	15		
Peak Hour Volume:	1,573 vehicles	6	He	avy Trucks (	3+ Axles).	15		
Vehicle Speed:	35 mph		Vehicle I	Nix				
Near/Far Lane Distance:	58 feet		Vehi	icleType	Day	Evening	Night	Daily
Site Data				Autos	s: 75.5%	6 14.0%	10.5%	97.42
Barrier Height:	0.0 feet		Me	edium Trucks	s: 48.9%	5 2.2%	48.9%	1.84
Barrier Type (0-Wall, 1-Berm):	0.0		ŀ	leavy Truck	s: 47.3%	5.4%	47.3%	0.74
Centerline Dist. to Barrier:	55.0 feet		Noine Co	uree Eleved	iono (in f	a a 4 1		
Centerline Dist. to Observer:	55.0 feet		Noise Su	Autor		eel)		
Barrier Distance to Observer:	0.0 feet		Madiu	AUIOS.	0.000			
Observer Height (Above Pad):	5.0 feet		Neului	II TIUCKS.	2.297	Grado Ad	liustmont	
Pad Elevation:	0.0 feet		neav	y mucks.	0.000	Graue Au	jusunen	. 0.0
Road Elevation:	0.0 feet		Lane Equ	uivalent Dis	tance (in	feet)		
Road Grade:	0.0%			Autos:	47.000			
Left View:	-90.0 degree	es	Mediur	n Trucks:	46.811			
Right View:	90.0 degree	es	Heav	y Trucks:	46.830			
FHWA Noise Model Calculatio	ns							
VehicleType REMEL	Traffic Flow	Distand	e Finite	Road Fi	resnel	Barrier Att	en Ber	m Atter
Autos: 64.3	0 1.11		0.30	-1.20	-4.67	0.0	000	0.00
Medium Trucks: 75.7	5 -16.13		0.33	-1.20	-4.87	0.0	000	0.00
Heavy Trucks: 81.5	7 -20.09		0.32	-1.20	-5.38	0.0	000	0.00
Unmitigated Noise Levels (with	hout Topo and	barrier at	tenuation)					
VehicleType Leq Peak Ho	our Leq Day	Leo	q Evening	Leq Nigh	t	Ldn	C	NEL
Autos: 6	4.5	63.8	62.5		56.5	64.9	9	65
Medium Trucks: 5	8.7	56.2	48.7		57.4	63.	6	63
Heavy Trucks: 6	0.6	57.9	54.5		59.1	65.	3	65
Vehicle Noise: 6	6.7	65.4	63.3		62.6	69.4	4	69
Centerline Distance to Noise C	Contour (in feet)	)						
			70 dBA	65 dBA		60 dBA	55	dBA
				100		005	6	05
		Ldn:	51	109		235	0	000

FHWA-RD-77-108 HIGHWAY NOISE PREDICTION MODEL Scenario: Existing (2020) Road Name: Highland Springs Ave. Project Name: Highland Springs and 8th Job Number: 13073 Road Segment: n/o Ramsey St. SITE SPECIFIC INPUT DATA NOISE MODEL INPUTS Site Conditions (Hard = 10, Soft = 15) Highway Data Average Daily Traffic (Adt): 21,684 vehicles Peak Hour Percentage: 7.37% Autos: 15 Medium Trucks (2 Axles): 15 Peak Hour Volume: Vehicle Speed: 1,598 vehicles Heavy Trucks (3+ Axles): 15 30 mph Vehicle Mix Near/Far Lane Distance: 58 feet 
 Che mix
 Day
 Evening
 Night
 Daily

 VehicleType
 Day
 Evening
 Night
 Daily

 Autos:
 75.5%
 14.0%
 10.5%
 97.42%

 Medium Trucks:
 48.9%
 2.2%
 48.9%
 1.84%
 Site Data Barrier Height: Barrier Type (0-Wall, 1-Berm): 0.0 feet 0.0 Heavy Trucks: 47.3% 5.4% 47.3% 0.74% 55.0 feet 55.0 feet Centerline Dist. to Barrier: Centerline Dist. to Observer: Noise Source Elevations (in feet) Autos: 0.000 Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297 5.0 feet Observer Height (Above Pad): Grade Adjustment: 0.0 Heavy Trucks: 8.006 Pad Elevation: 0.0 feet Lane Equivalent Distance (in feet) 0.0 feet 0.0% Road Elevation: Autos: 47.000 Medium Trucks: 46.811 Road Grade: Left View: -90.0 degrees Right View: Heavy Trucks: 46.830 90.0 degrees FHWA Noise Model Calculations VehicleType REMEL Autos: 61 
 MEL
 Traffic Flow
 Distance
 Finite Road
 Fresnel
 Barrier Atten
 Berm Atten

 61.75
 1.85
 0.30
 -1.20
 -4.67
 0.000
 0.000
 -1.20 Medium Trucks: 73.48 -15.39 0.33 -4.87 0.000

Heavy Trucks:	79.92	-19.35	0.32	-1.20	-5.38 0.00	0.000
Unmitigated Nois	e Levels (without	Topo and barri	ier attenuation)			
VehicleType	Leq Peak Hour	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	62.7	62.0	60.7	54.7	63.1	63.7
Medium Trucks:	57.2	54.6	47.1	55.9	62.1	62.1
Heavy Trucks:	59.7	57.0	53.6	58.2	64.4	64.5
Vehicle Noise:	65.2	63.8	61.6	61.3	68.1	68.3
Centerline Distan	ce to Noise Conte	our (in feet)				
			70 dBA	65 dBA	60 dBA	55 dBA
		Ldn:	41	88	190	409
		CNEL:	43	92	198	426

	FH)	WA-RD-77-108	HIGHW	AY NO	DISE PF	REDICTIO	N MODEL			
Scenario Road Name Road Segment	:: Existing (20 :: Highland S :: s/o Ramse	020) prings Ave. y St.				Project N Job Nur	ame: High nber: 1307	land Springs 3	and 8th	I
SITE S	PECIFIC IN	NPUT DATA				NO	ISE MOD	EL INPUT	S	
Highway Data				S	ite Con	ditions (H	ard = 10,	Soft = 15)		
Average Daily T	raffic (Adt):	31,684 vehicle	s				Auto	s: 15		
Peak Hour F	Percentage:	7.37%			Me	dium Truc	ks (2 Axles	;): 15		
Peak Ho	ur Volume:	2,335 vehicle	s		He	avy Truck	s (3+ Axles	;): 15		
Veh	icle Speed:	35 mph		14	ahiala I	Mise				
Near/Far Lan	e Distance:	78 feet			Voh	icloTuro	Dav	Evoning	Night	Daily
Site Data					Ven	Δι	tos: 75.5	% 14.0%	10.5%	07 12%
one butu					M	edium Tru	rks: 48.0	% 2.2%	48.9%	5 57.42% 5 1.84%
Barr	ier Height:	0.0 feet			, inc	Heavy Tru	oks: 47.3	% 5.4%	47.3%	6 0.74%
Contorlino Dist	to Porrior:	0.0 67.0 foot								
Contorlino Dist. tr	Obsonior:	67.0 feet		N	oise So	ource Elev	ations (in	feet)		
Parriar Distance to	Observer.	07.0 feet				Autos:	0.000			
Obsonior Hoight (A	hove Pad)	5.0 feet			Mediur	m Trucks:	2.297			
Observer neight (A	d Elevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	ljustmen	t: 0.0
Road	d Elevation:	0.0 feet		Li	ane Ea	uivalent D	istance (i	1 feet)		-
R	oad Grade:	0.0%				Autos:	54,708	,		
	Left View:	-90.0 deare	29		Mediur	m Trucks:	54,546			
	Right View:	90.0 degre	es		Heav	y Trucks:	54.562			
ELIMA Naisa Madal	Colouistion									
VehicleType	REMEI	Traffic Flow	Dista	nce	Finito	Road	Freenel	Rarrier At	ton Re	rm Atton
Autos	64.30	2.82	Dista	-0.69	TINIC	-1.20	-4.7	1 0	000	0.000
Medium Trucks:	75.75	-14.41		-0.67		-1.20	-4.8	, с. в О.	000	0.000
Heavy Trucks:	81.57	-18.37		-0.67		-1.20	-5.2	9 0.	000	0.000
Unmitigated Noise	Lovols (with	out Topo and	barrior	attonu	ation)					
VehicleType I	ea Peak Ho	ur Lea Day		ea Eve	enina	Lea Ni	aht	l dn	0	NEI
Autos	.04 / 00// / 00	52	64.6	04 210	63.2	20471	57.2	65	6	66.3
Medium Trucks:	59	9.5	56.9		49.4		58.1	64	3	64.4
Heavy Trucks:	61	1.3	58.6		55.2		59.9	66.	1	66.2
Vehicle Noise:	67	7.5	66.1		64.0		63.3	70.	2	70.4
Centerline Distance	to Noise C	ontour (in feet	)							
t				70 dE	BA	65 dE	A	60 dBA	55	5 dBA
			Ldn:	69		148		319	· ·	688
		С	NEL:	72		155		333		718

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0.000

0.000

	FH	WA-RD-77-108	HIGHW	AY N	DISE P	REDICTIC		DEL			
Scenar Road Nan Road Segme	rio: Existing (2 ne: Highland S ent: s/o I-10	020) prings Ave.				Project N Job Nu	Vame: I mber:	Highla 13073	ind Springs	and 8	th
SITE	SPECIFIC IN	NPUT DATA				NC	DISE N	/ODE	L INPUT	S	
Highway Data				S	ite Cor	nditions (I	Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	40,286 vehicle	s					Autos	: 15		
Peak Hour	Percentage:	7.37%			Me	edium Truc	cks (2 A	(xles	: 15		
Peak H	Hour Volume:	2,969 vehicle	s		He	avy Truck	ks (3+ A	(xles	: 15		
Ve	ehicle Speed:	35 mph		V	ohiclo	Mix					
Near/Far La	ane Distance:	78 feet			Veł	nicleType		Dav	Evenina	Niah	t Dailv
Site Data					107	AL	utos:	75.5%	6 14.0%	10.5	% 97.42%
Ba	rrier Height	0.0 feet			N	ledium Tru	icks:	48.9%	6 2.2%	48.9	% 1.84%
Barrier Type (0-W	Vall, 1-Berm):	0.0				Heavy Tru	icks:	47.3%	6 5.4%	47.3	% 0.74%
Centerline Di	ist. to Barrier:	67.0 feet		N	loise S	ource Ele	vation	s (in f	oot)		
Centerline Dist.	to Observer:	67.0 feet			0130 0	Autos	0	200	001)		
Barrier Distance	to Observer:	0.0 feet			Madii	m Trucke	2	207			
Observer Height	(Above Pad):	5.0 feet			Hoo	wy Trucke	81	106	Grade Ar	liustme	nt 0.0
P	ad Elevation:	0.0 feet			neu	vy mucho.	0.1	500	0/000/10	juounie	
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent l	Distand	ce (in	feet)		
	Road Grade:	0.0%				Autos:	54.	708			
	Left View:	-90.0 degre	es		Mediu	im Trucks:	54.	546			
	Right View:	90.0 degre	es		Hea	vy Trucks:	54.	562			
FHWA Noise Mod	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresn	el	Barrier At	ten E	Berm Atten
Autos:	64.30	3.87		-0.69		-1.20		-4.71	0.	000	0.000
Medium Trucks:	75.75	-13.37		-0.67		-1.20		-4.88	0.	000	0.000
Heavy Trucks:	81.57	-17.33		-0.67		-1.20		-5.29	0.	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Daj	V L	eq Ev	ening	Leq N	light		Ldn		CNEL
Autos:	66	5.3	65.6		64.3		58.3	5	66.	7	67.3
Medium Trucks:	60	0.5	57.9		50.4		59.2	2	65.	4	65.4
Heavy Trucks:	62	2.4	59.7		56.3		60.9	)	67.	1	67.2
Vehicle Noise:	68	3.5	67.1		65.1		64.4	Ļ	71.	2	71.5
Centerline Distan	ce to Noise C	ontour (in feel	t)								
				70 di	BA	65 d	BA		60 dBA		55 dBA
			Ldn:	81		174	4		375		807
		С	NEL:	84		181	1		391		842

	FHV	VA-RD-77-108	HIGHV	VATIN	JISE PR	EDICTIC		EL					
Scenari	o: Existing (20	20)			Project Name: Highland Springs and 8th								
Road Nam	e: 8th St.					Job Nu	mber: 1	3073					
Road Segmer	nt: w/o Pennsy	Ivania Ave.											
SITE S	SPECIFIC IN	PUT DATA				NC	DISE M	ODE	L INPUT	s			
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	3,890 vehicles					A	utos:	15				
Peak Hour	Percentage:	7.37%			Med	lium Truc	cks (2 A	(les):	15				
Peak H	our Volume:	287 vehicles			Hea	ivy Truck	(3+ A	des):	15				
Vei	hicle Speed:	30 mph		v	ehicle N	lix							
Near/Far Lar	ne Distance:	34 feet		Ē	Vehio	leType	Ĺ	Day	Evening	Night	Daily		
Site Data						AL	itos: 7	5.5%	14.0%	10.5%	97.42%		
Bar	rier Height:	0.0 feet			Me	dium Tru	cks: 4	8.9%	2.2%	48.9%	1.84%		
Barrier Type (0-W	all. 1-Berm):	0.0			н	leavy Tru	cks: 4	7.3%	5.4%	47.3%	0.74%		
Centerline Dis	t. to Barrier:	33.0 feet			laina Ca	uree Ele	votiono	lin fe	o.4)				
Centerline Dist.	to Observer:	33.0 feet		/	UISE SU	Autoor	vauons	00	el)				
Barrier Distance	to Observer:	0.0 feet			Modium	Trucke:	2.0	07					
Observer Height (.	Above Pad):	5.0 feet			Hoan	/ Trucks:	8.0	06 06	Grade Ad	liustmen	+ 0 0		
Pa	d Elevation:	0.0 feet			110017		0.0			,			
Roa	d Elevation:	0.0 feet		L	ane Equ	ivalent I	Distance	e (in f	feet)				
F	Road Grade:	0.0%				Autos:	28.7	23					
	Left View:	-90.0 degree	s		Mediun	n Trucks:	28.4	13					
	Right View:	90.0 degree	s		Heavy	/ Trucks:	28.4	44					
FHWA Noise Mode	Calculation:	5											
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite F	Road	Fresne	e/	Barrier Att	en Bei	rm Atten		
Autos:	61.75	-5.62		3.51		-1.20	-	4.52	0.0	000	0.000		
Medium Trucks:	73.48	-22.85		3.58		-1.20	-	4.86	0.0	000	0.000		
Heavy Trucks:	79.92	-26.81		3.57		-1.20	-	5.69	0.0	000	0.000		
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ation)								
VehicleType	Leq Peak Hou	r Leq Day	1	Leq Ev	ening	Leq N	ight		Ldn	C	NEL		
Autos:	58	.4	57.8		56.4		50.4		58.9	9	59.		
Medium Trucks:	53	.0	50.4		42.9		51.7		57.9	9	57.		
Heavy Trucks:	55	.5	52.8		49.4		54.0		60.3	2	60.3		
Vehicle Noise:	61	.0	59.5		57.4		57.1		63.	9	64.1		
Centerline Distanc	e to Noise Co	ntour (in feet)		70		05.					10.4		
				70 di	BA	65 di	ВA	6	iU dBA	55	aBA		
			Lan:	13		28			60	1	128		
									~~				

	FHV	/A-RD-77-108	HIGH	WAY	NOISE P	REDICT	TION M	ODEL			
Scenari Road Nam Road Segmer	io: Existing (20 e: 8th St. nt: e/o Pennsyl	20) vania Ave.				Projec Job I	t Name Numbe	e: Highla r: 13073	ind Springs	and 8th	
SITE	SPECIFIC IN	PUT DATA				I	NOISE		L INPUT	s	
Highway Data					Site Cor	nditions	(Hard	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	4,452 vehicles	6					Autos	: 15		
Peak Hour	Percentage:	7.37%			Me	edium Ti	rucks (	2 Axles)	: 15		
Peak H	our Volume:	328 vehicles	6		He	eavy Tru	ıcks (3-	+ Axles)	: 15		
Ve	hicle Speed:	35 mph		+	Vohielo	Mix					
Near/Far La	ne Distance:	36 feet		F	Venicle	nicleTvn	ρ	Dav	Evenina	Niaht	Daily
Site Data					10.		Autos:	75.5%	6 14.0%	10.5%	97 42%
ono puta					N	ledium 1	Trucks:	48.9%	6 2.2%	48.9%	1.84%
Barrier Tune (0.14)	rier Height:	0.0 feet				Heavy 7	Trucks:	47.39	6 5.4%	47.3%	0.74%
Contorlino Dir	all, 1-Dellil).	0.0									
Contorlino Dist	to Obsonior:	44.0 feet			Noise S	ource E	levatio	ons (in f	eet)		
Barrier Distance	to Observer:	0.0 feet				Auto	os:	0.000			
Observer Height (	Above Pad):	5.0 feet			Mediu	ım Truck	ks:	2.297			
Pa	ad Elevation:	0.0 feet			Hea	vy Truck	ks:	8.006	Grade Ad	justmen	t: 0.0
Ros	ad Elevation:	0.0 feet		ŀ	Lane Eo	uivalen	t Dista	nce (in	feet)		
1	Road Grade:	0.0%		ľ		Auto	os: 4	0.460	,		
-	Left View:	-90.0 degree	24		Mediu	im Truck	ks: 4	0.241			
	Right View:	90.0 degree	es		Hea	vy Truck	ks: 4	0.262			
FHWA Noise Mode	el Calculations	;									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fre	snel	Barrier Att	en Be	rm Atten
Autos:	64.30	-5.70		1.2	28	-1.20		-4.61	0.0	000	0.000
Medium Trucks:	75.75	-22.94		1.3	31	-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	81.57	-26.89		1.3	31	-1.20		-5.50	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrie	r attei	nuation)						
VehicleType	Leq Peak Hou	r Leq Day	'	Leq E	vening	Leq	Night		Ldn	C	NEL
Autos:	58	7	58.0		56.7		50	0.7	59.1	1	59.7
Medium Trucks:	52	9	50.4		42.8	1	5	1.6	57.8	3	57.8
Heavy Trucks:	54	8	52.1		48.7	,	5	3.3	59.5	5	59.6
Vehicle Noise:	60	9	59.5		57.5	,	5	6.8	63.0	5	63.9
Centerline Distance	e to Noise Co	ntour (in feet	)								
				70	dBA	65	dBA		60 dBA	55	i dBA
			Ldn:		17		36		77		165
		Ci	NEL:		17		37		80		172

FH	WA-RD-77-108 HIG	HWAY N	OISE PREDICT	ION MODEL		
Scenario: Existing (2 Road Name: 8th St. Road Segment: e/o Xenia /	020) Ave.		Projec Job N	t Name: Highl Number: 1307	and Springs a 3	and 8th
SITE SPECIFIC II	NPUT DATA		r	NOISE MOD	EL INPUTS	
Highway Data		5	Site Conditions	(Hard = 10, S	Soft = 15)	
Average Daily Traffic (Adt):	4,616 vehicles			Autos	s: 15	
Peak Hour Percentage:	7.37%		Medium Tr	rucks (2 Axles	): 15	
Peak Hour Volume:	340 vehicles		Heavy Tru	icks (3+ Axles	): 15	
Vehicle Speed:	35 mph		(obiolo Mix			
Near/Far Lane Distance:	36 feet	1	Vehiele Turn	o Dou	Evening	Night Doily
Site Data			venicieryp	Autos: 75.5	% 14.0%	10.5% 97.42%
			Medium T	Frucks: 48.9	% 2.2%	48.9% 1.84%
Barrier Height:	0.0 feet		Heavy 7	rucks: 47.3	% 5.4%	47.3% 0.74%
Barrier Type (U-Wall, 1-Berri):	0.0 44.0 feet		nouty i	100.00		
Centerline Dist. to Barrier.	44.0 Teel	/	loise Source E	levations (in	feet)	
Barriar Distance to Observer.	44.0 feet		Auto	os: 0.000		
Observer Height (Above Pad):	5.0 feet		Medium Truck	ks: 2.297		
Pad Elevation:	0.0 feet		Heavy Truck	ks: 8.006	Grade Adjı	stment: 0.0
Road Elevation:	0.0 feet	1	ane Equivalen	t Distance (in	i feet)	
Road Grade:	0.0%	-	Auto	os: 40.460		
Left View:	-90.0 degrees		Medium Truck	ks: 40.241		
Right View:	90.0 degrees		Heavy Truck	ks: 40.262		
FHWA Noise Model Calculation	IS					
VehicleType REMEL	Traffic Flow D	istance	Finite Road	Fresnel	Barrier Atte	n Berm Atten
Autos: 64.30	-5.54	1.28	3 -1.20	-4.61	0.00	0.000
Medium Trucks: 75.75	-22.78	1.31	1 -1.20	-4.87	7 0.00	0.000 0.000
Heavy Trucks: 81.57	-26.74	1.31	1 -1.20	-5.50	0.00	0.000
Unmitigated Noise Levels (with	out Topo and barr	ier atten	uation)			
VehicleType Leq Peak Ho	ur Leq Day	Leg Ev	ening Leq	Night	Ldn	CNEL
Autos: 54	8.8 58.2		56.8	50.8	59.2	59.9
Medium Trucks: 53	3.1 50.5		43.0	51.8	57.9	58.0
Heavy Trucks: 54	4.9 52.2		48.8	53.5	59.7	59.8
Vehicle Noise: 6	1.1 59.7		57.6	56.9	63.8	64.1
Centerline Distance to Noise C	ontour (in feet)					
		70 c	IBA 65	dBA	60 dBA	55 dBA
	Ldn:	17	7 : 3	36	79	169
	CNEL:	: 18	з ;	38	82	177

Tuesday, March 24, 2020

Tuesday, March 24, 2020

	FH	WA-RD-77-108	HIGHW	AY NO	DISE P	REDICTIC	N MODE	EL			
Scenar Road Narr Road Segme	io: Existing (2 ne: 8th St. nt: e/o Drivew	020) ay 1				Project N Job Nu	<i>lame:</i> Hi mber: 13	ghland Sp 073	rings and	i 8th	
SITE	SPECIFIC IN	IPUT DATA				NC	DISE MO	DDEL IN	PUTS		
Highway Data				S	ite Cor	nditions (H	lard = 10	), Soft = 1	15)		
Average Daily	Traffic (Adt):	5,205 vehicle	s				AL	itos: 15	5		
Peak Hour	Percentage:	7.37%			Me	edium Truc	ks (2 Ax	les): 15	5		
Peak H	lour Volume:	384 vehicle	s		He	avy Truck	s (3+ Ax	<i>les):</i> 15	5		
Ve	hicle Speed:	45 mph		V	ohiclo	Mix					
Near/Far La	ne Distance:	54 feet			Veł	nicleType	D	av Ever	nina Ni	aht Dail	v
Site Data						AL	itos: 7	5.5% 14	1.0% 1	0.5% 97.42	2%
Ba	rrier Heiaht	0.0 feet			Μ	ledium Tru	cks: 48	3.9% 2	.2% 4	3.9% 1.84	4%
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy Tru	cks: 4	7.3% 5	5.4% 4	7.3% 0.74	1%
Centerline Di	st. to Barrier:	50.0 feet		N	oise S	ource Ele	vations	(in feet)			_
Centerline Dist.	to Observer:	50.0 feet				Autos:	0.00	0			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks:	2.29	7			
Observer Height	(Above Pad):	5.0 feet			Hea	vv Trucks:	8.00	6 Grad	le Adjust	ment: 0.0	
P	ad Elevation:	0.0 feet		-		,					
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalent L	Distance	(in feet)			
	Road Grade:	0.0%				Autos:	42.37	9			
	Left View:	-90.0 degre	es		Mediu	im Trucks:	42.17	0			
	Right View:	90.0 degre	es		Hea	vy Trucks:	42.19	0			
FHWA Noise Mod	el Calculation	IS									-
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrie	er Atten	Berm Atte	en
Autos:	68.46	-6.11		0.97		-1.20	-4	.65	0.000	0.0	000
Medium Trucks:	79.45	-23.35		1.01		-1.20	-4	.87	0.000	0.0	000
Heavy Trucks:	84.25	-27.31		1.00		-1.20	-5	i.43	0.000	0.0	)00
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	V L	.eq Eve	ening	Leq N	ight	Ldn		CNEL	
Autos:	62	2.1	61.4		60.1		54.1		62.5	63	3.2
Medium Trucks:	55	5.9	53.3		45.8		54.6		60.8	60	0.8
Heavy Trucks:	56	6.7	54.0		50.6	i	55.3		61.5	61	1.6
venicle Noise:	64	1.0	62.7		60.7		59.5		66.4	66	6.7
Centerline Distant	ce to Noise C	ontour (in feel	!)	70 "	0.4	05.		00.12		66 JD (	
			1 day	70 di	BA	65 di	54	60 dB/	4	DD dBA	
		0	Lan:	29		62		134		289	
		C	NEL:	30		65		140		303	

Sconario: Existing	20201				Project Ma	mo: Hic	bland Spri	inge on	1 Qth	
Road Name: Wilcon S	2020) t				Job Num	กษ. กษุ her: 13เ	nanu opn 173	ings all	Jul	
Road Segment: e/o Highl	 and Sprin	as Ave.			000 Mum	001. 10	510			
		307110.			NO	SE MO		UTC		
Highway Data	INFOIL			Site Con	ditions (Ha	rd = 10	Soft = $1!$	5)		
Average Daily Traffic (Adt)	12 780	vehicles				Au	tos: 15	/		
Peak Hour Percentage	7 379	%		Med	dium Truck	s (2 Axl	es): 15			
Peak Hour Volume	942	vehicles		Hea	avy Trucks	(3+ Axl	es): 15			
Vehicle Speed:	45	mph		Vahiala	, Nu		,			
Near/Far Lane Distance	48	feet		Venicie i		D	Evon	ina Mi	aht	Daily
Site Data				veni	Aut	DS: 75	5% 14	0% 10	) 5%	97 42
Demise Usinki		A		Me	dium Truc	ks: 48	9% 2	2% 4	3.9%	1.849
Barrier Height.	. 0.0	rieet		H	leavy Truc	ks: 47	.3% 5.	4% 4	7.3%	0.749
Centerline Dist to Barrier	. 50.0	, ) feet								
Centerline Dist. to Observer	50.0	) feet		Noise So	urce Eleva	tions (	in feet)			
Barrier Distance to Observer	0.0	) feet			Autos:	0.00	0			
Observer Height (Above Pad)	5.0	) feet		Mediur	n Trucks:	2.29	í Gradu	Adjust	mont	0.0
Pad Elevation	0.0	) feet		neav	y mucks.	0.00	5 Graue	+ Aujusi	nem.	0.0
Road Elevation	0.0	) feet		Lane Equ	ivalent Di	stance	(in feet)			
Road Grade.	0.0	)%			Autos:	44.14	7			
Left View.	-90.0	) degrees		Mediur	n Trucks:	43.94	7			
Right View.	90.0	) degrees		Heav	y Trucks:	43.96	6			
FHWA Noise Model Calculation	ons									
VehicleType REMEL	Traffic	Flow D	Distance	Finite	Road I	Fresnel	Barrie	r Atten	Beri	m Atten
Autos: 68.4	16	-2.21	0.7	71	-1.20	-4	.65	0.000		0.00
Medium Trucks: 79.4	15	-19.45	0.7	74	-1.20	-4	.87	0.000		0.00
Heavy Trucks: 84.2	25	-23.41	0.7	73	-1.20	-5	.43	0.000		0.00
Unmitigated Noise Levels (wi	thout To	po and bar	rier attei	nuation)						
VehicleType Leq Peak H	our l	Leq Day	Leq E	vening	Leq Nig	ht	Ldn		CI	IEL
Autos:	65.8	65.1	1	63.8		57.7		66.2		66.
Medium Trucks:	59.5	57.0	)	49.5		58.2		64.4		64.
Heavy Trucks:	60.4	57.7	( 	54.3		58.9		65.1		65.
Vehicle Noise:	67.6	66.3	3	64.4		63.1		70.1		70.
Centerline Distance to Noise	Contour	(in feet)								
			70	dBA	65 dB/	4	60 dBA		55	dBA
		Ldn	c 4	50	109		234		5	J4
		01/5/					0.45		-	

Connection Existing (2020)	
Road Name: 6th St. Road Segment: w/o Highland Springs Ave.	Project Name: Highland Springs and 8th Job Number: 13073
SITE SPECIFIC INPUT DATA	NOISE MODEL INPUTS
Highway Data	Site Conditions (Hard = 10, Soft = 15)
Average Daily Traffic (Adt): 17,780 vehicles	Autos: 15
Peak Hour Percentage: 7.37%	Medium Trucks (2 Axles): 15
Peak Hour Volume: 1,310 vehicles	Heavy Trucks (3+ Axles): 15
Vehicle Speed: 35 mph	Vehicle Mix
Near/Far Lane Distance: 58 feet	VehicleType Day Evening Night Daily
Site Data	Autos: 75.5% 14.0% 10.5% 97.42%
Barrier Height: 0.0 feet	Medium Trucks: 48.9% 2.2% 48.9% 1.84%
Barrier Type (0-Wall, 1-Berm): 0.0	Heavy Trucks: 47.3% 5.4% 47.3% 0.74%
Centerline Dist. to Barrier: 55.0 feet	Noise Source Elevations (in feet)
Centerline Dist. to Observer: 55.0 feet	Autos: 0.000
Barrier Distance to Observer: 0.0 feet	Medium Trucks: 2.297
Observer Height (Above Pad): 5.0 feet	Heavy Trucks: 8.006 Grade Adjustment: 0.0
Pad Elevation: 0.0 feet	
Road Elevation: 0.0 feet	Lane Equivalent Distance (in feet)
Road Grade: 0.0%	Autos: 47.000
Left View: -90.0 degrees	Medium Trucks: 46.811
Right View: 90.0 degrees	Heavy Trucks: 46.830
FHWA Noise Model Calculations	
VehicleType REMEL Traffic Flow Distance	Finite Road Fresnel Barrier Atten Berm Atten
Autos: 64.30 0.31 0.	30 -1.20 -4.67 0.000 0.000
Medium Trucks: 75.75 -16.92 0.	33 -1.20 -4.87 0.000 0.000
Heavy Trucks: 81.57 -20.88 0.	32 -1.20 -5.38 0.000 0.000
Unmitigated Noise Levels (without Topo and barrier atte	nuation)
VehicleType Leq Peak Hour Leq Day Leq I	Evening Leq Night Ldn CNEL
Autos: 63.7 63.0	61.7 55.7 64.1 64.8
Medium Trucks: 58.0 55.4	47.9 56.6 62.8 62.8
Heavy Trucks: 59.8 57.1	53.7 58.3 64.5 64.6
Vehicle Noise: 65.9 64.6	62.5 61.8 68.7 68.9
Centerline Distance to Noise Contour (in feet)	
70	dBA 65 dBA 60 dBA 55 dBA
l dn:	45 96 208 447

	FHV	VA-RD-77-108	HIGHW	AY NOI	SE PR	EDICTIC	ON MO	DEL				
Scenar Road Nam Road Segme	io: Existing (20 ne: Ramsey St nt: e/o Highlan	020) d Springs Ave.				Project N Job Nui	lame: mber:	Highla 13073	nd Sprin	.gs and	J 8th	
SITE	SPECIFIC IN	IPUT DATA				NC	DISE	MODE	L INPU	JTS		
Highway Data				Sit	e Cond	litions (H	Hard =	10, S	oft = 15)			
Average Daily	Traffic (Adt):	16,356 vehicles						Autos.	: 15			
Peak Hour	Percentage:	7.37%			Med	lium Truc	cks (2 .	Axles)	: 15			
Peak H	lour Volume:	1,205 vehicles			Hea	vy Truck	(S (3+ .	Axles)	: 15			
Ve	hicle Speed:	45 mph		Ve	hicle M	ix						
Near/Far La	ne Distance:	58 feet			Vehic	leType		Day	Evenin	g Ni	ght	Daily
Site Data						AL	itos:	75.5%	6 14.0	% 10	0.5%	97.42%
Ba	rrier Height:	0.0 feet			Me	dium Tru	icks:	48.9%	6 2.2	% 48	3.9%	1.84%
Barrier Type (0-W	/all. 1-Berm):	0.0			H	eavy Tru	icks:	47.3%	6 5.4	% 47	7.3%	0.74%
Centerline Di	st. to Barrier:	55.0 feet		No	iso Sou	urco Elos	vation	e (in f	oot)			
Centerline Dist.	to Observer:	55.0 feet		140	136 301	Autos:	vauon	000	eel)			
Barrier Distance	to Observer:	0.0 feet			Modium	Trucko:	2	207				
Observer Height	Above Pad):	5.0 feet			Hoav	Trucks:	. 8	006	Grade	Adiust	ment	0.0
Pi	ad Elevation:	0.0 feet			neavy	mucho.	0.	000		,		
Roi	ad Elevation:	0.0 feet		Lai	ne Equ	ivalent L	Distan	ce (in	feet)			
	Road Grade:	0.0%				Autos:	47	.000				
	Left View:	-90.0 degree	s		Medium	Trucks:	46	.811				
	Right View:	90.0 degree	s		Heavy	/ Trucks:	46	.830				
FHWA Noise Mode	el Calculation	s										
VehicleType	REMEL	Traffic Flow	Distan	се	Finite F	Road	Fresi	nel	Barrier J	Atten	Bern	n Atten
Autos:	68.46	-1.14		0.30		-1.20		-4.67		0.000	-	0.000
Medium Trucks:	79.45	-18.38		0.33		-1.20		-4.87		0.000		0.000
Heavy Trucks:	84.25	-22.33		0.32		-1.20		-5.38		0.000		0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenua	tion)					-	-	
VehicleType	Leq Peak Hou	ır Leq Day	Le	eq Ever	ning	Leq N	light		Ldn		CN	EL
Autos:	66	.4	55.7		64.4		58.	4	6	6.8		67.5
Medium Trucks:	60	.2	57.6		50.1		58.	9	6	5.0		65.1
Heavy Trucks:	61	.0	58.3		54.9		59.	6	6	5.8		65.9
Vehicle Noise:	68	.3	67.0		65.0		63.	8	7	0.7		71.0
Centerline Distant	ce to Noise Co	ontour (in feet)								-	-	
				70 dB/	4	65 di	BA		60 dBA	1	55 0	/BA
			Ldn:	61		132	2		285		61	4
		CI	IEL:	64		139	Э		299		64	3

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	FH	WA-RD-77-108	HIGHW	AY NO	DISE P								
Scenar Road Nan Road Segme	io: E+P ne: Pennsylvar nt: n/o 8th St.				Project N Job Nu	Vame: I mber:	Highla 13073	nd Springs	and 8th				
SITE	SPECIFIC IN	IPUT DATA				NC	DISE N	/ODE	L INPUT	s			
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	10,918 vehicle	s					Autos:	15				
Peak Hour	Percentage:	7.37%			Me	edium Truc	cks (2 A	(xles)	15				
Peak H	lour Volume:	805 vehicle	s		He	avy Truck	ks (3+ A	(xles)	15				
Ve	hicle Speed:	30 mph		V	ohiclo	Mix							
Near/Far La	ne Distance:	34 feet			Veł	nicleType		Dav	Evenina	Niaht	Daily		
Site Data					101	AL	utos:	75.5%	5 14.0%	10.5%	97.42%		
Ba	rrier Height	0.0 feet			М	ledium Tru	icks:	48.9%	5 2.2%	48.9%	1.84%		
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy Tru	icks:	47.3%	5.4%	47.3%	0.74%		
Centerline Di	st. to Barrier:	33.0 feet		N	oise S	ource Ele	vation	s (in fi	eet)				
Centerline Dist.	to Observer:	33.0 feet				Autos	0.0	000	,				
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	2	297					
Observer Height	(Above Pad):	5.0 feet			Hea	vv Trucks:	8.0	200	Grade Ad	iustmeni	: 0.0		
P	ad Elevation:	0.0 feet				.,							
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalent l	Distand	ce (in i	feet)				
	Road Grade:	0.0%				Autos:	28.	723					
	Left View:	-90.0 degre	es		Mediu	m Trucks:	28.	413					
	Right View:	90.0 degre	es		Hea	vy Trucks:	28.	444					
FHWA Noise Mod	el Calculation	IS											
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresn	el	Barrier Att	en Bei	rm Atten		
Autos:	61.75	-1.13		3.51		-1.20		-4.52	0.0	000	0.000		
Medium Trucks:	73.48	-18.37		3.58		-1.20		-4.86	0.0	000	0.000		
Heavy Trucks:	79.92	-22.33		3.57		-1.20		-5.69	0.0	000	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenu	ation)								
VehicleType	Leq Peak Ho	ur Leq Daj	/ L	eq Eve	ening	Leq N	light		Ldn	С	NEL		
Autos:	62	2.9	62.2		60.9		54.9	)	63.3	3	64.0		
Medium Trucks:	57	7.5	54.9		47.4		56.2	2	62.3	3	62.4		
Heavy Trucks:	60	0.0	57.2		53.8		58.5	i	64.7	7	64.8		
Vehicle Noise:	65	5.5	64.0		61.9		61.6	6	68.3	3	68.6		
Centerline Distant	ce to Noise C	ontour (in feel	)										
				70 dł	BA	65 d	BA	e	60 dBA	55	dBA		
			Ldn:	26		55			119	2	256		
		С	NEL:	27		57			123	2	266		

	FHW	A-RD-77-108	HIGHW.	AY NC	DISE PRE	DICTIC		DEL						
Scenario Road Name Road Segmen	o: E+P e: Pennsylvania t: s/o 8th St.	a Ave.			F	Project N Job Nu	lame: I mber: '	lighlai	nd Springs	and 8th				
SITE S	PECIFIC INF	UT DATA				NC	DISE N	IODE		s				
Highway Data				Site Conditions (Hard = 10, Soft = 15)										
Average Daily 1 Peak Hour I Peak Ho	Fraffic (Adt): 10 Percentage: pur Volume:	),809 vehicles 7.37% 797 vehicles			Medi Hear	um Truc /y Truck	) cks (2 A (s (3+ A	Autos: Ixles): Ixles):	15 15 15					
Noar/Ear Lan	ncie Speeu.	30 mpn		Ve	ehicle Mi	x								
Neal/I al Lan	e Distance.	24 1661			Vehici	leType		Day	Evening	Night	Daily			
Site Data						AL	itos:	75.5%	14.0%	10.5%	97.42			
Bari	rier Height:	0.0 feet			Mec	lium Tru -	cks:	48.9%	2.2%	48.9%	1.84			
Barrier Type (0-Wa	all, 1-Berm):	0.0			He	eavy Tru	CKS:	47.3%	5.4%	47.3%	0.749			
Centerline Dis	t. to Barrier:	39.0 feet		N	oise Sou	rce Ele	vations	s (in fe	et)					
Centerline Dist. t Barrier Distance t Observer Height (A Pa	o Observer: o Observer: Above Pad): d Elevation:	39.0 feet 0.0 feet 5.0 feet			Medium Heavy	Autos: Trucks: Trucks:	0.0 2.2 8.0	000 297 006	Grade Ad	justment	: 0.0			
Roa	d Elevation:	0.0 feet		Lá	ane Eaui	valent I	Distand	e (in i	feet)					
5	load Grade:	0.0%				Autos:	37.4	, 143	,					
	Left View: Right View:	-90.0 degree 90.0 degree	s s		Medium Heavy	Trucks: Trucks:	37.: 37.:	206 230						
FHWA Noise Mode	l Calculations													
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite R	oad	Fresn	el	Barrier Att	en Ber	m Atter			
Autos:	61.75	-1.18		1.78		-1.20		-4.58	0.0	000	0.00			
Medium Trucks:	73.48	-18.42		1.82		-1.20		-4.87	0.0	000	0.00			
Heavy Trucks:	79.92	-22.37		1.82		-1.20		-5.57	0.0	000	0.00			
Unmitigated Noise	Levels (witho	ut Topo and I	oarrier a	attenu	ation)									
VehicleType	Leq Peak Hour	Leq Day	Le	eq Eve	ening	Leq N	light		Ldn	C	NEL			
Autos:	61.2	26	60.5		59.2		53.1		61.6	3	62			
Medium Trucks:	55.7	, E	53.1		45.6		54.4		60.5	5	60			
Heavy Trucks:	58.2	2 6	5.4		52.1		56.7		62.9	9	63			
Vehicle Noise:	63.7	7 6	32.2		60.1		59.8		66.	5	66			
Centerline Distance	e to Noise Cor	ntour (in feet)		70.1		05.	04		0.0		-10.4			
			-	70 dE	54	65 di	5A	6	U dBA	55	aBA			
		1	an:	23		49			107	2	29			
		0		0.4		E 4			444		00			

	FH	WA-RD-77-108	BHIGHV	VAY N	DISE PR	REDICTIO	ON MODEL			
Scenario	p: E+P					Project I	Vame: High	land Springs	and 8th	
Road Name	e: Xenia Ave.					Job Nu	mber: 1307	3		
Road Segmen	<i>t:</i> n/o 8th St.									
SITE S	PECIFIC IN	NPUT DATA				N	DISE MOD	EL INPUTS	S	
Highway Data				S	ite Con	ditions (l	Hard = 10, 3	Soft = 15)		
Average Daily 7	raffic (Adt):	6,398 vehicle	s				Auto	s: 15		
Peak Hour F	Percentage:	7.37%			Me	dium Tru	cks (2 Axles	s): 15		
Peak Ho	our Volume:	472 vehicle	s		Hei	avy Truck	ks (3+ Axles	s): 15		
Veh	icle Speed:	45 mph		V	ohicle I	Niv				
Near/Far Lan	e Distance:	54 feet		-	Vehi	cleTvpe	Dav	Evenina	Night	Dailv
Site Data						A	utos: 75.5	% 14.0%	10.5%	97.42%
Barr	rior Hoiaht	0.0 feet			Me	edium Tru	icks: 48.9	% 2.2%	48.9%	1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			F	leavy Tru	icks: 47.3	% 5.4%	47.3%	0.74%
Centerline Dis	t. to Barrier:	50.0 feet		N	loise So	urce Ele	vations (in	feet)		-
Centerline Dist. to	o Observer:	50.0 feet		-		Autos	0.000			
Barrier Distance to	o Observer:	0.0 feet			Mediur	n Trucks	2.297			
Observer Height (A	Above Pad):	5.0 feet			Heav	v Trucks	8.006	Grade Adj	iustment:	0.0
Pa	d Elevation:	0.0 feet								
Roa	d Elevation:	0.0 feet		L	ane Equ	ivalent l	Distance (ii	n feet)		
R	Road Grade:	0.0%				Autos.	42.379			
	Left View:	-90.0 degre	es		Mediur	n Trucks.	42.170			
	Right View:	90.0 degre	es		Heav	y Trucks.	42.190			
FHWA Noise Mode	I Calculation	S								
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresnel	Barrier Atte	en Bern	n Atten
Autos:	68.46	-5.22		0.97		-1.20	-4.6	5 0.0	000	0.00
Medium Trucks:	79.45	-22.45		1.01		-1.20	-4.8	7 0.0	000	0.00
Heavy Trucks:	84.25	-26.41		1.00		-1.20	-5.4	3 0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	uation)					
VehicleType	Leq Peak Ho	ur Leq Da	V	Leq Ev	ening	Leq N	light	Ldn	CN	EL
Autos:	63	3.0	62.3		61.0		55.0	63.4	Ļ	64.
Medium Trucks:	56	3.8	54.2		46.7		55.5	61.7	,	61.
Heavy Trucks:	57	7.6	54.9		51.5		56.2	62.4	ł	62.
Vehicle Noise:	64	1.9	63.6		61.6		60.4	67.3	3	67.
Centerline Distance	e to Noise C	ontour (in fee	)						-	
				70 d	BA	65 d	BA	60 dBA	55 0	1BA
			Ldn:	33		71		154	33	31
		C	NEL:	35		75		161	34	7

	FIII	WA-IND-77-100	nightw.			LDICI						
Scenar	io: E+P					Project	t Name:	Highla	nd Sprin	igs an	d 8th	
Road Nan	e: Allegheny S	St.				Job N	lumber:	13073				
Road Segme	nt: s/o 8th St.											
SITE	SPECIFIC IN	IPUT DATA				Ν	OISE	MODE	L INPU	JTS		
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	oft = 15)			
Average Daily	Traffic (Adt):	932 vehicles	3					Autos:	15			
Peak Hour	Percentage:	7.37%			Me	dium Tr	ucks (2	Axles):	15			
Peak H	lour Volume:	69 vehicles	5		He	avy Tru	cks (3+	Axles):	15			
Ve	hicle Speed:	35 mph		V	ehicle I	Nix						
Near/Far La	ne Distance:	34 feet		-	Veh	icleTvne	,	Dav	Evenin	a N	iaht	Daily
Site Data							Autos:	75.5%	5 14.0	% 1	0.5%	97.42%
Pa	rrior Hoight:	0.0 foot			Me	edium T	rucks:	48.9%	5 2.2 <sup>4</sup>	% 4	8.9%	1.84%
Barrier Type (0-V	(all 1-Berm)	0.0 1001			ŀ	leavy T	rucks:	47.3%	5.4	% 4	7.3%	0.74%
Centerline Di	st. to Barrier:	33.0 feet										
Centerline Dist.	to Observer:	33.0 feet		N	oise So	ource El	levation	is (in fe	et)			
Barrier Distance	to Observer:	0.0 feet				Auto	IS: ()	.000				
Observer Height	Above Pad);	5.0 feet			Mediui	n Truck	:s: 2	.297	0	A		
P	ad Elevation:	0.0 feet			Heav	y Truck	:s: 8	.006	Grade	Aajusi	ment:	0.0
Ro	ad Elevation:	0.0 feet		Li	ane Equ	uivalen	t Distan	ce (in	feet)			
	Road Grade:	0.0%				Auto	s: 28	.723				
	Left View:	-90.0 degree	s		Mediur	n Truck	s: 28	.413				
	Right View:	90.0 degree	s		Heav	y Truck	:s: 28	.444				
ELIMA Noise Med	al Calculation	•										
VehicleType	REMEI	Traffic Flow	Distar	000	Finito	Road	Fras	nol	Barrier	Atton	Ron	m Atton
Autos	64.30	-12.49	Distai	3.51	1 mile	-1 20	1103	-4.52	Damer	0.000	Don	0.000
Medium Trucks:	75.75	-29.73		3.58		-1.20		-4.86		0.000		0.000
Heavy Trucks:	81.57	-33.68		3.57		-1.20		-5.69		0.000		0.000
Unmitimated Main	a Lavala (with	out Tono and	horrior c	40.00	(otion)							
VohioloTypo	Levels (with		Darriera		oning	1.00	Night		1 dn		<u></u>	
Autos	Ley Feak 1100	1 Ley Day	53 / L	SY LV	52 1	Ley	AG	1	Lun	4.5	CI.	VLL 55 '
Modium Trucks:	19	4	15.9		30.3		40.	1	5	3.2		52.2
Hoowy Trucks:	40	.4	43.0		44.1		47.	0	5	5.0		55.0
Vehicle Noise	56	.3	47.J		52.0		40. 52	2	5	0.0		59.
Contorlino Distor	n to Noise C	ntour (in foot			52.5		02.	-		0.1		00
Centernine Distant	e lo Noise Co	mour (in ieet)		70 d	RΔ	65	dBA		SO dBA		55	dR∆
			l dn:	6		1	13	1	20	1	55	32
		C	IFI ·	6		1	14		30		6	34
		01	T days have a						~~~			

Tuesday, March 24, 2020

Tuesday, March 24, 2020

	FH	WA-RD-77-108	HIGHW	AY NO	DISE P	REDICT	ION MO	DEL						
Scenar Road Nam Road Segme	Scenario: E+P Road Name: Highland Springs Ave. Road Segment: n/o Wilson St.					Project Name: Highland Springs and 8th Job Number: 13073								
SITE	SPECIFIC IN	VPUT DATA				P	IOISE I	MODE	L INPUT	5				
Highway Data				S	ite Cor	nditions	(Hard =	10, Se	oft = 15)					
Average Daily	Traffic (Adt):	19,768 vehicle	s					Autos:	15					
Peak Hour	Percentage:	7.37%			Me	edium Tr	ucks (2	Axles):	15					
Peak H	lour Volume:	1,457 vehicle	s		He	avy Tru	cks (3+ .	Axles):	15					
Ve	hicle Speed:	35 mph		14	ahiala	Misc								
Near/Far La	ne Distance:	58 feet			Vok	IVIIX		Dav	Evoning	Night	Daily			
Site Data					ven	licierype	; Autos:	75.5%	Evening	10.5%	97 42%			
One Data		0.0.64			М	Iedium T	rucks:	48.9%	2.2%	48.9%	1.84%			
Barrier Tune (0.14	rrier Height:	0.0 feet				Heavv T	rucks:	47.3%	5.4%	47.3%	0.74%			
Contorlino Di	all, 1-Dell11).	0.0												
Centerline Dist	to Observer:	55.0 feet		N	oise S	ource E	levation	s (in f	eet)					
Barrier Distance	to Observer:	0.0 feet				Auto	s: 0.	000						
Observer Height (	(Above Pad):	5.0 feet			Mediu	Im Truck	's: 2.	297						
P	ad Elevation:	0.0 feet			Hea	vy Truck	's: 8.	006	Grade Ad	iustment	t: 0.0			
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalen	t Distan	ce (in	feet)					
	Road Grade:	0.0%				Auto	s: 47.	.000	,					
	Left View:	-90.0 degre	es		Mediu	m Truck	s: 46	811						
	Right View:	90.0 degre	es		Hea	vy Truck	s: 46	.830						
FHWA Noise Mode	el Calculation	IS												
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresi	nel	Barrier Atte	en Bei	rm Atten			
Autos:	64.30	0.77		0.30		-1.20		-4.67	0.0	000	0.000			
Medium Trucks:	75.75	-16.46		0.33		-1.20		-4.87	0.0	000	0.000			
Heavy Trucks:	81.57	-20.42		0.32		-1.20		-5.38	0.0	000	0.000			
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenu	ation)									
VehicleType	Leq Peak Ho	ur Leq Daj	/ L	eq Eve	ening	Leq	Night		Ldn	С	NEL			
Autos:	64	4.2	63.5		62.2		56.	2	64.6	5	65.2			
Medium Trucks:	58	3.4	55.8		48.3		57.	1	63.3	3	63.3			
Heavy Trucks:	60	0.3	57.6		54.2	2	58.	В	65.0	)	65.1			
Vehicle Noise:	66	6.4	65.0		63.0	)	62.	3	69.1		69.4			
Centerline Distant	ce to Noise C	ontour (in feel	)											
				70 dł	BA	65	dBA	(	60 dBA	55	dBA			
			Ldn:	48		1	03		223	4	180			
		С	NEL:	50		1	08		233	5	501			

Scenario: E+P			Project Name:	Highland Springs	and 8th
Road Name: Highland Springs Av	e.		Job Number:	13073	
Road Segment. s/o Wilson St.					
SITE SPECIFIC INPUT DA	TA	0/4- 0-	NOISE	MODEL INPUT	S
Highway Data		Site Co	nditions (Hard :	= 10, Soft = 15)	
Average Daily Traffic (Adt): 21,756 ve	ehicles			Autos: 15	
Peak Hour Percentage: 7.37%		N	ledium Trucks (2	Axles): 15	
Peak Hour Volume: 1,603 ve	ehicles	H	leavy Trucks (3+	Axles): 15	
Vehicle Speed: 35 m	ph	Vehicle	Mix		
Near/Far Lane Distance: 58 fe	et	Ve	hicleType	Day Evening	Night Daily
Site Data			Autos:	75.5% 14.0%	10.5% 97.42%
Barrier Height: 0.0 f	eet	1	Nedium Trucks:	48.9% 2.2%	48.9% 1.84%
Barrier Type (0-Wall, 1-Berm): 0.0			Heavy Trucks:	47.3% 5.4%	47.3% 0.74%
Centerline Dist. to Barrier: 55.0 f	eet	Noise S	Source Elevation	ns (in feet)	
Centerline Dist. to Observer: 55.0 f	eet		Autos: (	000	
Barrier Distance to Observer: 0.0 f	eet	Medi	um Trucks: 2	297	
Observer Height (Above Pad): 5.0 f	eet	Hei	avv Trucks: 8	006 Grade Ad	liustment: 0.0
Pad Elevation: 0.0 f	eet				,
Road Elevation: 0.0 f	eet	Lane E	quivalent Distar	ice (in feet)	
Road Grade: 0.0%			Autos: 47	.000	
Left View: -90.0 d	legrees	Medi	um Trucks: 46	.811	
Right View: 90.0 c	legrees	Hea	avy Trucks: 46	.830	
FHWA Noise Model Calculations					
VehicleType REMEL Traffic F	low Dista	nce Finit	e Road Fres	nel Barrier At	ten Berm Atten
Autos: 64.30	1.19	0.30	-1.20	-4.67 0.	000 0.00
Medium Trucks: 75.75 -	16.05	0.33	-1.20	-4.87 0.	000 0.00
Heavy Trucks: 81.57 -2	20.00	0.32	-1.20	-5.38 0.	000 0.00
Unmitigated Noise Levels (without Topo	and barrier	attenuation	)		
VehicleType Leq Peak Hour Le	q Day L	eq Evening	Leq Night	Ldn	CNEL
Autos: 64.6	63.9	62.	6 56	.6 65.	0 65.
Medium Trucks: 58.8	56.3	48.	8 57	.5 63.	7 63.
Heavy Trucks: 60.7	58.0	54.	6 59	.2 65.	4 65.
Vehicle Noise: 66.8	65.5	63.	4 62	.7 69.	5 69.
Centerline Distance to Noise Contour (in	n feet)				
		70 dBA	65 dBA	60 dBA	55 dBA
	Ldn:	51	110	238	512

	FH)	WA-RD-77-108	HIGHWA	Y N	DISE PF	REDICT	ION MO	DEL			
Scenar Road Nam Road Segmei	io: E+P e: Highland S nt: n/o Ramse	prings Ave. y St.				Project Job N	Name: lumber:	Highla 13073	and Springs	and 8th	1
SITE	SPECIFIC IN	NPUT DATA				N	IOISE N	NODE	EL INPUTS	s	
Highway Data				S	ite Con	ditions	(Hard =	10, S	oft = 15)		
Average Daily Peak Hour Peak H	Traffic (Adt): Percentage: lour Volume:	22,015 vehicles 7.37% 1,623 vehicles	3		Me He	dium Tr avy Tru	ucks (2 ) cks (3+ )	Autos Axles) Axles)	: 15 : 15 : 15		
Ve	hicle Speed:	30 mph		V	ehicle I	Nix					
Near/Far La	ne Distance:	58 feet			Vehi	cleType	9	Day	Evening	Night	Daily
Site Data							Autos:	75.5%	6 14.0%	10.5%	6 97.42%
Bai	rier Height	0.0 feet			Me	edium T	rucks:	48.9%	6 2.2%	48.9%	6 1.84%
Barrier Type (0-W	all, 1-Berm):	0.0			ŀ	leavy T	rucks:	47.39	6 5.4%	47.3%	6 0.74%
Centerline Dis	st. to Barrier:	55.0 feet		N	loise So	urce El	evation	s (in f	eet)		
Centerline Dist.	to Observer:	55.0 feet				Auto	s: 0	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	n Truck	s: 2.	297			
Observer Height (	Above Pad):	5.0 feet			Heav	v Truck	s: 8.	006	Grade Adj	iustmer	nt: 0.0
Pa	ad Elevation:	0.0 feet				,					
Roa	ad Elevation:	0.0 feet		L	ane Equ	uivalen	t Distan	ce (in	feet)		
	Road Grade:	0.0%				Auto	s: 47.	000			
	Left View: Right View:	-90.0 degree	es S		Mediur	n Truck v Truck	s: 46. s: 46	811 830			
	right view.	50.0 degree	-5		nour	y maon	0. 40.	000			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Distan	ce	Finite	Road	Fresr	nel	Barrier Atte	en Be	erm Atten
Autos:	61.75	1.91		0.30		-1.20		-4.67	0.0	000	0.000
Medium Trucks:	73.48	-15.33		0.33		-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	79.92	-19.28		0.32		-1.20		-5.38	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenı	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	Le	q Ev	ening	Leq	Night		Ldn	0	ONEL
Autos:	62	2.8	62.1		60.8		54.8	3	63.2	2	63.8
Medium Trucks:	57	7.3	54.7		47.2		56.0	)	62.1		62.2
Heavy Trucks:	59	9.8	57.0		53.6		58.3	3	64.5	5	64.6
Vehicle Noise:	65	5.3	63.8		61.7		61.4	4	68.1		68.4
Centerline Distance	e to Noise C	ontour (in feet	)							1	
				70 d	BA	65	dBA	1	60 dBA	5	5 dBA
			Ldn:	41		8	39		192		414
		Ci	VEL:	43		ę	93		200		430

Scenario: E+P     Project Name: Highland Spring: Job Number: 13073       Road Vame: Highland Springs Ave. Road Segment: s/o Ramsey St.     Job Number: 13073       SITE SPECIFIC INPUT DATA     NOISE MODEL INPUT       Highway Data     Site Conditions (Hard = 10, Soft = 15)       Average Daily Traffic (Adt): 31,960 vehicles     Autos: 15       Peak Hour Volume: 2,355 vehicles     Medium Trucks: (24/se): 15       Vehicle Speed: 35 mph     Vehicle Mix       Near/Far Lane Distance: 78 feet     Vehicle Mix       Barrier Height: 0.0 feet     Autos: 75.5% 140,0%       Barrier Type (0-Wall, 1-Berm): 0.0     Autos: 0.00       Centerline Dist. to Barrier: 67.0 feet     Molse Source Elevations (in feet)       Barrier Distance to Observer: 0.0 feet     Autos: 0.00       Barrier Distance to Observer: 0.0 feet     Autos: 0.00       Pad Elevation: 0.0 feet     Heavy Trucks: 8.006 Grade Autos:       Road Elevation: 0.0 feet     Lane Equivalent Distance (in feet)	s and 8th
Bit Ste Data     Job Number: 13073       Noad Segment: sio Ramsey St.     Job Number: 13073       Sitt SPECIFIC INPUT DATA     NOISE MODEL INPUT       Highway Data     Site Conditions (Hard = 10, Soft = 15)       Average Daily Traffic (Adt): 31,960 vehicles     Autos: 15       Peak Hour Volume: 2,355 vehicles     Autos: 15       Vehicle Speed: 35 mph     Medium Trucks (2 Akles): 15       Vehicle Speed: 35 mph     Vehicle Mix       Site Data     Autos: 75.5%       Barrier Height: 0.0 feet     Medium Trucks: 48.9%       Barrier Type (0-Wall, 1-Berm): 0.0     Centerline Dist. to Barrier: 67.0 feet       Barrier Distance to Observer: 0.0 feet     Molse Source Elevations (In feet)       Chever Height (Advove Pad): 5.0 feet     Autos: 0.00       Barrier Distance to Observer: 0.0 feet     Autos: 8.006       Pad Elevation: 0.0 feet     Lane Equivalent Distance (In feet)       Road Elevation: 0.0 feet     Lane Equivalent Distance (In feet)	<u></u>
Road Segment: s/o Ramsey St.           SITE SPECIFIC INPUT DATA         NOISE MODEL INPUT           Highway Data         Site Conditions (Hard = 10, Soft = 15)           Average Daily Traffic (Adt): 31,960 vehicles         Autos: 15           Peak Hour Percentage: 7.37%         Medium Trucks (2 Axles): 15           Vehicle Speed: 35 mph         Heavy Trucks (2 Axles): 15           Vehicle Speed: 35 mph         Vehicle Type         Day           Site Data         Autos: 75.5%         14.0%           Barrier Height: 0.0 feet         Medium Trucks: 48.9%         2.3%           Barrier Type (0-Wall, 1-Berm): 0.0         Centerline Dist. to Barrier: 67.0 feet         Molse Source Elevations (In feet)           Barrier Vistance to Observer: 0.0 feet         Autos: 0.000         Medium Trucks: 4.89%         2.2%           Observer Height (Above Pad): 5.0 feet         Autos: 0.000         Medium Trucks: 4.2.97         Heavy Trucks: 8.006           Pad Elevation: 0.0 feet         Road Elevation: 0.0 feet         Lane Equivalent Distance (In feet)         Heavy Trucks: 8.006	rs
SITE SPECIFIC INPUT DATA         NOISE MODEL INPUT           Highway Data         Site Conditions (Hard = 10, Soft = 15)           Average Daily Traffic (Adt): 31,960 vehicles         Site Conditions (Hard = 10, Soft = 15)           Peak Hour Percentage: 7.37%         Autos: 15           Peak Hour Volume: 2,355 vehicles         Medium Trucks (2 Axles): 15           Vehicle Speed: 35 mph         Vehicle Mix           Near/Far Lane Distance: 78 feet         Vehicle Mix           Barrier Type (0-Wall, 1-Berm): 0.0         Autos: 75.5% 14.0%           Centerline Dist. to Basrive: 67.0 feet         Medium Trucks: 48.9% 2.2%           Barrier Distance to Observer: 6.0 feet         Medium Trucks: 4000           Barrier Distance to Observer: 6.0 feet         Autos: 0.000           Pad Elevation: 0.0 feet         Autos: 8.006 Grade Ac           Road Elevation: 0.0 feet         Lane Equivalent Distance (in feet)	ſS
Site Conditions (Hard = 10, Soft = 15)       Average Daily Traffic (Adt):     31,960 vehicles     Autos:     15       Peak Hour Percentage:     7.37%     Medium Trucks (2 Avies):     15       Peak Hour Volume:     2,355 vehicles     Heavy Trucks (3+ Avles):     15       Vehicle Speed:     35 mph     Vehicle Mix     Vehicle Type     Day     Evening       Site Data     Autos:     75.5%     14 0%       Barrier Type (0-Wall, 1-Berm):     0.0     Medium Trucks:     47.3%     5.4%       Centerline Dist. to Barrier:     67.0 feet     Meldum Trucks:     47.3%     5.4%       Barrier Distance to Observer:     0.0 feet     Mutos:     0.0     Melium Trucks:     2.297       Observer Height (Above Pad):     5.0 feet     Autos:     0.00     Medium Trucks:     8.006     Grade Avies       Pad Elevation:     0.0 feet     Lane Equivalent Distance (in feet)     Lane Equivalent Distance (in feet)	
Average Daily Traffic (Adt): 31,960 vehicles     Autos: 15       Peak Hour Opercentage:     7.37%       Vehicle Speed:     35 mph       Vehicle Speed:     35 mph       Near/Far Lane Distance:     78 feet       Barrier Height:     0.0 feet       Barrier Type (0-Wall, 1-Berm):     0.0       Centerline Dist. to Barrier:     67.0 feet       Barrier Distance to Observer:     0.0 feet       Pad Elevation:     0.0 feet       Road Elevation:     0.0 feet	
Peak Hour Volume:     2,35%     Medium Trucks (2 Axles):     15       Peak Hour Volume:     2,355 vehicles     Heavy Trucks (2 Axles):     15       Vehicle Speed:     35 mph     Vehicle Mix     Vehicle Mix       Site Data     Autos:     75.5%     14.0%       Barrier Height:     0.0 feet     Autos:     75.5%     14.0%       Barrier Type (0-Wall, 1-Berm):     0.0     Medium Trucks:     47.3%     5.4%       Centerline Dist. to Barrier:     67.0 feet     Autos:     0.00       Barrier Lobserver:     0.0 feet     Autos:     0.00       Barrier Vehicle Vehicle Type     Day     Evening       Observer:     67.0 feet     Autos:     0.00       Barrier Height (Above Pad):     5.0 feet     Autos:     0.00       Barrier Patterion:     0.0 feet     Autos:     0.00       Medium Trucks:     2.297     Heavy Trucks:     8.006     Grade Autos:       Road Elevation:     0.0 feet     Lane Equivalent Distance (in feet)	
Peak Hour Volume:     2,355 vehicles       Vehicle Speed:     35 mph       Near/Far Lane Distance:     78 feet       Site Data     Autos:       Barrier Type (0-Wall, 1-Berm):     0.0       Centerline Dist. to Dserver:     67.0 feet       Barrier Distance to Observer:     0.0 feet       Barrier Distance to Observer:     0.0 feet       Partier Distance to Observer:     0.0 feet       Partier Distance to Observer:     0.0 feet       Part Elevation:     0.0 feet       Partier Distance to Observer:     0.0 feet       Part Elevation:     0.0 feet       Road Elevation:     0.0 feet	
Vehicle Speed: 35 mph       Near/Far Lane Distance: 78 feet     Vehicle Mix       Site Data     Autos: 75.5% 14.0%       Barrier Height: 0.0 feet     Medium Trucks: 48.9% 2.2%       Barrier Type (0-Wall, 1-Berm): 0.0     Medium Trucks: 47.3% 5.4%       Centerline Dist. to Barrier: 67.0 feet     Molse Source Elevations (in feet)       Centerline Dist. to Barrier: 0.0 feet     Molse Source Elevations (in feet)       Barrier Distance to Observer: 0.0 feet     Medium Trucks: 2.97       Pad Elevation: 0.0 feet     Lane Equivalent Distance (in feet)       Road Elevation: 0.0 feet     Lane Equivalent Distance (in feet)	
Near/Far Lane Distance:         78 feet         VehicleType         Day         Evening           Site Data         Autos:         75.5%         14.0%           Barrier Height:         0.0 feet         Medium Trucks::         48.9%         2.2%           Barrier Type (0-Wall, 1-Berm):         0.0         67.0 feet         Medium Trucks::         47.3%         5.4%           Centerline Dist. to Barrier:         67.0 feet         Autos:         0.00         Medium Trucks::         2.297           Observer:         0.0 feet         Medium Trucks::         8.006         Grade Autos:           Pad Elevation:         0.0 feet         Lane Equivalent Distance (in feet)         Lane Equivalent Distance (in feet)	
Site Data         Control of the sector           Barrier Height:         0.0 feet           Barrier Type (0-Wall, 1-Berm):         0.0           Centerline Dist. to Barrier:         67.0 feet           Barrier Dist. to Observer:         67.0 feet           Barrier Dist. to Observer:         67.0 feet           Barrier Distance to Observer:         67.0 feet           Doserver Height (Above Pad):         5.0 feet           Pad Elevation:         0.0 feet           Road Elevation:         0.0 feet           Lane Equivalent Distance (in feet)	Night Daily
Barrier Height:         0.0 feet         Medium Trucks:         48.9%         2.2%           Barrier Type (0-Wall, 1-Berm):         0.0         Heavy Trucks:         47.3%         5.4%           Centerline Dist. to Barrier:         67.0 feet         Noise Source Elevations (in feet)         Noise Source Elevations (in feet)           Barrier Distance to Observer:         0.0 feet         Autos:         0.00           Deserver Height (Above Pad):         5.0 feet         Medium Trucks:         2.297           Observer Height (Above Pad):         0.0 feet         Heavy Trucks:         8.006         Grade Au           Pad Elevation:         0.0 feet         Lane Equivalent Distance (in feet)         Lane Equivalent Distance (in feet)	10.5% 97.42%
Barrier Type (0-Wall, 1-Berm):     0.0 feet     Heavy Trucks:     47.3%     5.4%       Centerline Dist. to Barrier:     67.0 feet     Noise Source Elevations (in feet)       Centerline Dist. to Observer:     67.0 feet     Autos:     0.000       Barrier Distance to Observer:     0.0 feet     Medium Trucks:     2.297       Observer Height (Above Pad):     5.0 feet     Heavy Trucks:     8.006     Grade Ac       Road Elevation:     0.0 feet     Lane Equivalent Distance (in feet)	48.9% 1.84%
Centerline Dist. to Barrier: 67.0 feet Centerline Dist. to Barrier: 67.0 feet Barrier Distance to Observer: 67.0 feet Barrier Distance to Observer: 0.0 feet Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Road Elevation: 0.0 feet	47.3% 0.74%
Centerline Dist. to Observer:         67.0 feet         Noise Source Lievations (in feet)           Barrier Distance to Observer:         0.0 feet         Autos:         0.00           Observer Height (Above Pad):         5.0 feet         Medium Trucks:         2.297           Pad Elevation:         0.0 feet         Heavy Trucks:         8.006         Grade Ac           Road Elevation:         0.0 feet         Lane Equivalent Distance (in feet)         Lane Equivalent Distance (in feet)	
Barrier Distance to Observer: 0.0 feet Medium Trucks: 2.297 Observer Height (Above Pad): 5.0 feet Pad Elevation: 0.0 feet Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)	
Observer Height (Above Pad):         5.0 feet         Meaium Tracks:         2.297           Pad Elevation:         0.0 feet         Heavy Tracks:         8.006         Grade Active Ac	
Pad Elevation:         0.0 feet         Heavy Trucks:         6.000         Glave Activities           Road Elevation:         0.0 feet         Lane Equivalent Distance (in feet)         Contract         Contr	diustmont: 0.0
Road Elevation: 0.0 feet Lane Equivalent Distance (in feet)	Justinent. 0.0
Road Grade: 0.0% Autos: 54.708	
Left View: -90.0 degrees Medium Trucks: 54.546	
Right View: 90.0 degrees Heavy Trucks: 54.562	
FHWA Noise Model Calculations	
VehicleType REMEL Traffic Flow Distance Finite Road Fresnel Barrier At	tten Berm Atten
Autos: 64.30 2.86 -0.69 -1.20 -4.71 0.	.000 0.000
Medium Trucks: 75.75 -14.38 -0.67 -1.20 -4.88 0.	.000 0.000
Heavy Trucks: 81.57 -18.33 -0.67 -1.20 -5.29 0.	.000 0.000
Unmitigated Noise Levels (without Topo and barrier attenuation)	
VehicleType Leq Peak Hour Leq Day Leq Evening Leq Night Ldn	CNEL
Autos: 65.3 64.6 63.3 57.3 65.	.7 66.3
Medium Trucks: 59.5 56.9 49.4 58.2 64.	.4 64.4
Heavy Trucks: 61.4 58.6 55.2 59.9 66.	.1 66.2
Vehicle Noise: 67.5 66.1 64.1 63.4 70.	
Centerline Distance to Noise Contour (in feet)	.2 70.5
70 dBA 65 dBA 60 dBA	.2 70.5
Ldn: 69 149 321	.2 70.5 55 dBA
CNEL: 72 155 335	.2 70.5 55 dBA 692

Tuesday, March 24, 2020

Tuesday, March 24, 2020

	FH	WA-RD-77-108	HIGHW	AY NO	DISE P	REDICTIC	ON MO	DEL			
Scenar Road Narr Road Segme	io: E+P ne: Highland S nt: s/o I-10	prings Ave.				Project I Job Nu	Vame: Imber:	Highla 13073	nd Springs	and 8t	h
SITE	SPECIFIC IN	NPUT DATA				N	DISE N	NODE	L INPUT	S	
Highway Data				S	ite Cor	ditions (l	Hard =	10, So	oft = 15)		
Average Daily	Traffic (Adt):	40,342 vehicle	s					Autos:	15		
Peak Hour	Percentage:	7.37%			Me	edium Tru	cks (2 /	Axles):	15		
Peak H	lour Volume:	2,973 vehicle	s		He	avy Truck	ks (3+ /	Axles):	15		
Ve	hicle Speed:	35 mph		V	ohiclo	Mix					
Near/Far La	ne Distance:	78 feet		-	Veł	nicleTyne		Dav	Evenina	Niaht	Daily
Site Data					VCI	A	utos:	75.5%	6 14.0%	10.5	% 97.42%
Ba	rrier Height	0.0 feet			М	edium Tru	icks:	48.9%	6 2.2%	48.9	% 1.84%
Barrier Type (0-W	/all. 1-Berm):	0.0				Heavy Tru	icks:	47.3%	6 5.4%	47.3	% 0.74%
Centerline Di	st. to Barrier:	67.0 feet		A	oloo C	ouroo Elo	votion	o (in f	0.04)		
Centerline Dist.	to Observer:	67.0 feet		14	0136 3		vauon	000	eel)		
Barrier Distance	to Observer:	0.0 feet			Modiu	MUIOS.	. 0.	207			
Observer Height	Above Pad):	5.0 feet			Hoo	III TTUCKS.	. 2. . o	297	Grada Ar	liustma	nt: 0.0
P	ad Elevation:	0.0 feet			nea	vy mucks.	. 0.	000	Orado Ad	justino	n. 0.0
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalent l	Distan	ce (in	feet)		
	Road Grade:	0.0%				Autos.	: 54.	708			
	Left View:	-90.0 degre	es		Mediu	m Trucks.	54.	546			
	Right View:	90.0 degre	es		Hea	vy Trucks.	: 54.	562			
FHWA Noise Mod	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresr	nel	Barrier At	ten B	erm Atten
Autos:	64.30	3.87		-0.69		-1.20		-4.71	0.	000	0.000
Medium Trucks:	75.75	-13.37		-0.67		-1.20		-4.88	0.	000	0.000
Heavy Trucks:	81.57	-17.32		-0.67		-1.20		-5.29	0.	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	/ Le	eq Eve	ening	Leq N	light		Ldn		CNEL
Autos:	66	3.3	65.6		64.3		58.3	3	66.	7	67.3
Medium Trucks:	60	0.5	57.9		50.4		59.2	2	65.	4	65.4
Heavy Trucks:	62	2.4	59.7		56.3		60.9	9	67.	1	67.2
Vehicle Noise:	68	3.5	67.1		65.1		64.4	4	71.	2	71.5
Centerline Distant	ce to Noise C	ontour (in feet	)								
				70 dł	BA	65 d	BA	0	60 dBA	5	i5 dBA
			Ldn:	81		174	4		375		808
		С	NEL:	84		18	2		391		843

	FHW	A-RD-77-108 HIG	HWAY	NOISE PH	EDICTION		EL							
Scenario.	: E+P				Project Na	me: H	ighlar	nd Springs	and 8th					
Road Name.	8th St.				Job Nur	ber: 1	3073							
Road Segment.	: w/o Pennsylv	ania Ave.												
SITE SI	PECIFIC INP	UT DATA			NO	SE M	ODE	L INPUT	s					
Highway Data				Site Conditions (Hard = 10, Soft = 15)										
Average Daily Tr	raffic (Adt): 4	,000 vehicles				A	utos:	15						
Peak Hour P	ercentage:	7.37%		Me	dium Truck	s (2 A	xles):	15						
Peak Ho	ur Volume:	295 vehicles		He	avy Trucks	(3+ A	xles):	15						
Vehi	cle Speed:	30 mph		Vehicle N	lix									
Near/Far Lane	e Distance:	34 feet		Vehi	cleType	Ĺ	Day	Evening	Night	Daily				
Site Data					Aut	os: 7	5.5%	14.0%	10.5%	97.42				
Barri	ier Heiaht:	0.0 feet		Me	edium Truc	ks: 4	8.9%	2.2%	48.9%	1.849				
Barrier Type (0-Wa	ll, 1-Berm):	0.0		ŀ	leavy Truc	ks: 4	7.3%	5.4%	47.3%	0.749				
Centerline Dist.	to Barrier:	33.0 feet		Noise So	urce Elev	ations	(in fe	of)						
Centerline Dist. to	Observer:	33.0 feet		110/30 00	Autos:	0.0	00							
Barrier Distance to	Observer:	0.0 feet		Mediur	n Trucks:	2.2	97							
Observer Height (A	bove Pad):	5.0 feet		Heav	v Trucks:	8.0	06	Grade Ad	liustment	0.0				
Pad	Elevation:	0.0 feet		mour	<i>y</i> 1100110.	0.0			,					
Road	Elevation:	0.0 feet		Lane Equ	ivalent Di	stance	e (in f	eet)						
Ro	oad Grade:	0.0%			Autos:	28.7	23							
	Left View:	-90.0 degrees		Mediur	n Trucks:	28.4	13							
F	Right View:	90.0 degrees		Heav	y Trucks:	28.4	44							
FHWA Noise Model	Calculations													
VehicleType	REMEL	Traffic Flow D	Distance	Finite	Road	Fresne	e/ .	Barrier Att	en Ber	m Atten				
Autos:	61.75	-5.49	3.	51	-1.20	-	4.52	0.0	000	0.00				
Medium Trucks:	73.48	-22.73	3.	58	-1.20	-	4.86	0.0	000	0.00				
Heavy Trucks:	79.92	-26.69	3.	57	-1.20	-	5.69	0.0	000	0.00				
Unmitigated Noise I	Levels (withou	ut Topo and bar	rier atte	nuation)										
VehicleType L	eq Peak Hour	Leq Day	Leq E	vening	Leq Nig	t		Ldn	C	NEL				
Autos:	58.6	57.9	9	56.6		50.6		59.0	D	59.				
Medium Trucks:	53.1	50.6	j.	43.1		51.8		58.0	U	58.				
Heavy Trucks:	55.6	52.9	)	49.5		54.1		60.3	3	60.				
Vehicle Noise:	61.1	59.6	6	57.5		57.2		64.0	0	64.				
Centerline Distance	to Noise Con	tour (in feet)	70	dD A	ee dD	4	6	0 dBA	55	dD A				
		I da	1 10	12	05 08	4	0	61	1 22	21 21				
		Lan. CNEL		13	28			60	1	36				

	FH	WA-RD-77-108	HIGH	WAY NO	DISE PR	EDICTIO	ON MODE	L			
Scenario Road Name Road Segmen	o: E+P e: 8th St. t: e/o Pennsy	/Ivania Ave.				Project I Job Nu	Vame: Hig Imber: 130	hland S )73	prings ar	ıd 8th	
SITE S	PECIFIC IN	IPUT DATA				N	DISE MO	DEL IN	IPUTS		
Highway Data				S	te Cond	litions (	Hard = 10	Soft =	15)		
Average Daily 1 Peak Hour F Peak Ho	raffic (Adt): Percentage: our Volume:	4,728 vehicle 7.37% 348 vehicle	s		Med Hea	dium Tru avy Truci	Au cks (2 Axi ks (3+ Axi	tos: 1 es): 1 es): 1	5 5		
Veh	icle Speed:	35 mph		V	ehicle N	lix					
Near/Far Lan	e Distance:	36 feet			Vehi	cleTvpe	Da	V Eve	enina N	liaht	Dailv
Site Data						A	utos: 75	.5% 1	4.0%	0.5%	97.42%
Bar	ior Hoight:	0.0 foot			Me	dium Tru	icks: 48	.9%	2.2%	18.9%	1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			н	leavy Tru	ucks: 47	.3%	5.4% 4	7.3%	0.74%
Centerline Dis	t. to Barrier:	44.0 feet		N	oise So	urce Ele	vations (i	n feet)			
Centerline Dist. to	o Observer:	44.0 feet				Autos	: 0.000	)			
Barrier Distance to	o Observer:	0.0 feet			Mediun	n Trucks	2.297	,			
Observer Height (A	Above Pad): d Elevation:	5.0 feet			Heav	/ Trucks	8.006	Gra	ide Adjus	tment:	0.0
Roa	d Elevation:	0.0 feet		Li	ane Eau	ivalent	Distance	(in feet)			
Filler	oad Grade:	0.0%				Autos	40.460	)			
	Left View	-90.0 degre	00		Mediun	n Trucks	40.24				
	Right View:	90.0 degre	es		Heav	/ Trucks	40.262	2			
FHWA Noise Mode	Calculation	s									
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite I	Road	Fresnel	Barr	rier Atten	Berr	n Atten
Autos:	64.30	-5.44		1.28		-1.20	-4.	61	0.000	)	0.000
Medium Trucks:	75.75	-22.68		1.31		-1.20	-4.	87	0.000	)	0.000
Heavy Trucks:	81.57	-26.63		1.31		-1.20	-5.	50	0.000	)	0.000
Unmitigated Noise	Levels (with	out Topo and	barrie	r attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Daj	/	Leq Eve	ening	Leq N	light	Ldr	1	CN	IEL
Autos:	58	3.9	58.3		56.9		50.9		59.4		60.0
Medium Trucks:	53	3.2	50.6		43.1		51.9		58.0		58.1
Heavy Trucks:	55	5.0	52.3		48.9		53.6		59.8		59.9
Vehicle Noise:	61	1.2	59.8		57.7		57.0		63.9		64.2
Centerline Distance	e to Noise C	ontour (in feet	t)								
				70 dł	BA	65 d	BA	60 dl	BA	55	dBA
			Ldn:	17		37	, '	80		1	72
		С	NEL:	18		39	)	83		1	80

	FH	WA-RD-77-108 H	IGHWAY	NOISE P	REDICTIO	N MODEL		
Scenar Road Nan Road Segme	io: E+P ne: 8th St. nt: e/o Xenia /	Ave.			Project N Job Nur	ame: Highli nber: 13073	and Springs a 3	ınd 8th
SITE	SPECIFIC I	NPUT DATA			NO	ISE MOD	EL INPUTS	
Highway Data				Site Cor	nditions (H	lard = 10, S	Soft = 15)	
Average Daily	Traffic (Adt):	4,948 vehicles				Autos	s: 15	
Peak Hour	Percentage:	7.37%		Me	edium Truc	ks (2 Axles	): 15	
Peak H	lour Volume:	365 vehicles		He	avy Truck	s (3+ Axles	): 15	
Ve	hicle Speed:	35 mph		Vehicle	Mix			
Near/Far La	ne Distance:	36 feet		Veh	nicleType	Dav	Evening	Night Daily
Site Data					Au	tos: 75.5	% 14.0%	10.5% 97.42%
Ba	rrier Height	0.0 feet		M	ledium Tru	cks: 48.9	% 2.2%	48.9% 1.84%
Barrier Type (0-M	/all_1_Borm)	0.0 1001			Heavy Tru	cks: 47.3	% 5.4%	47.3% 0.74%
Centerline Di	st to Barrier	44.0 feet			·			
Centerline Dist.	to Observer:	44.0 feet		Noise S	ource Elev	ations (in	feet)	
Barrier Distance	to Observer:	0.0 feet			Autos:	0.000		
Observer Height	(Above Pad):	5.0 feet		Mediu	m Trucks:	2.297	Crada Adi	ofmont 0.0
P	ad Elevation:	0.0 feet		Hea	vy Trucks:	8.006	Grade Adju	sument. 0.0
Ro	ad Elevation:	0.0 feet		Lane Eq	uivalent D	istance (in	feet)	
	Road Grade:	0.0%			Autos:	40.460		
	Left View:	-90.0 degrees		Mediu	m Trucks:	40.241		
	Right View:	90.0 degrees		Hea	vy Trucks:	40.262		
FHWA Noise Mod	el Calculation	IS		1				-
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Atte	n Berm Atten
Autos:	64.30	-5.24	1	.28	-1.20	-4.61	0.00	0.000
Medium Trucks:	75.75	-22.48	1	.31	-1.20	-4.87	° 0.00	0.000
Heavy Trucks:	81.57	-26.43	1	.31	-1.20	-5.50	0.00	0.000
Unmitigated Noise	e Levels (with	out Topo and ba	nrrier att	enuation)				
VehicleType	Leq Peak Ho	ur Leq Day	Leq	Evening	Leq Ni	ght	Ldn	CNEL
Autos:	59	9.1 58	.5	57.1		51.1	59.5	60.2
Medium Trucks:	50	3.4 50	.8	43.3		52.1	58.2	58.3
Heavy Trucks:	55	5.2 52	.5	49.1		53.8	60.0	60.1
Vehicle Noise:	61	1.4 60	.0	57.9		57.2	64.1	64.4
Centerline Distant	ce to Noise C	ontour (in feet)						
			7	0 dBA	65 dE	3A	60 dBA	55 dBA
		Lo	in:	18	38		82	177
		CNE	EL:	19	40		86	185

Tuesday, March 24, 2020

Tuesday, March 24, 2020

	FH	WA-RD-77-108	HIGHV	VAY NO	DISE PI	REDICTIO	N MOD	EL			
Scenar Road Nan Road Segme	io: E+P ne: 8th St. nt: e/o Drivew	ay 1				Project N Job Nui	lame: H mber: 1	lighlan 3073	d Springs	and 8th	
SITE	SPECIFIC IN	NPUT DATA				NC	DISE M	ODEL	INPUTS	5	
Highway Data				S	ite Con	ditions (H	lard = 1	10, Soi	ft = 15)		
Average Daily	Traffic (Adt):	5,618 vehicle	s				Α	utos:	15		
Peak Hour	Percentage:	7.37%			Ме	dium Truc	ks (2 A	xles):	15		
Peak H	our Volume:	414 vehicle	s		He	avy Truck	is (3+ A	xles):	15		
Ve	hicle Speed:	45 mph		V	ohiolo	Mix					
Near/Far La	ne Distance:	54 feet			Voh	icleType	1	)av	Evenina	Niaht	Daily
Site Data					ven	AL	itos: 7	75.5%	14.0%	10.5%	97.42%
Ba	rrier Height	0.0 feet			М	edium Tru	cks: 4	18.9%	2.2%	48.9%	1.84%
Barrier Type (0-V	/all. 1-Berm):	0.0				Heavy Tru	cks: 4	17.3%	5.4%	47.3%	0.74%
Centerline Di	st. to Barrier:	50.0 feet		A		uree Eler	vetiene	(in fo	o.41		
Centerline Dist.	to Observer:	50.0 feet		/*	0/36 30	Autoor	auons	00	=()		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucks:	2.0	00			
Observer Height	(Above Pad):	5.0 feet			Hoo	n Trucks.	2.2	06	Grada Adi	ustmon	+ 0.0
P	ad Elevation:	0.0 feet			nea	ry mucks.	0.0	00	orade Auj	usunon	0.0
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalent E	Distance	e (in fe	eet)		
	Road Grade:	0.0%				Autos:	42.3	79			
	Left View:	-90.0 degre	es		Mediu	m Trucks:	42.1	70			
	Right View:	90.0 degre	es		Hear	/y Trucks:	42.1	90			
FHWA Noise Mod	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresne	el E	Barrier Atte	en Bei	rm Atten
Autos:	68.46	-5.78		0.97		-1.20	-	4.65	0.0	00	0.000
Medium Trucks:	79.45	-23.02		1.01		-1.20	-	4.87	0.0	00	0.000
Heavy Trucks:	84.25	-26.97		1.00		-1.20	-	5.43	0.0	00	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	V I	Leq Eve	ening	Leq N	ight		Ldn	С	NEL
Autos:	62	2.5	61.8		60.5		54.4		62.9		63.5
Medium Trucks:	56	3.2	53.7		46.2		54.9		61.1		61.1
Heavy Trucks:	57	7.1	54.4		51.0		55.6		61.8		61.9
Vehicle Noise:	64	4.3	63.0		61.1		59.8		66.8		67.1
Centerline Distan	ce to Noise C	ontour (in fee	!)								
			T	70 dł	BA	65 dł	BA	60	) dBA	55	dBA
			Ldn:	30		65			141	3	304
		C	NEL:	32		69			148	3	318

	FH\	NA-RD-77-108	HIGHW	VAY NO	OISE PRED	CTION				
Scenar	io: E+P				Pro	ject Na	me: Highla	and Springs	and 8th	
Road Nam	e: Wilson St.				Jo	b Num	ber: 13073	3		
Road Segme	nt: e/o Highlan	d Springs Ave.								
SITE	SPECIFIC IN	IPUT DATA				NOI	SE MOD	EL INPUT	s	
Highway Data				S	ite Conditio	ns (Ha	ard = 10, S	Soft = 15)		
Average Daily	Traffic (Adt):	13,056 vehicles	8				Autos	s: 15		
Peak Hour	Percentage:	7.37%			Mediun	Truck	s (2 Axles	): 15		
Peak H	lour Volume:	962 vehicles	s		Heavy	Trucks	(3+ Axles	): 15		
Ve	hicle Speed:	45 mph		v	ehicle Mix				-	-
Near/Far La	ne Distance:	48 feet			VehicleT	ype	Day	Evening	Night	Daily
Site Data						Auto	os: 75.5	% 14.0%	10.5%	97.42
Ba	rrier Heiaht:	0.0 feet			Mediu	n Truc	ks: 48.9	% 2.2%	48.9%	1.849
Barrier Type (0-W	all, 1-Berm):	0.0			Heav	y Truc	ks: 47.3	% 5.4%	47.3%	0.749
Centerline Di	st. to Barrier:	50.0 feet		N	loise Sourc	Eleva	tions (in	feet)		
Centerline Dist.	to Observer:	50.0 feet			A	utos:	0.000			-
Barrier Distance	to Observer:	0.0 feet			, Medium Tr	ucks:	2 297			
Observer Height (	Above Pad):	5.0 feet			Heavy Tr	ucks:	8.006	Grade Ad	liustment	t: 0.0
P	ad Elevation:	0.0 feet								
Ro	ad Elevation:	0.0 feet		L	ane Equiva	lent Di	stance (in	feet)		
	Road Grade:	0.0%			A	utos:	44.147			
	Left View:	-90.0 degree	es		Medium Tr	ucks:	43.947			
	Right View:	90.0 degree	es		Heavy Ir	ucks:	43.966			
FHWA Noise Mod	el Calculation	s								-
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite Roa	d I	Fresnel	Barrier Att	ten Ber	rm Atter
Autos:	68.46	-2.12		0.71	-1.	20	-4.65	5 0.0	000	0.00
Medium Trucks:	79.45	-19.36		0.74	-1.	20	-4.87	° 0.0	000	0.00
Heavy Trucks:	84.25	-23.31		0.73	-1.	20	-5.43	8 0.0	000	0.00
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	uation)					
VehicleType	Leq Peak Hou	ır Leq Day	/ L	Leq Ev	ening L	.eq Nig	ht	Ldn	C	NEL
Autos:	65	i.9	65.2		63.9		57.8	66.3	3	66.
Medium Trucks:	59	.6	57.1		49.6		58.3	64.	5	64
Heavy Trucks:	60	1.5	57.8		54.4		59.0	65.3	2	65.
Vehicle Noise:	67	.7	66.4		64.5		63.2	70.	1	70.
Centerline Distant	e to Noise Co	ontour (in feet	)	70 d	DA .	ee dD		60 dBA	55	dDA
			I dn:	70 al	DA	110	•	227	1 22	UDA 512
		~	NEL:	51		116		231		526
		0	VLL.	34		113		243		

Scenario	: E+P				1	Project N	lame: Highl	and Springs	and 8th	
Road Name	e: 6th St.					Job Nu	mber: 1307	3		
Road Segmen	t: w/o Highlai	nd Springs Ave.								
SITE S	PECIFIC IN	NPUT DATA				NO	DISE MOD	EL INPUT	S	
Highway Data				Sit	e Cond	itions (l	lard = 10, S	Soft = 15)		
Average Daily 7	raffic (Adt):	17,946 vehicles	6				Auto	s: 15		
Peak Hour F	Percentage:	7.37%			Med	ium Truo	ks (2 Axles:	): 15		
Peak Ho	our Volume:	1,323 vehicles	6		Hea	vy Truck	is (3+ Axles	): 15		
Veh	icle Speed:	35 mph		Ve	hicle M	ix				
Near/Far Lan	e Distance:	58 feet			Vehic	leTvpe	Dav	Evenina	Night	Dailv
Site Data						AL	itos: 75.5	% 14.0%	10.5%	97.42
Par	ior Hoight:	0.0 foot			Med	dium Tru	cks: 48.9	% 2.2%	48.9%	1.849
Barrier Type (0-W/	ull 1-Rorm)	0.0			He	avy Tru	cks: 47.3	% 5.4%	47.3%	0.749
Centerline Dis	to Barrier	55.0 feet				,				
Centerline Dist_t	n Ohserver:	55.0 feet		No	ise Sou	irce Ele	vations (in	feet)		
Barrier Distance to	o Observer:	0.0 feet				Autos:	0.000			
Observer Height (#	hove Pad):	5.0 feet		1	Medium	Trucks:	2.297			
Pa	d Elevation:	0.0 feet			Heavy	Trucks:	8.006	Grade Adj	ustment	: 0.0
Roa	d Elevation:	0.0 feet		La	ne Equi	ivalent I	Distance (ir	feet)		
	oad Grade:	0.0%			,	Autos:	47.000	í		
	Left View:	-90.0 degree	s		Medium	Trucks:	46.811			
	Right View:	90.0 degree	es		Heavy	Trucks:	46.830			
FHWA Noise Mode	Calculation	s								
VehicleType	REMEL	Traffic Flow	Distan	ice	Finite F	load	Fresnel	Barrier Atte	en Ber	m Atten
Autos:	64.30	0.35		0.30		-1.20	-4.6	۶ 0.0	000	0.00
Medium Trucks:	75.75	-16.88		0.33		-1.20	-4.8	۶ 0.C	000	0.00
Heavy Trucks:	81.57	-20.84		0.32		-1.20	-5.38	3 0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrier a	ttenua	tion)					
VehicleType	eq Peak Ho	ur Leq Day	Le	eq Ever	ning	Leq N	ight	Ldn	CI	NEL
Autos:	63	3.8	63.1		61.8		55.7	64.2	2	64.
Medium Trucks:	58	3.0	55.4		47.9		56.7	62.8	3	62.
Heavy Trucks:	59	9.9	57.1		53.7		58.4	64.6	6	64.
Vehicle Noise:	66	5.0	64.6		62.5		61.8	68.7	7	69.
	te Neise C	ontour (in feet	)							
Centerline Distance	e to Noise C	(								
Centerline Distance	e lo Noise C			70 dB/	4	65 d	BA	60 dBA	55	dBA
Centerline Distance	e to noise C		Ldn:	70 dB/ 45	4	65 di 97	BA	60 dBA 209	55 4	dBA 50

		MA-IND-77-100	mon	WATN		KEDIC IIC						
Scena	rio: E+P					Project I	Vame: H	lighla	nd Spri	ngs and	d 8th	
Road Nar	ne: Ramsey St	t.				Job Nu	mber: *	13073				
Road Segme	ent: e/o Highlar	nd Springs Ave										
SITE	SPECIFIC IN	NPUT DATA				N	DISE N	/IODE	L INP	UTS		
Highway Data				5	Site Cor	ditions (	Hard =	10, Se	oft = 15	5)		
Average Daily	Traffic (Adt):	16,577 vehicle	s				,	Autos:	15			
Peak Hour	Percentage:	7.37%			Me	edium Tru	cks (2 A	(xles)	15			
Peak I	Hour Volume:	1,222 vehicle	s		He	eavy Truck	ks (3+ A	(xles)	15			
Ve	ehicle Speed:	45 mph		1	Vehicle	Mix						
Near/Far La	ane Distance:	58 feet		F	Veh	icleType		Day	Eveni	ing Ni	ght	Daily
Site Data				-		A	utos:	75.5%	6 14.0	0% 10	0.5%	97.42%
Ba	rrier Height:	0.0 feet			М	edium Tru	icks:	48.9%	5 2.1	2% 4	8.9%	1.84%
Barrier Type (0-V	Vall. 1-Berm):	0.0				Heavy Tru	icks:	47.3%	5.4	4% 4	7.3%	0.74%
Centerline D	ist. to Barrier:	55.0 feet		,	Noiso Si	ource Ele	vation	: (in f	oot)			
Centerline Dist.	to Observer:	55.0 feet		,	10/36 30			200	eer)			
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucko	. 21	207				
Observer Height	(Above Pad):	5.0 feet			Hoo	a Trucks		106	Grade	Adjust	ment <sup>.</sup>	0.0
P	ad Elevation:	0.0 feet			nea	ry mucho.	. 0.0	000				
Ro	ad Elevation:	0.0 feet		L	Lane Eq	uivalent	Distand	e (in	feet)			
	Road Grade:	0.0%				Autos.	47.0	000				
	Left View:	-90.0 degre	es		Mediu	m Trucks.	46.	B11				
	Right View:	90.0 degre	es		Hear	vy Trucks.	46.	830				
FHWA Noise Mod	el Calculation	IS										
VehicleType	REMEL	Traffic Flow	Dist	tance	Finite	Road	Fresn	el	Barrier	r Atten	Berr	n Atten
Autos:	68.46	-1.08		0.30	0	-1.20		-4.67		0.000		0.000
Medium Trucks:	79.45	-18.32		0.33	3	-1.20		-4.87		0.000		0.000
Heavy Trucks:	84.25	-22.28		0.32	2	-1.20		-5.38		0.000		0.000
Unmitigated Nois	e Levels (with	out Topo and	barrie	r atten	uation)							
VehicleType	Leq Peak Ho	ur Leq Daj	/	Leq E	vening	Leq N	light		Ldn		C٨	IEL
Autos:	66	6.5	65.8		64.5		58.5			66.9		67.5
Medium Trucks:	60	0.3	57.7		50.2		58.9	)		65.1		65.1
Heavy Trucks:	61	1.1	58.4		55.0		59.6	i		65.8		65.9
Vehicle Noise:	68	3.3	67.1		65.1		63.8	5		70.8		71.1
Centerline Distan	ce to Noise C	ontour (in fee	)									
				70 c	'BA	65 d	BA		60 dBA		55	dBA
			Ldn:	62	2	13	3		288		6	19
		С	NEL:	6	5	14	0		301		64	19

Tuesday, March 24, 2020

Tuesday, March 24, 2020

	FH	WA-RD-77-108	HIGHW	AY NO	DISE P	REDICTIO		DEL			
Scenar Road Nam Road Segme	io: OYC (2021 ne: Pennsylvar nt: n/o 8th St.	I) nia Ave.				Project I Job Nu	Vame: I Imber: `	Highla 13073	nd Springs	and 8t	h
SITE	SPECIFIC IN	VPUT DATA				N	DISE N	/IODE	L INPUT	s	
Highway Data				Si	ite Cor	nditions (	Hard =	10, S	oft = 15)		
Average Daily	Traffic (Adt):	11,202 vehicle	s					Autos.	15		
Peak Hour	Percentage:	7.37%			Me	edium Tru	cks (2 A	Axles).	15		
Peak H	lour Volume:	826 vehicle	s		He	avy Truci	ks (3+ A	Axles).	15		
Ve	hicle Speed:	30 mph		V	ohiclo	Mix					
Near/Far La	ne Distance:	34 feet			Veł	nicleTyne		Dav	Evenina	Niaht	Daily
Site Data					VCI	A	utos:	75.5%	6 14.0%	10.5	% 97.42%
Ba	rrier Height	0.0 feet			М	ledium Tru	icks:	48.9%	6 2.2%	48.99	% 1.84%
Barrier Type (0-W	/all. 1-Berm):	0.0				Heavy Tru	icks:	47.3%	6 5.4%	47.39	% 0.74%
Centerline Di	st. to Barrier:	33.0 feet		AL.	oico S	ourco Ela	vation	c (in f	oot)		
Centerline Dist.	to Observer:	33.0 feet		74	0136 3	Autos	· 01	3 ( <i>III I</i>	eel)		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucko	. 0.	207			
Observer Height (	(Above Pad):	5.0 feet			Hoo	wy Trucks	. 2.	106	Grade Ad	iustme	nt: 0.0
Pa	ad Elevation:	0.0 feet			neu	vy mucho	. 0.	500	0/000 / 10	Juounio	
Roa	ad Elevation:	0.0 feet		La	ane Eq	uivalent	Distand	ce (in	feet)		
	Road Grade:	0.0%				Autos	28.	723			
	Left View:	-90.0 degre	es		Mediu	m Trucks	: 28.	413			
	Right View:	90.0 degre	es		Hea	vy Trucks	: 28.	444			
FHWA Noise Mode	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresn	el	Barrier Att	en B	erm Atten
Autos:	61.75	-1.02		3.51		-1.20		-4.52	0.0	000	0.000
Medium Trucks:	73.48	-18.26		3.58		-1.20		-4.86	0.0	000	0.000
Heavy Trucks:	79.92	-22.22		3.57		-1.20		-5.69	0.0	000	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Daj	/ L	eq Eve	ening	Leq N	light		Ldn	(	CNEL
Autos:	63	3.0	62.4		61.0	)	55.0	)	63.4	1	64.1
Medium Trucks:	57	7.6	55.0		47.5	;	56.3	5	62.4	4	62.5
Heavy Trucks:	60	0.1	57.4		54.0	)	58.6	;	64.8	3	64.9
Vehicle Noise:	65	5.6	64.1		62.0	)	61.7	,	68.4	4	68.7
Centerline Distant	ce to Noise C	ontour (in feel	)								-
				70 dE	BA	65 d	BA		60 dBA	5	5 dBA
			Ldn:	26		56	6		121		260
		С	NEL:	27		58	3		126		270

	FHV	VA-RD-77-108	HIGH	WAY NO	OISE PI	REDICT	ION MC	DEL			
Scenario	o: OYC (2021)	)				Project	Name:	Highla	nd Springs	and 8th	
Road Name	e: Pennsylvani	ia Ave.				Job N	lumber:	13073			
Road Segmen	t: s/o 8th St.										
SITE S	PECIFIC IN	PUT DATA				Ν	IOISE	MODE	L INPUT	S	
Highway Data				s	ite Con	ditions	(Hard =	: 10, S	oft = 15)		
Average Daily	Fraffic (Adt): 1	1,388 vehicles	s					Autos	15		
Peak Hour I	Percentage:	7.37%			Me	dium Tr	ucks (2	Axles)	15		
Peak Ho	our Volume:	839 vehicles	s		He	avy Tru	cks (3+	Axles)	15		
Vel	nicle Speed:	30 mph		v	ehicle l	Mix					
Near/Far Lar	e Distance:	24 feet			Veh	icleType	,	Day	Evening	Night	Daily
Site Data							Autos:	75.5%	6 14.0%	10.5%	97.42%
Bar	rier Height:	0.0 feet			M	edium T	rucks:	48.9%	6 2.2%	48.9%	1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			ŀ	Heavy T	rucks:	47.3%	5.4%	47.3%	0.74%
Centerline Dis	t. to Barrier:	39.0 feet		N	loise Sr	ource E	levation	is (in f	eet)		
Centerline Dist. t	o Observer:	39.0 feet		-	0.00 00	Auto	s <sup>.</sup> 0	000			
Barrier Distance t	o Observer:	0.0 feet			Mediu	m Truck	s: 2	297			
Observer Height (/	Above Pad):	5.0 feet			Heav	v Truck	s: 8	.006	Grade Ad	justment	: 0.0
Pa	d Elevation:	0.0 feet		-	_						
Roa	d Elevation:	0.0 feet		L	ane Eq	uivalen	t Distan	ce (in	feet)		
F	load Grade:	0.0%				Auto	s: 37	.443			
	Left View:	-90.0 degree	es		Mediu	m Truck	S: 37	.200			
	Right view:	90.0 degree	es		neav	y muck	8. 31	.230			
FHWA Noise Mode	I Calculations	5									
VehicleType	REMEL	Traffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	61.75	-0.95		1.78		-1.20		-4.58	0.0	000	0.00
Medium Trucks:	73.48	-18.19		1.82		-1.20		-4.87	0.0	000	0.00
Heavy Trucks:	79.92	-22.15		1.82		-1.20		-5.57	0.0	000	0.00
Unmitigated Noise	Levels (with	out Topo and	barrie	er attenu	uation)						
VehicleType	Leq Peak Hou	r Leq Day	/	Leq Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	61.	.4	60.7		59.4		53.	4	61.6	В	62.
Medium Trucks:	55.	.9	53.3		45.8		54.	6	60.	В	60.
Heavy Trucks:	58.	.4	55.7		52.3		56.	9	63.	1	63.
Vehicle Noise:	63.	.9	62.5		60.3		60.	0	66.	8	67.
Centerline Distance	e to Noise Co	ntour (in feet	)	70.				1			10.4
			1.10	70 di	ВА	65	aBA	1	5U dBA	55	aBA
		~	LUN.	24		-			115	-	147

FHWA-RD-7/-108 HIGHWAY NOISE Scenario: OYC (2021) Road Name: Xenia Ave. Road Segment: n/o 8th St.	Project Name: Highland Springs and 8th Job Number: 13073
Scenario: OYC (2021) Road Name: Xenia Ave. Road Segment: n/o 8th St.	Project Name: Highland Springs and 8th Job Number: 13073
Road Name: Xenia Ave. Road Segment: n/o 8th St.	Job Number: 13073
Road Segment: n/o 8th St.	
SITE SPECIEIC INDUT DATA	
SITE SPECIFIC INPUT DATA	NOISE MODEL INPUTS
Highway Data Site Co	Conditions (Hard = 10, Soft = 15)
Average Daily Traffic (Adt): 6,863 vehicles	Autos: 15
Peak Hour Percentage: 7.37%	Medium Trucks (2 Axles): 15
Peak Hour Volume: 506 vehicles	Heavy Trucks (3+ Axles): 15
Vehicle Speed: 45 mph	lo Mix
Near/Far Lane Distance: 54 feet	lehicleType Day Evening Night Daily
Site Data	Autos: 75.5% 14.0% 10.5% 97.42
Barrier Height 0.0 feet	Medium Trucks: 48.9% 2.2% 48.9% 1.84
Barrier Tune (0 Wall 1 Rem): 0.0	Heavy Trucks: 47.3% 5.4% 47.3% 0.74
Centerline Dist to Barrier: 50.0 feet	
Centerline Dist. to Observer: 50.0 feet	Source Elevations (in feet)
Barrier Distance to Observer: 0.0 feet	Autos: 0.000
Observer Height (Above Pad): 5.0 feet	dium Trucks: 2.297
Pad Elevation: 0.0 feet	eavy Trucks: 8.006 Grade Adjustment: 0.0
Road Elevation: 0.0 feet Lane E	Equivalent Distance (in feet)
Road Grade: 0.0%	Autos: 42.379
Left View: -90.0 degrees Med	dium Trucks: 42.170
Right View: 90.0 degrees He	eavy Trucks: 42.190
FHWA Noise Model Calculations	its Daard - Frankel - Damin Attan - Dama Atta
Venicle Type REMEL Trattic Flow Distance Fini	1 20 4 65 0,000 0,00
Autos. 00.40 -4.91 0.97 Modium Trucks: 70.45 22.15 1.01	-1.20 -4.65 0.000 0.00
Heavy Trucks: 13:43 =22:13 1:01	-1.20 -5.43 0.000 0.00
Theavy Trucks. 04.20 -20.11 1.00	-1.20 -0.40 0.000 0.00
Unmitigated Noise Levels (without Topo and barrier attenuation	n)
Venicle Type Leq Peak Hour Leq Day Leq Evening	g Leq Night Lan CNEL
Autos: 63.3 62.6 61	1.3 55.3 63.7 64
Medium Trucks: 57.1 54.5 47	7.0 55.8 62.0 62
Heavy Trucks: 58.0 55.2 51	1.8 56.5 62.7 62
Venicle Noise: 65.2 63.9 61	1.9 60.7 67.6 67
Centerline Distance to Noise Contour (in feet)	
70 dBA	65 dBA 60 dBA 55 dBA
Ldn: 35	75 161 347
CNEL: 36	78 169 364

	FHV	VA-RD-77-108 H	IGHWAY	NOISE PF	REDICTIO	N MODEL		
Scenar Road Nam Road Segme	io: OYC (2021 ne: Allegheny S nt: s/o 8th St.	) St.			Project Na Job Nun	ame: Highla nber: 13073	and Springs	and 8th
SITE	SPECIFIC IN	IPUT DATA			NO	ISE MODI	EL INPUT	5
Highway Data				Site Con	ditions (H	ard = 10, S	oft = 15)	
Average Daily	Traffic (Adt):	782 vehicles				Autos	: 15	
Peak Hour	Percentage:	7.37%		Me	dium Truci	ks (2 Axles)	: 15	
Peak H	our Volume:	58 vehicles		He	avy Trucks	s (3+ Axles)	: 15	
Ve	hicle Speed:	35 mph		Vahiala	liv			
Near/Far La	ne Distance:	34 feet		Vehicle	iolo Tuno	Dav	Evoning	Night Doily
Site Data				ven	Au	tos: 75.5%	6 14.0%	10.5% 97.42%
One Data		0.0.6		Me	adium Truc	ks: 48.9	% 2.2%	48.9% 1.84%
Barrier Turne (0.14	rrier Height:	0.0 reet		ŀ	leavy Truc	ks: 47.39	6 5.4%	47.3% 0.74%
Centerline Di	st to Barrier	33.0 feet						
Centerline Dist	to Observer:	33.0 feet		Noise So	ource Elev	ations (in f	feet)	
Barrier Distance	to Observer:	0.0 feet			Autos:	0.000		
Observer Height	(Above Pad):	5.0 feet		Mediur	n Trucks:	2.297		
P	ad Elevation:	0.0 feet		Heav	y Trucks:	8.006	Grade Adj	ustment: 0.0
Ro	ad Elevation:	0.0 feet		Lane Equ	uivalent D	istance (in	feet)	
	Road Grade:	0.0%			Autos:	28.723		
	Left View:	-90.0 degrees		Mediur	n Trucks:	28.413		
	Right View:	90.0 degrees		Heav	y Trucks:	28.444		
FHWA Noise Mode	el Calculation	s						
VehicleType	REMEL	Traffic Flow	Distance	e Finite	Road	Fresnel	Barrier Att	en Berm Atten
Autos:	64.30	-13.25	3	.51	-1.20	-4.52	0.0	0.00
Medium Trucks:	75.75	-30.49	3	.58	-1.20	-4.86	0.0	00.00
Heavy Trucks:	81.57	-34.44	3	.57	-1.20	-5.69	0.0	0.000
Unmitigated Noise	e Levels (with	out Topo and ba	rrier atte	enuation)				
VehicleType	Leq Peak Hou	r Leq Day	Leq	Evening	Leq Ni	ght	Ldn	CNEL
Autos:	53	.4 52	.7	51.4		45.4	53.8	3 54.4
Medium Trucks:	47	.6 45	.1	37.6		46.3	52.5	i 52.
Heavy Trucks:	49	.5 46	.8	43.4		48.0	54.2	2 54.3
Vehicle Noise:	55	.6 54	.2	52.2		51.5	58.3	58.6
Centerline Distant	ce to Noise Co	ontour (in feet)						
		-	7	0 dBA	65 dB	A	60 dBA	55 dBA
		La	In:	5	12		26	55
		CNE	L:	6	12		27	57

Tuesday, March 24, 2020

Tuesday, March 24, 2020

	FH\	WA-RD-77-108	HIGHW	AY NO	DISE P	REDICTIC	ON MOE	DEL			
Scenai Road Nan Road Segme	rio: OYC (2021 ne: Highland S ent: n/o Wilson				Project N Job Nu	<i>lame:</i> ⊦ mber: 1	lighlan 3073	d Springs	and 8th		
SITE	SPECIFIC IN	NPUT DATA				NC	DISE M	IODEI	INPUT	S	
Highway Data				S	ite Cor	nditions (I	lard = 1	10, So	ft = 15)		
Average Daily	Traffic (Adt):	23,862 vehicle	s				A	lutos:	15		
Peak Hour	Percentage:	7.37%			Me	edium Truc	cks (2 A	xles):	15		
Peak H	Hour Volume:	1,759 vehicle	s		He	avy Truck	(3+ A	xles):	15		
Ve	ehicle Speed:	35 mph		V	ohiolo	Miy					
Near/Far La	ane Distance:	58 feet			Vor	nicleType		791/	Evenina	Night	Daily
Site Data					VCI	Ai	itos:	75.5%	14.0%	10.5%	97.42%
Ba	wier Height	0.0 feet			Μ	ledium Tru	icks: 4	18.9%	2.2%	48.9%	1.84%
Barrior Type (0.1/	Voll 1 Rorm):	0.0 1001				Heavy Tru	icks: 4	17.3%	5.4%	47.3%	0.74%
Centerline D	ist to Barrier:	55.0 feet									
Centerline Dist	to Observer:	55.0 feet		N	oise S	ource Ele	vations	(in fe	et)		
Barrier Distance	to Observer:	0.0 feet				Autos:	0.0	00			
Observer Height	(Above Pad):	5.0 feet			Mediu	m Trucks:	2.2	97			
P	ad Elevation:	0.0 feet			Hea	vy Trucks:	8.0	06	Grade Adj	iustment	: 0.0
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent I	Distanc	e (in f	eet)		
	Road Grade:	0.0%				Autos	47.0	00	,		
	Left View:	-90.0 degre	25		Mediu	m Trucks:	46.8	11			
	Right View:	90.0 degre	es		Hea	vy Trucks:	46.8	30			
FHWA Noise Mod	lel Calculation	IS		-							
VehicleType	REMEL	Traffic Flow	Distar	nce	Finite	Road	Fresne	el l	Barrier Atte	en Ber	m Atten
Autos:	64.30	1.59		0.30		-1.20	-	4.67	0.0	000	0.000
Medium Trucks:	75.75	-15.65		0.33		-1.20	-	4.87	0.0	000	0.000
Heavy Trucks:	81.57	-19.60		0.32		-1.20		5.38	0.0	000	0.000
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)						
VehicleType	Leq Peak Hou	ur Leq Day	/ L	eq Ev	ening	Leq N	light		Ldn	C	NEL
Autos:	65	5.0	64.3		63.0		57.0		65.4	Ļ	66.0
Medium Trucks:	59	9.2	56.7		49.2		57.9		64.1		64.1
Heavy Trucks:	61	1.1	58.4		55.0		59.6		65.8	3	65.9
Vehicle Noise:	67	7.2	65.9		63.8		63.1		69.9	)	70.2
Centerline Distan	ce to Noise C	ontour (in feet	)								
				70 di	BA	65 d	BA	6	0 dBA	55	dBA
			Ldn:	54		117	7		253	5	44
		С	NEL:	57		122	2		264	5	68

Scenario.	OYC (2021)				Project Na	me: H	lighlar	nd Springs	and 8th			
Road Name.	Highland Sprin	gs Ave.			Job Num	ber: 1	3073					
Road Segment.	s/o Wilson St.											
SITE SI	PECIFIC INPU	T DATA			NOI	SE M	ODE	l input	s			
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily Tr	affic (Adt): 25,6	63 vehicles				A	utos:	15				
Peak Hour P	ercentage: 7	.37%		Med	lium Truck	s (2 A	xles):	15				
Peak Ho	ur Volume: 1,8	91 vehicles		Hea	vy Trucks	(3+ A	xles):	15				
Vehi	cle Speed:	35 mph	ŀ	Vehicle M	ix							
Near/Far Lane	Distance:	58 feet	ŀ	Vehic	leTvpe	1	Dav	Evenina	Niaht	Dailv		
Site Data					Auto	os: 7	75.5%	14.0%	10.5%	97.42		
Barri	er Height:	0.0 feet		Me	dium Truc	ks: 4	18.9%	2.2%	48.9%	1.84		
Barrier Type (0-Wa	I. 1-Berm):	0.0		н	eavy Truc	ks: 4	17.3%	5.4%	47.3%	0.74		
Centerline Dist.	to Barrier:	55.0 feet	-	Nolos Co			() - K-	- 41				
Centerline Dist. to	Observer:	55.0 feet	-	NOISE SOL	Irce Eleva	nuons	(In re	et)				
Barrier Distance to	Observer:	0.0 feet		Modium	Autos:	0.0	00					
Observer Height (A	bove Pad):	5.0 feet		Healun	Trucks.	2.2	97 06	Grada Ad	iustmon	H 0 0		
Pad	Elevation:	0.0 feet		neavy	TTUCKS.	0.0	00	Grade Au	usunen	. 0.0		
Road	Elevation:	0.0 feet		Lane Equ	ivalent Di	stanc	e (in f	feet)				
Re	ad Grade:	0.0%			Autos:	47.0	00					
	Left View: -9	0.0 degrees		Medium	Trucks:	46.8	11					
ŀ	Right View:	0.0 degrees		Heavy	/ Trucks:	46.8	30					
FHWA Noise Model	Calculations		I									
VehicleType	REMEL Tr	affic Flow Dis	stance	Finite F	Road	resne	el .	Barrier Att	en Ber	rm Atter		
Autos:	64.30	1.91	0.3	0	-1.20	-	4.67	0.0	000	0.00		
Medium Trucks:	75.75	-15.33	0.3	3	-1.20	-	4.87	0.0	000	0.00		
Heavy Trucks:	81.57	-19.29	0.3	2	-1.20	-	5.38	0.0	000	0.00		
Unmitigated Noise I	evels (without.	Topo and barri	er atter	uation)								
VehicleType L	eq Peak Hour	Leq Day	Leq E	vening	Leq Nig	ht		Ldn	C	NEL		
Autos:	65.3	64.6		63.3		57.3		65.	7	66		
Medium Trucks:	59.5	57.0		49.5		58.2		64.4	1	64		
Heavy Trucks:	61.4	58.7		55.3		59.9		66.	1	66		
Vehicle Noise:	67.5	66.2		64.1		63.4		70.3	2	70		
Centerline Distance	to Noise Conto	our (in feet)			-		-	-				
			70	dBA	65 dB/	1	6	i0 dBA	55	dBA		
				7	100			265	6	571		
		Lan:	5	<i></i>	123			200				

	FH	WA-RD-77-108	HIGHW	AY NC	ISE PR	EDICTIC	ON MODEL			
Scenar Road Narr Road Segme	io: OYC (2021 ne: Highland S nt: n/o Ramse	I) springs Ave. sy St.				Project N Job Nu	<i>Vame:</i> High mber: 1307	and Springs a	and 8th	
SITE	SPECIFIC I	NPUT DATA				NC	DISE MOD	EL INPUTS	5	
Highway Data				Si	te Cond	ditions (I	Hard = 10, 3	Soft = 15)		
Average Daily Peak Hour	Traffic (Adt): Percentage:	26,014 vehicle 7.37%	s		Mee	dium Truc	Auto cks (2 Axles	s: 15 ;): 15		
Peak F	lour Volume:	1,917 vehicle	s		Hea	avy Truck	ks (3+ Axles	:): 15		
Ve	hicle Speed:	30 mph		Ve	hicle N	lix				
Near/Far La	ne Distance:	58 feet			Vehi	cleTvpe	Dav	Evenina	Night Da	ailv
Site Data						A	utos: 75.5	% 14.0%	10.5% 97.	.42%
Ba	rrier Heiaht	0.0 feet			Ме	dium Tru	icks: 48.9	% 2.2%	48.9% 1.	.84%
Barrier Type (0-W	/all, 1-Berm):	0.0			H	leavy Tru	icks: 47.3	% 5.4%	47.3% 0.	.74%
Centerline Di	st. to Barrier:	55.0 feet		No	oise So	urce Ele	vations (in	feet)		
Centerline Dist.	to Observer:	55.0 feet				Autos:	0.000			
Barrier Distance	to Observer:	0.0 feet			Mediun	n Trucks:	2.297			
Observer Height	(Above Pad):	5.0 feet			Heav	y Trucks:	8.006	Grade Adji	ustment: 0.0	)
- Po	ad Elevation.	0.0 feet		1:	no Fai	uivalent l	Distanco (ii	1 feet)		
Ru	Bood Crodo	0.0 teet			ne Lyc	Autor	47.000	riccij		
	Loft Viow:	0.0%			Modium	n Trucke	46.911			
	Right View:	90.0 degre	es		Heav	y Trucks:	46.830			
FHWA Noise Mod	el Calculation	IS								
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresnel	Barrier Atte	en Berm A	tten
Autos:	61.75	2.64		0.30		-1.20	-4.6	7 0.0	00 0	0.000
Medium Trucks:	73.48	-14.60		0.33		-1.20	-4.8	7 0.0	00 0	0.000
Heavy Trucks:	79.92	-18.56		0.32		-1.20	-5.3	8 0.0	00 0	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)					
VehicleType	Leq Peak Ho	ur Leq Daj	/ L	.eq Eve	ning	Leq N	light	Ldn	CNEL	
Autos:	63	3.5	62.8		61.5		55.5	63.9		64.5
Medium Trucks:	58	3.0	55.4		47.9		56.7	62.9		62.9
Heavy Trucks:	60	0.5	57.8		54.4		59.0	65.2		65.3
Vehicle Noise:	6	5.0	64.6		62.4		62.1	68.9		69.1
Centerline Distant	ce to Noise C	ontour (in feel	)							
				70 dE	8A	65 di	BA	60 dBA	55 dBA	1
			Ldn:	46		100	D	215	462	
		С	NEL:	48		104	4	223	481	

	FHV	VA-RD-77-108	HIGHWA	Y NOISE F	PREDICTI	ON MODEL				
Scenar Road Nam Road Segme	io: OYC (2021 le: Highland S nt: s/o Ramsey	) prings Ave. / St.			Project Job N	Name: High umber: 130	land Sprin 73	gs and	d 8th	
SITE	SPECIFIC IN	IPUT DATA			N	IOISE MOD	DEL INPL	JTS		
Highway Data				Site Co	nditions	(Hard = 10,	Soft = 15)			
Average Daily	Traffic (Adt):	35,531 vehicles				Auto	os: 15			
Peak Hour	Percentage:	7.37%		M	edium Tru	ucks (2 Axle	s <i>):</i> 15			
Peak H	lour Volume:	2,619 vehicles		н	eavy Truc	cks (3+ Axle	s <i>):</i> 15			
Ve	hicle Speed:	35 mph		Vohiolo	Mix					
Near/Far La	ne Distance:	78 feet		Venicle	hicleType	Day	Evenin	a Ni	aht Dails	
Site Data				10	nicie i ype	Autos: 75	5% 14.0	9 / 10 % 10	0.5% 97.42	, 2%
Ba	wier Height	0.0 feet		٨	, Aedium Tr	rucks: 48.9	9% 2.2 <sup>4</sup>	% 4	3.9% 1.84	1%
Barrior Type (0.14	all 1 Rorm):	0.0 feet			Heavy Tr	rucks: 47.3	3% 5.4	% 4	7.3% 0.74	1%
Centerline Di	st to Barrier	67.0 feet								
Centerline Dist.	to Observer:	67.0 feet		Noise S	Source El	evations (in	feet)			
Barrier Distance	to Observer:	0.0 feet			Autos	s: 0.000				
Observer Height	Above Pad);	5.0 feet		Medi	um Trucks	s: 2.297	0	A		
P	ad Elevation:	0.0 feet		Hea	avy Trucks	s: 8.006	Grade	Adjust	ment: 0.0	
Ro	ad Elevation:	0.0 feet		Lane E	quivalent	Distance (i	n feet)			
	Road Grade:	0.0%			Autos	s: 54.708				
	Left View:	-90.0 degree	5	Medi	um Trucks	s: 54.546				
	Right View:	90.0 degree	5	Hea	avy Trucks	s: 54.562				
FHWA Noise Mode	el Calculation	s								
VehicleType	REMEL	Traffic Flow	Distand	ce Finite	e Road	Fresnel	Barrier	Atten	Berm Atte	n
Autos:	64.30	3.32	-	0.69	-1.20	-4.7	'1	0.000	0.0	00
Medium Trucks:	75.75	-13.92	-	0.67	-1.20	-4.8	8	0.000	0.0	00
Heavy Trucks:	81.57	-17.87	-	0.67	-1.20	-5.2	9	0.000	0.0	.00
Unmitigated Noise	e Levels (with	out Topo and I	arrier at	tenuation)	1					
VehicleType	Leq Peak Hou	ır Leq Day	Le	q Evening	Leq	Night	Ldn		CNEL	
Autos:	65	.7 6	5.0	63.	7	57.7	6	6.1	66	3.8
Medium Trucks:	60	.0 5	7.4	49.	9	58.6	6	4.8	64	1.8
Heavy Trucks:	61	.8 5	9.1	55.	7	60.4	6	6.6	66	3.6
Vehicle Noise:	68	.0 6	6.6	64.	5	63.8	7	0.7	70	).9
Centerline Distant	e to Noise Co	ontour (in feet)								_
				70 dBA	65 0	dBA	60 dBA		55 dBA	
		L	.dn:	74	16	50	345		742	
		Ch	IEL:	77	16	67	360		775	

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	FH	WA-RD-77-108	HIGHW					EL					
Scenar Road Nan Road Segme	io: OYC (2021 ne: Highland S nt: s/o I-10	) prings Ave.			Project Name: Highland Springs and 8th Job Number: 13073								
SITE	SPECIFIC IN	IPUT DATA			NOISE MODEL INPUTS								
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	43,164 vehicle	s				A	utos:	15				
Peak Hour	Percentage:	7.37%			Me	edium Truc	cks (2 Ax	des):	15				
Peak H	our Volume:	3,181 vehicle	s		He	avy Truck	(3+ Ax	des):	15				
Ve	hicle Speed:	35 mph		V	ohiclo	Mix							
Near/Far La	ne Distance:	78 feet			Veł	nicleType		av E	venina	Niaht	Daily		
Site Data					101	AL	itos: 7	5.5%	14.0%	10.5%	97.42%		
Ba	rrier Height	0.0 feet			М	edium Tru	icks: 4	8.9%	2.2%	48.9%	1.84%		
Barrier Type (0-V	/all_1-Rerm)	0.0				Heavy Tru	icks: 4	7.3%	5.4%	47.3%	0.74%		
Centerline Di	ist, to Barrier:	67.0 feet			0			() K K					
Centerline Dist.	to Observer:	67.0 feet		N	oise S	ource Ele	vations	(In reet,	)				
Barrier Distance	to Observer:	0.0 feet			11-10	Autos:	0.00	50					
Observer Height	(Above Pad):	5.0 feet			Heat	III TIUCKS.	2.28	97 De Ci	rado Adi	istmont	0.0		
P	ad Elevation:	0.0 feet			пеа	vy mucks.	0.00	0 01	aue Auji	Journerit	0.0		
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalent l	Distance	e (in fee	t)				
	Road Grade:	0.0%				Autos:	54.70	08					
	Left View:	-90.0 degre	es		Mediu	m Trucks:	54.54	46					
	Right View:	90.0 degre	es		Hea	vy Trucks:	54.56	52					
FHWA Noise Mod	el Calculation	IS											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	I Ba	rrier Atte	en Ber	m Atten		
Autos:	64.30	4.17		-0.69		-1.20	-4	4.71	0.0	00	0.000		
Medium Trucks:	75.75	-13.07		-0.67		-1.20	-4	4.88	0.0	00	0.000		
Heavy Trucks:	81.57	-17.03		-0.67		-1.20	-{	5.29	0.0	00	0.000		
Unmitigated Nois	e Levels (with	out Topo and	barrier a	attenu	ation)								
VehicleType	Leq Peak Ho	ur Leq Daj	/ L	eq Eve	ening	Leq N	light	Lo	dn	CI	VEL		
Autos:	66	3.6	65.9		64.6		58.6		67.0		67.6		
Medium Trucks:	60	).8	58.2		50.7		59.5		65.7		65.7		
Heavy Trucks:	62	2.7	59.9		56.6		61.2		67.4		67.5		
Vehicle Noise:	68	3.8	67.4		65.4		64.7		71.5		71.8		
Centerline Distan	ce to Noise C	ontour (in feel	)										
				70 dł	BA	65 d	BA	60 0	dBA	55	dBA		
			Ldn:	85		182	2	39	92	8	45		
		С	NEL:	88		190	)	40	)9	8	82		

Scenario: OYC (20	021)			Pro	oject Name:	Highla	nd Springs	and 8th				
Road Name: 8th St.				J	ob Number:	13073						
Road Segment: w/o Pen	nsylvania Av	e.										
SITE SPECIFIC	INPUT DA	ATA			NOISE	MODE		s				
Highway Data				Site Conditions (Hard = 10, Soft = 15)								
Average Daily Traffic (Adt	): 5,274 ve	hicles				Autos:	15					
Peak Hour Percentage	e: 7.37%			Mediur	n Trucks (2	Axles):	15					
Peak Hour Volume	e: 389 ve	hicles		Heavy	Trucks (3+	Axles):	15					
Vehicle Speed	<i>l:</i> 30 m	ph	1	Vehicle Mix								
Near/Far Lane Distance	e: 34 fe	et	-	Vehicle	ype	Day	Evening	Night	Daily			
Site Data					Autos:	75.5%	14.0%	10.5%	97.42			
Barrier Heigh	t: 0.0 f	eet		Mediu	m Trucks:	48.9%	2.2%	48.9%	1.84			
Barrier Type (0-Wall, 1-Berm	): 0.0			Hea	/y Trucks:	47.3%	5.4%	47.3%	0.74			
Centerline Dist. to Barrie	r: 33.0 f	eet	-	Noise Sourc	o Flovation	ne (in fi	aat)					
Centerline Dist. to Observe	r: 33.0 f	eet	-	torse obure	lutos: 0	000						
Barrier Distance to Observe	r: 0.0 f	eet		Medium T	unos. 0 rucke: 2	207						
Observer Height (Above Pad	): 5.0 f	eet		Ηροιη/Τ	ucke: 8	006	Grade Ad	iustment	0.0			
Pad Elevation	n: 0.0 f	eet		noury n	40/10. 0	.000						
Road Elevation	n: 0.0 f	eet	1	Lane Equiva	lent Distar	nce (in	feet)					
Road Grade	e: 0.0%	J		,	Autos: 28	.723						
Left View	v: -90.0 c	legrees		Medium T	rucks: 28	.413						
Right View	v: 90.0 c	legrees		Heavy T	ucks: 28	.444						
FHWA Noise Model Calculat	ons											
VehicleType REMEL	Traffic F	low Dis	stance	Finite Roa	d Fres	nel	Barrier Att	en Ber	m Atter			
Autos: 61	75	-4.29	3.5	1 -1	.20	-4.52	0.0	000	0.00			
Medium Trucks: 73	48 -2	21.53	3.5	8 -1	.20	-4.86	0.0	000	0.00			
Heavy Trucks: 79	92 -2	25.49	3.5	7 -1	.20	-5.69	0.0	000	0.00			
Unmitigated Noise Levels (w	ithout Topo	and barri	er atten	uation)								
VehicleType Leq Peak	Hour Le	q Day	Leq E	vening	Leq Night		Ldn	CI	VEL			
Autos:	59.8	59.1		57.8	51	.8	60.2	2	60			
Medium Trucks:	54.3	51.8		44.3	53.	.0	59.2	2	59			
Heavy Trucks:	56.8	54.1		50.7	55.	.3	61.5	5	61			
Vehicle Noise:	62.3	60.8		58.7	58	.4	65.2	2	65			
Centerline Distance to Noise	Contour (ir	1 feet)										
		Т	70 0	dBA	65 dBA	e	60 dBA	55	dBA			
		I dn	1	6	34		73	1	57			
		Earn.		-								

	FH	WA-RD-77-108	HIGHV	VAY NO	DISE PR	EDICTI	ON MOD	EL					
Scenar Road Nam Road Segmei	io: OYC (2021 e: 8th St. nt: e/o Pennsy	I) /Ivania Ave.			Project Name: Highland Springs and 8th Job Number: 13073								
SITE	SPECIFIC IN	NPUT DATA				N	OISE M	ODEL INP	UTS				
Highway Data				Si	te Cond	ditions	(Hard = 1	0, Soft = 15	)				
Average Daily Peak Hour Peak H	Traffic (Adt): Percentage: lour Volume:	6,241 vehicle 7.37% 460 vehicle	s		Mee Hea	dium Tra avy Truc	A ucks (2 A cks (3+ A	utos: 15 des): 15 des): 15					
Ve	hicle Speed:	35 mph		V	ehicle N	lix							
Near/Far La	ne Distance:	36 feet			Vehi	cleType	Ĺ	Day Eveni	ng Nig	ght Daily			
Site Data						A	Autos: 7	5.5% 14.0	0% 10	0.5% 97.42%			
Bai	rier Height	0.0 feet			Me	dium Ti	rucks: 4	8.9% 2.2	2% 48	8.9% 1.84%			
Barrier Type (0-W	all, 1-Berm):	0.0			H	leavy Ti	rucks: 4	7.3% 5.4	47	.3% 0.74%			
Centerline Dis	st. to Barrier:	44.0 feet		N	oise So	urce El	evations	(in feet)					
Centerline Dist.	to Observer:	44.0 feet				Auto:	s: 0.0	0					
Barrier Distance	to Observer:	0.0 feet			Mediur	n Truck	s: 2.2	97					
Observer Height (	Above Pad):	5.0 feet			Heav	v Truck	s: 8.0	6 Grade	Adjustr	nent: 0.0			
Pa	ad Elevation:	0.0 feet							,				
Roa	ad Elevation:	0.0 feet		La	ane Equ	iivalent	Distance	e (in feet)					
1	Road Grade:	0.0%				Autos	s: 40.4	60					
	Left View:	-90.0 degre	es		Mediun	n Truck	s: 40.2	41					
	Right View:	90.0 degre	es		Heav	y Truck:	s: 40.2	62					
FHWA Noise Mode	el Calculation	IS											
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresne	Barrier	Atten	Berm Atten			
Autos:	64.30	-4.23		1.28		-1.20	-	4.61	0.000	0.000			
Medium Trucks:	75.75	-21.47		1.31		-1.20	-	4.87	0.000	0.000			
Heavy Trucks:	81.57	-25.43		1.31		-1.20	-	5.50	0.000	0.000			
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)								
VehicleType	Leq Peak Ho	ur Leq Daj	v 1	Leq Eve	ening	Leq	Night	Ldn		CNEL			
Autos:	60	D.1	59.5		58.1		52.1		60.6	61.2			
Medium Trucks:	54	4.4	51.8		44.3		53.1	1	59.2	59.3			
Heavy Trucks:	56	5.2	53.5		50.1		54.8		61.0	61.1			
Vehicle Noise:	62	2.4	61.0		58.9		58.2		65.1	65.4			
Centerline Distance	e to Noise C	ontour (in feel	t)										
				70 dE	BA	65	dBA	60 dBA		55 dBA			
			Ldn:	21		4	5	96		207			
		С	NEL:	22		4	7	100		216			

	FHV	VA-RD-77-108 I	HIGH	WAY N	IOISE PR	EDICTIO	ON MODEL						
Scenario Road Name Road Segment	: OYC (2021 : 8th St. : e/o Xenia A	) ve.			Project Name: Highland Springs and 8th Job Number: 13073								
SITE S	PECIFIC IN	IPUT DATA			NOISE MODEL INPUTS								
Highway Data					Site Con	litions (	Hard = 10, S	oft = 15)					
Average Daily T	raffic (Adt):	6,803 vehicles					Autos	15					
Peak Hour P	Percentage:	7.37%			Mee	dium Tru	cks (2 Axles)	15					
Peak Ho	ur Volume:	501 vehicles			Hea	avy Truc	ks (3+ Axles)	: 15					
Veh	Vehicle Speed: 35 mph												
Near/Far Lan		VehicleType Day Evening Night Dail											
Site Data				-	1011	Δ	utos: 75.5%	6 14.0%	10.5%	97.42%			
					Me	dium Tri	icks: 48.9%	6 2.2%	48.9%	1.84%			
Barr.	ier Height:	0.0 feet			- F	leavy Tri	icks: 47.3%	6 54%	47.3%	0.74%			
Barrier Type (U-Wa	III, 1-Berm):	0.0				outy n		0.170		0.1 170			
Centerline Dist	. lo barrier.	44.0 feet		1	Noise So	urce Ele	vations (in f	eet)					
Barrior Distance to	Observer.	44.0 feet				Autos	0.000						
Observer Height (A	hovo Pod):	5.0 feet			Mediur	n Trucks	2.297						
Doserver meight (A	d Elevation:	0.0 feet			Heav	y Trucks	8.006	Grade Adjı	istment.	0.0			
Pag	d Elevation:	0.0 feet			l ane Foi	ivalent	Distance (in	feet)					
R	and Grade:	0.0 1661				Autos	· 40.460	,					
	Left View:	-90 0 0.0-			Mediur	n Trucks	40 241						
	Right View:	-50.0 degree	2		Heav	v Trucks	40.262						
	agin nom.	SULU degree.	,			,	10.202						
FHWA Noise Model	Calculation	s											
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresnel	Barrier Atte	n Ber	m Atten			
Autos:	64.30	-3.86		1.2	8	-1.20	-4.61	0.00	00	0.000			
Medium Trucks:	75.75	-21.10		1.3	1	-1.20	-4.87	0.00	00	0.000			
Heavy Trucks:	81.57	-25.05		1.3	1	-1.20	-5.50	0.00	00	0.000			
Unmitigated Noise	Levels (with	out Topo and b	arrie	r atten	uation)								
VehicleType L	.eq Peak Hou	r Leq Day		Leq E	vening	Leq N	light	Ldn	CI	VEL			
Autos:	60	.5 5	9.8		58.5		52.5	60.9		61.6			
Medium Trucks:	54	.8 5	2.2		44.7		53.4	59.6		59.7			
Heavy Trucks:	56	.6 5	3.9		50.5		55.2	61.4		61.4			
Vehicle Noise:	62	.8 6	1.4		59.3		58.6	65.5		65.7			

 70 dBA
 65 dBA

 22
 47

 23
 49

Ldn: CNEL: 60 dBA 102 106

Tuesday, March 24, 2020

Centerline Distance to Noise Contour (in feet)

Tuesday, March 24, 2020

	FH	WA-RD-77-108	HIGHW	AY NO	DISE P	REDICTIC	ON MOD	EL					
Scenar Road Narr Road Segme	io: OYC (202 ne: 8th St. nt: e/o Drivew	) ay 1				Project N Job Nu	<i>lame:</i> Hi mber: 13	ighland 3073	Springs	and 8th			
SITE	SPECIFIC I	IPUT DATA				NC	DISE M	ODEL	INPUTS	;			
Highway Data				S	Site Conditions (Hard = 10, Soft = 15)								
Average Daily	Traffic (Adt):	7,401 vehicle	s				A	utos:	15				
Peak Hour	Percentage:	7.37%			Me	edium Truc	cks (2 Ax	des):	15				
Peak H	lour Volume:	545 vehicle	s		He	avy Truck	(3+ Ax	des):	15				
Ve	hicle Speed:	45 mph		V	ohiclo	Mix					-		
Near/Far La	ne Distance:	54 feet		-	Veh	nicleType	D	)av F	venina	Niaht	Dailv		
Site Data							itos: 7	5.5%	14.0%	10.5%	97.42%		
Ba	rrier Heiaht	0.0 feet			Μ	ledium Tru	icks: 4	8.9%	2.2%	48.9%	1.84%		
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy Tru	icks: 4	7.3%	5.4%	47.3%	0.74%		
Centerline Di	st. to Barrier:	50.0 feet		N	loise S	ource Ele	vations	(in fee	<i>t</i> )				
Centerline Dist.	to Observer:	50.0 feet				Autos	0.00	10	-/				
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks	2.20	97					
Observer Height	(Above Pad):	5.0 feet			Hea	vv Trucks:	8.00	06 G	ade Adi	ustment	: 0.0		
P	ad Elevation:	0.0 feet				.,							
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent l	Distance	e (in fe	et)				
	Road Grade:	0.0%				Autos:	42.37	79					
	Left View:	-90.0 degre	es		Mediu	m Trucks:	42.17	70					
	Right View:	90.0 degre	es		Hea	vy Trucks:	42.19	90					
FHWA Noise Mod	el Calculatior	IS											
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresne	l Bi	arrier Atte	en Ber	m Atten		
Autos:	68.46	-4.58		0.97		-1.20	-4	4.65	0.0	00	0.000		
Medium Trucks:	79.45	-21.82		1.01		-1.20	-4	4.87	0.0	00	0.000		
Heavy Trucks:	84.25	-25.78		1.00		-1.20	-8	5.43	0.0	00	0.000		
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenu	uation)								
VehicleType	Leq Peak Ho	ur Leq Daj	V L	eq Ev	ening	Leq N	light	L	dn	CI	VEL		
Autos:	63	3.7	63.0		61.7		55.6		64.1		64.7		
Medium Trucks:	5	7.4	54.9		47.4		56.1		62.3		62.3		
Heavy Trucks:	58	3.3	55.6		52.2		56.8		63.0		63.1		
Vehicle Noise:	6	5.5	64.2		62.3		61.0		68.0		68.3		
Centerline Distant	ce to Noise C	ontour (in feet	)										
				70 di	BA	65 d	BA	60	dBA	55	dBA		
		-	Ldn:	37		79		1	69	3	65		
		С	NEL:	38		82		1	78	3	83		

Road Name: Wilson St.			Job Num	ber: 130	nano Springs 73	s and sth	
Road Segment: e/o Highland Springs Ave.							
SITE SPECIFIC INPUT DATA			NOI	SE MOI	DEL INPUT	s	
Highway Data		Site Con	ditions (Ha	rd = 10,	Soft = 15)		
Average Daily Traffic (Adt): 14,420 vehicles				Auto	os: 15		
Peak Hour Percentage: 7.37%		Me	dium Truck	s (2 Axle	s <i>):</i> 15		
Peak Hour Volume: 1,063 vehicles		He	avy Trucks	(3+ Axle	s <i>):</i> 15		
Vehicle Speed: 45 mph		Vehicle N	Nix				
Near/Far Lane Distance: 48 feet		Vehi	icleType	Day	Evening	Night	Daily
Site Data			Auto	os: 75.	5% 14.0%	10.5%	97.42
Barrier Height: 0.0 feet		Me	edium Truc	ks: 48.9	9% 2.2%	48.9%	1.84
Barrier Type (0-Wall, 1-Berm): 0.0		F	leavy Truc	ks: 47.3	3% 5.4%	47.3%	0.74
Centerline Dist. to Barrier: 50.0 feet		Noise So	urce Eleva	tions (ir	(foot)		
Centerline Dist. to Observer: 50.0 feet			Autos:	0.000	1000)		
Barrier Distance to Observer: 0.0 feet		Mediur	n Trucks:	2,297			
Observer Height (Above Pad): 5.0 feet		Heav	v Trucks:	8.006	Grade Ad	ljustment	: 0.0
Pad Elevation: 0.0 feet							
Road Elevation: 0.0 feet		Lane Equ	livalent Di	stance (I	n teet)		
Road Grade: 0.0%		14	Autos:	44.147			
Left View: -90.0 degree	s	Hoov	n Trucks.	43.947			
Right view. 90.0 degree	5	Tieav	y muchs.	43.500			
FHWA Noise Model Calculations							
VehicleType REMEL Traffic Flow	Distanc	ce Finite	Road I	resnel	Barrier At	ten Ber	m Atter
Autos: 68.46 -1.69		0.71	-1.20	-4.6	65 0.	000	0.00
Medium Trucks: 79.45 -18.93		0.74	-1.20	-4.8	7 0.	000	0.00
Heavy Trucks: 84.25 -22.88		0.73	-1.20	-5.4	3 0.	000	0.00
Unmitigated Noise Levels (without Topo and	barrier at	tenuation)					
VehicleType Leq Peak Hour Leq Day	Le	q Evening	Leq Nig	ht	Ldn	C	NEL
Autos: 66.3	65.6	64.3		58.3	66.	7	67
Medium Trucks: 60.1	57.5	50.0		58.7	64.	9	64
Heavy Trucks: 60.9	58.2	54.8		59.4	65.	6	65.
Vehicle Noise: 68.1	6.9	64.9		63.6	70.	6	70
Centerline Distance to Noise Contour (in feet)							
		70 dBA	65 dB/	1	60 dBA	55	dBA
	dn:	55	118		254	5	547
CN	IEL:	57	123		266	F	573

	FH\	WA-RD-77-108	HIGHW	AY NO	DISE PF	REDICTIO	N MOD	DEL			
Scenari Road Nam Road Segmer	o: OYC (2021 e: 6th St. nt: w/o Highlar	) nd Springs Ave				Project N Job Nu	lame: H mber: 1	lighlai 3073	nd Springs	and 8th	
SITE S	SPECIFIC IN	NPUT DATA				NC	DISE N	IODE	L INPUT	s	
Highway Data				Si	ite Con	ditions (H	lard =	10, Sc	oft = 15)		
Average Daily	Traffic (Adt):	18,762 vehicle	s				A	Autos:	15		
Peak Hour	Percentage:	7.37%			Me	dium Truc	:ks (2 A	xles):	15		
Peak H	our Volume:	1,383 vehicle	s		He	avy Truck	is (3+ A	xles):	15		
Vel	hicle Speed:	35 mph		V	ehicle I	Mix					
Near/Far Lar	ne Distance:	58 feet		-	Vehi	icleType		Dav	Evenina	Night	Daily
Site Data						AL	itos:	75.5%	14.0%	10.5%	97.42%
Bar	rier Heiaht	0.0 feet			Me	edium Tru	cks:	48.9%	2.2%	48.9%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0			ŀ	leavy Tru	cks:	47.3%	5.4%	47.3%	0.74%
Centerline Dis	st. to Barrier:	55.0 feet		N	oise So	urce Elev	vations	in fe	et)		
Centerline Dist.	to Observer:	55.0 feet			0.00 00	Autos:	0.0	00			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Trucks:	2.2	97			
Observer Height (	Above Pad):	5.0 feet			Heav	v Trucks:	8.0	06	Grade Ad	liustmen	t: 0.0
Pa	ad Elevation:	0.0 feet				,				·	
Roa	ad Elevation:	0.0 feet		Lá	ane Equ	uivalent L	Distanc	e (in i	leet)		
F	Road Grade:	0.0%				Autos:	47.0	000			
	Left View:	-90.0 degre	es		Mediur	m Trucks:	46.8	311			
	Right View:	90.0 degre	es		Heav	y Trucks:	46.8	330			
FHWA Noise Mode	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresn	el	Barrier Att	en Be	rm Atten
Autos:	64.30	0.55		0.30		-1.20		4.67	0.0	000	0.000
Medium Trucks:	75.75	-16.69		0.33		-1.20		4.87	0.0	000	0.000
Heavy Trucks:	81.57	-20.65		0.32		-1.20		-5.38	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier a	ttenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Daj	/ Le	eq Eve	ening	Leq N	ight		Ldn	C	NEL
Autos:	63	3.9	63.3		62.0		55.9		64.4	1	65.0
Medium Trucks:	58	3.2	55.6		48.1		56.9		63.0	D	63.1
Heavy Trucks:	60	0.0	57.3		53.9		58.6		64.8	3	64.9
Vehicle Noise:	66	3.2	64.8		62.7		62.0		68.9	9	69.2
Centerline Distance	e to Noise Co	ontour (in feel	)								
				70 dE	BA	65 dE	BA	6	60 dBA	55	5 dBA
			Ldn:	46		100	)		215		464
		С	NEL:	48		104	Ļ		225		484

	FHV	VA-RD-77-108	HIGHW	AY NO	DISE PR	REDICTI	ON MC	DEL				
Scenar Road Nan Road Segme	io: OYC (2021 ne: Ramsey St. nt: e/o Highlan		Project Name: Highland Springs and 8th Job Number: 13073									
SITE	SPECIFIC IN	PUT DATA				N	OISE	MODE	EL INF	PUTS		
Highway Data				S	ite Con	ditions (	(Hard =	= 10, S	oft = 1	5)		
Average Daily	Traffic (Adt):	7,467 vehicles						Autos	: 15			
Peak Hour	Percentage:	7.37%			Mee	dium Tru	icks (2	Axles)	: 15			
Peak H	lour Volume:	1,287 vehicles			Hea	avy Truc	:ks (3+	Axles)	: 15			
Ve	hicle Speed:	45 mph		V	ehicle N	<i>lix</i>						
Near/Far La	ne Distance:	58 feet		-	Vehi	cleTvpe	1	Dav	Ever	ina	Niaht	Daily
Site Data						4	utos.	75.5%	6 14	0%	10.5%	97.42%
Ba	wier Height	0.0 feet			Me	edium Tr	ucks:	48.9%	6 2	2%	48.9%	1.84%
Barrior Turno (0.14	(all 1 Borm):	0.0 1001			F	leavv Tr	ucks:	47.39	6 5	.4%	47.3%	0.74%
Centerline Di	st to Barrier	55.0 feet				,						
Centerline Dist	to Observer:	55.0 feet		N	oise So	urce Ele	evatior	ıs (in f	eet)			
Barrier Distance	to Observer:	0.0 feet				Autos	s: 0	.000				
Observer Height	Above Pad):	5.0 feet			Mediur	n Trucks	8: 2	.297	~ .			
P	ad Elevation:	0.0 feet			Heav	y Trucks	s: 8	.006	Grad	e Adju	stment.	0.0
Ro	ad Elevation:	0.0 feet		La	ane Equ	ıivalent	Distan	ice (in	feet)			
	Road Grade:	0.0%				Autos	s: 47	.000				
	Left View:	-90.0 degree	s		Mediur	n Trucks	: 46	.811				
	Right View:	90.0 degree	s		Heav	y Trucks	s: 46	.830				
FHWA Noise Mod	el Calculation	5										
VehicleType	REMEL	Traffic Flow	Distan	ice	Finite	Road	Fres	nel	Barrie	er Atter	n Ber	m Atten
Autos:	68.46	-0.85		0.30		-1.20		-4.67		0.00	0	0.000
Medium Trucks:	79.45	-18.09		0.33		-1.20		-4.87		0.00	0	0.000
Heavy Trucks:	84.25	-22.05		0.32		-1.20		-5.38		0.00	0	0.000
Unmitigated Noise	e Levels (with	out Topo and I	barrier a	ttenu	ation)							
VehicleType	Leq Peak Hou	r Leq Day	Le	eq Eve	ening	Leq I	Vight		Ldn		CI	IEL
Autos:	66	.7 (	6.0		64.7		58.	7		67.1		67.7
Medium Trucks:	60	.5	57.9		50.4		59.	2		65.3		65.4
Heavy Trucks:	61	.3 !	58.6		55.2		59.	9		66.1		66.2
Vehicle Noise:	68	.5 (	67.3		65.3		64.	0		71.0		71.3
Centerline Distant	ce to Noise Co	ntour (in feet)						_				
				70 dE	BA	65 0	1BA		60 dBA	1	55	dBA
			dn:	64		13	88		298		6	41
		Cl	IEL:	67		14	15		312		6	72

Tuesday, March 24, 2020

Tuesday, March 24, 2020
	FH	WA-RD-77-108	HIGHV	VAY NO	DISE P	REDICTIC	ON MOD	EL			
Scenar Road Nan Road Segme	Scenario: OYC+P (2021) Road Name: Pennsylvania Ave. Road Segment: n/o Bth St. SITE SPECIFIC INPUT DATA					Project N Job Nu	<i>lame:</i> Hi mber: 13	ighland 3073	Springs	and 8th	
SITE	SPECIFIC IN	IPUT DATA				NC	DISE M	ODEL	INPUTS	5	
Highway Data				Si	ite Cor	nditions (I	Hard = 1	0, Soft	= 15)		
Average Daily	Traffic (Adt):	11,312 vehicle	s				A	utos:	15		
Peak Hour	Percentage:	7.37%			Me	edium Truc	cks (2 Ax	des):	15		
Peak H	lour Volume:	834 vehicle	s		He	avy Truck	(3+ Ax	des):	15		
Ve	hicle Speed:	30 mph		14	ohiolo	Miy					
Near/Far La	ne Distance:	34 feet			Voł	nicleType		av F	venina	Night	Daily
Site Data					101	AL	itos: 7	5.5%	14.0%	10.5%	97.42%
Ba	rrier Height	0.0 feet			М	ledium Tru	icks: 4	8.9%	2.2%	48.9%	1.84%
Barrier Type (0-W	/all, 1-Berm):	0.0				Heavy Tru	icks: 4	7.3%	5.4%	47.3%	0.74%
Centerline Di	st. to Barrier:	33.0 feet		N	nisa S	ource Ele	vations	(in foot	•		
Centerline Dist.	to Observer:	33.0 feet			0/30 0	Autos	0.00		/		
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucke	2.00	7			
Observer Height	Observer Height (Above Pad): 5.0 feet				Hoo	W Trucks	8.00	,, 16 G	rade Adii	ustment	0.0
P	Pad Elevation: 0.0 feet				mou	y maono.	0.00				
Ro	ad Elevation:	0.0 feet		Lá	ane Eq	uivalent l	Distance	e (in fee	et)		
	Road Grade:	0.0%				Autos:	28.72	23			
	Left View:	-90.0 degre	es		Mediu	m Trucks:	28.41	13			
	Right View:	90.0 degre	es		Hea	vy Trucks:	28.44	14			
FHWA Noise Mod	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresne	I Ba	arrier Atte	en Ber	m Atten
Autos:	61.75	-0.98		3.51		-1.20	-4	4.52	0.0	00	0.000
Medium Trucks:	73.48	-18.22		3.58		-1.20	-4	4.86	0.0	00	0.000
Heavy Trucks:	79.92	-22.17		3.57		-1.20	-{	5.69	0.0	00	0.000
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Daj	/ 1	Leq Eve	ening	Leq N	light	L	dn	CI	VEL
Autos:	63	3.1	62.4		61.1		55.1		63.5		64.1
Medium Trucks:	57	7.6	55.1		47.6		56.3		62.5		62.5
Heavy Trucks:	60	).1	57.4		54.0		58.6		64.8		64.9
Vehicle Noise:	65	5.6	64.2		62.0		61.7		68.5		68.7
Centerline Distant	ce to Noise C	ontour (in feel	)								
				70 dBA 65 dBA 60 dBA		55	dBA				
			Ldn:	26 56 121 2			2	62			
		С	NEL:	27	27 59 126 272					72	

	FHV	VA-RD-77-108	HIGH	HWAY NO	DISE PF	REDICT	ON MO	DEL							
Scenari Road Nam Road Segmen	Scenario: OYC+P (2021) Road Name: Pennsylvania Ave. Road Segment: s/o 8th St.						Project Name: Highland Springs and 8th Job Number: 13073								
SITE S	SPECIFIC IN	PUT DATA				Ν	IOISE N	/ODE	L INPUT	s					
Highway Data				S	ite Con	ditions	(Hard =	10, Sc	oft = 15)						
Average Daily	Traffic (Adt): 1	1,444 vehicle	s					Autos:	15						
Peak Hour	Percentage:	7.37%			Me	dium Tr	ucks (2 /	Axles):	15						
Peak H	our Volume:	843 vehicle	s		He	avy Tru	cks (3+ /	Axles):	15						
Vel	hicle Speed:	30 mph		V	ehicle N	Nix									
Near/Far Lar	ne Distance:	24 feet			Vehi	cleType		Day	Evening	Night	Daily				
Site Data							Autos:	75.5%	14.0%	10.5%	97.42%				
Bar	rier Heiaht:	0.0 feet			Me	edium T	rucks:	48.9%	2.2%	48.9%	1.84%				
Barrier Type (0-Wa	all, 1-Berm):	0.0			ŀ	leavy T	rucks:	47.3%	5.4%	47.3%	0.74%				
Centerline Dis	t. to Barrier:	39.0 feet		N	nisa Sa	urco Fl	ovation	s (in fa	aat)						
Centerline Dist. t	to Observer:	39.0 feet			0130 00	Auto	e 0	000							
Barrier Distance t	to Observer:	0.0 feet			Modiur	n Truck	s. 0.	207							
Observer Height (J	server Height (Above Pad): 5.0 feet					v Truck	s. 2.	006	Grade Ad	liustment	0.0				
Pa	d Elevation:	0.0 feet			mour	<i>y</i> 11000	J. U.			,					
Roa	d Elevation:	0.0 feet		Li	ane Equ	iivalent	Distan	ce (in i	feet)						
F	Road Grade:	0.0%				Auto	s: 37.	443							
	Left View:	-90.0 degre	es		Mediur	n Iruck	s: 37.	206							
	Right View:	90.0 degre	es		Heav	у Ттиск	s: 37.	230							
FHWA Noise Mode	Calculation:	5													
VehicleType	REMEL	Traffic Flow	Dis	stance	Finite	Road	Fresr	iel	Barrier Att	en Ber	m Atten				
Autos:	61.75	-0.93		1.78		-1.20		-4.58	0.0	000	0.00				
Medium Trucks:	73.48	-18.17		1.82		-1.20		-4.87	0.0	000	0.00				
Heavy Trucks:	79.92	-22.12		1.82		-1.20		-5.57	0.0	000	0.00				
Unmitigated Noise	Levels (with	out Topo and	barri	er attenu	ation)										
VehicleType	Leq Peak Hou	r Leq Day	/	Leq Eve	ening	Leq	Night		Ldn	C	NEL				
Autos:	61	.4	60.7		59.4		53.4	Ļ	61.6	В	62.4				
Medium Trucks:	55	.9	53.4		45.9		54.6	6	60.	В	60.				
Heavy Trucks:	58	.4	55.7		52.3		56.9	)	63.	1	63.2				
Vehicle Noise:	63	.9	62.5		60.3		60.0	)	66.	В	67.1				
Centerline Distanc	e to Noise Co	ntour (in feet	)												
				70 dE	зA	65	аBA	6	ou dBA	55	aBA				
	Ldn:					24 51 111 238			38						
		~				-			445		40				

	FH	WA-RD-77-108	HIGHW	AY N	DISE PF	REDICTI	ON MO	DDEL			
Scenari Road Nam Road Segmer	o: OYC+P (20 e: Xenia Ave. nt: n/o 8th St.	021)				Project Job N	Name: umber:	Highla 13073	nd Springs	and 8th	
SITE S	SPECIFIC IN	NPUT DATA				N	OISE	MODE		s	
Highway Data				S	ite Con	ditions	(Hard =	= 10, Se	oft = 15)		
Average Daily	Traffic (Adt):	6,919 vehicle	5					Autos:	15		
Peak Hour	Percentage:	7.37%			Me	dium Tru	ucks (2	Axles):	15		
Peak H	our Volume:	510 vehicle	5		He	avy Truc	cks (3+	Axles):	15		
Vel	hicle Speed:	45 mph		V	ohiclo I	Niv					
Near/Far Lar	ne Distance:	54 feet			Vehi	cleTvpe		Dav	Evenina	Night	Dailv
Site Data					-	A	Autos:	75.5%	5 14.0%	10.5%	97.42%
Bar	rier Heiaht:	0.0 feet			Me	edium Tr	ucks:	48.9%	5 2.2%	48.9%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0			ŀ	leavy Tr	ucks:	47.3%	5.4%	47.3%	0.74%
Centerline Dis	st. to Barrier:	50.0 feet		N	oise So	urce El	evatio	ns (in f	eet)		
Centerline Dist.	to Observer:	50.0 feet				Autos	s: 0	.000	,		
Barrier Distance	to Observer:	0.0 feet			Mediu	n Trucks	s: 2	.297			
Observer Height (	Observer Height (Above Pad): 5.0				Heav	v Trucks	s: 8	.006	Grade Ad	justment	: 0.0
Pa	ad Elevation:	0.0 feet									
Roa	ad Elevation:	0.0 feet		L	ane Equ	livalent	Distar	nce (in	feet)		
ŀ	Road Grade:	0.0%				Autos	s: 42	.379			
	Left View:	-90.0 degree	es		Mediur	n Trucks	s: 42	2.170			
	Right View:	90.0 degree	es		Heav	у ттиска	5: 42	2.190			
FHWA Noise Mode	el Calculation	IS									
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	68.46	-4.88		0.97		-1.20		-4.65	0.0	000	0.000
Medium Trucks:	79.45	-22.11		1.01		-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	84.25	-26.07		1.00		-1.20		-5.43	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	L	eq Ev	ening	Leq	Night		Ldn	С	NEL
Autos:	63	3.4	62.7		61.4		55	.3	63.8	3	64.4
Medium Trucks:	57	7.1	54.6		47.1		55	.8	62.0	0	62.0
Heavy Trucks:	58	3.0	55.3		51.9		56	.5	62.7	(	62.8
Vehicle Noise:	65	5.2	63.9		62.0		60	.7	67.7	7	68.0
Centerline Distanc	e to Noise C	ontour (in feet	)								
				70 di	BA	65 0	dBA	0	60 dBA	55	dBA
		-	Ldn:	35 75			162	3	149		
		C	VEL:	37	37 79 170 366						166

	FHW	/A-RD-77-108	HIGHWA	AY NO	JISE PH	REDICI		DEL				
Scenar	io: OYC+P (202	21)				Project	Name: I	lighla	nd Springs	and 8t	th	
Road Nam	e: Allegheny S	t.				Job N	lumber: '	13073				
Road Segme	nt: s/o 8th St.											
SITE	SPECIFIC IN	PUT DATA				I	IOISE N	/ODE	L INPUTS	5		
Highway Data				S	ite Con	ditions	(Hard =	10, So	oft = 15)			
Average Daily	Traffic (Adt):	947 vehicles						Autos:	15			
Peak Hour	Percentage:	7.37%			Me	dium Tr	ucks (2 A	(xles)	15			
Peak H	lour Volume:	70 vehicles			He	avy Tru	cks (3+ A	(xles)	15			
Ve	hicle Speed:	35 mph		V	ehicle I	Nix						-
Near/Far La	ne Distance:	34 feet		-	Veh	icleType	,	Day	Evening	Night	t Daily	-
Site Data							Autos:	75.5%	14.0%	10.5	% 97.42%	1/6
Ba	rrier Heiaht:	0.0 feet			Me	edium T	rucks:	48.9%	2.2%	48.9	% 1.84%	6
Barrier Type (0-W	all, 1-Berm):	0.0			ŀ	leavy T	rucks:	47.3%	5.4%	47.3	% 0.74%	6
Centerline Dis	st. to Barrier:	33.0 feet		N	oise So	urce E	levation	s (in fe	eet)			-
Centerline Dist.	to Observer:	33.0 feet				Auto	s: 0.0	000	,		-	-
Barrier Distance	to Observer:	0.0 feet			Mediu	n Truck	s 2.2	297				
Observer Height (	Above Pad):	5.0 feet			Heav	v Truck	s: 8(	006	Grade Adi	ustme	nt: 0.0	
Pa	ad Elevation:	0.0 feet			mour	y maon	0. 0.					
Roa	ad Elevation:	0.0 feet		Li	ane Equ	uivalen	t Distand	e (in	feet)			
	Road Grade:	0.0%				Auto	s: 28.	723				
	Left View:	-90.0 degree	5		Mediur	n Truck	s: 28.4	413				
	Right View:	90.0 degree	5		Heav	y Truck	s: 28.4	444				
FHWA Noise Mode	el Calculations	;									-	-
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fresn	el	Barrier Atte	en B	erm Atten	
Autos:	64.30	-12.42		3.51		-1.20		-4.52	0.0	00	0.00	C
Medium Trucks:	75.75	-29.66		3.58		-1.20		-4.86	0.0	00	0.00	0
Heavy Trucks:	81.57	-33.61		3.57		-1.20		-5.69	0.0	00	0.00	C
Unmitigated Noise	e Levels (witho	out Topo and L	arrier a	ttenu	ation)						-	-
VehicleType	Leq Peak Hou	r Leq Day	Le	eq Eve	ening	Leq	Night		Ldn		CNEL	
Autos:	54.	2 5	3.5		52.2		46.2		54.6	j –	55.	2
Medium Trucks:	48.	5 4	5.9		38.4		47.1		53.3	i i	53.	4
Heavy Trucks:	50.	3 4	7.6		44.2		48.9		55.1		55.	2
Vehicle Noise:	56.	4 5	5.1		53.0		52.3	l.	59.2	!	59.	4
Centerline Distance	e to Noise Co	ntour (in feet)										-
		. ,		70 dl	BA	65	dBA	e	60 dBA	5	55 dBA	
		L	dn:	6		1	3		29		62	
		CA	EL:	7		1	4		30		65	

Tuesday, March 24, 2020

Tuesday, March 24, 2020

Tuesday, March 24, 2020

	FH	WA-RD-77-10	B HIGH	WAY NO	DISE P	REDICTIC	ON MODE	EL					
Scenai Road Nan Road Segme	Scenaric: OYC+P (2021) Road Name: Highland Springs Ave. Road Segment: n/o Wilson St. SITE SPECIFIC INPUT DATA					Project N Job Nu	<i>lame:</i> Hi mber: 13	ghland Sprir 073	ngs and	l 8th			
SITE	SPECIFIC II	NPUT DATA				NO	DISE MO	DEL INP	UTS				
Highway Data				S	ite Cor	nditions (I	Hard = 10	), Soft = 15	)				
Average Daily	Traffic (Adt):	24,028 vehicle	s		Autos: 15								
Peak Hour	Percentage:	7.37%			Me	edium Truc	cks (2 Ax	les): 15					
Peak I	Hour Volume:	1,771 vehicle	s		Heavy Trucks (3+ Axles): 15								
Ve	ehicle Speed:	35 mph		V	ohiclo	Mix							
Near/Far La	ane Distance:	58 feet			Vor	nicleType	D	av Evenir	na Nii	aht	Daily		
Site Data					VCI	A	itos: 7	5.5% 14.0	0% 10	).5%	97.42%		
Ba	rrier Height	0.0 feet			Medium Trucks: 48.9% 2.2% 48.9% 1.84								
Barrier Type (0-V	Vall. 1-Berm):	0.0				Heavy Tru	icks: 4	7.3% 5.4	47	7.3%	0.74%		
Centerline D	ist. to Barrier:	55.0 feet			0			(Inc. 6 4)					
Centerline Dist.	to Observer:	55.0 feet		N	oise S	ource Ele	vations (	in reet)					
Barrier Distance	to Observer:	0.0 feet			11-10	Autos:	0.00	7					
Observer Height	Observer Height (Above Pad): 5.0 feet				Mediu	m Trucks:	2.29	Crada	Adiuch	mont	0.0		
P	ad Elevation:	0.0 feet			Hea	vy Trucks:	8.00	6 Grade	Aujusti	nem.	0.0		
Ro	ad Elevation:	0.0 feet		L	ane Eq	uivalent l	Distance	(in feet)					
	Road Grade:	0.0%				Autos:	47.00	0					
	Left View:	-90.0 degre	es		Mediu	m Trucks:	46.81	1					
	Right View:	90.0 degre	es		Hea	vy Trucks:	46.83	0					
FHWA Noise Mod	el Calculation	ıs											
VehicleType	REMEL	Traffic Flow	Dist	ance	Finite	Road	Fresnel	Barrier	Atten	Bern	n Atten		
Autos:	64.30	) 1.62		0.30		-1.20	-4	.67	0.000		0.000		
Medium Trucks:	75.75	5 -15.62		0.33		-1.20	-4	.87	0.000		0.000		
Heavy Trucks:	81.57	-19.57		0.32		-1.20	-5	i.38	0.000		0.000		
Unmitigated Nois	e Levels (with	nout Topo and	barrie	r attenu	ation)								
VehicleType	Leq Peak Ho	ur Leq Da	y	Leg Ev	ening	Leq N	light	Ldn		CN	EL		
Autos:	6	5.0	64.3		63.0		57.0	(	65.4		66.1		
Medium Trucks:	59	9.3	56.7		49.2		57.9	(	64.1		64.1		
Heavy Trucks:	6	1.1	58.4		55.0		59.7	(	65.8		65.9		
Vehicle Noise:	6	7.3	65.9		63.8		63.1		70.0		70.2		
Centerline Distan	ce to Noise C	ontour (in fee	t)										
				70 di	70 dBA 65 dBA		BA	60 dBA		55 a	!BA		
			Ldn:	55 118 254			54	7					
		C	NEL:	57	57 123 265 571					1			

Scenario	: OYC+P (2021)		Project Name: Highland Springs and 8th							
Road Name	Highland Sprin	gs Ave.			Job Number:	13073				
Road Segment	: s/o Wilson St.									
SITE S	PECIFIC INPL	IT DATA			NOISE	MODEL	INPUTS	5		
Highway Data				Site Condi	tions (Hard =	= 10, Sof	t = 15)			
Average Daily T	raffic (Adt): 26,0	)77 vehicles				Autos:	15			
Peak Hour P	ercentage: 7	.37%		Medi	um Trucks (2	Axles):	15			
Peak Ho	ur Volume: 1,9	22 vehicles		Heav	y Trucks (3+	Axles):	15			
Vehi	icle Speed:	35 mph	ŀ	Vehicle Mi	Y					
Near/Far Lane	e Distance:	58 feet	ŀ	Vehicl	eTvpe	Dav	Evenina	Niaht	Dailv	
Site Data					Autos:	75.5%	14.0%	10.5%	97.42	
Barr	ior Hoight:	0.0 feet		Mea	lium Trucks:	48.9%	2.2%	48.9%	1.84	
Barrier Type (0-Wa	II. 1-Berm):	0.0		He	avy Trucks:	47.3%	5.4%	47.3%	0.74	
Centerline Dist	to Barrier:	55.0 feet	-		-					
Centerline Dist. to	Observer:	55.0 feet	-	Noise Sou	rce Elevation	is (in fee	et)			
Barrier Distance to	Observer:	0.0 feet		1 4 m all 1 m a	Autos: 0	.000				
Observer Height (A	bove Pad):	5.0 feet		Medium	Trucks: 2	.297	Crada Adi	untrant		
Pad	Elevation:	0.0 feet		neavy	TTUCKS. 0	.000 0	Siaue Auj	usuneni	0.0	
Road	Elevation:	0.0 feet	[	Lane Equi	valent Distar	ice (in fe	et)			
Re	oad Grade:	0.0%			Autos: 47	.000				
	Left View: -	90.0 degrees		Medium	Trucks: 46	.811				
1	Right View:	90.0 degrees		Heavy	Trucks: 46	.830				
FHWA Noise Model	Calculations									
VehicleType	REMEL TI	affic Flow Di	stance	Finite R	oad Fres	nel E	Barrier Atte	en Ber	m Atter	
Autos:	64.30	1.98	0.3	10	-1.20	-4.67	0.0	00	0.00	
Medium Trucks:	75.75	-15.26	0.3	3	-1.20	-4.87	0.0	00	0.00	
Heavy Trucks:	81.57	-19.22	0.3	2	-1.20	-5.38	0.0	00	0.00	
Unmitigated Noise	Levels (without	Topo and barri	ier atter	nuation)						
VehicleType L	eq Peak Hour	Leq Day	Leq E	vening	Leq Night	I	Ldn	CI	VEL	
Autos:	65.4	64.7		63.4	57.	4	65.8	3	66	
Medium Trucks:	59.6	57.0		49.5	58	3	64.5	5	64	
Heavy Trucks:	61.5	58.8		55.4	60.	0	66.2	2	66	
Vehicle Noise:	67.6	66.2		64.2	63	5	70.3	5	70	
Centerline Distance	to Noise Conte	our (in feet)								
			70	dBA	65 dBA	60	) dBA	55	dBA	
				· o	404		268	5	78	
		Lan:	5	08	124	4	200	0	10	

	FHWA	A-RD-77-108	HIGH	WAY N	OISE PI	REDICT	ION MO	DDEL				
Scenario: OYC+F Road Name: Highlar Road Segment: n/o Ra	(2021 d Spri nsey S	l) ngs Ave. St.				Projec Job I	t Name: Number:	Highla 13073	nd Springs	and 8th	1	
SITE SPECIFI	INP	UT DATA				I	NOISE	MODE		s		
Highway Data				5	Site Con	ditions	(Hard =	= 10, Se	oft = 15)			
Average Daily Traffic (Ad	t): 26	,345 vehicles	5					Autos:	15			
Peak Hour Percentag	e: i	7.37%			Medium Trucks (2 Axles): 15							
Peak Hour Volum	e: 1	,942 vehicles	5		He	avy Tru	icks (3+	Axles):	15			
Vehicle Spee	d:	30 mph			ohicle l	Mix						
Near/Far Lane Distand	e:	58 feet			Veh	icleTvp	e	Dav	Evenina	Niaht	Dailv	
Site Data						,,	Autos:	75.5%	5 14.0%	10.5%	6 97.42%	
Barrier Heid	<i>t</i> .	0.0 feet			М	edium 1	rucks:	48.9%	2.2%	48.9%	5 1.84%	
Barrier Type (0-Wall, 1-Berr	n):	0.0			I	Heavy T	rucks:	47.3%	5.4%	47.3%	6 0.74%	
Centerline Dist. to Barri	er:	55.0 feet		1	loise So	ource E	levatior	ns (in f	eet)			
Centerline Dist. to Observ	er:	55.0 feet				Auto	os: 0	.000				
Barrier Distance to Observ	er:	0.0 feet			Mediu	m Truck	(s: 2	.297				
Observer Height (Above Pa	I):	5.0 feet			Heav	/y Truck	(S: 8	.006	Grade Ad	justmer	t: 0.0	
Pad Elevation	n:	0.0 feet					1 Distan		6			
Road Elevatio	n:	0.0 feet		-	ane Eq	uivaien	t Distar	ice (in	reet)			
Road Grad	e:	0.0%				Auto	os: 47	.000				
Left Vie	N:	-90.0 degree	es		Mediu	m Truck	(S: 46	.811				
Right Vie	N:	90.0 degree	es		Heat	y muci	(S: 46	.830				
FHWA Noise Model Calcula	ions											
VehicleType REMEL	7	raffic Flow	Dis	tance	Finite	Road	Fres	nel	Barrier Att	en Be	rm Atten	
Autos: 61	.75	2.69		0.30	)	-1.20		-4.67	0.0	000	0.000	
Medium Trucks: 73	.48	-14.55		0.33	5	-1.20		-4.87	0.0	000	0.000	
Heavy Trucks: 75	.92	-18.50		0.32		-1.20		-5.38	0.0	000	0.000	
Unmitigated Noise Levels (	vithou	It Topo and	barrie	er atten	uation)			-				
Venicie Type Leq Peak	Hour	Leq Day	, I	Leq Ev	ening	Leq	Night	_	Lan	ļ	INEL	
Autos:	03.0 E0.1		62.9 EE E		49.0		55.	.5 7	64.0	,	64.0	
Medium Trucks:	58.1 60.5		55.5 E7 0		48.0		50.	1	6Z.5		62.9 65.4	
Vehicle Noise:	66.1		64.6		62.5		59. 62.	.1	68.9	) )	69.2	
Centerline Distance to Nois	Con	tour (in feet	)									
				70 c	BA	65	dBA	6	60 dBA	5	5 dBA	
			Ldn:	47 100 216 46			466					
	Ldn: CNEL:						49 105 225 485				485	

	FH	WA-RD-77-108	HIGHW	AY NO	DISE PE	REDICTIO	N MODEL						
Scenar Road Nam Road Segmei	io: OYC+P (2 ne: Highland S nt: s/o Ramse	021) Springs Ave. ey St.				Project N Job Nu	<i>lame:</i> High mber: 1307	land Springs '3	and 8	3th			
SITE	SPECIFIC II	NPUT DATA				NC	DISE MOD	EL INPUT	s				
Highway Data				S	ite Con	ditions (H	lard = 10,	Soft = 15)	_				
Average Daily	Traffic (Adt):	35,807 vehicle	s				Auto	is: 15					
Peak Hour	Percentage:	7.37%			Medium Trucks (2 Axles): 15								
Peak H	lour Volume:	2,639 vehicle	s		He	avy Truck	s (3+ Axles	s): 15					
Ve	hicle Speed:	35 mph		V	obielo I	Mix							
Near/Far La	ne Distance:	78 feet		-	Voh	icloTypo	Dav	Evoning	Nia	ht Doil	67		
Site Data				_	ven	Lie i ype Δi	itos: 75 P	14.0%	10	5% 97 A	y 2%		
one Data					M	edium Tru	cks: 48.9	14.0% 2.2%	48	9% 184	2%		
Barrier Turne (0.14	rrier Height:	0.0 feet			, in the second s	Heavy Tru	cks: 47.3	3% 5.4%	47.	3% 0.74	4%		
Contorlino Di	et to Parriar:	0.0 67.0 foot											
Contorlino Dist	to Obsonvor:	67.0 feet		N	oise Sc	ource Elev	vations (in	feet)					
Barrier Distance	to Observer:	0.0 feet				Autos:	0.000						
Observer Height (	(Above Pad):	5.0 feet			Mediu	m Trucks:	2.297						
Pi	ad Flevation:	0.0 feet			Heav	y Trucks:	8.006	Grade Ad	ljustm	ent: 0.0			
Roa	ad Elevation:	0.0 feet		Li	ane Eq	uivalent L	Distance (i	n feet)					
	Road Grade:	0.0%				Autos:	54.708						
	Left View:	-90.0 deare	es		Mediu	m Trucks:	54.546						
	Right View:	90.0 degre	es		Heav	y Trucks:	54.562						
EHWA Noise Mode	ol Colculation	10											
VehicleType	REMEI	Traffic Flow	Distar	ICE	Finite	Road	Fresnel	Barrier At	ten	Rerm Atte	n		
Autos:	64.30	3.35	Diotai	-0.69	1 11110	-1.20	-4.7	1 0.	000	0.0	000		
Medium Trucks:	75.75	5 -13.88		-0.67		-1.20	-4.8	8 0.	000	0.0	000		
Heavy Trucks:	81.57	-17.84		-0.67		-1.20	-5.2	9 0.	000	0.0	000		
Unmitigated Noise	e Levels (with	nout Topo and	barrier a	attenu	ation)								
VehicleType	Leg Peak Ho	ur Leq Da	/ Le	eq Eve	ening	Leg N	ight	Ldn	Τ	CNEL			
Autos:	6	5.8	65.1		63.8		57.8	66.	2	6	6.8		
Medium Trucks:	6	0.0	57.4		49.9		58.7	64.	8	6	4.9		
Heavy Trucks:	Heavy Trucks: 61.9 59.1				55.7 60.4 66.6				6	6.7			
Vehicle Noise:	6	8.0	66.6		64.6		63.9	70.	7	7	1.0		
Centerline Distance	ce to Noise C	ontour (in fee	)										
		-		70 dBA 65 dBA 60 dBA				55 dBA	_				
			Ldn:	75	75 161			346		746			
	Ldn: CNEL:						78 168 361 779						

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	FH	WA-RD-77-108	HIGHW	AY NO	DISE P	REDICTIC	ON MO	DEL				
Scenar Road Narr Road Segme	Scenario: OYC+P (2021) Road Name: Highland Springs Ave. Road Segment: s/o I-10 SITE SPECIFIC INPUT DATA					Project I Job Nu	Vame: Imber:	Highla 13073	nd Springs	s and 8	ith	
SITE	SPECIFIC IN	IPUT DATA				N	DISE N	NODE	L INPUT	S		
Highway Data				S	ite Cor	ditions (l	Hard =	10, S	oft = 15)			
Average Daily	Traffic (Adt):	43,220 vehicle	s		Autos: 15							
Peak Hour	Percentage:	7.37%			Me	edium Tru	cks (2 /	Axles).	15			
Peak H	lour Volume:	3,185 vehicle	s		He	avy Truck	ks (3+ /	Axles).	15			
Ve	hicle Speed:	35 mph		V	ohiclo	Mix						
Near/Far La	ne Distance:	78 feet			Veł	nicleTyne		Dav	Evenina	Niah	t Daily	
Site Data					VCI	A	utos:	75.5%	6 14.0%	10.5	5% 97.42%	
Ba	rrier Height	0.0 feet			М	edium Tru	icks:	48.9%	6 2.2%	48.9	9% 1.84%	
Barrier Type (0-W	/all. 1-Berm):	0.0				Heavy Tru	icks:	47.3%	6 5.4%	47.3	8% 0.74%	
Centerline Di	st. to Barrier:	67.0 feet		M	oiso S	ourco Elo	vation	e (in f	oot)			
Centerline Dist.	to Observer:	67.0 feet		14	0136 3		· O	000	eel)			
Barrier Distance	to Observer:	0.0 feet			Modiu	m Trucks	. 0.	207				
Observer Height	(Above Pad):	5.0 feet			Hoo	m Trucks	. 2.	006	Grade Ad	liustme	nt: 0 0	
P	Pad Elevation: 0.0 feet				neu	vy mucho.	. 0.	000	0/000 / 10	juouni		
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalent l	Distan	ce (in	feet)			
	Road Grade:	0.0%				Autos.	: 54.	708				
	Left View:	-90.0 degre	es		Mediu	m Trucks.	: 54.	546				
	Right View:	90.0 degre	es		Hea	vy Trucks.	: 54.	562				
FHWA Noise Mod	el Calculation	IS										
VehicleType	REMEL	Traffic Flow	Distar	псе	Finite	Road	Fresr	nel	Barrier At	ten E	Berm Atten	
Autos:	64.30	4.17		-0.69		-1.20		-4.71	0.	000	0.000	
Medium Trucks:	75.75	-13.07		-0.67		-1.20		-4.88	0.	000	0.000	
Heavy Trucks:	81.57	-17.02		-0.67		-1.20		-5.29	0.	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barrier a	attenu	ation)							
VehicleType	Leq Peak Ho	ur Leq Daj	/ L	eq Eve	ening	Leq N	light		Ldn		CNEL	
Autos:	66	3.6	65.9		64.6		58.6	6	67.	0	67.6	
Medium Trucks:	60	).8	58.2		50.7		59.5	5	65.	7	65.7	
Heavy Trucks:	62	2.7	60.0		56.6		61.2	2	67.	4	67.5	
Vehicle Noise:	68	3.8	67.4		65.4		64.7	7	71.	5	71.8	
Centerline Distant	ce to Noise C	ontour (in feel	)									
				70 dBA 65 dBA			60 dBA		55 dBA			
			Ldn:	85 182 393			393		846			
		С	NEL:	88		88 190 410 883					883	

	FHW	A-RD-77-108	HIGHWA	AY NOI	SE PREDICT		DEL			
Scenario	o: OYC+P (202	21)			Project	Name: H	lighlar	nd Springs	and 8th	
Road Name	e: 8th St.				Job N	lumber: 1	3073			
Road Segmen	it: w/o Pennsyl	vania Ave.								
SITE S	SPECIFIC IN	PUT DATA			P	IOISE N	IODE	L INPUT	s	
Highway Data				Site	e Conditions	(Hard =	10, Sc	ft = 15)		
Average Daily 1	Traffic (Adt):	5,384 vehicles				A	Autos:	15		
Peak Hour I	Percentage:	7.37%			Medium Tr	ucks (2 A	xles):	15		
Peak Ho	our Volume:	397 vehicles			Heavy Tru	cks (3+ A	xles):	15		
Vel	nicle Speed:	30 mph		Vel	nicle Mix					
Near/Far Lar	ne Distance:	34 feet			VehicleType		Day	Evening	Night	Daily
Site Data						Autos:	75.5%	14.0%	10.5%	97.42%
Bar	rier Heiaht:	0.0 feet			Medium T	rucks:	48.9%	2.2%	48.9%	1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			Heavy T	rucks:	47.3%	5.4%	47.3%	0.74%
Centerline Dis	t. to Barrier:	33.0 feet		No	sa Sourca E	lovations	(in fe	of)		
Centerline Dist. t	o Observer:	33.0 feet		1101	Auto	e 0.0	00			
Barrier Distance t	o Observer:	0.0 feet			Aedium Truck	s 22	97			
Observer Height (/	Above Pad):	5.0 feet			Heavy Truck	s: 8.0	006	Grade Ad	iustment	: 0.0
Pa	d Elevation:	0.0 feet								
Roa	d Elevation:	0.0 feet		Lar	e Equivalen	t Distanc	e (in f	eet)		
F	Road Grade:	0.0%			Auto	s: 28.7	23			
	Left View:	-90.0 degree	s		Aedium Truck	s: 28.4	113			
	Right View:	90.0 degree	s		Heavy Truck	s: 28.4	144			
FHWA Noise Mode	l Calculations	3								
VehicleType	REMEL	Traffic Flow	Distan	се	Finite Road	Fresn	el	Barrier Att	en Ber	m Atten
Autos:	61.75	-4.20		3.51	-1.20		-4.52	0.0	000	0.00
Medium Trucks:	73.48	-21.44		3.58	-1.20		-4.86	0.0	000	0.00
Heavy Trucks:	79.92	-25.40		3.57	-1.20		-5.69	0.0	000	0.00
Unmitigated Noise	Levels (witho	out Topo and I	barrier a	ttenua	tion)					
VehicleType	Leq Peak Hou	r Leq Day	Le	eq Ever	ing Leq	Night		Ldn	C	NEL
Autos:	59.	.9 !	59.2		57.9	51.8		60.3	3	60.
		4	51.8		44.3	53.1		59.3	3	59.
Medium Trucks:	54.							61.6	5	61.
Medium Trucks: Heavy Trucks:	54. 56.	9	54.2		50.8	55.4		01.0	-	
Medium Trucks: Heavy Trucks: Vehicle Noise:	54. 56. 62.	9	54.2 50.9		50.8 58.8	55.4 58.5		65.3	3	65.
Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	54. 56. 62. e to Noise Co	9 4 4 (in feet)	54.2 50.9		50.8 58.8	55.4 58.5		65.3	3	65.
Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	54. 56. 62. e to Noise Co	9 4 ntour (in feet)	54.2	70 dB/	50.8 58.8 65	55.4 58.5 dBA	6	65.3	55	65.: dBA
Medium Trucks: Heavy Trucks: Vehicle Noise: Centerline Distanc	54. 56. 62. e to Noise Co	9 4 (in feet)	54.2 50.9	70 dBA 16	50.8 58.8 65	55.4 58.5 dBA	6	65.0 0 dBA 74	55	65.9 dBA 60

	FH	WA-RD-77-108	HIGHV	VAY N	DISE PF	REDICT	ION MO	DDEL			
Scenari Road Nam Road Segmer	o: OYC+P (20 e: 8th St. nt: e/o Pennsy	021) /Ivania Ave.				Project Job N	Name: lumber:	Highla 13073	nd Springs	and 8th	
SITE S	SPECIFIC IN	NPUT DATA				N	IOISE	MODE		s	
Highway Data				S	ite Con	ditions	(Hard =	= 10, S	oft = 15)		
Average Daily	Traffic (Adt):	6,517 vehicle	5					Autos.	15		
Peak Hour	Percentage:	7.37%			Me	dium Tr	ucks (2	Axles).	15		
Peak H	our Volume:	480 vehicle	6		He	avy Tru	cks (3+	Axles).	15		
Vel	hicle Speed:	35 mph		V	ehicle I	Mix					
Near/Far Lar	ne Distance:	36 feet		Ē	Veh	icleType	,	Day	Evening	Night	Daily
Site Data						. ,	Autos:	75.5%	6 14.0%	10.5%	97.42%
Bar	rier Heiaht:	0.0 feet			M	edium T	rucks:	48.9%	6 2.2%	48.9%	1.84%
Barrier Type (0-W	all, 1-Berm):	0.0			ŀ	leavy T	rucks:	47.3%	6 5.4%	47.3%	0.74%
Centerline Dis	st. to Barrier:	44.0 feet		N	loise Sc	ource El	evatio	ns (in f	eet)		
Centerline Dist.	to Observer:	44.0 feet				Auto	s: 0	000			
Barrier Distance	to Observer:	0.0 feet			Mediu	m Truck	s. 2	297			
Observer Height (	Observer Height (Above Pad): 5.0 feet				Heav	v Truck	s: 8	.006	Grade Ad	justment	: 0.0
Pa	ad Elevation:	0.0 feet				,					
Roa	ad Elevation:	0.0 feet		L	ane Eq	uivalen	t Distar	nce (in	feet)		
F	Road Grade:	0.0%				Auto	s: 40	.460			
	Left View:	-90.0 degree	es		Mediu	m Truck	s: 40	).241			
	Right View:	90.0 degree	es		Heav	y Truck	s: 40	.262			
FHWA Noise Mode	el Calculation	s									
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fres	nel	Barrier Att	en Ber	m Atten
Autos:	64.30	-4.04		1.28		-1.20		-4.61	0.0	000	0.000
Medium Trucks:	75.75	-21.28		1.31		-1.20		-4.87	0.0	000	0.000
Heavy Trucks:	81.57	-25.24		1.31		-1.20		-5.50	0.0	000	0.000
Unmitigated Noise	Levels (with	out Topo and	barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	·	Leq Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	60	).3	59.6		58.3		52	.3	60.7	7	61.4
Medium Trucks:	54	1.6	52.0		44.5		53	.3	59.4	1	59.5
Heavy Trucks:	56	6.4	53.7		50.3		55	.0	61.2	2	61.3
Vehicle Noise:	62	2.6	61.2		59.1		58	.4	65.3	3	65.6
Centerline Distanc	e to Noise C	ontour (in feet	)								
				70 d	BA	65	dBA	1	60 dBA	55	dBA
			Ldn:	21	21 46			99	2	213	
	Lon: CNEL:				22 48 103 222						22

	FH\	WA-RD-77-108	HIGHWA	AY NO	JISE PR	REDICT		DEL						
Scena	Scenario: OYC+P (2021)						Project Name: Highland Springs and 8th							
Road Nar	ne: 8th St.					Job N	lumber:	13073		-				
Road Segme	ent: e/o Xenia A	we.												
SITE	SPECIFIC IN	IPUT DATA				Ν	IOISE	MODE	L INPU	JTS				
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	oft = 15)					
Average Daily	Traffic (Adt):	7,135 vehicles						Autos:	15					
Peak Hou	Percentage:	7.37%			Me	dium Tr	ucks (2	Axles):	15					
Peak I	Hour Volume:	526 vehicles			He	avy Tru	cks (3+	Axles):	15					
Ve	ehicle Speed:	35 mph		V	ohiclo I	Nix								
Near/Far La	ane Distance:	36 feet		-	Vehi	icleTvne		Dav	Evenin	a Ni	iaht	Daily		
Site Data				-	1011	0.01300	Autos:	75.5%	14.0 <sup>4</sup>	9 ···	0.5%	97.42%		
Pa	rrior Hoight:	0.0 foot			Me	edium T	rucks:	48.9%	5 2.2 <sup>4</sup>	% 4	8.9%	1.84%		
Barrier Type (0-V	Vall 1-Berm)	0.0 1001			H	leavy T	rucks:	47.3%	5.4	% 4	7.3%	0.74%		
Centerline D	ist. to Barrier:	44.0 feet		-		-								
Centerline Dist.	to Observer:	44.0 feet		N	oise So	ource El	evatior	ns (in fe	eet)					
Barrier Distance	to Observer:	0.0 feet				Auto	s: 0	.000						
Observer Height	(Above Pad);	5.0 feet			Mediur	n Truck	s: 2	.297	0	A				
F	ad Elevation:	0.0 feet			Heav	y Truck	s: 8	.006	Grade	adjust	ment:	0.0		
Ro	ad Elevation:	0.0 feet		L	ane Equ	uivalent	Distan	ce (in	feet)					
	Road Grade:	0.0%				Auto	s: 40	.460		-				
	Left View:	-90.0 degree	s		Mediur	n Truck	s: 40	.241						
	Right View:	90.0 degree	s		Heav	y Truck	s: 40	.262						
EHWA Noise Mod	ol Calculation	e												
VehicleType	REMEL	Traffic Flow	Distan	се	Finite	Road	Fres	nel	Barrier	Atten	Beri	m Atten		
Autos:	64.30	-3.65		1.28		-1.20		-4.61		0.000		0.000		
Medium Trucks:	75.75	-20.89		1.31		-1.20		-4.87		0.000		0.000		
Heavy Trucks:	81.57	-24.85		1.31		-1.20		-5.50		0.000		0.000		
Unmitigated Nois	e Levels (with	out Topo and I	oarrier at	ttenu	ation)									
VehicleType	Leg Peak Hou	Ir Leq Day	Le	q Ev	ening	Leq	Night		Ldn		Ch	VEL		
Autos:	60	0.7 6	0.0		58.7		52.	7	6	1.1		61.8		
Medium Trucks:	55	i.0 £	52.4		44.9		53.	6	5	9.8		59.9		
Heavy Trucks:	56	.8 5	54.1		50.7		55.	4	6	1.6		61.7		
Vehicle Noise:	63	l.0 6	61.6		59.5		58.	8	6	5.7		65.9		
Centerline Distan	ce to Noise Co	ontour (in feet)												
				70 d	BA	65	dBA	e	60 dBA		55	dBA		
		l	dn:	23		4	9		105		22	26		
		CA	IEL:	24		5	i1		110		23	36		

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	FH	WA-RD-77-10	B HIGHV	VAY NO	DISE PI	REDICTIC	ON MOE	DEL			
Scenai Road Nan Road Segme	rio: OYC+P (20 ne: 8th St. ent: e/o Drivew	021) ay 1				Project I Job Nu	Vame: H mber: 1	lighlar 3073	nd Springs a	ind 8th	
SITE	SPECIFIC II	NPUT DATA				N	DISE M	IODE	L INPUTS		
Highway Data				S	ite Con	ditions (l	Hard = 1	10, So	oft = 15)		
Average Daily	Traffic (Adt):	7,814 vehicle	s				A	Autos:	15		
Peak Hour	Percentage:	7.37%			Ме	edium Tru	cks (2 A	xles):	15		
Peak H	our Volume:	576 vehicle	s		He	avy Truck	ks (3+ A	xles):	15		
Ve	ehicle Speed:	45 mph		V	ohiolo	Miy					
Near/Far La	ane Distance:	54 feet			Veh	nicleType		Dav	Evenina	Niaht	Daily
Site Data					1011	A	utos:	75.5%	14.0%	10.5%	97.42%
Ba	rrier Height	0.0 feet			М	edium Tru	icks:	48.9%	2.2%	48.9%	1.84%
Barrier Type (0-V	Vall 1-Rerm)	0.0				Heavy Tru	icks: 4	47.3%	5.4%	47.3%	0.74%
Centerline D	ist. to Barrier:	50.0 feet						11-1	- 41		
Centerline Dist.	to Observer:	50.0 feet		/	use so	Juice Ele	vauons		el)		
Barrier Distance	to Observer:	0.0 feet			Madiu	Autos.	0.0	100			
Observer Height	(Above Pad):	5.0 feet			Hoo	III TTUCKS.	. 2.2	.97	Grade Adiu	etmont	0.0
P	ad Elevation:	0.0 feet			nea	vy mucks.	0.0	00	Olduc Auju	Sunona	0.0
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalent l	Distanc	e (in f	leet)		
	Road Grade:	0.0%				Autos.	42.3	879			
	Left View:	-90.0 degre	es		Mediu	m Trucks.	42.1	70			
	Right View:	90.0 degre	es		Hear	vy Trucks.	42.1	90			
FHWA Noise Mod	el Calculation	ıs									-
VehicleType	REMEL	Traffic Flow	Dista	ance	Finite	Road	Fresne	el	Barrier Atte	n Ber	m Atten
Autos:	68.46	6 -4.35	5	0.97		-1.20	-	4.65	0.00	0	0.000
Medium Trucks:	79.45	5 -21.59	)	1.01		-1.20	-	4.87	0.00	0	0.000
Heavy Trucks:	84.25	-25.54	Ļ	1.00		-1.20		-5.43	0.00	00	0.000
Unmitigated Nois	e Levels (with	nout Topo and	l barrier	attenu	ation)						
VehicleType	Leq Peak Ho	ur Leq Da	y I	Leq Eve	ening	Leq N	light		Ldn	CI	VEL
Autos:	63	3.9	63.2		61.9		55.9		64.3		64.9
Medium Trucks:	5	7.7	55.1		47.6		56.3		62.5		62.6
Heavy Trucks:	8.5	55.8		52.4		57.0		63.2		63.3	
Vehicle Noise:	6	5.7	64.5		62.5		61.2		68.2		68.5
Centerline Distan	Centerline Distance to Noise Contour (in fe										-
				70 dBA		65 d	BA	6	0 dBA	55	dBA
						82			176	3	79
		C	NEL:	40		85			184	3	97

Scenario: O	YC+P (2021)				Project Na	me: Hi	ghlan	d Springs	and 8th	
Road Name: W	llson St.				Job Num	ber: 13	8073			
Road Segment: e/	o Highland Sp	orings Ave.								
SITE SPE	CIFIC INPU	T DATA			NOI	SE M	ODEL	INPUT	5	
Highway Data				Site Con	ditions (Ha	rd = 1	0, Soi	ft = 15)		
Average Daily Traff	ic (Adt): 14,6	96 vehicles				A	utos:	15		
Peak Hour Perc	entage: 7.	37%		Me	dium Truck	s (2 Ax	des):	15		
Peak Hour \	Volume: 1,0	83 vehicles		He	avy Trucks	(3+ Ax	des):	15		
Vehicle	Speed:	45 mph		Vehicle N	lix					
Near/Far Lane D	istance:	48 feet	F	Vehi	cleType	D	ay	Evening	Night	Daily
Site Data					Auto	os: 7	5.5%	14.0%	10.5%	97.42
Barrier	Heiaht:	0.0 feet		Me	edium Truc	(s: 4	8.9%	2.2%	48.9%	1.84
Barrier Type (0-Wall, 1	-Berm):	0.0		ŀ	leavy Truc	ks: 4	7.3%	5.4%	47.3%	0.749
Centerline Dist. to	Barrier: 5	i0.0 feet	E E	Noise So	urce Fleva	tions	(in fo	at)		
Centerline Dist. to Ol	bserver: 5	i0.0 feet	Ľ.	10130 00	Autoe:	0.00	0			
Barrier Distance to Ol	bserver:	0.0 feet		Modiur	n Trucks	2.20	)0 )7			
Observer Height (Abov	/e Pad):	5.0 feet		Hoov	v Trucke	8.00	,, 16 1	Grade Ad	iustment	.00
Pad El	evation:	0.0 feet		mour	y maono.	0.00				
Road El	evation:	0.0 feet	4	Lane Equ	ivalent Di	stance	e (in fe	eet)		
Road	Grade:	0.0%			Autos:	44.14	17			
Le	eft View: -9	0.0 degrees		Mediur	n Trucks:	43.94	17			
Rigi	ht View: 9	0.0 degrees		Heav	y Trucks:	43.96	56			
FHWA Noise Model Ca	lculations									
VehicleType R	EMEL Tra	affic Flow Di	istance	Finite	Road I	resne	I E	Barrier Att	en Ber	m Atter
Autos:	68.46	-1.60	0.7	1	-1.20	-4	4.65	0.0	000	0.00
Medium Trucks:	79.45	-18.84	0.7	4	-1.20	-4	4.87	0.0	000	0.00
Heavy Trucks:	84.25	-22.80	0.7	3	-1.20	-{	5.43	0.0	000	0.00
Unmitigated Noise Lev	els (without	Topo and barri	ier atten	uation)						
VehicleType Leq	Peak Hour	Leq Day	Leq E	vening	Leq Nig	ht		Ldn	C	NEL
Autos:	66.4	65.7		64.4		58.4		66.8	3	67
Medium Trucks:	60.1	57.6		50.1		58.8		65.0	)	65
Heavy Trucks:	61.0	58.3		54.9		59.5		65.7	7	65.
Vehicle Noise:	68.2	66.9		65.0		63.7		70.7	7	71
Centerline Distance to	Noise Conto	ur (in feet)								
			70 (	dBA	65 dB/	1	60	) dBA	55	dBA
		Ldn:	5	5	119			257	5	53

	FH	WA-RD-77-108	HIGHWA	AY NOISE PREDICTION MODEL							
Scenari	o: OYC+P (20	021)				Project	Name:	Highla	nd Springs	and 8th	
Road Name	e: 6th St.					Job N	lumber:	13073			
Road Segmen	nt: w/o Highla	nd Springs Ave.									
SITE S	SPECIFIC IN	VPUT DATA				Ν	IOISE	MODE	L INPUT	s	-
Highway Data				S	ite Con	ditions	(Hard =	= 10, So	oft = 15)		
Average Daily	Traffic (Adt):	18,928 vehicles						Autos:	15		
Peak Hour	Percentage:	7.37%			Me	dium Tri	ucks (2	Axles):	15		
Peak He	our Volume:	1,395 vehicles			He	avy Tru	cks (3+	Axles):	15		
Vel	hicle Speed:	35 mph		v	ehicle I	Nix					
Near/Far Lar	ne Distance:	58 feet		-	Vehi	cleType		Day	Evening	Night	Daily
Site Data							Autos:	75.5%	5 14.0%	10.5%	97.42%
Bar	rier Heiaht:	0.0 feet			Me	edium Ti	rucks:	48.9%	5 2.2%	48.9%	1.84%
Barrier Type (0-Wa	all, 1-Berm):	0.0			ŀ	leavy T	rucks:	47.3%	5.4%	47.3%	0.74%
Centerline Dis	t. to Barrier:	55.0 feet		N	oise So	urce El	evatio	ns (in f	eet)		
Centerline Dist. t	to Observer:	55.0 feet				Auto	s: 0	000			-
Barrier Distance t	to Observer:	0.0 feet			Mediu	n Truck	s: 2	.297			
Observer Height ()	Above Pad):	5.0 feet			Heav	v Truck	s: 8	.006	Grade Ad	ljustmeni	t: 0.0
Pa	d Elevation:	0.0 feet		-	_						
Roa	d Elevation:	0.0 feet		L	ane Equ	livalent	Distar	ice (in	feet)		
F	Road Grade:	0.0%				Auto.	s: 47	000			
	Left View:	-90.0 degree	S	Medium Trucks: 46.811							
	Right view:	90.0 degree	S		neav	у писк	5. 40	.830			
FHWA Noise Mode	Calculation	IS									
VehicleType	REMEL	Traffic Flow	Distanc	е	Finite	Road	Fres	nel	Barrier Att	en Bei	rm Atten
Autos:	64.30	0.59		0.30		-1.20		-4.67	0.	000	0.00
Medium Trucks:	75.75	-16.65		0.33		-1.20		-4.87	0.	000	0.00
Heavy Trucks:	81.57	-20.61		0.32		-1.20		-5.38	0.	000	0.00
Unmitigated Noise	Levels (with	out Topo and I	parrier at	tenı	ation)						
VehicleType	Leq Peak Ho	ur Leq Day	Leo	η Ev	ening	Leq	Night		Ldn	C	NEL
Autos:	64	4.0 6	3.3		62.0		56	.0	64.4	4	65.
Medium Trucks:	58	3.2 5	5.7		48.1		56	.9	63.	1	63.
Heavy Trucks:	Heavy Trucks: 60.1				54.0		58	.6	64.	8	64.
Venicle Noise:	Vehicle Noise: 66.2 64.8				62.8		62	.1	68.	9	69.3
Centerline Distanc	Centerline Distance to Noise Contour (in feet)										
			<u> </u>	70 dBA 65 dBA 60 dBA 55			aBA				
	1				47 101 217			4	100		
		CA	EL:	49		10	JD		226	2	101

	гп	WA-RD-77-100	пісни			EDICI		DEL				
Scenar	io: OYC+P (2	021)				Project	Name: I	lighlar	d Springs	and 8th	1	
Road Nam	ne: Ramsey S	t.				Job N	lumber: *	13073				
Road Segme	<i>nt:</i> e/o Highlai	nd Springs Ave.										
SITE	SPECIFIC II	NPUT DATA				r	IOISE N	IODE	L INPUT	s		
Highway Data				S	ite Con	ditions	(Hard =	10, So	ft = 15)			
Average Daily	Traffic (Adt):	17,688 vehicle	s					Autos:	15			
Peak Hour	Percentage:	7.37%			Me	dium Tr	ucks (2 A	(xles)	15			
Peak H	lour Volume:	1,304 vehicle	s		He	avy Tru	cks (3+ A	(xles)	15			
Ve	hicle Speed:	45 mph		V	ehicle l	Nix						
Near/Far La	ne Distance:	58 feet		-	Veh	icleTvpe		Dav	Evenina	Niaht	Daily	
Site Data					1011	0.01.900	Autos:	75.5%	14.0%	10.5%	6 97.42%	
Pa	rrior Hoight	0.0 foot			M	edium T	rucks:	48.9%	2.2%	48.9%	6 1.84%	
Barrior Turno (0.14	/oll_1_Rorm):	0.0 1001			ŀ	leavv T	rucks:	47.3%	5.4%	47.3%	6 0.74%	
Centerline Di	st to Barrier	55.0 feet		-								
Centerline Dist.	to Observer:	55.0 feet		N	oise Sc	ource E	evations	s (in fe	et)			
Barrier Distance	to Observer:	0.0 feet			Autos: 0.000							
Observer Height	(Above Pad);	5.0 feet			Mediu	n Truck	s: 2.2	297	0	E		
P	ad Elevation:	0.0 feet			Heav	y Truck	s: 8.0	006	Grade Ad	justmen	<i>It:</i> 0.0	
Ro	ad Elevation:	0.0 feet		Li	ane Eq	uivalen	t Distand	e (in f	eet)			
	Road Grade:	0.0%				Auto	s: 47.	000		-		
	Left View:	-90.0 degree	es		Mediu	n Truck	s: 46.	811				
	Right View:	90.0 degree	es		Heavy Trucks: 46.830							
FHWA Noise Mode	el Calculatior	is										
VehicleType	REMEL	Traffic Flow	Dista	nce	Finite	Road	Fresn	el i	Barrier At	ten Be	erm Atten	
Autos:	68.46	-0.80		0.30		-1.20		-4.67	0.	000	0.000	
Medium Trucks:	79.45	-18.04		0.33		-1.20		-4.87	0.	000	0.000	
Heavy Trucks:	84.25	-21.99		0.32		-1.20		-5.38	0.	000	0.000	
Unmitigated Noise	e Levels (with	out Topo and	barrier	attenu	ation)							
VehicleType	Leq Peak Ho	ur Leq Day	/ L	.eq Eve	ening	Leq	Night		Ldn	0	NEL	
Autos:	6	5.8	66.1		64.8		58.8		67.	2	67.8	
Medium Trucks:	6	0.5	58.0		50.5		59.2		65.	4	65.4	
Heavy Trucks:	6	1.4	58.7		55.3		59.9		66.	1	66.	
Vehicle Noise:	6	B.6	67.3		65.4		64.1		71.	1	71.4	
Centerline Distant	)	-										
			1	70 dBA 65 dBA 60 dBA			55	5 dBA				
			Ldn:	65		1	39		300		647	
		C	NEL:	68		1	46	315			678	

Tuesday, March 24, 2020

Tuesday, March 24, 2020

Tuesday, March 24, 2020

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APPENDIX 9.1:

CADNAA OPERATIONAL NOISE MODEL INPUTS

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### 13073

### CadnaA Noise Prediction Model: 13073\_2.cna Date: 26.03.20 Analyst: B. Lawson

### **Receiver Noise Levels**

Name	М.	ID		Level Lr		Limit. Value				Land Use			:	Coordinates			
			Day	Night	CNEL	Day	Night	CNEL	Туре	Auto	Noise Type			Х	Y	Z	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)	
RECEIVERS		R1	45.9	44.4	51.1	55.0	45.0	0.0				5.00	а	6350058.89	2283838.04	5.00	
RECEIVERS		R2	43.3	40.7	47.6	55.0	45.0	0.0				5.00	а	6350422.50	2283513.23	5.00	
RECEIVERS		R3	46.9	42.1	49.4	55.0	45.0	0.0				5.00	а	6350153.85	2283350.09	5.00	
RECEIVERS		R4	42.2	38.2	45.3	55.0	45.0	0.0				5.00	a	6349660.03	2283271.21	5.00	
RECEIVERS		R5	48.4	43.6	50.9	55.0	45.0	0.0				5.00	a	6349818.88	2283542.64	5.00	

### Point Source(s)

Name	М.	ID	R	esult. PW	'L	Lw / Li			Op	erating Ti	me	К0	Height	C	oordinates	
			Day	Evening	Night	Туре	Value	norm.	Day	Special	Night			х	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(dB)	(ft)	(ft)	(ft)	(ft)
POINTS		AC01	88.9	88.9	88.9	Lw	88.9		585.00	0.00	252.00	0.0	5.00	g 6350107.35	2283555.08	25.00
POINTS		AC02	88.9	88.9	88.9	Lw	88.9		585.00	0.00	252.00	0.0	5.00	g 6349985.08	2283596.65	25.00
POINTS		DT	83.2	83.2	83.2	Lw	83.2		450.00	0.00	270.00	0.0	3.00	a 6349978.56	2283537.14	3.00
POINTS		GAS01	79.9	79.9	79.9	Lw	79.9					0.0	5.00	a 6350074.75	2283650.44	5.00
POINTS		GAS02	79.9	79.9	79.9	Lw	79.9					0.0	5.00	a 6350102.46	2283651.26	5.00
POINTS		GAS03	79.9	79.9	79.9	Lw	79.9					0.0	5.00	a 6350130.17	2283652.08	5.00
POINTS		GAS04	79.9	79.9	79.9	Lw	79.9					0.0	5.00	a 6350157.89	2283652.08	5.00
POINTS		TRASH01	94.0	94.0	94.0	Lw	94		75.00	0.00	0.00	0.0	5.00	a 6349927.21	2283468.67	5.00
POINTS		TRASH02	94.0	94.0	94.0	Lw	94		75.00	0.00	0.00	0.0	5.00	a 6350051.11	2283468.67	5.00

### Building(s)

								Coordinates							
Name	М.	ID	RB	Residents	Absorption	Height			Coordinat	es					
						Begin		х	У	z	Ground				
						(ft)		(ft)	(ft)	(ft)	(ft)				
BUILDINGS		QSR	х	0		20.00	а	6349965.52	2283642.29	20.00	0.00				
								6350004.65	2283640.66	20.00	0.00				
								6350004.65	2283555.08	20.00	0.00				
								6349963.89	2283554.26	20.00	0.00				
BUILDINGS		CS	х	0		20.00	а	6350070.67	2283569.75	20.00	0.00				
								6350139.95	2283571.38	20.00	0.00				
								6350139.95	2283528.99	20.00	0.00				
								6350071.48	2283531.44	20.00	0.00				

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APPENDIX 10.1:

CADNAA CONSTRUCITON NOISE MODEL INPUTS

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### 13073

CadnaA Noise Prediction Model: 13073\_Construction.cna Date: 24.03.20 Analyst: B. Lawson

### **Receiver Noise Levels**

Name	М.	ID		Level Lr		Lii	ue	Land Use			Height	t	Coordinates			
			Day	Night	CNEL	Day	Night	CNEL	Туре	Auto	Noise Type			Х	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
RECEIVERS		R1	69.2	69.2	75.8	75.0	0.0	0.0				5.00	а	6350058.89	2283838.04	5.00
RECEIVERS		R2	65.9	65.9	72.6	75.0	0.0	0.0				5.00	а	6350422.50	2283513.23	5.00
RECEIVERS		R3	69.3	69.3	76.0	75.0	0.0	0.0				5.00	а	6350153.85	2283350.09	5.00
RECEIVERS		R4	63.3	63.3	69.9	75.0	0.0	0.0				5.00	а	6349660.03	2283271.21	5.00
RECEIVERS		R5	70.8	70.8	77.5	75.0	0.0	0.0				5.00	a	6349818.88	2283542.64	5.00

### Area Source(s)

ID	R	esult. PW	/L	Result. PWL"			Lw	/Li	Operating Time			M	oving Pt. S	Src	Height
	Day	Evening	Night	Day	Evening	Night	Туре	Value	Day	Special	Night		Number		
	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			(min)	(min)	(min)	Day	Evening	Night	(ft)
CONSTRUCTION	114.5	114.5	114.5	75.3	75.3	75.3	Lw"	75.3							8

Name	ŀ	lei	ght		Coordinat	es	
	Begin		End	х	У	z	Ground
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
SITE	8.00	а		6349891.89	2283449.08	8.00	0.00
				6349887.03	2283708.80	8.00	0.00
				6349955.78	2283717.83	8.00	0.00
				6350032.17	2283723.38	8.00	0.00
				6350174.53	2283726.16	8.00	0.00
				6350183.56	2283723.38	8.00	0.00
				6350195.36	2283717.13	8.00	0.00
				6350209.25	2283702.55	8.00	0.00
				6350209.94	2283621.30	8.00	0.00
				6350216.19	2283619.91	8.00	0.00
				6350221.75	2283616.44	8.00	0.00
				6350225.22	2283608.11	8.00	0.00
				6350227.31	2283453.94	8.00	0.00

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# APPENDIX I TRAFFIC IMPACT ANALYSIS APRIL 23, 2020



## Highland Springs and 8th Retail TRAFFIC IMPACT ANALYSIS CITY OF BEAUMONT

PREPARED BY:

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April 23, 2020

13072-03 TIA Report

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3	AR 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10 PR 4.1 4.2 4.3 4.4	Existing Circulation Network	19 19 23 23 23 23 23 23 23 23 23 23 23 23 23
4	AR 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10 PR 4.1 4.2 4.3 4.4 4.5	Existing Circulation Network	19         19         23         31         35         37         37         37
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4	AR 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10 PR 4.1 4.2 4.3 4.4 4.5 4.6 4.7	EXISTING Circulation Network	19         19         23         35         37         37         37         40         44
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### LIST OF ABBREVIATED TERMS

(1)	Reference
	Average Daily Traffic
ADT	Average Daily Traffic
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
DIF	Development Impact Fee
E+P	Existing Plus Project
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
NCHRP	National Cooperative Highway Research Program
OPR	Office of Planning and Research
PHF	Peak Hour Factor
Project	Highland Springs and 8th Retail
RCTC	Riverside County Transportation Commission
SB	Senate Bill
SHS	State Highway System
TIA	Traffic Impact Analysis
TUMF	Transportation Uniform Mitigation Fee
WRCOG	Western Riverside Council of Governments
V/C	Volume to Capacity
VMT	Vehicle Miles Traveled



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### 1 INTRODUCTION

This report presents the results of the traffic impact analysis (TIA) for the proposed Highland Springs and 8th Retail development ("Project"), which is located on the southwest corner of Highland Springs Avenue and 8<sup>th</sup> Street in the City of Beaumont, as shown on Exhibit 1-1.

The purpose of this TIA is to evaluate the potential deficiencies related to traffic and circulation system deficiencies that may result from the development of the proposed Project, and to recommend improvements to resolve identified deficiencies and to achieve acceptable circulation system operational conditions. This traffic study has been prepared in accordance with the County of Riverside's <u>Traffic Impact Analysis Preparation Guide</u> (August 2008), the California Department of Transportation (Caltrans) <u>Guide for the Preparation of Traffic Impact Studies</u>, and through consultation with City of Beaumont staff during the scoping process. (1) (2) The Project Traffic Study Scoping agreement is provided in Appendix 1.1 of this TIA, which has been approved by both the lead agency (City of Beaumont) and the neighboring City of Banning.

### **1.1 SUMMARY OF FINDINGS**

The Project is to construct the following improvements as a design features in conjunction with development of the site:

- Both Highland Springs Avenue and 8<sup>th</sup> Street are built out to their ultimate half-sections. However, the Project will construct additional curb, gutter, and sidewalk improvements along the Project's frontage, as needed for site access.
- Project to install a stop control on the northbound approach at Driveway 1 on 8<sup>th</sup> Street and on the eastbound approach at Driveway 2 on Highland Springs Avenue.

Additional details and intersection lane geometrics are provided in Section 1.7 *Recommendations* of this report.

The proposed Project is not anticipated to require the construction of any other off-site improvements, however, there are improvement needs identified at off-site intersections for future cumulative traffic analysis scenarios. As such, the Project Applicant's responsibility for the Project's contributions towards off-site deficient intersections is fulfilled through payment of fair share and/or payment into pre-existing fee programs (if applicable) that would be assigned to the future construction of the identified recommended improvements. The Project Applicant would be required to pay requisite fees and/or fair share contributions consistent with the City's requirements (see Section 7 *Local and Regional Funding Mechanisms*).



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# **EXHIBIT 1-1: PRELIMINARY SITE PLAN**

RIRO = RIGHT-IN/RIGHT-OUT ONLY ACCESS

### **1.2 PROJECT OVERVIEW**

The Project is proposed to consist of the following uses:

- 3,500 square feet of Fast-Food Restaurant with Drive-Through Window use
- 12 vehicle fueling position gasoline service station with convenience market

The Project opening year is 2021. Vehicular access will be provided via the following driveways (see Exhibit 1-1):

- 8<sup>th</sup> Street via Driveway 1 right-in/right-out only
- Highland Springs Avenue via Driveway 2 right-in/right-out only

Regional access to the Project site is available from the I-10 Freeway via Highland Springs Avenue.

Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) <u>Trip Generation</u> <u>Manual</u>, (10<sup>th</sup> Edition, 2017). (3) The proposed Project is anticipated to generate a total of 1,100 trip-ends per day, 145 AM peak hour trips and 100 PM peak hour trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

### **1.3** ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2020)
- Existing Plus Project (E+P)
- Opening Year Cumulative (2021) Without Project
- Opening Year Cumulative (2021) With Project

### **1.3.1** EXISTING (2020) CONDITIONS

Information for Existing (2020) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared. Traffic counts were conducted in December 2019. A 1.0% growth rate has been applied to the 2019 traffic counts to reflect 2020 conditions.

### **1.3.2** EXISTING PLUS PROJECT CONDITIONS

The E+P analysis determines any potential circulation system deficiencies that would occur on the existing roadway system in the scenario of the Project being placed upon Existing conditions.



### 1.3.3 OPENING YEAR CUMULATIVE (2021) CONDITIONS

The Opening Year Cumulative (2021) conditions analysis determines the potential near-term cumulative circulation system deficiencies. To account for background traffic growth, traffic associated with other known cumulative development projects in conjunction with an ambient growth from Existing (2020) conditions of 2.0% is included for Opening Year Cumulative (2021) traffic conditions. This comprehensive list was compiled from information provided by the City of Beaumont and City of Banning and is consistent with other recent studies in the study area.

### 1.4 STUDY AREA

To ensure that this TIA satisfies the City of Beaumont's traffic study requirements, Urban Crossroads, Inc. prepared a project traffic study scoping package for review by City of Beaumont and City of Banning staff prior to the preparation of this report. This agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The agreement approved by both the City of Beaumont and City of Banning is included in Appendix 1.1 of this report.

The 9 study area intersections shown on Exhibit 1-2 and listed in Table 1-1 were selected for evaluation in this TIA based on consultation with City of Beaumont staff. The study area includes intersections where the Project is anticipated to contribute 50 or more peak hour trips per the County of Riverside's traffic study guidelines. (1) The "50 peak hour trip" criteria represents a minimum number of trips at which a typical intersection would have the potential to be substantively affected by a given development proposal. The 50 peak hour trip criterion is a traffic engineering rule of thumb that is accepted and widely used within Riverside County for estimating a potential area of influence (i.e., study area).

ID	Intersection Location	Jurisdiction	CMP?
1	Pennsylvania Av. & 8th St.	City of Beaumont	No
2	Xenia Av. & 8th	City of Beaumont	No
3	Allegheny St. & 8th St.	City of Beaumont	No
4	Driveway 1 & 8th St. – Future Intersection	City of Beaumont	No
5	Highland Springs Av. & 8th St./Wilson St.	City of Beaumont, City of Banning	No
6	Highway Springs Av. & Driveway 2 – Future Intersection	City of Beaumont, City of Banning	No
7	Highland Springs Av. & 6th St./Ramsey St.	City of Beaumont, City of Banning	No
8	Highland Springs Av. & I-10 WB Ramps	City of Beaumont, City of Banning, Caltrans	No
9	Highland Springs Av. & I-10 EB Ramps	City of Beaumont, City of Banning, Caltrans	No

### TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS





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EXISTING INTERSECTION ANALYSIS LOCATION
 FUTURE INTERSECTION ANALYSIS LOCATION

LEGEND:



**EXHIBIT 1-2: LOCATION MAP** 

The intent of a Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of Riverside CMP became effective with the passage of Proposition 111 in 1990 and updated most recently updated in 2011. The Riverside County Transportation Commission (RCTC) adopted the 2011 CMP for the County of Riverside in December 2011. (4) CMP intersections are identified in Table 1-1. There are no study area intersections identified as a Riverside County CMP facility.

### 1.5 SENATE BILL 743 – VEHICLE MILES TRAVELED (VMT)

Senate Bill 743 (SB 743), approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of vehicle miles traveled (VMT) as the replacement for automobile delay-based Level of Service (LOS). In December 2018, the Natural Resources Agency finalized updates to CEQA Guidelines to incorporate SB 743 (i.e., VMT). While a lead agency has the option to immediately apply the new VMT based analysis methodology and thresholds for the purposes of evaluating transportation impacts, statewide application of the new guidelines is required July 1, 2020.

The revised Caltrans traffic impact analysis guidelines are set to be available in Spring/Summer 2020, however, Caltrans acknowledges automobile delay will no longer be considered a CEQA impact for development projects and will use VMT as the metric for determining impacts on the SHS. As such, the LOS operations included in this TIA for study area intersections and freeway facilities are informational and are not anticipated to support the environmental document.

### **1.6 DEFICIENCIES**

This section provides a summary of deficiencies by analysis scenario. Section 2 *Methodologies* provides information on the methodologies used in the analysis and Section 5 *E+P Traffic Conditions* and Section 6 *Opening Year Cumulative (2021) Traffic Conditions* includes the detailed analysis. A summary of LOS results for all analysis scenarios is presented on Exhibit 1-3.

### 1.6.1 E+P CONDITIONS

### Intersections

All study area intersections are anticipated to continue to operate at an acceptable LOS during the peak hours, consistent with Existing (2020) traffic conditions.

### Off-Ramp Queues

There are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95<sup>th</sup> percentile traffic flows, consistent with Existing (2020) traffic conditions.





#	Intersection	Existing (2020)	E+P	Opening Year Cumulative (2021) Without Project	Opening Year Cumulative (2021) With Project
1	Pennsylvania Av. & 8th St.		$\bigcirc$		
2	Xenia Av. & 8th St.		$\bigcirc$		
3	Allegheny St. & 8th St.		$\bigcirc$	$\bigcirc$	$\bigcirc$
4	Dwy. 1 & 8th St.	NA	$\bigcirc$	NA	
5	Highland Springs Av. & 8th St. / Wilson St.		$\bigcirc$		
6	Highland Springs Av. & Dwy. 2	NA	$\bigcirc$	NA	
7	Highland Springs Av. & 6th St. / Ramsey St.		$\bigcirc$		
8	Highland Springs Av. & I-10 WB Ramps		$\bigcirc$	$\bigcirc$	
9	Highland Springs Av. & I-10 EB Ramps		$\bigcirc$		

EXHIBIT 1-3: SUMMARY OF DEFICIENT INTERSECTIONS BY ANALYSIS SCENARIO





### 1.6.2 OPENING YEAR CUMULATIVE (2021) CONDITIONS

### Intersections

The following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2021) Without Project traffic conditions:

- Pennsylvania Avenue & 8<sup>th</sup> Street (#1) LOS F AM peak hour; LOS E PM peak hour
- Highland Springs Avenue & 8<sup>th</sup> Street/Wilson Street (#5) LOS D AM peak hour; LOS F PM peak hour
- Highland Springs Avenue & 6<sup>th</sup> Street/Ramsey Street (#7) LOS D PM peak hour only

There are no additional study area intersections anticipated to operate at an unacceptable LOS with the addition of Project traffic under Opening Year Cumulative (2021) With Project traffic conditions, in addition to the intersections identified above for Opening Year Cumulative (2021) Without Project traffic conditions.

### Off-Ramp Queues

There are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95<sup>th</sup> percentile traffic flows for Opening Year Cumulative (2021) traffic conditions, consistent with Existing (2020) traffic conditions.

### **1.7 RECOMMENDATIONS**

### **1.7.1** SITE ADJACENT AND SITE ACCESS RECOMMENDATIONS

The following recommendations are based on the improvements needed to accommodate site access. Exhibit 1-4 shows the site adjacent recommendations.

At the intersection of Highland Springs Avenue & 8<sup>th</sup> Street/Wilson Street, no improvements are recommended; the existing traffic control and intersection geometrics should be maintained.

**Recommendation 1.1 – Driveway 1 & 8<sup>th</sup> Street (#4)** – The following improvement is necessary to accommodate site access:

• Project to install a stop control on the northbound approach and a right turn lane (driveway).

**Recommendation 2.1 – Highland Springs Avenue & Driveway 2 (#6)** – The following improvement is necessary to accommodate site access:

• Project to install a stop control on the eastbound approach and a right turn lane (driveway).

**Recommendation 3.1 – 8<sup>th</sup> Street** is an east-west oriented roadway located along the Project's northern boundary. According to the City of Beaumont Circulation Element, 8<sup>th</sup> Street is currently built out to its ultimate half-section. As such, there are no roadway improvement recommendations. However, curb, gutter, and sidewalk improvements are recommended, as needed for site access along the Project's frontage, consistent with the City's standards.





# EXHIBIT 1-4: SITE ADJACENT ROADWAY AND SITE ACCESS RECOMMENDATIONS

**Recommendation 4.1 – Highland Springs Avenue** is a north-south oriented roadway located along the Project's eastern boundary. According to the City of Beaumont Circulation Element, Highland Springs Avenue is currently built out to its ultimate half-section. As such, there are no roadway improvement recommendations. However, curb, gutter, and sidewalk improvements are recommended, as needed for site access along the Project's frontage, consistent with the City's standards.

On-site traffic signing and striping should be implemented agreeable with the provisions of the California Manual on Uniform Traffic Control Devices (CA MUTCD) and in conjunction with detailed construction plans for the Project site.

Sight distance at each project access point should be reviewed with respect to standard Caltrans and City of Beaumont sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

### **1.7.2** OFF-SITE RECOMMENDATIONS

The recommended improvements needed to address the cumulative deficiencies identified under Existing (2020), E+P, Opening Year Cumulative (2021) traffic conditions are shown in Table 1-2. For those improvements listed in Table 1-2 and not constructed as part of the Project, the Project Applicant's responsibility for the Project's contributions towards deficient intersections is fulfilled through payment of fair share and/or Transportation Uniform Mitigation Fee (TUMF)/Development Impact Fee (DIF) program fees (if applicable) that would be assigned to construction of the identified recommended improvements. Preliminary cost estimates and fee assessments for these improvements are summarized in Table 1-2. The Project Applicant would be required to pay TUMF/DIF and/or fair share fees consistent with the City's requirements (see Section 7 *Local and Regional Funding Mechanisms*).

**Recommendation 5.1** – Prior to the issuance of building permits, the Project Applicant shall pay the Project's fair share amount of \$14,462 for the improvements identified in Table 1-2 at intersections located within the City of Beaumont, or as agreed to by the City and Project Applicant.

**Recommendation 6.1** – The Developer's fair-share amount for the intersections that either share a mutual border with or are wholly located within the City of Banning that have recommended improvements which are not covered by a pre-existing fee program is \$2,547. Developer shall be required to pay the amount shown above to the City of Beaumont prior to the issuance of building permits. The City of Beaumont shall hold Developer's Fair Share contribution in trust and shall apply Developer's Fair Share Contribution to any fee program adopted or agreed upon by the City of Beaumont and other agencies.



### Table 1-2

### Summary of Improvements by Analysis Scenario

#	Intersection Location	Jurisdiction	Recommended Improvements <sup>1</sup>			Improvements in	Project	Total Cost <sup>4</sup>		Fair Share	
#			Existing (2020)	E+P	2021 Without Project	2021 With Project	Fee Program? <sup>1</sup> Responsibility <sup>2</sup>	ee Program? <sup>1</sup> Responsibility <sup>2</sup>	Responsibility <sup>2</sup>	lotal Lost F	Fair Share %
1	Pennsylvania Av. & 8th St.	Beaumont	None	None	Install a Traffic Signal	Same	No	Fair Share	\$400,000	2.6%	\$10,390
					Restripe the NB approach to provide one left turn lane and one shared through-right turn lane	Same	No	Fair Share	\$39,200		\$1,018
					Restripe the SB approach to provide one left turn lane and one shared through-right turn lane	Same	No	Fair Share	\$39,200		\$1,018
					Restripe the EB approach to provide one left turn lane and one shared through-right turn lane	Same	No	Fair Share	\$39,200		\$1,018
					Restripe the WB approach to provide one left turn lane and one shared through-right turn lane	Same	No	Fair Share	\$39,200		\$1,018
								Total	\$556,800		\$14,462
5	Highland Springs Av. & 8th St./Wilson St.	Beaumont, Banning	None	None	Restripe the NB approach to provide one left turn lane, two through lanes, and one right turn lane	Same	Yes (TUMF)	Fees	\$0		\$0
								Total	\$0		\$0
7	Highland Springs Av. & 6th	Beaumont, Banning	None	None	Add 2nd WB left turn lane	Same	No	Fair Share	\$78,400	2.2%	\$1,698
	St./Ramsey St.				Stripe the WB defacto right turn lane	Same	No	Fair Share	\$39,200		\$849
								Total	\$117,600		\$2,547
Total Costs for Horizon Year (2040) Improvements						\$674,400	-	\$17,010			
Total Project Fair Share Contribution to the City of Beaumont (non-DIF) <sup>6</sup>							\$14,462				
Total Project Fair Share Contribution to the City of Banning <sup>7</sup>						\$2,547					

<sup>1</sup> Program improvements constructed by project may be eligible for fee credit. In lieu fee payment is at discretion of City.

<sup>2</sup> Identifies the Project's responsibility to construct an improvement or contribute a fee payment or fair share towards the implementation of the improvements shown.

<sup>3</sup> Represents the fair share percentage for the Project during the most impacted peak hour.

<sup>4</sup> Costs have been estimated using the data provided in Appendix "G" of the CMP (2016 Update) for preliminary construction costs.

<sup>5</sup> Rough order of magnitude cost estimate.

<sup>6</sup> Total project fair share contribution consists of the improvements which are not already included in a fee program for those intersections wholly or partially within the City of Beaumont.

<sup>7</sup> Total project fair share contribution consists of the improvements which are not already included in a fee program for those intersections wholly or partially within the City of Banning.


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# 2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. Since the City of Beaumont does not have their own traffic study guidelines, the methodologies described are generally consistent with the County of Riverside and Caltrans traffic study guidelines. (1) (2)

# 2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

### 2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The <u>Highway Capacity Manual</u> (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (5) The HCM uses different procedures depending on the type of intersection control.

### 2.2.1 SIGNALIZED INTERSECTIONS

The City of Beaumont and City of Banning require signalized intersection operations analysis based on the methodology described in the HCM (6<sup>th</sup> Edition). Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections, LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1. Study area intersections have been evaluated using the Synchro (Version 10) analysis software package.

The traffic modeling and signal timing optimization software package Synchro (Version 10) is utilized to analyze signalized intersections within the City of Beaumont. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	А	F
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	В	F
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	С	F
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D	F
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E	F
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up	F	F

	<b>TABLE 2-1: SIGNALIZED I</b>	NTERSECTION LOS THRESHOLDS
--	--------------------------------	----------------------------

Source: HCM, 6<sup>th</sup> Edition

A saturation flow rate of 1900 has been utilized for all study area intersections located within the City of Beaumont and City of Banning. The peak hour traffic volumes are adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (5)

### California Department of Transportation (Caltrans)

Per the Caltrans <u>Guide for the Preparation of Traffic Impact Studies</u>, the traffic modeling and signal timing optimization software package Synchro (Version 10) has also been utilized to analyze signalized intersections under Caltrans' jurisdiction, which include interchange to arterial ramps (i.e. I-10 Freeway ramps at Highland Springs Avenue). (2) Signal timing for the freeway arterial-to-ramp intersections have been obtained from Caltrans District 8 and were utilized for the purposes of this analysis.

### 2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Beaumont and City of Banning require the operations of unsignalized intersections be evaluated using the methodology described the HCM. (5) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2).

Description	Average Control Delay Per Vehicle (Seconds)	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Little or no delays.	0 to 10.00	А	F
Short traffic delays.	10.01 to 15.00	В	F
Average traffic delays.	15.01 to 25.00	С	F
Long traffic delays.	25.01 to 35.00	D	F
Very long traffic delays.	35.01 to 50.00	E	F
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F	F

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Source: HCM, 6<sup>th</sup> Edition

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole.

### 2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by the Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TIA uses the signal warrant criteria presented in the latest edition of the Caltrans <u>California Manual on Uniform Traffic Control Devices</u> (CA MUTCD). (6)

The signal warrant criteria for Existing conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The Caltrans <u>CA MUTCD</u> indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (6) Specifically, this TIA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing study area intersections for all analysis scenarios. Warrant 3 is appropriate to use for this TIA because it provides specialized warrant criteria for intersections with rural characteristics (e.g. located in communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour). For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

Traffic signal warrant analyses were performed for the following unsignalized study area intersection shown in Table 2-3:

ID	Intersection Location	Jurisdiction
1	Pennsylvania Av. & 8th St.	City of Beaumont
2	Xenia Av. & 8th	City of Beaumont
3	Allegheny St. & 8th St.	City of Beaumont

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

Although unsignalized, traffic signal warrants have not been performed for the intersection of Driveway 1 at 8<sup>th</sup> Street and Driveway 2 at Highland Springs Avenue since these intersections will be restricted to right-in/right-out access only and signalization of these locations is not recommended. The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3 *Area Conditions* of this report. The traffic signal warrant analyses for future conditions are presented in Section 5 *E+P Traffic Conditions*, and Section 6 *Opening Year Cumulative (2021) Traffic* Conditions of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

### 2.4 FREEWAY OFF-RAMP QUEUING ANALYSIS

Consistent with Caltrans requirements, the 95<sup>th</sup> percentile queuing of vehicles has been assessed at the off-ramps to determine potential queuing deficiencies at the freeway ramp intersections at the I-10 Freeway at Highland Springs Avenue interchange. Specifically, the queuing analysis is utilized to identify any potential queuing and "spill back" onto the I-10 Freeway mainline from the off-ramps.

The traffic progression analysis tool and HCM intersection analysis program, Synchro, has been used to assess the potential deficiencies/needs of the intersections with traffic added from the proposed Project. Storage (turn-pocket) length recommendations at the ramps have been based upon the 95<sup>th</sup> percentile queue resulting from the Synchro progression analysis. The footnote from the Synchro output sheets indicates if the 95<sup>th</sup> percentile cycle exceeds capacity. Traffic is simulated for two complete cycles of the 95<sup>th</sup> percentile traffic in Synchro in order to account for the effects of spillover between cycles. In practice, the 95<sup>th</sup> percentile queue shown will rarely be exceeded and the queues shown with the footnote are acceptable for the design of storage bays. The 95<sup>th</sup> percentile queue is derived from the average queue plus 1.65 standard deviations. The 95<sup>th</sup> percentile queue is not necessarily ever observed it is simply based on statistical calculations.



# 2.5 MINIMUM LEVEL OF SERVICE (LOS)

The definition of an intersection deficiency has been obtained from each of the applicable surrounding jurisdictions.

### 2.5.1 CITY OF BEAUMONT

The City of Beaumont has established LOS D as the minimum level of service for all roadways/intersections within the City (Policy 10 of the General Plan Circulation Element). Therefore, any intersection operating at LOS E or F will be considered deficient for the purposes of this analysis.

### 2.5.2 CITY OF BANNING

The City of Banning has established LOS C as the minimum level of service for all roadways/intersections within the City. Therefore, any City of Banning intersection operating at LOS D, E, or F will be considered deficient for the purposes of this analysis.

### 2.5.3 CALTRANS

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State Highway System (SHS) facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. Consistent with the City of Beaumont minimum LOS of LOS D, LOS D will be used as the target LOS for both arterial-to-freeway ramps and freeway mainline segments and ramp junctions.

### 2.6 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies.

### 2.6.1 CITY OF BEAUMONT INTERSECTIONS

To determine whether the addition of project traffic at a study intersection results in a direct project-related deficiency, the following thresholds of significance will be utilized:

- A significant project-related impact occurs at a study intersection if the addition of projectgenerated trips reduces the peak hour level of service of the study intersection to change from acceptable level of service (LOS A, B, C or D) to an unacceptable level of service (LOS E or F);
- A significant cumulative impact occurs at a study intersection if the Project contributes 50 or more peak hour trips to an intersection that is anticipated to operate at a deficient LOS without the Project (LOS E or F).

### 2.6.2 CITY OF BANNING INTERSECTIONS

To determine whether the addition of project traffic at a study intersection results in a direct project-related deficiency, the following thresholds of significance will be utilized:

- A significant project-related impact occurs at a study intersection if the addition of projectgenerated trips reduces the peak hour level of service of the study intersection to change from acceptable level of service (LOS A, B, or C) to an unacceptable level of service (LOS D, E, or F);
- A significant cumulative impact occurs at a study intersection if the Project contributes 50 or more peak hour trips to an intersection that is anticipated to operate at a deficient LOS without the Project (LOS D, E, or F).

### 2.7 PROJECT FAIR SHARE CALCULATION METHODOLOGY

Improvements found to be included in the TUMF and/or DIF will be identified as such. For improvements that do not appear to be in either of the pre-existing fee programs, a fair share contribution based on the Project's proportional share may be imposed in order to address the Project's share of deficiencies in lieu of construction. It should be noted that fair share calculations are for informational purposes only and the City Traffic Engineer will determine the appropriate improvements to be implemented by a project (to be identified in the conditions of approval).

The Project's fair share contribution is determined based on the following equation, which is the ratio of Project traffic to total future traffic:

Project Fair Share % = Project Traffic / Opening Year Cumulative (2021) Total Traffic

# **3** AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Beaumont General Plan Circulation Network, and a review of existing peak hour intersection operations, traffic signal warrant, and off-ramp queuing analyses.

### **3.1** EXISTING CIRCULATION NETWORK

Pursuant to the scoping agreement with City of Beaumont staff (Appendix 1.1), the study area includes a total of 9 existing and future intersections as shown previously on Exhibit 1-2, where the Project is anticipated to contribute 50 or more peak hour trips. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

### **3.2 GENERAL PLAN CIRCULATION ELEMENTS**

As noted previously, the Project site is located within the City of Beaumont. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on City of Beaumont General Plan Circulation Element, are described subsequently. Exhibit 3-2 shows the City of Beaumont General Plan Circulation Element and Exhibit 3-3 illustrates the City of Beaumont General Plan roadway cross-sections.

**Urban Arterials** are six-lane divided roadways (typically divided by a raised median or painted two-way turn-lane) with a 120-foot to 134-foot right-of-way and a 102-foot curb-to-curb measurement. These roadways serve both regional through-traffic and inter-city traffic and typically direct traffic onto and off-of the freeways. The following study area roadway within the City of Beaumont is classified as an Urban Arterial:

• Highland Springs Avenue, between 1<sup>st</sup> Street and 6<sup>th</sup> Street

**Arterial Highways** are six lane divided roadways (divided by a painted or raised median) with a 110-foot right-of-way and 86-foot curb-to-curb measurement. These roadways serve both regional through-traffic and inter-city traffic. The following study area roadway within the City of Beaumont is classified as an Arterial Highway:

• Highland Springs Avenue, north of 6<sup>th</sup> Street

**Major Roadways** are four lane divided roadways and may provide on-street parking. These roadways typically have an 88-foot to 100-foot right-of-way and a 70-foot to 76-foot curb-to-curb measurement. These roadways typically direct traffic through major development areas and serve to move large volumes of inter-city traffic. The following study area roadway within the City of Beaumont is classified as a Major Roadway:

• 8<sup>th</sup> Street, east of Allegheny Avenue









SPEED LIMIT (MPH)







**EXHIBIT 3-3: CITY OF BEAUMONT GENERAL PLAN ROADWAY CROSS-SECTIONS** 

**Secondary Streets** are four-lane roadways and may include a painted median. These roadways typically have a 76-foot to 86-foot right-of-way and a 56-foot to 64-foot curb-to-curb measurement. These roadways typically direct traffic through major development areas and a lesser capacity than Major Roadways. The following study area roadways within the City of Beaumont are classified as a Secondary Street:

- Xenia Avenue, south of 8<sup>th</sup> Street
- 8<sup>th</sup> Street, between Pennsylvania Avenue and Allegheny Avenue

**Collector Streets** are two-lane roadways and provide on-street parking on both sides. These roadways typically have a 66-foot to 78-foot right-of-way and a 44-foot curb-to-curb measurement. These roadways provide connections to secondary streets, arterials, and freeways, with most traffic being through-traffic or intra-city traffic. The following study area roadways within the City of Beaumont are classified as a Collector Street:

- Pennsylvania Avenue, north of 8<sup>th</sup> Street
- 8<sup>th</sup> Street, west of Pennsylvania Avenue
- Allegheny Avenue

### 3.3 CITY OF BANNING GENERAL PLAN CIRCULATION ELEMENT

The study area is also partially located within the City of Banning. Exhibit 3-4 shows the City of Banning General Plan Circulation Element, and Exhibit 3-5 illustrates the City of Banning General Plan roadway cross-sections.

### **3.4 TRANSIT SERVICE**

The study area is currently served by the Pass Transit with bus services along 6<sup>th</sup> Street, 8<sup>th</sup> Street, Pennsylvania Avenue, Highland Springs Avenue, and Xenia Avenue via Routes 2, 3, 4, and 125. The transit services are illustrated on Exhibit 3-6. There appears to be existing transit routes that could potentially serve the Project. Transit service is reviewed and updated by Pass Transit periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

### **3.5** BICYCLE & PEDESTRIAN FACILITIES

Class II bikeways, also referred to as "bike lanes," are intended to delineate the right-of-way assigned to bicyclists and motorists, and to provide for more predictable movements of each. Bike lane signs and pavement marking help define the bikeway. A more important reason for bike lanes is to better accommodate bicyclists through corridors where insufficient room exists for safe bicycling on existing streets. 6<sup>th</sup> Street/Ramsey Street currently has Class II bike lanes in the vicinity of the Project site. Field observations conducted in February 2020 indicate nominal pedestrian and bicycle activity within the study area. Exhibit 3-7 illustrates the existing pedestrian facilities, including sidewalks and crosswalks.





Highland Springs and 8th Retail Traffic Impact Analysis



EXHIBIT 3-5: CITY OF BANNING GENERAL PLAN ROADWAY CROSS-SECTIONS



2

= PASS TRANSIT COMMUTER 125

= PASS TRANSIT ROUTE 4

= PASS TRANSIT ROUTE 2
 = PASS TRANSIT ROUTE 3



**EXHIBIT 3-6: EXISTING TRANSIT ROUTES** 



### **3.6 EXISTING TRAFFIC COUNTS**

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in December 2019, while schools were in session. An ambient growth factor of 1.0% has been applied to the existing 2019 traffic counts to reflect 2020 conditions. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

The weekday AM and weekday PM peak hour count data are representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes, and near-by schools were in session and operating on normal schedules. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1. These raw turning volumes have been flow conserved between intersections with limited access, no access, and where there are currently no uses generating traffic.

Existing weekday Average Daily Traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 3-8. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 13.56 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 7.37 percent. As such, the above equation utilizing a factor of 13.56 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 7.37 percent (i.e., 1/0.0737 = 13.56) and was assumed to sufficiently estimate ADT volumes for planning-level analyses. Existing weekday AM and weekday PM peak hour intersection volumes are also shown on Exhibit 3-8.

### 3.7 EXISTING (2020) INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1 which indicates that all of the study area intersections are currently operating at an acceptable LOS during the peak hours.





### EXHIBIT 3-8: EXISTING (2020) TRAFFIC VOLUMES

1 Pennsylvania Av. & 8th St.	2 Xenia Av. & 8th St.	3 Allegheny St. & 8th St.	4 Dwy.1& 8th St.	5 Highland Springs Av. & 8th St./Wilson St.	6 Highland Springs Av. & Dwy 2
(0E2)L2E ↓ 89(64) ↓ 89(64) ↓ 116(80) ↓ 47(35)	(2E) 2E) 2G) 2G) 2G) 2G) 2G) 2G) 2G) 2G	<ul> <li>O</li> <li>O</li></ul>	Future	(161) (161)	Future
16(22) → 72(83) + 73(26) → 73(26) → 74(26) →	60(34) → ↑ ↑ ↑ ↑ 111(98) → ↑ (107) ½ 28(34) ↑ 28(34) ↑	0(0)→ 260(171)→ 25(19)→ (0)0		30(20) → ↑ ↑ ↑ ↑ ↑ 113(116) → ↑ ↑ ↑ ↑ ↑ ↑ ↑ 128(48) → ↑ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	
7 Highland Springs Av. & 6th St./Ramsey St.	8 Highland Springs Av. & I-10 WB Ramps	9 Highland Springs Av. & I-10 EB Ramps			
$\begin{array}{c} (5) \\$	$ \begin{array}{c}  & (5) & (5) \\  & (5) & (5) $	271(314) 271(314) 271(314)			
217(194) - 10(521) - 217(194) - 21	277(322 660(942	403(527) 999 403(527)			

### **LEGEND:**

**10.0** = ACTUAL (COUNT-BASED) VEHICLES PER DAY (1000'S)

**10.0** = ESTIMATED VEHICLES PER DAY (1000'S)

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES



Table 3-1

					п	Iters	ectic	n Ap	pro	ich L	anes	1			Del	ay²	Lev	el of
		Traffic	Nor	thbo	nnd	Sou	thbo	pun	East	tbou	pu	Wes	tbou	pu	(se	cs.)	Ser	vice
#	Intersection	Control <sup>3</sup>	٦	Г	R	_	Г	R	_	Г	R	L	Г	R	AM	PM	AM	PM
$\neg$	Pennsylvania Av. & 8th St.	AWS	0	1	p	0	1	p	0	1	р	0	1	q	29.3	22.3	Δ	С
7	Xenia Av. & 8th	AWS	1	Ч	р	Ч	Ч	1	1	Ч	1	1	7	σ	12.7	10.9	В	В
ŝ	Allegheny St. & 8th St.	CSS	0	Ч	0	0	1	0	1	1	σ	1	1	0	11.8	9.8	В	۷
4	Driveway 1 & 8th St.				•	-	utur	e Int	erse	ction								
ഹ	Highland Springs Av. & 8th St./Wilson St.	TS	1	Ч	4	Ч	2	0	1	2	0	Ч	2	1	32.1	29.8	ပ	U
9	Highway Springs Av. & Driveway 2					-	utur	e Int	erse	ction								
$\sim$	Highland Springs Av. & 6th St./Ramsey St.	TS	-	7	1	Ч	2	1	Ч	2	1	Ч	2	σ	26.2	33.4	U	ပ
$\infty$	Highland Springs Av. & I-10 WB Ramps	TS	Ч	7	0	Ч	7	1	0	0	0	0	Ч	1	22.0	30.5	U	ပ
б	Highland Springs Av. & I-10 EB Ramps	TS	0	7	1	Ч	7	0	0	Ч	1	0	0	0	20.8	20.8	ပ	U

Intersection Analysis for Existing (2020) Conditions

Acceptable

LOS⁴

Σ e đ

C

C C C

**BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. -

L = Left; T = Through; R = Right; d= Defacto Right Turn Lane; >= Right Turn Overlap Phasing

- Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. 2
  - AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal m
    - 4
      - Minimum acceptable LOS for each applicable jurisdiction.





It should be noted, based on field observations, the intersections of I-10 Westbound Ramps & Highland Springs Avenue (#8) and I-10 Eastbound Ramps & Highland Springs Avenue (#9) experienced queuing issues along Highland Springs Avenue during the AM peak hour. The northbound and southbound left turns onto the I-10 Freeway experienced heavy queues on Highland Springs Avenue only (not on the off-ramps). However, the entire length of the northbound and southbound left turn queues cleared each cycle. As such, the intersection operations analysis results shown in Table 3-1 reflect the field conditions at the time this TIA was prepared.

Consistent with Table 3-1, a summary of the peak hour intersection LOS for Existing conditions is shown on Exhibit 3-9. The intersection operations analysis worksheets are included in Appendix 3.2 of this TIA.

### **3.8 EXISTING (2020) TRAFFIC SIGNAL WARRANTS ANALYSIS**

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. There are no unsignalized study area intersections that currently warrant a traffic signal for Existing (2020) traffic conditions. Existing conditions traffic signal warrant analysis worksheets are provided in Appendix 3.3.

# 3.9 EXISTING (2020) OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway and Highland Springs Avenue interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway mainline. Queuing analysis findings are presented in Table 3-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 3-2, there are no movements that are currently experiencing queuing issues during the weekday AM or weekday PM peak 95<sup>th</sup> percentile traffic flows. This finding is consistent with field observations at the time traffic counts were conducted. Worksheets for Existing (2020) traffic conditions off-ramp queuing analysis are provided in Appendix 3.4.

### **3.10** RECOMMENDED IMPROVEMENTS

### 3.10.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

All existing study area intersections currently operate at an acceptable LOS; therefore, no improvements are recommended for Existing (2020) traffic conditions.

### 3.10.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

As shown previously in Table 3-2, there are currently no peak hour queuing issues at the I-10 Freeway and Highland Springs Avenue interchange for Existing (2020) traffic conditions. As such, no improvements have been recommended.





2

= NOT AN ANALYSIS LOCATION FOR THIS SCENARIO

= PM PEAK HOUR DEFICIENT LOS



# EXHIBIT 3-9: EXISTING (2020) SUMMARY OF LOS

### Table 3-2

			95th Pe	rcentile		
			Queue	(Feet)	Accept	able? <sup>1</sup>
			AM Peak	PM Peak		
Intersection	Movement		Hour	Hour	AM	PM
Highland Springs Av. & I-10 WB Ramps	WBL/T	350	240	398 <sup>2,3</sup>	Yes	Yes
	WBR	1,600	54	188	Yes	Yes
Highland Springs Av. & I-10 EB Ramps	EBL/T	630	243	268	Yes	Yes
	EBR	1,300	302	498 <sup>2</sup>	Yes	Yes

### Peak Hour Queuing Summary for Existing (2020) Conditions

<sup>1</sup> Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

<sup>2</sup> 95th percentile volume exceeds capacity, queue may be longer.

<sup>3</sup> Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.



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# 4 **PROJECTED FUTURE TRAFFIC**

The Project is proposed to consist of the following uses:

- 3,500 square feet of Fast-Food Restaurant with Drive-Through Window use
- 12 vehicle fueling position gasoline service station with convenience market

The Project opening year is 2021. Vehicular access will be provided via the following driveways:

- 8<sup>th</sup> Street via Driveway 1 right-in/right-out only
- Highland Springs Avenue via Driveway 2 right-in/right-out only

Regional access to the Project site is available from the I-10 Freeway via Highland Springs Avenue.

### 4.1 **PROJECT TRIP GENERATION**

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

Trip generation rates and resulting Project trip generation summary are shown in Table 4-1. The trip generation rates used for this analysis are based upon information collected by the ITE as provided in their <u>Trip Generation Manual</u> (10<sup>th</sup> Edition, 2017) for Fast-Food Restaurant with Drive-Through Window (ITE Land Use Code 934) and Super Convenience Market/Gas Station (ITE Land Use Code 960). (3)

Pass-by trips are defined as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator. These types of trips are many times associated with retail and restaurant uses. As the Project is proposed to include restaurant and gas station uses, pass-by percentages have been obtained from the ITE <u>Trip</u> <u>Generation Handbook (3<sup>rd</sup> Edition, 2017). (3)</u>

Patrons of the restaurant use may also visit the gas station on-site, without leaving the site. The ITE <u>Trip Generation Handbook</u> has been utilized to determine the internal capture for the applicable mix of uses. Internal capture is a percentage reduction that can be applied to the trip generation estimates for individual land uses to account for trips internal to the site. In other words, trips may be made between individual restaurant and gas station uses on-site and can be made either by walking or using internal roadways without using external streets. As such, an internal capture reduction was applied to recognize the interactions that would occur between the various complementary land uses. The internal capture is based on the National Cooperative Highway Research Program's (NCHRP Report 684) internal capture trip capture estimation tool.

As shown in Table 4-1, the proposed Project is anticipated to generate a total of 1,100 trip-ends per day, with 145 AM peak hour trips and 100 PM peak hour trips.



### Table 4-1

### Project Trip Generation Summary

	ITE		AN	1 Peak H	our	PN	l Peak H	our	
Land Use	Code	Units <sup>2</sup>	In	Out	Total	In	Out	Total	Daily
Fast Food Restaurant With Drive-Thru	934	TSF	20.50	19.69	40.19	16.99	15.68	32.67	470.95
Super Convenience Market/Gas Station	960	VFP	14.04	14.04	28.08	11.48	11.48	22.96	230.52

			AN	1 Peak H	our	PN	1 Peak H	our	
Land Use	Quantity	Units <sup>1</sup>	In	Out	Total	In	Out	Total	Daily
Fast Food Restaurant With Drive-Thru	3.500	TSF	72	69	141	59	55	114	1,648
Internal Capture:			-10	-22	-32	-23	-17	-40	-580
Pass-By (49% AM, 50% PM/Daily):			-23	-23	-46	-18	-18	-36	-534
Super Convenience Market/Gas Station	12	VFP	168	168	336	138	138	276	2,766
Internal Capture:			-22	-10	-32	-17	-23	-40	-402
Pass-By (76% AM/PM/Daily):			-111	-111	-222	-87	-87	-174	-1,798
Project Total:			74	71	145	52	48	100	1,100

<sup>1</sup> TSF = Thousand Square Feet; VFP = Vehicle Fueling Position



# 4.2 **PROJECT TRIP DISTRIBUTION**

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered to identify the route where the Project traffic would distribute. The Project trip distribution was developed based on anticipated travel patterns to and from the Project site and are consistent with other similar projects that have been reviewed and approved by City of Beaumont staff. The Project trip distribution patterns in the area for each land use type, the geographical location of the site, and the site's proximity to the regional arterial and state highway system. The Project trip distribution pattern was reviewed and approved by the City of Beaumont and City of Banning as part of the traffic study scoping process (see Appendix 1.1). The Project trip distribution pattern is graphically depicted on Exhibit 4-1.

# 4.3 MODAL SPLIT

The traffic reducing potential of public transit, walking, or bicycling have not been considered in this TIA. Essentially, the traffic projections are "conservative" in that these alternative travel modes might be able to reduce the forecasted traffic volumes.

### 4.4 **PROJECT TRIP ASSIGNMENT**

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project only ADT and peak hour intersection turning movement volumes are shown on Exhibit 4-2.

### 4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon a background (ambient) growth factor of 2.0% per year for 2021 traffic conditions. The ambient growth factor is intended to approximate traffic growth. The total ambient growth is 2.0% for 2021 traffic conditions. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects.

Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. Opening Year Cumulative (2021) traffic volumes are provided in Section 6 of this report.









**EXHIBIT 4-1: PROJECT TRIP DISTRIBUTION** 



|--|

1	Pennsylvania Av. & 8th St.	2	Xenia Av. & 8th St.	3 A	legheny St. & 8th St.	4	Dwy. 1 & 8th St.	5 <sup>Hie</sup>	ghland Sprin 8th St./W	gs Av. & ( ilson St.	6 Highland S	prings Av. & Dwy 2
	$ \begin{array}{c} (0) \\ (0) $	▲0(0) ←_0(0) ↓4(3)	▲4(2) <i>◄</i> -18(12) y <sup></sup> 0(0)	− 0(0) − 0(0)	له–0(0) ←21(14) ر—0(0)		<del>→</del> 21(14)	4 0/01	)0 → 0(0) )0 → 0(0) 19 → 11(8)	0) 0) 0(13)	<u>↓</u> 124(94) <i>→</i> 90(-71)	
	$\begin{array}{c} 0(0) \xrightarrow{-1} & \uparrow & \uparrow & \uparrow \\ 7(5) \xrightarrow{-1} & 0(0) & 0 \\ 0(0) \xrightarrow{-1} & 0 \end{array}$	0(0)—▲ 19(13)→ 0(0)→	∲_(0)0 +-(0)0 •	0(0)—▲ 22(16) <del>→</del> 0(0)—	0(0)→ 0(0)→ 22(16)→	-40(-32)→ 84(63)—	72(54)	1 <sup>-</sup> 18	1(7) (12) 4(2) ↓ (12) ↓) (12) ↓ (12) ↓) (12) (12) ↓) (12) (12) (12) (12) (12) (12) (12) (12	0(0)0	133(99)— <sub>)</sub>	21(14)-
7	Highland Springs Av. & 6th St./Ramsey St.	8 Highland S	Springs Av. & 10 WB Ramps	9 Highland	Springs Av. & I-10 EB Ramps							
	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $	▲_7(5) ≁-11(7)	↓_7(5) + 0(0) ↓_0(0) 1 (0)0 (8) 1 (0)0 (8)	(2) (2) (2) (2) (2) (2) (2) (2)	(13) → 0(0) →							
				0(0) 🕴								

### **LEGEND:**

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

**10.0** = VEHICLES PER DAY (1000'S)





### 4.6 CUMULATIVE DEVELOPMENT TRAFFIC

A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the City of Beaumont. The cumulative project list includes known and foreseeable projects that are anticipated to contribute traffic to the study area intersections. Known projects in the adjacent City of Banning has also been included.

Where applicable, cumulative projects anticipated to contribute measurable traffic (i.e. 50 or more peak hour trips) to study area intersections have been manually added to the study area network to generate Opening Year Cumulative (2021) forecasts. In other words, this list of cumulative development projects has been reviewed to determine which projects would likely contribute measurable traffic through the study area intersections (e.g., those cumulative projects in close proximity to the proposed Project). For the purposes of this analysis, the cumulative projects that were determined to affect one or more of the study area intersections are shown on Exhibit 4-3, listed in Table 4-2, and have been considered for inclusion.

Although it is unlikely that all of these cumulative projects would be fully built and occupied by Year 2021, they have been included in an effort to conduct a conservative analysis and overstate as opposed to understate potential traffic deficiencies. Any other cumulative projects located beyond the cumulative study area that are not expected to contribute measurable traffic to study area intersections have not been included since the traffic would dissipate due to the distance from the Project site and study area intersections. Any additional traffic generated by other projects not on the cumulative projects list is likely accounted for through background ambient growth factors that have been applied to the peak hour volumes at study area intersections as discussed in Section 4.5 *Background Traffic*. Cumulative Only ADT and peak hour intersection turning movement volumes are shown on Exhibit 4-4.





# **EXHIBIT 4-3: CUMULATIVE DEVELOPMENT PROJECTS LOCATION MAP**

13072-cd.mxd



**EXHIBIT 4-4: CUMULATIVE ONLY TRAFFIC VOLUMES** 

1 Pennsylvania Av. & 8th St.	2 Xenia Av. & 8th St.	3 Allegheny St. & 8th St.	4 Dwy. 1 & 8th St.	5 Highland Springs Av. & 8th St./Wilson St.	6 Highland Springs Av. & Dwy 2
		<ul> <li>(a)</li> <li>(b)</li> <li>(c)</li> <li>(c)</li></ul>	Future	(91)) (E82)E87 (91)) (252)/1 (30) (91)) (252)/1 (30) (30) (30) (30) (30) (30) (30) (30)	Future
0(0) 52(124) + 0(0) (0)	$\begin{array}{c} 0(0) \xrightarrow{1} \\ 50(124) \xrightarrow{1} \\ 0(0) \xrightarrow{1} \\ 0 \\ \end{array} \begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $	0(0)→ 57(142)→ 0(0)→ 0(0)→		$10(25) \xrightarrow{1} + (-+)$ $25(60) \xrightarrow{+} + (-+)$ $10(25) $	
7 Highland Springs Av. & 6th St./Ramsey St.	8 Highland Springs Av. & I-10 WB Ramps	9 Highland Springs Av. & I-10 EB Ramps			
$(66) = \frac{17}{(60)}$	(135) -138(1125) -148(135) -138(135) -1	←114(154) ←41(57)			
11(30) → ↑ ↑ ↑ 5(9) → 0(0) ↓ 0(0) ↓ 1000 ↓ 1000 ↓ 1000 ↓ 1000 ↓	12(15)_∮ 140(324)→	67(164) → + ( 0(0) → (161) 7(18) → (151) 7(18) → (151) 88			

### **LEGEND:**

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

10.0 = VEHICLES PER DAY (1000'S)





### Cumulative Development Land Use Summary

TAZ	Project	Land Use	Quantity <sup>1</sup>					
City of Beaumont								
B1	Sundance	Residential	4,450 DU					
B2	Fairway Canyon SCPGA	Residential	3,300 DU					
B3	Four Seasons Tract No. 32260 & 33096	Residential	1,890 DU					
B4 Heartland (Olivewood)		Residential	981 DU					
B5	Hidden Canyon Industrial	Industrial	2,890.000 TSF					
B6	Sundance Corporate Center	Commercial/Industrial	13.60 AC					
B7	Kirkwood Ranch	Residential	403 DU					
B8	Potrero Creek Estates	Residential	700 DU					
B9	Tract No. 32850	Residential	95 DU					
B10	Noble Creek Vistas	Residential	648 DU					
B11	Sunny-Cal Specific Plan	Residential	571 DU					
B12	San Gorgonio Village Phase 2	Commercial	22.50 AC					
B13	Tournament Hills 3, TM 36307	Residential	279 DU					
B14	Rolling Hills Ranch Industrial Phase 2	Industrial	2,850.000 TSF					
B15	Beaumont Village	Commercial	50.810 TSF					
B16	Beyond Beaumont	Commercial	6.589 TSF					
City of Banning								
	Butterfield Specific Plan	Residential	5,387 DU					
D A 1		Commercial	549.000 TSF					
DAT		Golf Course	253.9 AC					
		School	23.0 AC					
BA2	7-11 NWC Ramsey St. & Sunset Ave.	Gasoline/Service Station w/Conven. Mkt.	10.0 VFP					
BA3	Nourish	Commercial	1.07 AC					
BA4	The Alley Barber & Hair Styling	Commercial	0.16 AC					

<sup>1</sup> AC = Acres; DU = Dwelling Units; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions



### 4.7 NEAR-TERM TRAFFIC CONDITIONS

The "buildup" approach combines existing traffic counts with a background ambient growth factor to forecast the near-term 2021 traffic conditions. An ambient growth factor of 2.0% accounts for background (area-wide) traffic increases that occur over time up to the year 2021 from the year 2020. Traffic volumes generated by cumulative development projects are then added to assess the Opening Year Cumulative (2021) traffic conditions. Lastly, Project traffic is added to assess "With Project" traffic conditions. The 2021 roadway network is similar to the existing conditions roadway network with the exception of intersections proposed to be developed by the Project.

The near-term traffic analysis includes the following traffic conditions, with the various traffic components:

- Opening Year Cumulative Without Project
  - Existing 2020 counts
  - Ambient growth traffic (2.0%)
  - Cumulative Development Project traffic
- Opening Year Cumulative With Project
  - o Existing 2020 counts
  - Ambient growth traffic (2.0%)
  - Cumulative Development Project traffic
  - o Project traffic



# 5 E+P TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Existing Plus Project (E+P) conditions and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

### 5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

• Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for E+P conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).

### 5.2 E+P TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus Project traffic. The ADT and peak hour intersection turning movement volumes which can be expected for E+P traffic conditions are shown on Exhibit 5-1.

### 5.3 INTERSECTION OPERATIONS ANALYSIS

E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TIA. The intersection analysis results are summarized in Table 5-1, which indicates that with the addition of Project traffic, all study area intersections are anticipated to continue to operate at an acceptable LOS under E+P traffic conditions, consistent with Existing (2020) traffic conditions. A summary of the peak hour intersection LOS for E+P traffic conditions is shown on Exhibit 5-2. The intersection operations analysis worksheets for E+P traffic conditions are included in Appendix 5.1 of this TIA.

### 5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed (based on CA MUTCD) for E+P traffic conditions based on peak hour intersection turning movement volumes. There are no additional unsignalized study area intersections anticipated to meet a traffic signal warrant with the addition of Project traffic for E+P traffic conditions (see appendix 5.2).



Ехнівіт	5-1:	E+P	TRAFFIC	VOLUMES
EXINDIT	J T.	<b>-</b> · ·		* OLOIVILD

1 Pennsylvania Av. & 8th St.	2 Xenia Av. & 8th St.	3 Allegheny St. & 8th St.	4 Dwy. 1 & 8th St.	5 Highland Springs Av. & 8th St./Wilson St.	6 Highland Springs Av. & Dwy 2
(0E2)L2E ₩ 96(69) ₩ 96(69) ₩ 96(69) ₩ 96(69) ₩ 96(69) ₩ 96(69) ₩ 96(69) ₩ 96(69) ₩ 96(7) ₩	(LL) (E) (E) (E) (E) (E) (E) (E) (E	<ul> <li>○ ○ ○</li> <li>○ ○ ○</li> <li>→ -0(0)</li> <li>→ -370(182)</li> <li>→ ↓ ↓ ↓ 13(15)</li> </ul>	<del>~</del> 384(197)	(66) (66) (16) (66) (17) (17)	<ul> <li>▲ 124(94)</li> <li>▲ 825(573)</li> </ul>
16(22)	60(34) → ↑ ↓ ↓ ↓ 130(111) → 28(34) → ↓ ↓ ↓ ↓ 28(34) → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	0(0)→ 282(187)→ 25(19)→ 25(19)→ 25(19)→ 25(19)→ 25(19)→ 25(19)→ 25(19)→ 25(19)→ 25(19)→ 25(19)→ 25(19)→ 25(19)→ 25(19)→ 25(10)→ 2	232(169)→ 84(63) 7 84(63) 7 84(63) 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7	41(27) ↓ ↓ 131(128) ↓ ↓ 132(20) ↓ ↓ 132(222) ↓ 132(222) ↓	133(99) <mark>↓</mark> 621(943) <b>↓</b> 621(943)
7 Highland Springs Av. & 6th St./Ramsey St.	8 Highland Springs Av. & I-10 WB Ramps	9 Highland Springs Av. & I-10 EB Ramps			
$\begin{array}{c} (21) \\ (2$	$(000) \\ (118) \\ -151(300) \\ +4(6) \\ -205(326) \\ +(056) \\ L2 \\ -15(205) \\ -205(326) \\ -20$	278(319) 670(953)→ 670(950)→			

### **LEGEND:**

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

**10.0** = VEHICLES PER DAY (1000'S)





2

= AM PEAK HOUR ACCEPTABLE LOS

= AM PEAK HOUR DEFICIENT LOS

= PM PEAK HOUR ACCEPTABLE LOS

= PM PEAK HOUR DEFICIENT LOS



EXHIBIT 5-2: E+P SUMMARY OF LOS
#### Table 5-1

#### Intersection Analysis for E+P Conditions

			E>	isting	(2020	))		E+	Р		
			De	ay <sup>1</sup>	Lev	el of	Del	ay <sup>1</sup>	Leve	el of	Acceptable
		Traffic	(se	cs.)	Ser	vice	(se	cs.)	Ser	vice	LOS <sup>3</sup>
#	Intersection	<b>Control</b> <sup>2</sup>	AM	PM	AM	PM	AM	PM	AM	PM	
1	Pennsylvania Av. & 8th St.	AWS	29.3	22.3	D	С	32.5	24.1	D	С	D
2	Xenia Av. & 8th	AWS	12.7	10.9	В	В	13.3	11.1	В	В	D
3	Allegheny St. & 8th St.	CSS	11.8	9.8	В	А	11.8	9.8	В	А	D
4	Driveway 1 & 8th St.	<u>CSS</u>	Futu	ire Inte	ersect	tion	9.7	9.3	А	А	D
5	Highland Springs Av. & 8th St./Wilson St.	TS	32.1	29.8	С	С	34.7	30.7	С	С	С
6	Highway Springs Av. & Driveway 2	<u>CSS</u>	Futu	ire Inte	ersect	tion	15.0	11.8	С	В	С
7	Highland Springs Av. & 6th St./Ramsey St.	TS	26.2	33.4	С	С	27.5	34.5	С	С	С
8	Highland Springs Av. & I-10 WB Ramps	TS	22.0	30.5	С	С	22.1	30.6	С	С	С
9	Highland Springs Av. & I-10 EB Ramps	TS	20.8	20.8	С	С	21.3	21.0	С	С	С

**BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

<sup>1</sup> Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>2</sup> AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal; <u>CSS</u> = Improvement

<sup>3</sup> Minimum acceptable LOS for each applicable jurisdiction.



## 5.5 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway and Highland Springs Avenue interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway mainline. Queuing analysis findings are presented in Table 5-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 5-2 and consistent with Existing (2020) traffic conditions, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95<sup>th</sup> percentile traffic flows with the addition of Project traffic. Worksheets for E+P traffic conditions off-ramp queuing analysis are provided in Appendix 5.3.

## 5.6 RECOMMENDED IMPROVEMENTS

## 5.6.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

All study area intersections are anticipated to operate at an acceptable LOS; therefore, no improvements are recommended for E+P traffic conditions.

## 5.6.2 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

As shown previously in Table 5-2, there are no anticipated peak hour queuing issues at the I-10 Freeway and Highland Springs Avenue interchange for E+P traffic conditions. As such, no improvements have been recommended.



Table 5-2

		-   -   -   - V		Existing (202	50)			E+P		
		Available	95th Percen	itile Queue			95th Percen	itile Queue		
		Stacking	(Fe	et)	Accept	able? <sup>1</sup>	(Fe	et)	Accept	able? <sup>1</sup>
		Distance	AM Peak	PM Peak			AM Peak	PM Peak		
Intersection	Movement	(Feet)	Hour	Hour	AM	PM	Hour	Hour	AM	PM
Highland Springs Av. & I-10 WB Ramps	WBL/T	350	240	398 <sup>2,3</sup>	Yes	Yes	240	398 <sup>2,3</sup>	Yes	Yes
	WBR	1,600	54	188	Yes	Yes	55	194	Yes	Yes
Hichland Coringe Av. 8.1.10 ED Dames	EBI /T	009	CVC	950	707	Vor	076	CLC	Vor	202
The second strings AV. & 1-10 LB Nathby	רטר/ ו	000	642	5007		5	243	C/7		
	EBR	1,300	302	498 <sup>2</sup>	Yes	Yes	303	500 2	Yes	Yes
<b>BOLD</b> = Oueue length exceeds available stacking dis	istance.									

Peak Hour Queuing Summary for E+P Conditions

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<sup>1</sup> Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

<sup>2</sup> 95th percentile volume exceeds capacity, queue may be longer.

<sup>3</sup> Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.



# 6 OPENING YEAR CUMULATIVE (2021) TRAFFIC CONDITIONS

This section discusses the methods used to develop Opening Year Cumulative (2021) Without and With Project traffic forecasts, and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

## 6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year Cumulative (2021) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Opening Year Cumulative conditions only (e.g., intersection and roadway improvements along the Project's frontage and driveways).
- Driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for Opening Year Cumulative conditions only (e.g., intersection and roadway improvements along the cumulative development's frontages and driveways).

## 6.2 OPENING YEAR CUMULATIVE (2021) WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 2.0% plus traffic from pending and approved but not yet constructed known development projects in the area. Exhibit 6-1 shows the ADT and peak hour intersection turning movement volumes which can be expected for Opening Year Cumulative (2021) Without Project.

## 6.3 OPENING YEAR CUMULATIVE (2021) WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes, an ambient growth factor of 2.0%, traffic from pending and approved but not yet constructed known development projects in the area and the addition of Project traffic. Exhibit 6-2 shows the ADT and peak hour intersection turning movement volumes which can be expected for Opening Year Cumulative (2021) With Project.





EXHIBIT 6-1: OPENING YEAR CUMULATIVE (2021) WITHOUT PROJECT TRAFFIC VOLUMES

1	Pennsylvania Av. & 8th St.	2 Xenia Av 8th	& <b>3</b> St.	All	egheny St. & 8th St.	4	Dwy.1& 8th St.	5	Highland 8th 1	Springs Av. & St./Wilson St.	6	Highland Springs Av. & Dwy 2
	(19) (19) (19) (19) (19) (19) (19) (19)	(0721)091 (274)091 (275	)	(0)0 +_0(0)	←0(0) ←430(301) ←13(15)		Future Intersection		↓136(32) +-845(722) ↓321(220)	-228(179) -190(156) -258(224)		Future
	16(23)→ 125(208)→ 45(27)→ 45(27)→ (02)8 (27)8 (	61(35)→ 163(224)→ 29(35)→ 29(35)→ 6000 66555	32	0(0) 322(316)→ 26(20)→	10(8) → 0(0) → 12(14) →			1	41(45)→ 40(178)→ 138(66)→	111(83)_↓ 497(1018) → 189(300)_†		
7	Highland Springs Av. & 6th St./Ramsey St.	8 Highland Springs Av. I-10 WB Ram	& 9	Highland S I	prings Av. & 10 EB Ramps							
	$\begin{array}{c} \widehat{126(231)} \\ 126(231$	$\begin{array}{c} \widehat{(210)} \\ (2$	)	+	A (*	-						
	184(337) →   184(337) →   121(213) →   1	294(344)− 812(1285)⊣	41	0(1)→ 18(556)→	766(1144)⊣ 386(504)⊣							

## **LEGEND:**

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

10.0 = VEHICLES PER DAY (1000'S)





EXHIBIT 6-2: OPENING YEAR CUMULATIVE (2021) WITH PROJECT TRAFFIC VOLUMES

1 Pennsylvania Av. & 8th St.	2 Xenia Av. & 8th St.	3 Allegheny St. & 8th St.	4 Dwy. 1 & 8th St.	5 Highland Springs Av. & 8th St./Wilson St.	6 Highland Springs Av. & Dwy 2
(81) (81) 100 100 100 100 100 100 100 1	(021)091 (021)	<ul> <li>○○○</li> <li>→ ↓</li> <li>↓ ↓</li> <li>↓ ↓</li> <li>↓ ↓</li> <li>↓ ↓</li> </ul>	<del>- 4</del> 65(330)	(7228(179) (72)) (72)) (72)) (72)) (72)) (72) (72	▲_124(94) ▲_1151(941)
16(23) 132(213) 52(27) 52(27) 52(27) 132(27) 132(27) 132(27) 132(27) 14 152(27) 152(	61(35) 182(237) 29(35) 182(237) 29(35) 182(237) 192(237) 1	0(0) 344(332) 26(20) ↓ (0) (0) (0) (0) (0) (0) (0) (0)	294(315)→ 84(63)	52(52) → ↑ (000) 158(190) → 142(68) - ↓ (000) 142(68) - ↓ (000) 1	133(99) <mark>↓</mark> 133(99) <del> </del> 4 1415) <del> </del> 8 133(99) <del> </del>
7 Highland Springs Av. & 6th St./Ramsey St.	8 Highland Springs Av. & I-10 WB Ramps	9 Highland Springs Av. & I-10 EB Ramps			
$\begin{array}{c c} \hline (221) \\ \hline (221) \hline \hline (221) \\ \hline (221) \hline \hline (221) \\ \hline (221) \hline \hline \hline (221) \hline \hline (221) \hline \hline \hline (221) \hline \hline \hline \hline (221) \hline$	(6101) (8210) (8210) (8210) (8210) (8210) (8210) (8210) (8210) (8210) (8210) (8210) (8210) (9	(181)092 350(489) 0(1) (181)092 ↓ (181			
131(2) 131(2) 149(10 149(10	294(3 823(12	418(550) 386(11) 386(1			

## **LEGEND:**

10(10) = AM(PM) PEAK HOUR INTERSECTION VOLUMES

**10.0** = VEHICLES PER DAY (1000'S)



## 6.4 INTERSECTION OPERATIONS ANALYSIS

## 6.4.1 OPENING YEAR CUMULATIVE (2021) WITHOUT PROJECT TRAFFIC CONDITIONS

Opening Year Cumulative (2021) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection analysis results are summarized in Table 6-1, which indicate that the following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2021) Without Project:

- Pennsylvania Avenue & 8<sup>th</sup> Street (#1) LOS F AM peak hour; LOS E PM peak hour
- Highland Springs Avenue & 8<sup>th</sup> Street/Wilson Street (#5) LOS D AM peak hour; LOS F PM peak hour
- Highland Springs Avenue & 6<sup>th</sup> Street/Ramsey Street (#7) LOS D PM peak hour only

A summary of the peak hour intersection LOS for Opening Year Cumulative (2021) Without Project conditions is shown on Exhibit 6-3. The intersection operations analysis worksheets for Opening Year Cumulative Without Project traffic conditions are included in Appendix 6.1 of this TIA.

## 6.4.2 OPENING YEAR CUMULATIVE (2021) WITH PROJECT TRAFFIC CONDITIONS

As shown in Table 6-1 and illustrated on Exhibit 6-4, there are no additional study area intersections anticipated to operate at an unacceptable LOS with the addition of Project traffic, in addition to the intersections previously identified under Opening Year Cumulative (2021) Without Project traffic conditions. The intersection operations analysis worksheets for Opening Year Cumulative (2021) With Project traffic conditions are included in Appendix 6.2 of this TIA.

## 6.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed (based on CA MUTCD) for Opening Year Cumulative (2021) traffic conditions based on peak hour intersection turning movements volumes. The following unsignalized study area intersection is anticipated to meet a traffic signal warrant under Opening Year Cumulative (2021) Without Project traffic conditions (see Appendix 6.3):

• Pennsylvania Avenue & 8<sup>th</sup> Street (#1)

With the addition of Project traffic, the following additional unsignalized study area intersection is anticipated to meet a traffic signal warrant under Opening Year Cumulative (2021) With Project (see Appendix 6.4):

• Xenia Avenue & 8<sup>th</sup> Street (#2)



#### Table 6-1

			2021	Without	t Proj	ect	202	1 With F	Projec	t	
			De	ay <sup>1</sup>	Leve	el of	De	lay <sup>1</sup>	Leve	el of	Acceptable
		Traffic	(se	cs.)	Ser	vice	(se	cs.)	Ser	vice	LOS <sup>3</sup>
#	Intersection	<b>Control</b> <sup>2</sup>	AM	PM	AM	PM	AM	PM	AM	PM	
1	Pennsylvania Av. & 8th St.	TS	51.2	49.5	F	Е	55.2	52.1	F	F	D
2	Xenia Av. & 8th	<u>CSS</u>	15.4	14.6	С	В	16.6	15.3	С	С	D
3	Allegheny St. & 8th St.	<u>CSS</u>	12.9	11.1	В	В	12.8	11.1	В	В	D
4	Driveway 1 & 8th St.	<u>CSS</u>	Futu	re Inter	sectio	n	10.0	9.8	В	А	D
5	Highland Springs Av. & 8th St./Wilson St.	AWS	41.5	105.5	D	F	45.0	105.6	D	F	С
6	Highway Springs Av. & Driveway 2	<u>CSS</u>	Futu	re Inter	sectio	n	19.8	14.9	С	В	С
7	Highland Springs Av. & 6th St./Ramsey St.	TS	27.8	38.2	С	D	29.5	39.9	С	D	С
8	Highland Springs Av. & I-10 WB Ramps	TS	23.4	33.6	С	С	23.5	34.1	С	С	С
9	Highland Springs Av. & I-10 EB Ramps	TS	28.2	29.6	С	С	29.7	30.2	С	С	С

#### Intersection Analysis for Opening Year Cumulative (2021) Conditions

**BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

<sup>1</sup> Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>2</sup> AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal; <u>CSS</u> = Improvement

<sup>3</sup> Minimum acceptable LOS for each applicable jurisdiction.







EXHIBIT 6-3: OPENING YEAR CUMULATIVE (2021) WITHOUT PROJECT SUMMARY OF LOS



2

= NOT AN ANALYSIS LOCATION FOR THIS SCENARIO





2

= PM PEAK HOUR ACCEPTABLE LOS

= PM PEAK HOUR DEFICIENT LOS

AM PEAK HOUR ACCEPTABLE LOS
 AM PEAK HOUR DEFICIENT LOS



EXHIBIT 6-4: OPENING YEAR CUMULATIVE (2021) WITH PROJECT SUMMARY OF LOS

## 6.6 OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway and Highland Springs Avenue interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway mainline. Queuing analysis findings are presented in Table 6-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 6-2 and consistent with Existing (2020) traffic conditions, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95<sup>th</sup> percentile traffic flows under Opening Year Cumulative (2021) Without Project and With Project traffic conditions. Worksheets for Opening Year Cumulative (2021) Without Project and With Project traffic conditions off-ramp queuing analysis are provided in Appendices 6.5 and 6.6, respectively.

## 6.7 RECOMMENDED IMPROVEMENTS

## 6.7.1 RECOMMENDED IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been recommended at intersections that have been identified as deficient in an effort to reduce each location's peak hour delay and improve the associated LOS grade to acceptable LOS. The effectiveness of the recommended improvement strategies discussed below to address Opening Year Cumulative (2021) traffic deficiencies are presented in Table 6-3 and described below. The intersection operations analysis worksheets for Opening Year Cumulative (2021) Without Project and With Project traffic conditions, with improvements, are included in Appendices 6.7 and 6.8, respectively.

**Recommended Improvement – Pennsylvania Avenue & 8<sup>th</sup> Street (#1)** – The following improvements are necessary to bring the LOS back to acceptable levels:

- Install a traffic signal.
- Restripe the northbound approach to provide one left turn lane and one shared through-right turn lane.
- Restripe the southbound approach to provide one left turn lane and one shared through-right turn lane.
- Restripe the eastbound approach to provide one left turn lane and one shared through-right turn lane.
- Restripe the westbound approach to provide one left turn lane and one shared through-right turn lane.

**Recommended Improvement – Highland Springs Avenue & 8<sup>th</sup> Street/Wilson Street (#5)** – The following improvement is necessary to bring the LOS back to acceptable levels:

• Restripe the northbound approach to provide one left turn lane, two through lanes, and one right turn lane.



Table 6-2

			>	ithout Pro	ject			With Proje	t	
		Available	95th Per	centile			95th Percen	tile Queue		
		Stacking	Queue (	Feet)	Accept	able? <sup>1</sup>	(Fee	et)	Accept	able? <sup>1</sup>
		Distance	AM Peak	PM Peak			AM Peak	PM Peak		
Intersection	Movement	(Feet)	Hour	Hour	AM	PM	Hour	Hour	AM	PM
Highland Springs Av. & I-10 WB Ramps	WBL/T	350	253	387 <sup>2,3</sup>	Yes	Yes	253	387 <sup>2,3</sup>	Yes	Yes
	WBR	1,600	59	374 <sup>2</sup>	Yes	Yes	61	386 <sup>2</sup>	Yes	Yes
Highland Springs Av. & I-10 EB Ramps	EBL/T	630	311	453	Yes	Yes	318	459	Yes	Yes
	EBR	1,300	347	582 <sup>2</sup>	Yes	Yes	347	582 <sup>2</sup>	Yes	Yes
<b>BOID</b> = $Ouelle length exceeds available stacking dis$	tance									

Peak Hour Queuing Summary for Opening Year Cumulative (2021) Conditions

**BOLD** = Queue length exceeds available stacking distance.

<sup>1</sup> Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

<sup>2</sup> 95th percentile volume exceeds capacity, queue may be longer.

<sup>3</sup> Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.



Table 6-3

					_	nters	ection	η App	road	th Lar	les <sup>1</sup>				Del	ay¹	Leve	el of
		Traffic	Nor	thbol	pun	Sout	noqu	pu	East	poun	q	West	poun	p	(sec	:s.)	Sen	/ice
#	Intersection	Control <sup>3</sup>	J	F	R	_	г	R	Ļ	F	R	L	F	R	AM	PM	AM	PM
1	Pennsylvania Av. & 8th St.																	
	- Without Project	TS	<del>, ,</del> ,	1	0	<del>, ,</del> ,	1	0	<del>, I</del> I	1	0	<del>, I</del> I	1	0	15.4	15.0	В	В
	- With Project	<u>TS</u>	<del>, I</del> I	Ч	0	<del>, I</del>	7	0	<del>, ,</del>	7	0	1	-	0	15.8	15.2	В	В
വ	Highland Springs Av. & 8th St./Wilson St.																	
	- Without Project	TS	Ч	2	1	7	2	0	7	2	0	1	2	1	32.7	31.7	U	U
	- With Project	TS	1	2	1>	1	2	0	1	2	0	1	2	1	34.9	32.9	С	J
2	Highland Springs Av. & 6th St./Ramsey St.																	
	- Without Project	TS	Ч	7	1	7	2	1	7	2	1	7	2	<del>ر</del> ا	26.0	33.2	υ	U
	- With Project	TS	1	2	1	1	2	1	1	2	1	2	2	1	27.6	34.6	С	J
8			-		ĩ													

Intersection Analysis for Opening Year Cumulative (2021) Conditions With Improvements

**BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes. ÷

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; <u>1</u> = Improvement

- Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. 7
  - <sup>3</sup> TS = Traffic Signal; CSS = Improvement



**Recommended Improvement – Highland Springs Avenue & 8<sup>th</sup> Street (#1)** – The following improvements are necessary to bring the LOS back to acceptable levels:

- Modify the existing median to provide a 2<sup>nd</sup> westbound left turn lane.
- Stripe the westbound defacto right turn lane.

### 6.7.2 RECOMMENDED IMPROVEMENTS TO ADDRESS OFF-RAMP QUEUES

As shown previously in Table 6-2, there are no anticipated peak hour queuing issues at the I-10 Freeway and Highland Springs Avenue interchange for Opening Year Cumulative (2021) traffic conditions. As such, no improvements have been recommended.



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# 7 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Beaumont are funded through a combination of improvements constructed by the Project, development impact fee programs or fair share contributions. Fee programs applicable to the Project are described below.

## 7.1 RIVERSIDE COUNTY TRANSPORTATION UNIFORM MITIGATION FEE (TUMF)

The TUMF program is administered by the Western Riverside Council of Governments (WRCOG) based upon a regional Nexus Study most recently updated in 2016 to address major changes in right of way acquisition and improvement cost factors. (7) This regional program was put into place to ensure that development pays its fair share and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region. TUMF is a truly regional mitigation fee program and is imposed and implemented in every jurisdiction in Western Riverside County.

## 7.2 CITY OF BEAUMONT DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The City of Beaumont has created its own local DIF program to impose and collect fees from new residential, commercial and industrial development for the purpose of funding roadways and intersections necessary to accommodate City growth as identified in the City's General Plan Circulation Element. The City's DIF includes Street & Bridges Impact Fee, Traffic Signal Impact Fee and Railroad Crossing Impact Fee. Under the City's DIF program, the City may grant to developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program.

The Project Applicant will be subject to the City's DIF fee program and will pay the requisite City DIF fees at the rates then in effect. The Project Applicant's payment of the requisite DIF fees at the rates then in effect pursuant to the DIF Program will mitigate its impacts to DIF-funded facilities.

## 7.3 MEASURE A

Measure A, Riverside County's half-cent sales tax for transportation, was adopted by voters in 1988 and extended in 2002. It will continue to fund transportation improvements through 2039. Measure A funds a wide variety of transportation projects and services throughout the County. RCTC is responsible for administering the program. Measure A dollars are spent in accordance with a voter-approved expenditure plan that was adopted as part of the 1988 election.



## 7.4 FAIR SHARE CONTRIBUTION

Project improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City's discretion). When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each peak hour, have been provided in Table 7-1 for the applicable deficient study area intersection. These fees are collected with the proceeds solely used as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases.



#### Table 7-1

#	Intersection	Project	2021 With	Project Fair
			Project	Share <sup>1</sup>
1	Pennsylvania Av. & 8th St.			
	AM	36	1,386	2.6%
	PM	25	1,451	1.7%
7	Highland Springs Av. & 6th			
/	St./Ramsey St.			
	AM	66	3,047	2.2%
	PM	45	3,987	1.1%

\* Highest deficient peak hour represented in **BOLD** and shown on Table 1-2.



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# 8 **REFERENCES**

- 1. Riverside County Transportation Department. *Traffic Impact Analysis Preparation Guide*. County of Riverside : s.n., April 2008.
- 2. California Department of Transportation. *Guide for the Preparation of Traffic Impact Studies.* December 2002.
- 3. Institute of Transportationi Engineers (ITE). *Trip Generation Manual*. 10th Edition. 2017.
- 4. **Riverside County Transportation Commission.** 2011 Riverside County Congestion Management *Program.* County of Riverside : RCTC, December 14, 2011.
- 5. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 6th Edition. s.l. : National Academy of Sciences, 2016.
- California Department of Transportation. California Manual on Uniform Traffic Control Devices (MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CAMUTCD)*. 2017.
- 7. Western Riverside Council of Governments. *TUMF Nexus Study, 2016 Program Update.* July 2017.

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# APPENDIX J TRIBAL CONSULTATION SUMMARY

The City of Beaumont

# CHAMBERS GROUP

July 21, 2020 21231

On April 22, 2020, Governor Newsome issued Executive Order N-52-20 to extend tribal consultation timelines under AB 52. The Executive Order suspended the timeframes when a California Native American tribe must request consultation for 60 days, in consideration that tribal capacity to engage in or request consultation may be limited. The 60-day period concluded on June 22, 2020.

On May 7, 2020, the City of Beaumont submitted AB 52 notification letters to 15 Native American tribal governments or designated tribal representatives via certified mail and submitted letters digitally on May 11, 2020. Of the 15 tribes or tribal representatives (in some cases multiple letters were sent to representatives of the same tribe), the City received responses from three tribes.

Responses and consultation requests were received from the following tribes within the extended timeframes as signed under the Executive Order:

- Torres Martinez Desert Cahuilla Indians (May 12, 2020): The tribe stated that while the project area falls within the bounds of their Tribal Traditional Use Areas, they do not have specific concerns regarding known cultural resources, but does request that the appropriate consultation continue to take place between concerned tribes, project proponents, and local agencies. The Tribe wished to defer all future project notifications to Soboba Band of Luiseño Indians.
- Agua Caliente Band of Cahuilla Indians (June 10, 2020): The tribe requested consultation within the extended timeframe under AB 52 and requested a copy of the records search and associates survey reports and site records, a cultural resources inventory, copies of any cultural resources document, and the presence of an approved Agua Caliente Native American Cultural Resource Monitor(s). Copies of the requested documents were sent to the Tribal Historic Preservation Officer on June 22, 2020.
- Soboba Band of Luiseño Indians (June 12, 2020): Due to the extended timeframe under the Executive Order, the tribe indicated that they would provide a response to the project. A follow-up email was sent to Joseph Ontiveros on July 7, 2020. Mr. Ontiveros followed-up with an email on the same day stating that the Soboba Band of Mission Indians would be deferring to the Morongo Band of Mission Indians due to their closer proximity to the project area. Mr. Ontiveros carbon copied the new Tribal Historic Preservation Officer, Ms. Ann Brierty, who recently replaced the departing Mr. Travis Armstrong.
- On July 8, 2020 Morongo THPO Ann Brierty contacted Chambers Group informing them of the changes in staff at the tribe and requested documents related to the AB 52 notice be forwarded to her. These documents were forwarded on the same date to Ms. Brierty. At this time, no additional requests or comments have been received.

Pursuant to PRC 21080.3.1(d), each tribal government or representative was given 30 days upon receipt of the AB 52 notification letter, in addition to the extended timeframe from the Executive Order, to provide a request for consultation on the Project. In consideration that tribal capacity to engage in or request consultation may be limited even after the Executive Order deadline, the City will continue and accept consultation with the contacted tribes during the public review period. However, the City of Beaumont, as lead agency, has fulfilled its obligations under AB 52 to engage in tribal consultations with all other tribal governments.

