Appendix A Notice of Preparation and Comments

Appendices

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QUALITY EDUCATION
RELATIONSHIPS HOME SCHOOL RIGOR COMMUNITY RELEVANCE
A Shared Commitment
Beaumont Unified School District

BEAUMONT UNIFIED SCHOOL DISTRICT

BOARD OF TRUSTEES

Mrs. Susie Lara	*Mr. Brian Sylva*	*Mr. Steven Hovey*	*Mrs. Janelle Poulter*	*Mr. David Sanchez*
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District Superintendent	Assistant Superintendent Human Resources	Assistant Superintendent Instructional Support Services	Assistant Superintendent Business Services	Chief Innovation Officer Office of Innovation

NOTICE OF PREPARATION
OF A DRAFT ENVIRONMENTAL IMPACT REPORT

TO: Agencies, Organizations and Interested Parties

PROJECT TITLE: Beaumont High School Expansion

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report

NOTICE IS HEREBY GIVEN that the Beaumont Unified School District (BUSD or District), as Lead Agency under the California Environmental Quality Act (CEQA), will prepare a Draft Environmental Impact Report (Draft EIR) for the Beaumont High School Modernization project pursuant to the California Public Resources Code (PRC), Division 13, Section 21000 et seq. (CEQA Statute) and the California Code of Regulations (CCR), Title 14, Division 6, Chapter 3, Section 15000 et seq. (CEQA Guidelines).

The purpose of the Notice of Preparation is to (1) serve as a public notice of an environmental impact report (EIR) pursuant to the CEQA Guidelines Section 15082, and (2) advise and solicit comments and suggestions regarding the scope and content of the EIR to be prepared. The District, as Lead Agency, respectfully requests that any agencies responding to this notice respond in a manner consistent with CEQA Guidelines Section 15082(b). Agency and public comments should, at a minimum, identify the significant environmental issues, reasonable alternatives, and/or mitigation measures that should be explored in the EIR.

In compliance with CEQA Guidelines Section 15060(d) and 15082, the District will not be preparing an initial study and will begin work directly on the Draft EIR.

PROJECT LOCATION: The project site is within the main campus of Beaumont High School at 39139 Cherry Valley Boulevard, City of Beaumont, County of Riverside (Assessor's Parcel Number 403-200-011).

PROJECT DESCRIPTION: Physical improvements would occur on the north half of the main campus; no changes to the athletic complex. Campus work would include demolition and removal, new construction, and reconfiguration on about 34 acres of the 62-acre main campus.

- **Demolition and Removal**
  - Roundabout entry drive
  - A portion of Parking Lot E and all of Lot D
  - Turf athletic fields
  - 8 basketball courts and 8 tennis courts
- **New Construction**
  - Entry plaza and walkway along drop-off/pick-up zone
  - Lunch shelter
  - Two 25,000-sf 2-story classroom buildings with 42 classrooms and up to 1,344 seats, and an open courtyard between buildings.

350 W. Brookside Avenue ♦ PO Box 187 ♦ Beaumont ♦ California ♦ 92223-0187 ♦ Tele: (951) 845-1631

- **Reconfigure Parking and Circulation**
  - Lot E would be expanded to the south to provide an additional 225 spaces (total of 455 spaces). A new enter-only drive along Cherry Valley Boulevard would provide a second access point for students and would relieve congestion at the main entry stop light.
  - Lot D would be moved north and increased by 15 spaces (total of 199 spaces). This lot would have the entry drive and the drop-off/pick-up zone around the outside.
  - Driveway on Cherry Valley Boulevard (2-lane entry, 3-lane exit) would be extended to provide significantly more stacking and a longer drop-off/pick-up zone; lane configuration would be the same.

- **Reconstruct Athletic Fields**
  The fields would be reconstructed for better access and space: baseball and 2 softball practice fields; running track; 2 soccer fields; 8 basketball courts and 8 tennis courts

Other school facilities would remain the same, and no changes to operations, school-related events, or community use would occur.

POTENTIAL ENVIRONMENTAL EFFECTS: In accordance with Section 15082 of the CEQA Guidelines, the District has prepared this Notice of Preparation to provide agencies, organizations, and interested parties with information describing the proposed project and its potential environmental effects. Environmental factors that will be analyzed in the Draft EIR are:

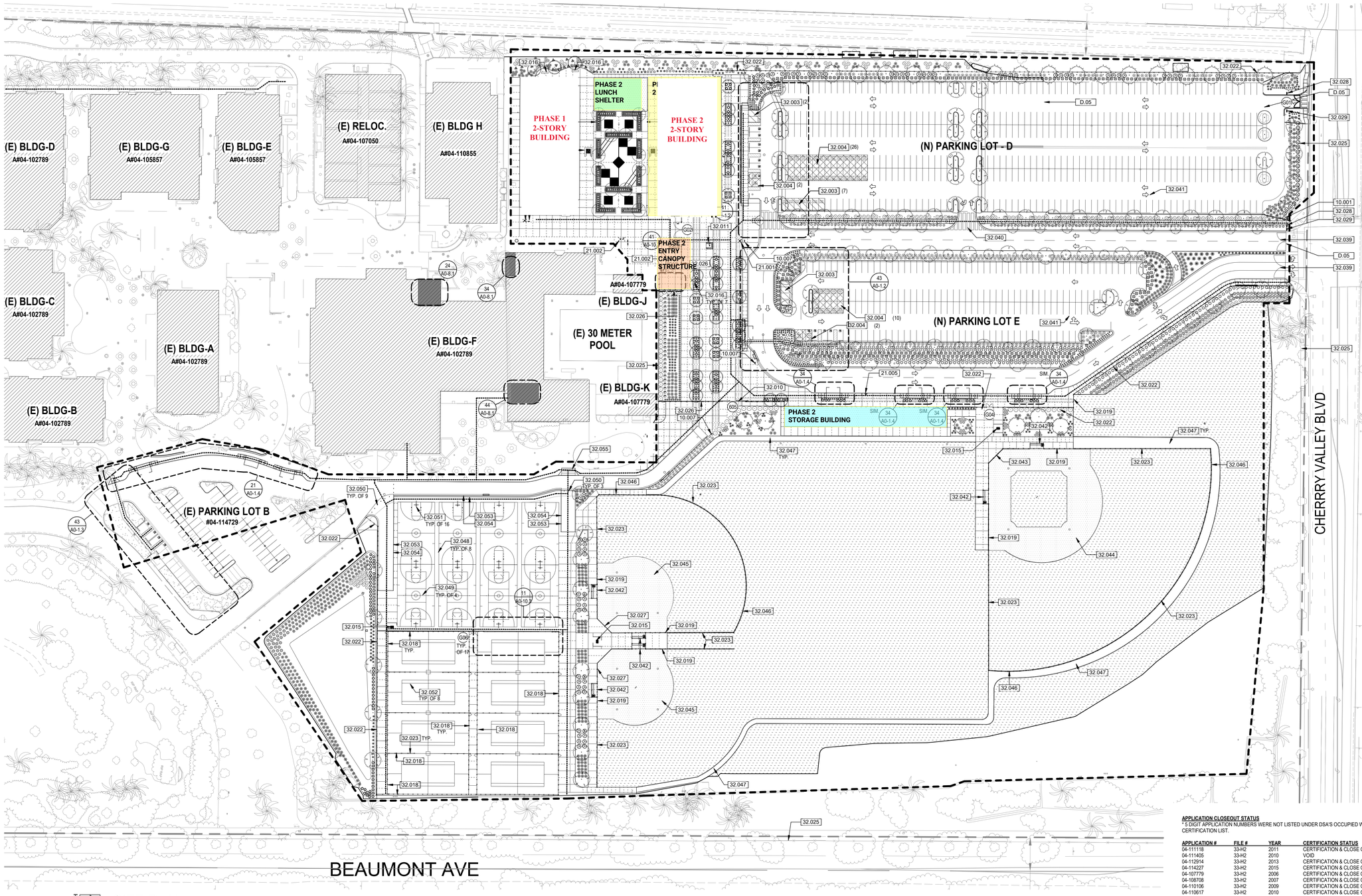
☐ Aesthetics	☐ Agriculture & Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology & Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology & Water Quality	☐ Land Use & Planning	☐ Mineral Resources
☐ Noise	☐ Population & Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities & Service Systems	☐ Wildfire	

DOCUMENT AVAILABILITY: The 30-day public review period for the NOP is from **June 19, 2020, to July 20, 2020**. In accordance with the time limits mandated by State law, if there are any concerns about the scope and content of the information to be addressed in EIR, please send written comments to the District, at the address below, at the earliest possible date but not later than July 20, 2020. This NOP is available for review on BUSD website: https://www.beaumontusd.us/apps/pages/Facilities_Projects.

PUBLIC COMMENTS: Please indicate a contact person and send your comments to:

Beaumont Unified School District
Facilities Planning Department
350 W. Brookside Avenue, Beaumont, CA 92223-0187
ATTN: Lisa Hendrix, Director of Facilities

Comments can also be sent by e-mail to lhendrix@beaumontusd.k12.ca.us. Please include "CEQA Beaumont HS" in the subject line. If you require additional information, please contact Lisa Hendrix at (951) 845-1631 ext. 005373.



NORTH

SITE PLAN

SCALE: 1" = 60'-0"

SITE PLAN LEGEND

- PROPERTY LINE
- EXISTING BUILDING
- EXISTING ACCESSIBLE RESTROOM
- PATH OF TRAVEL PER INCREMENT #1 - AS INDICATED IS A BARRIER FREE ACCESS WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" AT 1:2 MAXIMUM SLOPE. EXCEPT THAT LEVEL CHANGES DOES NOT EXCEED 1/4" VERTICAL (FOR REFERENCE/ LOCATION ONLY)
- PARKING STALL FOR CLEAN AIR VEHICLE
- PARKING STALL WITH ELECTRIC VEHICLE CHARGING STATION
- CHAIN LINK FENCE
- ORNAMENTAL FENCE
- GATE PER GATE SCHEDULE SEE SHEET HS 205
- PRIMARY SCOPE OF WORK BOUNDARY

KEYNOTES	
Key Value	Keynote Text
10.001	(N) FIRE LANE ENTRANCE SIGN - REFER TO 32/A0-10.1
10.007	FIRE LANE SIGN - REFER TO 22/A0-10.1
21.001	RELOCATED FIRE HYDRANT REFER TO CIVIL - FOR HYDRANT BOLLARD PROTECTION SEE A0-10.3
21.002	(N) FIRE DEPARTMENT CONNECTION REFER TO CIVIL - FOR FDC BOLLARD PROTECTION SEE A0-10.3
21.005	(N) FIRE HYDRANT REFER TO CIVIL - FOR (N) HYDRANT BOLLARD PROTECTION SEE A0-10.3
21.006	(N) FIRE DEPARTMENT CONNECTION - REFER TO CIVIL
32.003	(N) PARKING STALL STRIPING FOR CLEAN AIR VEHICLES
32.004	(N) PARKING STALLS STRIPING ELECTRIC VEHICLE CHARGING STATIONS
32.010	(N) ORNAMENTAL ROLLING GATE - REFER TO 4/HS203
32.011	(N) FLAGPOLE - REFER TO 9/HS206
32.015	(N) ACCESSIBLE DRINKING FOUNTAIN - REFER TO 7/HS207
32.016	(N) PLANTER/SEATING BENCH - REFER TO HS206
32.018	(N) 10' H CHAIN-LINK FENCE - REFER TO HS202
32.019	(N) 8' H CHAIN-LINK FENCE - REFER TO 1/HS203
32.022	(N) 6' H CHAIN LINK FENCE - REFER TO 2/HS203
32.023	(N) 4' CHAIN LINK FENCE - 3/HS203

KEYNOTES	
Key Value	Keynote Text
32.025	(E) FENCE TO REMAIN
32.026	(N) 6' H DECORATIVE FENCE - REFER TO 7/HS203
32.027	(N) 20' H BACKSTOP - REFER TO 1/HS201
32.028	(N) TRAFFIC LAW SIGN - REFER TO 35/A0-10.2
32.029	(N) TOW-AWAY SIGN - REFER TO 13/A0-10.2
32.039	(E) GATE TO REMAIN
32.040	ACCESSIBLE CROSSWALK MARKING PLAN - REFER TO 34/A0-10.2
32.041	TYPICAL PARKING LOT MARKINGS - REFER TO CIVIL
32.042	BASEBALL / SOFTBALL DUGOUT - REFER TO 4/HS200
32.043	(N) 30' H BASEBALL BACKSTOP - REFER TO 2/HS201
32.044	(N) BASEBALL FIELD LAYOUT - REFER TO 1/HS200
32.045	(N) SOFTBALL FIELD LAYOUT - REFER TO 2/HS200
32.046	(N) FOUL POLE - REFER TO SPECS
32.047	(N) D.G. RUNNING TRACK WITH CURBS - REFER TO 3/HS207
32.048	(N) BASKETBALL COURT - REFER TO 5/HS201
32.049	(N) VOLLEYBALL COURT - REFER TO 6/HS201

KEYNOTES	
Key Value	Keynote Text
32.050	(N) REMOVABLE BOLLARDS - REFER TO 14/C600
32.051	(N) BASKETBALL HOOP POST - REFER TO HS201
32.052	(N) TENNIS COURT - REFER TO HS202
32.053	CMU RETAINING WALL - REFER TO 2/C603
32.054	(N) FREESTANDING GUARD RAIL AT TOP OF RETAINING WALL - REFER TO 35/A0-10.1
32.055	CURB RAMP - REFER TO 12/C600
D.05	SAWCUT LINE, SEE C104 FOR EXTEND OF WORK.

APPLICATION CLOSEOUT STATUS

* 5 DIGIT APPLICATION NUMBERS WERE NOT LISTED UNDER DSA'S OCCUPIED WITHOUT CERTIFICATION LIST.

APPLICATION #	FILE #	YEAR	CERTIFICATION STATUS
04-111118	33-H2	2011	CERTIFICATION & CLOSE OF FILE #1
04-111405	33-H2	2010	VOID
04-112914	33-H2	2013	CERTIFICATION & CLOSE OF FILE #1
04-114227	33-H2	2015	CERTIFICATION & CLOSE OF FILE #1
04-107779	33-H2	2006	CERTIFICATION & CLOSE OF FILE #1
04-108708	33-H2	2007	CERTIFICATION & CLOSE OF FILE #1
04-110106	33-H2	2009	CERTIFICATION & CLOSE OF FILE #1
04-110617	33-H2	2010	CERTIFICATION & CLOSE OF FILE #1
04-110784	33-H2	2010	CERTIFICATION & CLOSE OF FILE #1
04-111188	33-H2	2010	CERTIFICATION & CLOSE OF FILE #1
04-116569	33-H2	2017	CERTIFICATION & CLOSE OF FILE #1
04-116838	33-H2	2018	OPEN
04-110855	33-H2	2010	CERTIFICATION & CLOSE OF FILE #1
04-102789	33-H2	2002	CERTIFICATION & CLOSE OF FILE #2
04-107050	33-H2	2005	CERTIFICATION & CLOSE OF FILE #1
04-105857	33-H2	2004	CERTIFICATION & CLOSE OF FILE #2

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:

THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NON-COMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS. DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT."

DLR Group
Architecture Engineering Planning Interiors

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1650 Spruce Street, Suite 300
Riverside, CA 92507

T 951.682.0470
dlrgroup.com

Revisions:

PARKING RATIO CALCULATIONS

(E) PARKING LOT B: ACCESIBLE PARKING CALCULATION:

EXISTING PARKING STALLS PROVIDED:	76 STALLS
ACCESSIBLE PARKING STALLS REQUIRED (2019 CBC, TABLE 11B-208.2):	4 STALLS (1 VAN)
ACCESSIBLE PARKING STALLS PROVIDED:	4 STALLS (1 VAN)

(N) PARKING LOT D: ACCESIBLE PARKING CALCULATION:

PARKING STALLS PROVIDED:	455 STALLS
ACCESSIBLE PARKING STALLS REQUIRED (2019 CBC, TABLE 11B-208.2):	9 STALLS (2 VAN)
ACCESSIBLE PARKING STALLS PROVIDED:	9 STALLS (2 VAN)

(N) PARKING LOT E: ACCESIBLE PARKING CALCULATION:

PARKING STALLS PROVIDED:	199 STALLS
ACCESSIBLE PARKING STALLS REQUIRED (2019 CBC, TABLE 11B-208.2):	6 STALLS (1 VAN)
ACCESSIBLE PARKING STALLS PROVIDED:	6 STALLS (1 VAN)

INCREMENT 1

BEAUMONT HIGH SCHOOL
EXPANSION PROJECT

39139 Cherry Valley Blvd, Beaumont, CA

QUALITY EDUCATION — RELATIONSHIPS, RIGOR, RELEVANCE, EQUITY, COMMUNITY

Beaumont Unified
School District

350 W. Brookside Avenue
Beaumont, CA 92223

DLR Project № 75-20209-00

SITE PLAN

A0-1.1

Sheet №

File Path & Name: BIM 360://75-20209-00_Beaumont High School/75-20209-00_Site_AR_2019.rvt
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South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL: July 20, 2020

lhendrix@beaumontusd.k12.ca.us
Lisa Hendrix, Director
Beaumont Unified School District, Facilities Planning Department
350 W. Brookside Avenue
Beaumont, CA 92223-0187

Notice of Preparation of a Draft Environmental Impact Report for the Beaumont High School Expansion

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. South Coast AQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Environmental Impact Report (EIR). Please send South Coast AQMD a copy of the Draft EIR upon its completion and public release. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to South Coast AQMD. Please forward a copy of the Draft EIR directly to South Coast AQMD at the address shown in the letterhead. **In addition, please send with the Draft EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files[1]. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, South Coast AQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.**

CEQA Air Quality Analysis

South Coast AQMD adopted its CEQA Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. It is recommended that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from South Coast AQMD's Subscription Services Department by calling (909) 396-3720. More guidance developed since this Handbook is also available on South Coast AQMD's website at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). South Coast AQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

South Coast AQMD has developed both regional and localized significance thresholds. South Coast AQMD staff recommends that the Lead Agency quantify criteria pollutant emissions and compare the emissions to

[1] Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

South Coast AQMD's CEQA regional pollutant emissions significance thresholds[2] and localized significance thresholds (LSTs)[3] to determine the Proposed Project's air quality impacts. The localized analysis can be conducted by either using the LST screening tables or performing dispersion modeling.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips, and hauling trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If the Proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment[4]. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. Guidance[5] on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

Mitigation Measures

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project, including:

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[2] South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.

[3] Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

[4] Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis.

[5] In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: https://www.arb.ca.gov/ch/landuse.htm.

- Chapter 11 "Mitigating the Impact of a Project" of South Coast AQMD'S *CEQA Air Quality Handbook.* South Coast AQMD's CEQA web pages available here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies
- South Coast AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities
- South Coast AQMD's Mitigation Monitoring and Reporting Plan (MMRP) for the 2016 Air Quality Management Plan (2016 AQMP) available here (starting on page 86): http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf
- California Air Pollution Control Officers Association (CAPCOA)'s *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

South Coast AQMD Permits

In the event that implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Draft EIR. The assumptions in the air quality analysis in the EIR will be the basis for evaluating the permit under CEQA and imposing permit conditions and limits. For more information on permits, please visit South Coast AQMD's webpage at: http://www.aqmd.gov/home/permits. Questions on permits can be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

Data Sources

South Coast AQMD rules and relevant air quality reports and data are available by calling South Coast AQMD's Public Information Center at (909) 396-2001 or at South Coast AQMD's website at: http://www.aqmd.gov.

South Coast AQMD staff is available to work with the Lead Agency to ensure that project air quality and health risk impacts are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at lsun@aqmd.gov.

Sincerely,

Lijin Sun

Lijin Sun, J.D.
Program Supervisor, CEQA IGR
Planning, Rule Development & Area Sources

LS
RVC200617-02
Control Number

Appendix B Air Quality, Greenhouse Gas, & Energy Modeling Data

Appendices

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Air Quality, Greenhouse Gas, and Energy Appendix

Emissions Worksheet

Regional Construction Emissions Worksheet:

Asphalt Demolition

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020 Summer**						
	Off-Road		3.31	33.20	21.75	0.04	1.66	1.54
	Total		**3.31**	**33.20**	**21.75**	**0.04**	**1.66**	**1.54**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.01	0.41	0.08	0.00	0.03	0.01
	Worker		0.08	0.05	0.60	0.00	0.16	0.04
	Total		**0.09**	**0.46**	**0.68**	**0.00**	**0.18**	**0.05**
TOTAL			***3.40***	***33.66***	***22.43***	***0.04***	***1.84***	***1.59***
Onsite		**2020 Winter**						
	Off-Road		3.31	33.20	21.75	0.04	1.66	1.54
	Total		**3.31**	**33.20**	**21.75**	**0.04**	**1.66**	**1.54**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.01	0.41	0.09	0.00	0.03	0.01
	Worker		0.07	0.05	0.49	0.00	0.16	0.04
	Total		**0.09**	**0.46**	**0.58**	**0.00**	**0.18**	**0.05**
TOTAL			***3.40***	***33.66***	***22.33***	***0.04***	***1.84***	***1.59***
Onsite		**2020**						
	Off-Road		3.31	33.20	21.75	0.04	1.66	1.54
	Total		**3.31**	**33.20**	**21.75**	**0.04**	**1.66**	**1.54**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.01	0.41	0.09	0.00	0.03	0.01
	Worker		0.08	0.05	0.60	0.00	0.16	0.04
	Total		**0.09**	**0.46**	**0.68**	**0.00**	**0.18**	**0.05**
TOTAL			***3.40***	***33.66***	***22.43***	***0.04***	***1.84***	***1.59***

Demolition Debris Haul

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020** Summer						
	Fugitive Dust						0.95	0.14
	Off-Road		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.95**	**0.14**
Offsite								
	Hauling		0.05	2.45	0.30	0.01	0.18	0.05
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.05**	**2.45**	**0.30**	**0.01**	**0.18**	**0.05**
TOTAL			***0.05***	***2.45***	***0.30***	***0.01***	***1.13***	***0.20***
Onsite		**2020** Winter						
	Fugitive Dust						0.95	0.14
	Off-Road		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.95**	**0.14**
Offsite								
	Hauling		0.06	2.48	0.35	0.01	0.18	0.05
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.06**	**2.48**	**0.35**	**0.01**	**0.18**	**0.05**
TOTAL			***0.06***	***2.48***	***0.35***	***0.01***	***1.13***	***0.20***
Onsite		**2020**						
	Fugitive Dust		0.00	0.00	0.00	0.00	0.95	0.14
	Off-Road		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.95**	**0.14**
Offsite								
	Hauling		0.06	2.48	0.35	0.01	0.18	0.05
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.06**	**2.48**	**0.35**	**0.01**	**0.18**	**0.05**
TOTAL			***0.06***	***2.48***	***0.35***	***0.01***	***1.13***	***0.20***

Site Preparation and Grading

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020** Summer						
	Fugitive Dust						3.71	1.54
	Off-Road		4.53	51.26	33.35	0.06	2.22	2.04
	Total		**4.53**	**51.26**	**33.35**	**0.06**	**5.93**	**3.58**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.01	0.41	0.08	0.00	0.03	0.01
	Worker		0.12	0.07	0.93	0.00	0.24	0.06
	Total		**0.13**	**0.48**	**1.00**	**0.00**	**0.26**	**0.07**
TOTAL			***4.66***	***51.74***	***34.35***	***0.07***	***6.19***	***3.65***
Onsite		**2020** Winter						
	Fugitive Dust						3.71	1.54
	Off-Road		4.53	51.26	33.35	0.06	2.22	2.04
	Total		**4.53**	**51.26**	**33.35**	**0.06**	**5.93**	**3.58**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.01	0.41	0.09	0.00	0.03	0.01
	Worker		0.11	0.07	0.75	0.00	0.24	0.06
	Total		**0.13**	**0.48**	**0.84**	**0.00**	**0.26**	**0.07**
TOTAL			***4.66***	***51.74***	***34.19***	***0.07***	***6.19***	***3.65***
Onsite		**2020**						
	Fugitive Dust		0.00	0.00	0.00	0.00	3.71	1.54
	Off-Road		4.53	51.26	33.35	0.06	2.22	2.04
	Total		**4.53**	**51.26**	**33.35**	**0.06**	**5.93**	**3.58**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.01	0.41	0.09	0.00	0.03	0.01
	Worker		0.12	0.07	0.93	0.00	0.24	0.06
	Total		**0.13**	**0.48**	**1.00**	**0.00**	**0.26**	**0.07**
TOTAL			***4.66***	***51.74***	***34.35***	***0.07***	***6.19***	***3.65***

Grading Soil Haul

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020** Summer						
	Fugitive Dust						0.16	0.02
	Off-Road		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.16**	**0.02**
Offsite								
	Hauling		1.96	90.01	11.11	0.29	6.48	1.99
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**1.96**	**90.01**	**11.11**	**0.29**	**6.48**	**1.99**
TOTAL			***1.96***	***90.01***	***11.11***	***0.29***	***6.65***	***2.01***
Onsite		**2020** Winter						
	Fugitive Dust						0.16	0.02
	Off-Road		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.16**	**0.02**
Offsite								
	Hauling		2.06	90.80	13.01	0.28	6.49	1.99
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**2.06**	**90.80**	**13.01**	**0.28**	**6.49**	**1.99**
TOTAL			***2.06***	***90.80***	***13.01***	***0.28***	***6.65***	***2.02***
Onsite		**2020**						
	Fugitive Dust		0.00	0.00	0.00	0.00	0.16	0.02
	Off-Road		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.16**	**0.02**
Offsite								
	Hauling		2.06	90.80	13.01	0.29	6.49	1.99
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**2.06**	**90.80**	**13.01**	**0.29**	**6.49**	**1.99**
TOTAL			***2.06***	***90.80***	***13.01***	***0.29***	***6.65***	***2.02***

Utilities Trenching

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2021 Summer**						
	Off-Road		0.39	4.07	4.81	0.01	0.24	0.22
	Total		**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.04	0.02	0.30	0.00	0.08	0.02
	Total		**0.04**	**0.02**	**0.30**	**0.00**	**0.08**	**0.02**
TOTAL			***0.43***	***4.09***	***5.10***	***0.01***	***0.32***	***0.24***
Onsite		**2021 Winter**						
	Off-Road		0.39	4.07	4.81	0.01	0.24	0.22
	Total		**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.04	0.02	0.24	0.00	0.08	0.02
	Total		**0.04**	**0.02**	**0.24**	**0.00**	**0.08**	**0.02**
TOTAL			***0.43***	***4.10***	***5.05***	***0.01***	***0.32***	***0.24***
Onsite		**2021**						
	Off-Road		0.39	4.07	4.81	0.01	0.24	0.22
	Total		**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.04	0.02	0.30	0.00	0.08	0.02
	Total		**0.04**	**0.02**	**0.30**	**0.00**	**0.08**	**0.02**
TOTAL			***0.43***	***4.10***	***5.10***	***0.01***	***0.32***	***0.24***

Utilities Trenching, Athletic Field Installation, and Building Construction

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2021 Summer**						
	Off-Road		0.39	4.07	4.81	0.01	0.24	0.22
	Total		**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.04	0.02	0.30	0.00	0.08	0.02
	Total		**0.04**	**0.02**	**0.30**	**0.00**	**0.08**	**0.02**
TOTAL			***0.43***	***4.09***	***5.10***	***0.01***	***0.32***	***0.24***
Onsite		**2021 Winter**						
	Off-Road		0.39	4.07	4.81	0.01	0.24	0.22
	Total		**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.04	0.02	0.24	0.00	0.08	0.02
	Total		**0.04**	**0.02**	**0.24**	**0.00**	**0.08**	**0.02**
TOTAL			***0.43***	***4.10***	***5.05***	***0.01***	***0.32***	***0.24***
Onsite		**2021**						
	Off-Road		0.39	4.07	4.81	0.01	0.24	0.22
	Total		**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.04	0.02	0.30	0.00	0.08	0.02
	Total		**0.04**	**0.02**	**0.30**	**0.00**	**0.08**	**0.02**
TOTAL			***0.43***	***4.10***	***5.10***	***0.01***	***0.32***	***0.24***

Athletic Field Installation and Building Construction		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021 Summer**						
	Off-Road	1.98	18.44	17.97	0.03	1.00	0.94
	Total	**1.98**	**18.44**	**17.97**	**0.03**	**1.00**	**0.94**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.58	22.86	4.08	0.06	1.52	0.47
	Worker	3.00	1.71	23.40	0.07	6.56	1.78
	Total	**3.58**	**24.57**	**27.48**	**0.13**	**8.09**	**2.25**
TOTAL		***5.55***	***43.00***	***45.45***	***0.16***	***9.09***	***3.19***
Onsite	**2021 Winter**						
	Off-Road	1.98	18.44	17.97	0.03	1.00	0.94
	Total	**1.98**	**18.44**	**17.97**	**0.03**	**1.00**	**0.94**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.61	22.66	4.82	0.06	1.53	0.47
	Worker	2.95	1.77	18.89	0.06	6.56	1.78
	Total	**3.56**	**24.43**	**23.71**	**0.12**	**8.09**	**2.25**
TOTAL		***5.53***	***42.86***	***41.68***	***0.15***	***9.09***	***3.19***
Onsite	**2021**						
	Off-Road	1.98	18.44	17.97	0.03	1.00	0.94
	Total	**1.98**	**18.44**	**17.97**	**0.03**	**1.00**	**0.94**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.61	22.86	4.82	0.06	1.53	0.47
	Worker	3.00	1.77	23.40	0.07	6.56	1.78
	Total	**3.58**	**24.57**	**27.48**	**0.13**	**8.09**	**2.25**
TOTAL		***5.55***	***43.00***	***45.45***	***0.16***	***9.09***	***3.19***

Building Construction, Paving, and Finishing and Landscaping		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021** Summer						
	Off-Road	3.23	31.32	32.59	0.05	1.68	1.56
	Paving	0.29				0.00	0.00
	Total	**3.52**	**31.32**	**32.59**	**0.05**	**1.68**	**1.56**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.58	22.86	4.08	0.06	1.52	0.47
	Worker	3.19	1.82	24.88	0.07	6.98	1.89
	Total	**3.77**	**24.67**	**28.96**	**0.14**	**8.50**	**2.36**
TOTAL		***7.29***	***56.00***	***61.55***	***0.19***	***10.18***	***3.92***
Onsite	**2021** Winter						
	Off-Road	3.23	31.32	32.59	0.05	1.68	1.56
	Paving	0.29				0.00	0.00
	Total	**3.52**	**31.32**	**32.59**	**0.05**	**1.68**	**1.56**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.61	22.66	4.82	0.06	1.53	0.47
	Worker	3.13	1.88	20.08	0.06	6.98	1.89
	Total	**3.74**	**24.54**	**24.91**	**0.13**	**8.50**	**2.36**
TOTAL		***7.27***	***55.86***	***57.50***	***0.18***	***10.18***	***3.93***
Onsite	**2021**						
	Off-Road	3.23	31.32	32.59	0.05	1.68	1.56
	Paving	0.29	0.00	0.00	0.00	0.00	0.00
	Total	**3.52**	**31.32**	**32.59**	**0.05**	**1.68**	**1.56**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.61	22.86	4.82	0.06	1.53	0.47
	Worker	3.19	1.88	24.88	0.07	6.98	1.89
	Total	**3.77**	**24.67**	**28.96**	**0.14**	**8.50**	**2.36**
TOTAL		***7.29***	***56.00***	***61.55***	***0.19***	***10.18***	***3.93***

Architectural Coating 2021							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021** Summer						
	Archit. Coating	14.22				0.00	0.00
	Off-Road	0.22	1.53	1.82	0.00	0.09	0.09
	Total	**14.44**	**1.53**	**1.82**	**0.00**	**0.09**	**0.09**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.60	0.34	4.70	0.01	1.32	0.36
	Total	**0.60**	**0.34**	**4.70**	**0.01**	**1.32**	**0.36**
TOTAL		***15.04***	***1.87***	***6.51***	***0.02***	***1.41***	***0.45***
Onsite	**2021** Winter						
	Archit. Coating	14.22				0.00	0.00
	Off-Road	0.22	1.53	1.82	0.00	0.09	0.09
	Total	**14.44**	**1.53**	**1.82**	**0.00**	**0.09**	**0.09**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.59	0.35	3.79	0.01	1.32	0.36
	Total	**0.59**	**0.35**	**3.79**	**0.01**	**1.32**	**0.36**
TOTAL		***15.03***	***1.88***	***5.61***	***0.02***	***1.41***	***0.45***
Onsite	**2021**						
	Archit. Coating	14.22	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.22	1.53	1.82	0.00	0.09	0.09
	Total	**14.44**	**1.53**	**1.82**	**0.00**	**0.09**	**0.09**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.60	0.35	4.70	0.01	1.32	0.36
	Total	**0.60**	**0.35**	**4.70**	**0.01**	**1.32**	**0.36**
TOTAL		***15.04***	***1.88***	***6.51***	***0.02***	***1.41***	***0.45***

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Asphalt Demolition and Demolition Haul	***3***	***36***	***23***	***0***	***3***	***2***
Site Preparation and Grading/Grading Soil Haul	***7***	***143***	***47***	***0***	***13***	***6***
Utilities Trenching	***0***	***4***	***5***	***0***	***0***	***0***
Utilities Trenching, Athletic Fields Installation, and Building Construction	***0***	***4***	***5***	***0***	***0***	***0***
Athletic Fields Installation and Building Construction	***6***	***43***	***45***	***0***	***9***	***3***
Building Construction, Paving, and Finishing and Landscaping	***7***	***56***	***62***	***0***	***10***	***4***
Building Construction, Paving, Finishing and Landscaping , and Architectural Coating	***22***	***58***	***68***	***0***	***12***	***4***
MAX DAILY	**22**	**143**	**68**	**0**	**13**	**6**
Regional Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	Yes	No	No	No	No

Mitigated Regional Construction Emissions Worksheet:

Asphalt Demolition							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020 Summer**						
	Off-Road	3.31	33.20	21.75	0.04	1.66	1.54
	Total	**3.31**	**33.20**	**21.75**	**0.04**	**1.66**	**1.54**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.41	0.08	0.00	0.03	0.01
	Worker	0.08	0.05	0.60	0.00	0.16	0.04
	Total	**0.09**	**0.46**	**0.68**	**0.00**	**0.18**	**0.05**
TOTAL		***3.40***	***33.66***	***22.43***	***0.04***	***1.84***	***1.59***
Onsite	**2020 Winter**						
	Off-Road	3.31	33.20	21.75	0.04	1.66	1.54
	Total	**3.31**	**33.20**	**21.75**	**0.04**	**1.66**	**1.54**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.41	0.09	0.00	0.03	0.01
	Worker	0.07	0.05	0.49	0.00	0.16	0.04
	Total	**0.09**	**0.46**	**0.58**	**0.00**	**0.18**	**0.05**
TOTAL		***3.40***	***33.66***	***22.33***	***0.04***	***1.84***	***1.59***
Onsite	**2020**						
	Off-Road	3.31	33.20	21.75	0.04	1.66	1.54
	Total	**3.31**	**33.20**	**21.75**	**0.04**	**1.66**	**1.54**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.41	0.09	0.00	0.03	0.01
	Worker	0.08	0.05	0.60	0.00	0.16	0.04
	Total	**0.09**	**0.46**	**0.68**	**0.00**	**0.18**	**0.05**
TOTAL		***3.40***	***33.66***	***22.43***	***0.04***	***1.84***	***1.59***

Demolition Debris Haul							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2020** Summer						
	Fugitive Dust					0.95	0.14
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.95**	**0.14**
Offsite							
	Hauling	0.05	2.45	0.30	0.01	0.18	0.05
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.05**	**2.45**	**0.30**	**0.01**	**0.18**	**0.05**
TOTAL		***0.05***	***2.45***	***0.30***	***0.01***	***1.13***	***0.20***
Onsite	**2020** Winter						
	Fugitive Dust					0.95	0.14
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.95**	**0.14**
Offsite							
	Hauling	0.06	2.48	0.35	0.01	0.18	0.05
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.06**	**2.48**	**0.35**	**0.01**	**0.18**	**0.05**
TOTAL		***0.06***	***2.48***	***0.35***	***0.01***	***1.13***	***0.20***
Onsite	**2020**						
	Fugitive Dust	0.00	0.00	0.00	0.00	0.95	0.14
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.95**	**0.14**
Offsite							
	Hauling	0.06	2.48	0.35	0.01	0.18	0.05
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.06**	**2.48**	**0.35**	**0.01**	**0.18**	**0.05**
TOTAL		***0.06***	***2.48***	***0.35***	***0.01***	***1.13***	***0.20***

Site Preparation and Grading

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020** Summer						
	Fugitive Dust						8.86	4.37
	Off-Road		2.09	41.53	50.47	0.09	1.85	1.85
	Total		**2.09**	**41.53**	**50.47**	**0.09**	**10.71**	**6.22**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.01	0.41	0.08	0.00	0.03	0.01
	Worker		0.15	0.09	1.21	0.00	0.31	0.08
	Total		**0.16**	**0.50**	**1.28**	**0.00**	**0.34**	**0.09**
TOTAL			***2.26***	***42.03***	***51.75***	***0.09***	***11.04***	***6.31***
Onsite		**2020** Winter						
	Fugitive Dust						8.86	4.37
	Off-Road		2.09	41.53	50.47	0.09	1.85	1.85
	Total		**2.09**	**41.53**	**50.47**	**0.09**	**10.71**	**6.22**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.01	0.41	0.09	0.00	0.03	0.01
	Worker		0.15	0.09	0.98	0.00	0.31	0.08
	Total		**0.16**	**0.50**	**1.07**	**0.00**	**0.34**	**0.09**
TOTAL			***2.25***	***42.04***	***51.53***	***0.09***	***11.04***	***6.31***
Onsite		**2020**						
	Fugitive Dust		0.00	0.00	0.00	0.00	8.86	4.37
	Off-Road		2.09	41.53	50.47	0.09	1.85	1.85
	Total		**2.09**	**41.53**	**50.47**	**0.09**	**10.71**	**6.22**
Offsite								
	Hauling		0.00	0.00	0.00	0.00	0.00	0.00
	Vendor		0.01	0.41	0.09	0.00	0.03	0.01
	Worker		0.15	0.09	1.21	0.00	0.31	0.08
	Total		**0.16**	**0.50**	**1.28**	**0.00**	**0.34**	**0.09**
TOTAL			***2.26***	***42.04***	***51.75***	***0.09***	***11.04***	***6.31***

Grading Soil Haul 2020

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020** Summer						
	Fugitive Dust						0.08	0.01
	Off-Road		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.08**	**0.01**
Offsite								
	Hauling		0.98	45.01	5.55	0.14	3.24	0.99
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.98**	**45.01**	**5.55**	**0.14**	**3.24**	**0.99**
TOTAL			***0.98***	***45.01***	***5.55***	***0.14***	***3.32***	***1.01***
Onsite		**2020** Winter						
	Fugitive Dust						0.08	0.01
	Off-Road		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.08**	**0.01**
Offsite								
	Hauling		1.03	45.40	6.50	0.14	3.24	1.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**1.03**	**45.40**	**6.50**	**0.14**	**3.24**	**1.00**
TOTAL			***1.03***	***45.40***	***6.50***	***0.14***	***3.33***	***1.01***
Onsite		**2020**						
	Fugitive Dust		0.00	0.00	0.00	0.00	0.08	0.01
	Off-Road		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.00**	**0.00**	**0.08**	**0.01**
Offsite								
	Hauling		1.03	45.40	6.50	0.14	3.24	1.00
	Vendor		0.00	0.00	0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00	0.00	0.00
	Total		**1.03**	**45.40**	**6.50**	**0.14**	**3.24**	**1.00**
TOTAL			***1.03***	***45.40***	***6.50***	***0.14***	***3.33***	***1.01***

Utilities Trenching

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021 Summer**						
	Off-Road	0.39	4.07	4.81	0.01	0.24	0.22
	Total	**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.04	0.02	0.30	0.00	0.08	0.02
	Total	**0.04**	**0.02**	**0.30**	**0.00**	**0.08**	**0.02**
TOTAL		***0.43***	***4.09***	***5.10***	***0.01***	***0.32***	***0.24***
Onsite	**2021 Winter**						
	Off-Road	0.39	4.07	4.81	0.01	0.24	0.22
	Total	**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.04	0.02	0.24	0.00	0.08	0.02
	Total	**0.04**	**0.02**	**0.24**	**0.00**	**0.08**	**0.02**
TOTAL		***0.43***	***4.10***	***5.05***	***0.01***	***0.32***	***0.24***
Onsite	**2021**						
	Off-Road	0.39	4.07	4.81	0.01	0.24	0.22
	Total	**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.04	0.02	0.30	0.00	0.08	0.02
	Total	**0.04**	**0.02**	**0.30**	**0.00**	**0.08**	**0.02**
TOTAL		***0.43***	***4.10***	***5.10***	***0.01***	***0.32***	***0.24***

Utilities Trenching, Athletic Field Installation, and Building Construction

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021 Summer**						
	Off-Road	0.39	4.07	4.81	0.01	0.24	0.22
	Total	**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.04	0.02	0.30	0.00	0.08	0.02
	Total	**0.04**	**0.02**	**0.30**	**0.00**	**0.08**	**0.02**
TOTAL		***0.43***	***4.09***	***5.10***	***0.01***	***0.32***	***0.24***
Onsite	**2021 Winter**						
	Off-Road	0.39	4.07	4.81	0.01	0.24	0.22
	Total	**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.04	0.02	0.24	0.00	0.08	0.02
	Total	**0.04**	**0.02**	**0.24**	**0.00**	**0.08**	**0.02**
TOTAL		***0.43***	***4.10***	***5.05***	***0.01***	***0.32***	***0.24***
Onsite	**2021**						
	Off-Road	0.39	4.07	4.81	0.01	0.24	0.22
	Total	**0.39**	**4.07**	**4.81**	**0.01**	**0.24**	**0.22**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.04	0.02	0.30	0.00	0.08	0.02
	Total	**0.04**	**0.02**	**0.30**	**0.00**	**0.08**	**0.02**
TOTAL		***0.43***	***4.10***	***5.10***	***0.01***	***0.32***	***0.24***

Athletic Field Installation and Building Construction

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021 Summer**						
	Off-Road	1.98	18.44	17.97	0.03	1.00	0.94
	Total	**1.98**	**18.44**	**17.97**	**0.03**	**1.00**	**0.94**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.58	22.86	4.08	0.06	1.52	0.47
	Worker	3.00	1.71	23.40	0.07	6.56	1.78
	Total	**3.58**	**24.57**	**27.48**	**0.13**	**8.09**	**2.25**
TOTAL		***5.55***	***43.00***	***45.45***	***0.16***	***9.09***	***3.19***
Onsite	**2021 Winter**						
	Off-Road	1.98	18.44	17.97	0.03	1.00	0.94
	Total	**1.98**	**18.44**	**17.97**	**0.03**	**1.00**	**0.94**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.61	22.66	4.82	0.06	1.53	0.47
	Worker	2.95	1.77	18.89	0.06	6.56	1.78
	Total	**3.56**	**24.43**	**23.71**	**0.12**	**8.09**	**2.25**
TOTAL		***5.53***	***42.86***	***41.68***	***0.15***	***9.09***	***3.19***
Onsite	**2021**						
	Off-Road	1.98	18.44	17.97	0.03	1.00	0.94
	Total	**1.98**	**18.44**	**17.97**	**0.03**	**1.00**	**0.94**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.61	22.86	4.82	0.06	1.53	0.47
	Worker	3.00	1.77	23.40	0.07	6.56	1.78
	Total	**3.58**	**24.57**	**27.48**	**0.13**	**8.09**	**2.25**
TOTAL		***5.55***	***43.00***	***45.45***	***0.16***	***9.09***	***3.19***

Building Construction, Paving, and Finishing and Landscaping

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021** Summer						
	Off-Road	3.23	31.32	32.59	0.05	1.68	1.56
	Paving	0.29				0.00	0.00
	Total	**3.52**	**31.32**	**32.59**	**0.05**	**1.68**	**1.56**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.58	22.86	4.08	0.06	1.52	0.47
	Worker	3.19	1.82	24.88	0.07	6.98	1.89
	Total	**3.77**	**24.67**	**28.96**	**0.14**	**8.50**	**2.36**
TOTAL		***7.29***	***56.00***	***61.55***	***0.19***	***10.18***	***3.92***
Onsite	**2021** Winter						
	Off-Road	3.23	31.32	32.59	0.05	1.68	1.56
	Paving	0.29				0.00	0.00
	Total	**3.52**	**31.32**	**32.59**	**0.05**	**1.68**	**1.56**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.61	22.66	4.82	0.06	1.53	0.47
	Worker	3.13	1.88	20.08	0.06	6.98	1.89
	Total	**3.74**	**24.54**	**24.91**	**0.13**	**8.50**	**2.36**
TOTAL		***7.27***	***55.86***	***57.50***	***0.18***	***10.18***	***3.93***
Onsite	**2021**						
	Off-Road	3.23	31.32	32.59	0.05	1.68	1.56
	Paving	0.29	0.00	0.00	0.00	0.00	0.00
	Total	**3.52**	**31.32**	**32.59**	**0.05**	**1.68**	**1.56**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.61	22.86	4.82	0.06	1.53	0.47
	Worker	3.19	1.88	24.88	0.07	6.98	1.89
	Total	**3.77**	**24.67**	**28.96**	**0.14**	**8.50**	**2.36**
TOTAL		***7.29***	***56.00***	***61.55***	***0.19***	***10.18***	***3.93***

Architectural Coating 2021							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	**2021** Summer						
	Archit. Coating	14.22				0.00	0.00
	Off-Road	0.22	1.53	1.82	0.00	0.09	0.09
	Total	**14.44**	**1.53**	**1.82**	**0.00**	**0.09**	**0.09**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.60	0.34	4.70	0.01	1.32	0.36
	Total	**0.60**	**0.34**	**4.70**	**0.01**	**1.32**	**0.36**
TOTAL		***15.04***	***1.87***	***6.51***	***0.02***	***1.41***	***0.45***
Onsite	**2021** Winter						
	Archit. Coating	14.22				0.00	0.00
	Off-Road	0.22	1.53	1.82	0.00	0.09	0.09
	Total	**14.44**	**1.53**	**1.82**	**0.00**	**0.09**	**0.09**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.59	0.35	3.79	0.01	1.32	0.36
	Total	**0.59**	**0.35**	**3.79**	**0.01**	**1.32**	**0.36**
TOTAL		***15.03***	***1.88***	***5.61***	***0.02***	***1.41***	***0.45***
Onsite	**2021**						
	Archit. Coating	14.22	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.22	1.53	1.82	0.00	0.09	0.09
	Total	**14.44**	**1.53**	**1.82**	**0.00**	**0.09**	**0.09**
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.60	0.35	4.70	0.01	1.32	0.36
	Total	**0.60**	**0.35**	**4.70**	**0.01**	**1.32**	**0.36**
TOTAL		***15.04***	***1.88***	***6.51***	***0.02***	***1.41***	***0.45***

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Asphalt Demolition and Demolition Haul	***3***	***36***	***23***	***0***	***3***	***2***
Site Preparation and Grading/Grading Soil Haul 2020	***3***	***87***	***58***	***0***	***14***	***7***
Utilities Trenching	***0***	***4***	***5***	***0***	***0***	***0***
Utilities Trenching, Athletic Fields Installation, and Building Construction	***0***	***4***	***5***	***0***	***0***	***0***
Athletic Fields Installation and Building Construction	***6***	***43***	***45***	***0***	***9***	***3***
Building Construction, Paving, and Finishing and Landscaping	***7***	***56***	***62***	***0***	***10***	***4***
Athletic Fields Installation 2021, Building Construction, Paving, Finishing and Landscaping , and Architectural Coating	***22***	***58***	***68***	***0***	***12***	***4***
MAX DAILY	**22**	**87**	**68**	**0**	**14**	**7**
Regional Thresholds	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

Construction LSTs Worksheet:

Asphalt Demolition

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2020**				
	Off-Road		33.20	21.75	1.66	1.54
	Total		**33.20**	**21.75**	**1.66**	**1.54**
TOTAL			***33.20***	***21.75***	***1.66***	***1.54***
Onsite		**2020**				
	Off-Road		33.20	21.75	1.66	1.54
	Total		**33.20**	**21.75**	**1.66**	**1.54**
TOTAL			***33.20***	***21.75***	***1.66***	***1.54***
Onsite		**2020**				
	Off-Road		33.20	21.75	1.66	1.54
	Total		**33.20**	**21.75**	**1.66**	**1.54**
TOTAL			***33.20***	***21.75***	***1.66***	***1.54***

Demolition Debris Haul

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2020**				
	Fugitive Dust				0.95	0.14
	Off-Road		0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.95**	**0.14**
TOTAL			***0.00***	***0.00***	***0.95***	***0.14***
Onsite		**2020**				
	Fugitive Dust				0.95	0.14
	Off-Road		0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.95**	**0.14**
TOTAL			***0.00***	***0.00***	***0.95***	***0.14***
Onsite		**2020**				
	Fugitive Dust		0.00	0.00	0.95	0.14
	Off-Road		0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.95**	**0.14**
TOTAL			***0.00***	***0.00***	***0.95***	***0.14***

Site Preparation and Grading

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2020**				
	Fugitive Dust				3.71	1.54
	Off-Road		51.26	33.35	2.22	2.04
	Total		**51.26**	**33.35**	**5.93**	**3.58**
TOTAL			***51.26***	***33.35***	***5.93***	***3.58***
Onsite		**2020**				
	Fugitive Dust				3.71	1.54
	Off-Road		51.26	33.35	2.22	2.04
	Total		**51.26**	**33.35**	**5.93**	**3.58**
TOTAL			***51.26***	***33.35***	***5.93***	***3.58***
Onsite		**2020**				
	Fugitive Dust		0.00	0.00	3.71	1.54
	Off-Road		51.26	33.35	2.22	2.04
	Total		**51.26**	**33.35**	**5.93**	**3.58**
TOTAL			***51.26***	***33.35***	***5.93***	***3.58***

Grading Soil Haul

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2020**				
	Fugitive Dust				0.16	0.02
	Off-Road		0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.16**	**0.02**
TOTAL			***0.00***	***0.00***	***0.16***	***0.02***
Onsite		**2020**				
	Fugitive Dust				0.16	0.02
	Off-Road		0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.16**	**0.02**
TOTAL			***0.00***	***0.00***	***0.16***	***0.02***
Onsite		**2020**				
	Fugitive Dust		0.00	0.00	0.16	0.02
	Off-Road		0.00	0.00	0.00	0.00
	Total		**0.00**	**0.00**	**0.16**	**0.02**
TOTAL			***0.00***	***0.00***	***0.16***	***0.02***

Utilities Trenching

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2021**				
	Off-Road		4.07	4.81	0.24	0.22
	Total		**4.07**	**4.81**	**0.24**	**0.22**
TOTAL			***4.07***	***4.81***	***0.24***	***0.22***
Onsite		**2021**				
	Off-Road		4.07	4.81	0.24	0.22
	Total		**4.07**	**4.81**	**0.24**	**0.22**
TOTAL			***4.07***	***4.81***	***0.24***	***0.22***
Onsite		**2021**				
	Off-Road		4.07	4.81	0.24	0.22
	Total		**4.07**	**4.81**	**0.24**	**0.22**
TOTAL			***4.07***	***4.81***	***0.24***	***0.22***

Utilities Trenching, Athletic Field Installation, and Building Construction

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2021**				
	Off-Road		4.07	4.81	0.24	0.22
	Total		**4.07**	**4.81**	**0.24**	**0.22**
TOTAL			***4.07***	***4.81***	***0.24***	***0.22***
Onsite		**2021**				
	Off-Road		4.07	4.81	0.24	0.22
	Total		**4.07**	**4.81**	**0.24**	**0.22**
TOTAL			***4.07***	***4.81***	***0.24***	***0.22***
Onsite		**2021**				
	Off-Road		4.07	4.81	0.24	0.22
	Total		**4.07**	**4.81**	**0.24**	**0.22**
TOTAL			***4.07***	***4.81***	***0.24***	***0.22***

Athletic Field Installation and Building Construction

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2021**				
	Off-Road		18.44	17.97	1.00	0.94
	Total		**18.44**	**17.97**	**1.00**	**0.94**
TOTAL			***18.44***	***17.97***	***1.00***	***0.94***
Onsite		**2021**				
	Off-Road		18.44	17.97	1.00	0.94
	Total		**18.44**	**17.97**	**1.00**	**0.94**
TOTAL			***18.44***	***17.97***	***1.00***	***0.94***
Onsite		**2021**				
	Off-Road		18.44	17.97	1.00	0.94
	Total		**18.44**	**17.97**	**1.00**	**0.94**
TOTAL			***18.44***	***17.97***	***1.00***	***0.94***

Building Construction, Paving, and Finishing and Landscaping

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		**2021**				
	Off-Road		31.32	32.59	1.68	1.56
	Paving				0.00	0.00
	Total		**31.32**	**32.59**	**1.68**	**1.56**
TOTAL			***31.32***	***32.59***	***1.68***	***1.56***
Onsite		**2021**				
	Off-Road		31.32	32.59	1.68	1.56
	Paving				0.00	0.00
	Total		**31.32**	**32.59**	**1.68**	**1.56**
TOTAL			***31.32***	***32.59***	***1.68***	***1.56***
Onsite		**2021**				
	Off-Road		31.32	32.59	1.68	1.56
	Paving		0.00	0.00	0.00	0.00
	Total		**31.32**	**32.59**	**1.68**	**1.56**
TOTAL			***31.32***	***32.59***	***1.68***	***1.56***

Architectural Coating 2021					
		NOx	CO	PM10 Total	PM2.5 Total
Onsite	**2021**				
Archit. Coating				0.00	0.00
Off-Road		1.53	1.82	0.09	0.09
Total		**1.53**	**1.82**	**0.09**	**0.09**
TOTAL		***1.53***	***1.82***	***0.09***	***0.09***
Onsite	**2021**				
Archit. Coating				0.00	0.00
Off-Road		1.53	1.82	0.09	0.09
Total		**1.53**	**1.82**	**0.09**	**0.09**
TOTAL		***1.53***	***1.82***	***0.09***	***0.09***
Onsite	**2021**				
Archit. Coating		0.00	0.00	0.00	0.00
Off-Road		1.53	1.82	0.09	0.09
Total		**1.53**	**1.82**	**0.09**	**0.09**
TOTAL		***1.53***	***1.82***	***0.09***	***0.09***
		NOx	**CO**	**PM10 Total**	**PM2.5 Total**
Asphalt Demolition and Demolition Haul		***33***	***22***	***2.61***	***1.69***
1.00 Acre LST		***103***	***1,000***	***6.00***	***4.00***
Exceeds LST?		***no***	***no***	***no***	***no***
Site Preparation and Grading/Grading Soil Haul		***51***	***33***	***6.09***	***3.60***
5.00 Acre LST		***236***	***2,817***	***20.99***	***11.00***
Exceeds LST?		***no***	***no***	***no***	***no***
Utilities Trenching		***4***	***5***	***0.24***	***0.22***
0.00 Acre LST		***103***	***1,000***	***6.00***	***4.00***
Exceeds LST?		***no***	***no***	***no***	***no***
Athletic Fields Installation 2021, Utilities Trenching, and Building Construction		***4***	***5***	***0.24***	***0.22***
1.81 Acre LST		***140***	***1,439***	***9.24***	***5.62***
Exceeds LST?		***no***	***no***	***no***	***no***
Athletic Fields Installation 2021 and Building Construction		***18***	***18***	***1.00***	***0.94***
1.81 Acre LST		***140***	***1,439***	***9.24***	***5.62***
Exceeds LST?		***no***	***no***	***no***	***no***
Building Construction, Paving, and Finishing and Landscaping		***31***	***33***	***1.68***	***1.56***
1.31 Acre LST		***117***	***1,169***	***7.25***	***4.62***
Exceeds LST?		***no***	***no***	***no***	***no***
Building Construction, Paving, Finishing and Landscaping , and Architectural Coating		***33***	***34***	***1.77***	***1.66***
1.31 Acre LST		***117***	***1,169***	***7.25***	***4.62***
Exceeds LST?		***no***	***no***	***no***	***no***

Regional Operation Emissions Worksheet: Buildout Year 2021[1]

[1] CalEEMod, Version 2016.3.2.25

Proposed Net Operations

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.80	0.00	0.38	0.00	0.00	0.00
Energy	0.01	0.09	0.08	0.00	0.01	0.01
Mobile	8.54	6.11	56.13	0.12	13.89	3.75
Total	**10.34**	**6.20**	**56.59**	**0.12**	**13.90**	**3.76**

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.80	0.00	0.38	0.00	0.00	0.00
Energy	0.01	0.09	0.08	0.00	0.01	0.01
Mobile	9.03	5.97	54.75	0.12	13.89	3.75
Total	**10.84**	**6.07**	**55.21**	**0.12**	**13.90**	**3.76**

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	2	0	0	0	0	0
Energy	0	0	0	0	0	0
Mobile	9	6	56	0	14	4
Total	**11**	**6**	**57**	**0**	**14**	**4**
Regional Thresholds (lb/day)	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

GHG Emissions Inventory

Proposed Project Buildout

Construction

	$MTCO_2e$ Total Project*
2020	488
2021	942
Total Construction	**1,430**

*CalEEMod, Version 2016.3.2.25

Operation*

Proposed Project		
Area	0	$MTCO_2e$/Year**
Energy	119	$MTCO_2e$/Year
Mobile	1,889	$MTCO_2e$/Year
Solid Waste	207	$MTCO_2e$/Year
Water	94	$MTCO_2e$/Year
Amortized Construction Emissions***	48	$MTCO_2e$/Year
Total	**2,357**	**$MTCO_2e$/Year**
Net Emissions	**2,357**	
SCAQMD Bright-Line Screening Threshold	3,000	$MTCO_2e$/Year
Exceed Threshold?	**No**	

*CalEEMod, Version 2016.3.2.25

** $MTCO_2e$=metric tons of carbon dioxide equivalent.

*** Total construction emissions are amortized over 30 years per SCAQMD methodology; SCAQMD. 2009, November 19. Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2.

Assumptions Worksheet

CalEEMod Inputs - Beaumont High School Expansion Project, Construction

Name:	Beaumont High School Expansion Project
Project Number:	BEA-06
Project Location:	39139 Cherry Valley Boulevard, Beaumont, CA
County/Air Basin:	Riverside
Climate Zone:	10
Land Use Setting:	Urban
Operational Year:	2021
Utility Company:	Southern California Edison
Air Basin:	South Coast Air Basin
Air District:	SCAQMD
SRA:	29 - Banning Airport

Project Site Acreage	62.24
Disturbed Site Acreage	34.00

Project Components	CY Demolished	Tons/Cy	Tons	
Demolition				
Existing Asphalt Demo	3,600.00	1.26	4,551.00	
New Construction	***SQFT***	***ACRES***	**Building Footprint (sqft)**	Number of Stories
Classroom Building 1	25,000	0.29	12,500.00	2
Classroom Building 2	25,000	0.29	12,500.00	2
Total Building	50,000			
Parking Lot	269,580	6.19		
Other Asphalt Surfaces	163,350	3.75		
Total Hardscape	149,305	3.43		
Total Landscaping:	622,145	14.28		
Total Athletic Fields:	251,660	5.78		

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage*	Land Use Square Feet
Educational	High School	50.000	1000 sqft	0.57	50,000
Parking	Parking Lot	269.580	1000 sqft	6.19	269,580
Parking	Other Asphalt Surfaces	163.350	1000 sqft	3.75	163,350
Parking	Other Non-asphalt Surfaces	1,023.110	1000 sqft	23.49	1,023,110
				34.00	

* while lot acreage for CalEEMod inputs exceeds disturbed site acreage, only construction equipment mix provided by applicant would affect emissions outputs

Demolition

Component	Amount to be Demolished (Tons)	Haul Truck Capacity (tons)1	Haul Distance (miles)	Total Trip Ends	Duration (days)
Total Asphalt Demo	4,551	20	20	456	44
Total	4,551			456	

[1] *Based on information provided by the applicant*

[2] *CalEEMod Default*

Soil Haul[1]

Construction Activities	Haul Truck Capacity (cy)	Volume (CY)	No. of total one-way import haul (trip ends)	No. of total one-way haul (trip ends/day)	Total Days
Rough Grading (Import)	16	27,600	3450	157	22
Rough Grading (Export)	16	39,300	4913	224	22

Export Haul Travel Distance (1-Way): 20

Architectural Coating (Life Sciences)

Percentage of Proposed Buildings' Interior Painted: 80%

Percentage of Proposed Buildings' Exterior Painted: 67%

Rule 1113

Interior Paint VOC content: 150 grams per liter

Exterior Paint VOC content: 150 grams per liter

Residential Structures	Land Use Square Feet	CalEEMod Factor[2]	Total Paintable Surface Area	Paintable Interior Area[1]	Paintable Exterior Area[1]
High School	50,000	2.0	100,000	60,000	16,750
			100,000	60,000	16,750
Parking Lot	1,456,040	6%	87,362		87,362
			87,362		87,362

[1] CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.

[2] The program assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage defined by the user. Architectural coatings for the parking lot is based on CalEEMod methodology applied to a surface parking lot (i.e., striping), in which 6% of surface area is painted.

[3] 100% of the interior and exterior of buildings to be modernized will be painted

Southern California Edison Carbon Intensity Factors

CO2:[1,2]	531.44	pounds per megawatt hour
CH4:[3]	0.029	pound per megawatt hour
N2O:[3]	0.00617	pound per megawatt hour

[1] Based on CO_2e intensity factor of 534 pounds per megawatt hour; Southern California Edison. 2019, May. 2018 Sustainability Report. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf.

[2] Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

[3] CalEEMod default values.

Global Warming Potentials (GWP)

	AR4	AR5
CO_2	1	1
CH_4	25	28
N_2O	298	265

Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC).

Construction Mitigation

SCAQMD Rule 403			
Replace Ground Cover	PM10:	5	% Reduction
Replace Ground Cover	PM2.5:	5	% Reduction
Water Exposed Area	Frequency:	2	per day
	PM10:	55	% Reduction
	PM25:	55	% Reduction
Unpaved Roads	Vehicle Speed:	15	mph
SCAQMD Rule 1186	Clean Paved Road	9	% PM Reduction

Construction Activities and Schedule Assumptions: Beaumont High School Expansion Project

*based on CalEEMod default construction durations provided by applicant

		Construction Schedule		
Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
Demolition	Demolition	9/1/2020	11/1/2020	44
Demolition Debris Haul	Demolition	9/1/2020	11/1/2020	44
Site Preparation	Site Preparation	11/1/2020	12/1/2020	22
Grading	Grading	11/1/2020	12/1/2020	22
Grading Soil Haul	Grading	11/1/2020	12/1/2020	22
Utilities	Trenching	1/1/2021	2/1/2021	22
Athletic Fields Installation	Building Construction	2/1/2021	2/28/2021	20
Building Construction	Building Construction	2/1/2021	7/1/2021	109
Architectural Coating	Architectural Coating	4/1/2021	7/1/2021	66
Paving	Paving	3/1/2021	7/1/2021	89
Finishing and Landscaping	Trenching	3/1/2021	7/1/2021	89

CalEEMod Defaults for Overlapping Construction Activities

Construction Activities	**Phase Type**	**Start Date**	**End Date**	**CalEEMod Duration (Workday)**
Asphalt Demolition	Demolition	9/1/2020	10/31/2020	44
Demolition Debris Haul	Demolition	9/1/2020	10/31/2020	44
Site Preparation and Grading	Grading	11/1/2020	12/1/2020	22
Grading Soil Haul	Grading	11/1/2020	12/1/2020	22
Utilities Trenching	Trenching	1/1/2021	1/31/2021	21
Utilities Trenching, Athletic Fields Installation, and Building Construction	Building Construction	2/1/2021	2/1/2021	1
Athletic Fields Installation and Building Construction	Building Construction	2/2/2021	2/28/2021	19
Building Construction, Paving, and Finishing and Landscaping	Paving	3/1/2021	7/1/2021	89
Architectural Coating	Architectural Coating	4/1/2021	7/1/2021	66

CalEEMod Construction Off-Road Equipment Inputs

**Based on CalEEMod defaults, assumed equipment would not be shared for most conservative results*

General Construction Hours: 8 hours btwn 7:00 AM to 4:00 PM (with 1 hr break), Mon-Fri

Construction Equipment Details							
Equipment	**model**	**# of Equipment**	**hr/day**	**hp**	**load factor***	**Tier Rating**	**total trips**
Phase 1							
Asphalt Demolition							
Concrete/Industrial Saws		1	8	81	0.73		
Excavators		3	8	158	0.38		
Rubber Tired Dozers		2	8	247	0.4		
Worker Trips							15
Vendor Trips							0
Hauling Trips							0
Water Trucks							4
Demolition Debris Haul							
no additional equipment required for Demo Haul							
Worker Trips							0
Vendor Trips							0
Hauling Trips							456
Site Preparation and Grading							
Excavators		2	8	158	0.38		
Graders		1	8	187	0.41		
Rubber Tired Dozers		3	8	247	0.4		
Scrapers		2	8	367	0.48		
Tractors/Loaders/Backhoes		4	8	97	0.37		
			8	89	0.2		
			8	65	0.3685		
Worker Trips							30
Vendor Trips							0
Hauling Trips							0
Water Trucks							4
Grading Soil Haul							
no additional equipment required for Grading Soil Haul							
Worker Trips							0
Vendor Trips							0
Hauling Trips							8,363
Utilities Trenching							
Excavators		1	8	158	0.38		
Worker Trips							3
Vendor Trips							0
Hauling Trips							0
Utilities Trenching, Athletic Fields Installation, and Building Construction							
Cranes		1	7	231	0.29		
Forklifts		3	8	89	0.2		
Generator Sets		1	8	84	0.74		
Tractors/Loaders/Backhoes		3	7	97	0.37		
Welders		1	8	46	0.45		
Skid Steer Loader		1	8	65	0.3685		
Excavators		1	8	158	0.38		
Worker Trips							633
Vendor Trips							247
Hauling Trips							0
Athletic Fields Installation and Building Construction							
Cranes		1	7	231	0.29		
Forklifts		3	8	89	0.2		
Generator Sets		1	8	84	0.74		
Tractors/Loaders/Backhoes		3	7	97	0.37		
Welders		1	8	46	0.45		
Skid Steer Loader		1	8	65	0.3685		
Worker Trips							633
Vendor Trips							247
Hauling Trips							0
Building Construction, Paving, and Finishing and Landscaping							
Cranes		1	7	231	0.29		
Forklifts		3	8	89	0.2		
Generator Sets		1	8	84	0.74		
Tractors/Loaders/Backhoes		3	7	97	0.37		
Welders		1	8	46	0.45		
Excavators		1	8	158	0.38		
Pavers		2	8	130	0.42		
Paving Equipment		2	8	132	0.36		
Rollers		2	8	80	0.38		
Worker Trips							673
Vendor Trips							247
Hauling Trips							0
Architectural Coating							
Air Compressors		1	6	78	0.48		
Worker Trips							127
Vendor Trips							0
Hauling Trips							0

Construction Trips Worksheet

Phase Name	Worker Trip Ends Per Day	Vendor Trip Ends Per Day	Haul Truck Trip Ends Per Day	Total Haul Truck Trip Ends	Start Date	End Date	Workdays
Asphalt Demolition	15	4	0	0	9/1/2020	10/31/2020	44
Demolition Debris Haul	0	0	11	456	9/1/2020	10/31/2020	44
Site Preparation and Grading	30	4	0	0	11/1/2020	12/1/2020	22
Grading Soil Haul	0	0	381	8,363	11/1/2020	12/1/2020	22
Utilities Trenching	3	0	0	0	1/1/2021	1/31/2021	21
Utilities Trenching, Athletic Fields Installation and Building Construction	633	247	0	0	2/1/2021	2/1/2021	1
Athletic Fields Installation and Building Construction	633	247	0	0	2/2/2021	2/28/2021	19
Building Construction, Paving, and Finishing and Landscaping	673	247	0	0	3/1/2021	7/1/2021	89
Architectural Coating	127	0	0	0	4/1/2021	7/1/2021	66

Construction Activity (Overlapping)	Worker Trip Ends Per Day	Vendor Trip Ends Per Day	Haul Truck Trip Ends Per Day	Total Trip Ends Per Day	Start Date	End Date	Workdays
Asphalt Demolition and Demolition Debris Haul	15	4	11	30	9/1/2020	10/25/2020	39
Site Preparation and Grading/Grading Soil Haul	30	4	381	415	11/1/2020	12/1/2020	22
Utilities Trenching	3	0	0	3	9/26/2020	10/5/2020	6
Utilities Trenching, Athletic Fields Installation and Building Construction	633	247	0	880	10/6/2020	12/31/2020	63
Athletic Fields Installation and Building Construction	633	247	0	880	1/1/2021	1/3/2021	1
Building Construction, Paving, and Finishing and Landscaping	673	247	0	920	1/4/2021	10/10/2021	200
Building Construction, Paving, Finishing and Landscaping, and Architectural Coating	800	247	0	1047	10/11/2021	10/27/2021	13
Maximum Daily Trips	**800**	**247**	**381**	**1047**			

CalEEMod Inputs - Beaumont High School Expansion Project, Construction

Name: Beaumont High School Expansion Project
Project Number: BEA-06
Project Location: 39139 Cherry Valley Boulevard, Beaumont, CA
County/Air Basin: Riverside
Climate Zone: 10
Land Use Setting: Urban
Operational Year: 2021
Utility Company: Southern California Edison
Air Basin: South Coast Air Basin
Air District: SCAQMD
SRA: 29 - Banning Airport

Project Site Acreage	62.24
Disturbed Site Acreage	34.00

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Educational	High School	2,254.00	students	0.57	50,000
Parking	Parking Lot	269.58	1000 sqft	6.19	269,580
Parking	Other Asphalt Surfaces	163.35	1000 sqft	3.75	163,350
Parking	Other Non-asphalt Surfaces	1,023.11	1000 sqft	23.49	1,023,110
				34.00	

* while lot acreage for CalEEMod inputs exceeds disturbed site acreage, only construction equipment mix provided by applicant would affect emissions outputs

Weekday Trips Calculation

Trips						
Land Use Type	**Average Daily Trips[1]**	**CalEEMod Trip Rate**	**Saturday Trips**	**CalEEMod Trip Rate[2]**	**Sunday Trips**	**CalEEMod Trip Rate[2]**
High School	4,580	**2.03**	1,307	**0.58**	564	**0.25**

[1]Garland Associates. 2020 June. Traffic and Access Analysis for the Proposed Beaumont High School Expansion
[2]Institute of Transportation Engineers. 2017, September. Trip Generation Manual. 10th Edition.

Weekday Trips					
Trips	**Default Percentage of Trips[1]**	**Number of Daily Trips**	**Adjusted Number of Daily Trips[2]**	**Miles Traveled Per Trip[3]**	**Daily VMT**
Admin/Staff (CC)	17%	788	788	8.40	6,617.2
Students (C-W)	78%	3,563	3,029	3.28	9,934.3
Vendors(CNW)	5%	229	229	6.90	1,580.1
TOTAL	100%	4,580	4,046		18,132

[1] Based on CalEEMod default trip types percentages. Assumes C-C (commercial-customer) trip type represents admin/staff trips, C-W (commercial-work) trip type represent student trips, and C-NW (commercial-nonwork) trip types represent vendors.
[2] Assumes 15% reduction to student trips to account for carpool trips
[3] Student trip length based on information from Garland Associates and District. Admin/Staff and vendor trip distances are based on CalEEMod defaults.

Total Daily High School VMT	18,132	miles
Total Daily High School Trip Ends	4,046	trip ends

High School Inputs

Weekday Trip Rate:	1.7948154	trips/student/day
Saturday Trip Rate:	1.7948154	trips/student/day
Sunday Trip Rate:	1.7948154	trips/student/day
NonRes C-C Trip Length:	0	miles/trip
NonRes C-W Trip Length:	4.4819020	miles/trip
NonRes C-NW Trip Length:	0	miles/trip
Primary Trip:	100%	
Diverted Trip:	0%	
Pass-by Trip:	0%	
NonRes C-C Trip:	0%	
NonRes C-W Trip:	100%	
NonRes C-NW Trip:	0%	

Annual Trips Calculation

Trips						
Land Use Type	**Average Daily Trips[1]**	**CalEEMod Trip Rate**	**Saturday Trips**	**CalEEMod Trip Rate[2]**	**Sunday Trips**	**CalEEMod Trip Rate[2]**
High School	4,580	**2.03**	1,307	**0.58**	564	**0.25**

[1]Garland Associates. 2020 June. Traffic and Access Analysis for the Proposed Beaumont High School Expansion
[2]Institute of Transportation Engineers. 2017, September. Trip Generation Manual. 10th Edition.

Weekday Trips						
Trips	**Default Percentage of Trips[1]**	**Number of Daily Trips**	**Adjusted Number of Daily Trips[2]**	**Number of Annual Trips**	**Miles Traveled Per Trip[3]**	**Annual VMT**
Admin/Staff (CC)	17%	788	788	204,818	8.40	1,720,467.8
Students (C-W)	78%	3,563	3,029	787,476	3.28	2,582,921.4
Vendors(CNW)	5%	229	229	59,540	6.90	410,826.0
TOTAL	100%	4,580	4,046	1,051,834		4,714,215

[1] Based on CalEEMod default trip types percentages. Assumes C-C (commercial-customer) trip type represents admin/staff trips, C-W (commercial-work) trip type represent student trips, and C-NW (commercial-nonwork) trip types represent vendors.
[2] Assumes 15% reduction to student trips to account for carpool trips
[3] Student trip length based on information from Garland Associates and District. Admin/Staff and vendor trip distances are based on CalEEMod defaults.

Saturday Trips					
Trips	Default Percentage of Trips[1]	Number of Daily Trips	Number of Annual Trips[2]	Miles Traveled Per Trip[3]	Annual VMT
Admin/Staff (CC)	17%	225	11,693	8.40	98,218.4
Students (C-W)	78%	1,017	52,889	16.60	877,956.4
Vendors(CNW)	5%	65	3,399	6.90	23,453.3
TOTAL	100%	1,307	67,981		999,628

[1] Based on CalEEMod default trip types percentages. Assumes C-C (commercial-customer) trip type represents admin/staff trips, C-W (commercial-work) trip type represent student trips, and C-NW (commercial-nonwork) trip types represent vendors.
[2] Multiplied by 52 days per year based on CalEEMod methodology.
[3] CalEEMod defaults.

Sunday Trips					
Trips	Default Percentage of Trips[1]	Number of Daily Trips	Number of Annual Trips[2]	Miles Traveled Per Trip[3]	Annual VMT
Admin/Staff (CC)	17%	97	5,040	8.40	42,335.5
Students (C-W)	78%	438	22,797	16.60	378,429.5
Vendors(CNW)	5%	28	1,465	6.90	10,109.2
TOTAL	100%	564	29,302		430,874

[1] Based on CalEEMod default trip types percentages. Assumes C-C (commercial-customer) trip type represents admin/staff trips, C-W (commercial-work) trip type represent student trips, and C-NW (commercial-nonwork) trip types represent vendors.
[2] Multiplied by 52 days per year based on CalEEMod methodology.
[3] CalEEMod defaults.

Total Annual High School VMT	6,144,718	miles
Total Annual High School Trip Ends	1,149,116	trip ends

Annual High School Inputs

Weekday Trip Rate:	1.4005825	trips/student/day
Saturday Trip Rate:	1.4005825	trips/student/day
Sunday Trip Rate:	1.4005825	trips/student/day
NonRes C-C Trip Length:	0	miles/trip
NonRes C-W Trip Length:	5.3473418	miles/trip
NonRes C-NW Trip Length:	0	miles/trip
Primary Trip:	100%	
Diverted Trip:	0%	
Pass-by Trip:	0%	
NonRes C-C Trip:	0%	
NonRes C-W Trip:	100%	
NonRes C-NW Trip:	0%	

Energy Use

* CalEEMod defaults

Water Use (CalEEMod Defaults)

Land Use	Indoor	Outdoor	Total (gal/yr)
High School	9,928,779.84	25,531,148.16	35,459,928.00

*Assumes 100% aerobic treatment.

Solid Waste (CalEEMod Defaults

Land Use	Total Solid Waste (tons/yr)
High School	411.36

Architectural Coating

* See Architectural Coating for Construction Model

Electricity (Buildings)

Project Energy

Modeling is conservative because the carbon intensity of electricity does not account for additional reductions from the 33% RPS and 50% RPS under SB 350.

Buildings constructed after January 1, 2020 are required to meet the 2019 Building and Energy Efficiency Standards. The 2019 Standards are 30% more energy efficient for non-residential buildings and 7% more energy efficient for single family residential buildings than the 2016 Building and Energy Efficiency Standards.

Non-Residential Exceed Title 24	**30%**	Improvement over 2016

Sources:

[1] California Energy Commission (CEC). 2018. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. Accessed on April 3, 2019. http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf

Southern California Edison Carbon Intensity Factors

CO2:[1,2]	531.44	pounds per megawatt hour
CH4:[3]	0.029	pound per megawatt hour
N2O:[3]	0.00617	pound per megawatt hour

[1] Based on CO_2e intensity factor of 534 pounds per megawatt hour; Southern California Edison. 2019, May. 2018 Sustainability Report. https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf.
[2] Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.
[3] CalEEMod default values.

Global Warming Potentials (GWP)		
	AR4	AR5
CO_2	1	1
CH_4	25	28
N_2O	298	265

Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC).

Changes to the CalEEMod Defaults - Fleet Mix 2022

Net Average Daily Trips: 4,580

Default	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038	100%
Trips	2,483	172	848	543	74	24	80	315	6	5	21	4	5	4,580
Percent	0.77			0.12		0.11								
Proportion	0.704523	0.048836	0.240686	1.000000	0.144986	0.045894	0.155261	0.613250	0.012346	0.010561	0.005955	0.008436	0.009266	
Assumed Mix	0.97			0.02		0.01						100%		
adjusted with														
Assumed	0.683388	0.047371	0.233466	0.020000	0.001450	0.000459	0.001553	0.006132	0.000123	0.000106	0.005776	0.000084	0.000093	100%
Trips	3,130	217	1,069	92	7	2	7	28	1	0	26	0	0	4,580
Calibrated for zero heavy-duty trucks	0.683388	0.047371	0.233466	0.020000	0.001450	0.000459	0.001553	0.006132	0	0	0.005776	0.000084	0.000093	100.0%
Modified	**0.683544**	**0.047381**	**0.233519**	**0.020005**	**0.001450**	**0.000459**	**0.001553**	**0.006134**	**0**	**0**	**0.005777**	**0.000084**	0.000093	**100.0%**
Trips	3,131	217	1,070	92	**7**	**2**	**7**	**28**	**0**	**0**	26	0	**0**	4,580
Assumed Mix	97%			2%		1%								100%

Fleet mix for the project is modified to reflect a higher proportion of passenger vehicles that the regional VMT. Assumes a mix of approximately 98% passenger vehicles, 2% medium duty trucks, and 0% heavy duty trucks and buses.

EMFAC2017 Derived CalEEMod Annual Emission Rates: Year 2021[1,2]

Season	Pollutant	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	MCY	SBUS	MH
Annual	CH4_IDLEX	0	0	0	0	0.0047711	0.002907126	0.002746012	0.022396176	0.0088304	0	0	0.0871129	0
Annual	CH4_RUNEX	0.0024275	0.0076986	0.004003	0.0055311	0.0053525	0.003798716	0.005686654	0.027093468	0.0098616	3.0396179	0.3169159	0.007135	0.0033935
Annual	CH4_STREX	0.0521143	0.0891408	0.0732091	0.0915729	0.0153911	0.008146218	0.007101651	2.13107E-07	0.0251644	0.024549	0.2442196	0.0079942	0
Annual	CO_IDLEX	0	0	0	0	0.1692253	0.12735661	0.320717244	5.701876426	0.4835944	0	0	3.3751916	0
Annual	CO_RUNEX	0.6455849	1.5497736	0.9285359	1.151205	0.7245806	0.51888752	0.517973122	0.430127237	1.1148596	23.573333	19.49902	0.5895602	0.3484107
Annual	CO_STREX	2.1461939	2.4559317	2.7705676	3.3130931	0.9485847	0.509204368	0.847866769	0.005128654	2.8015784	1.9484088	8.603722	1.0950772	0
Annual	CO2_NBIO_IDLEX	0	0	0	0	9.4896098	15.14405494	73.08327844	1098.22623	68.902308	0	0	374.62421	0
Annual	CO2_NBIO_RUNEX	264.62422	313.72902	335.1684	419.22736	635.35809	629.0868517	977.3305337	1379.837173	1401.747	1641.5503	207.81278	1117.099	942.43147
Annual	CO2_NBIO_STREX	54.909258	66.962642	71.762295	89.124912	10.312151	6.609482886	7.017854677	0.043912883	21.766612	23.4275	60.962766	6.9700007	0
Annual	NOX_IDLEX	0	0	0	0	0.0870448	0.130106124	0.685894752	5.913487906	0.4135649	0	0	3.5294549	0
Annual	NOX_RUNEX	0.0393621	0.1406643	0.0846539	0.1173379	1.6821035	1.834779741	2.467383351	3.399015504	1.9605461	0.3004103	1.1320641	4.8002349	4.5334554
Annual	NOX_STREX[3]	0.1878088	0.3114534	0.3083019	0.3940027	0.3054891	0.171313939	1.177499564	2.012803622	0.5552841	0.2367755	0.2627139	0.653283	0
Annual	PM10_IDLEX	0	0	0	0	0.0009973	0.001501821	0.002455258	0.008120532	0.0017088	0	0	0.0039568	0
Annual	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060444872	0.13034	0.0918981	0.01176	0.7448002	0.13034
Annual	PM10_PMTW	0.008	0.008	0.008	0.008	0.0100527	0.010947756	0.012000003	0.035240808	0.012	0.0202294	0.004	0.0105772	0.016
Annual	PM10_RUNEX	0.0014413	0.0022623	0.0014809	0.0015592	0.0114908	0.014538988	0.085857098	0.057432454	0.0468547	0.0021611	0.0017168	0.0291807	0.1456508
Annual	PM10_STREX	0.0019145	0.0029788	0.0019495	0.0020458	0.0002285	0.000105451	8.30751E-05	6.96205E-07	0.0002094	0.0002091	0.0028688	4.408E-05	0
Annual	PM25_IDLEX	0	0	0	0	0.0009541	0.001436853	0.002349045	0.007769241	0.0016349	0	0	0.0037856	0
Annual	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025904945	0.05586	0.0393849	0.00504	0.3192001	0.05586
Annual	PM25_PMTW	0.002	0.002	0.002	0.002	0.0025132	0.002736939	0.003000001	0.008810202	0.003	0.0050573	0.001	0.0026443	0.004
Annual	PM25_RUNEX	0.0013279	0.002082	0.0013631	0.0014389	0.0109744	0.013901058	0.082140659	0.054947943	0.0448142	0.0020479	0.0016067	0.0279089	0.13935
Annual	PM25_STREX	0.0017604	0.0027391	0.0017925	0.0018823	0.0002101	9.69587E-05	7.63844E-05	6.40135E-07	0.0001926	0.0001923	0.002703	4.053E-05	0
Annual	ROG_DIURN	0.0580396	0.1947573	0.0911481	0.1101189	0.0026459	0.001226263	0.000472607	3.94308E-06	0.0026435	0.0023414	1.4188755	0.0013761	0
Annual	ROG_HTSK	0.0973983	0.2674539	0.1342796	0.1633491	0.0757159	0.036651434	0.015875748	0.000140754	0.0261186	0.0126655	0.7887791	0.0098813	0
Annual	ROG_IDLEX	0	0	0	0	0.0205999	0.01542314	0.019004387	0.443149907	0.0531544	0	0	0.4062588	0
Annual	ROG_RESTL	0.0455686	0.1337412	0.0758777	0.0964552	0.0013629	0.000648262	0.000248078	2.41545E-06	0.0011509	0.0009242	0.7560103	0.0006865	0
Annual	ROG_RUNEX	0.0093165	0.0339701	0.0162075	0.0244462	0.0626543	0.062582869	0.108888936	0.085297452	0.1022985	0.0487203	2.1526375	0.0999068	0.0730605
Annual	ROG_RUNLS	0.2073908	0.8688165	0.4230883	0.4778418	0.4789654	0.220761369	0.080923677	0.000733329	0.2852975	0.0605858	1.8680431	0.0600276	0
Annual	ROG_STREX	0.2289154	0.4562925	0.3385918	0.452814	0.0765501	0.039947158	0.038808968	1.0921E-06	0.134418	0.0955904	1.850541	0.0465908	0
Annual	SO2_IDLEX	0	0	0	0	9.168E-05	0.000144445	0.000692638	0.010323654	0.0006579	0	0	0.0035825	0
Annual	SO2_RUNEX	0.0026119	0.0030974	0.0033085	0.0041357	0.0061767	0.006052323	0.009282301	0.01288477	0.013618	0.0063901	0.0020565	0.0106965	0.0089094
Annual	SO2_STREX	0.0005421	0.0006611	0.0007085	0.0008799	0.000102	6.54062E-05	6.94474E-05	4.34554E-07	0.0002154	0.0002318	0.0006033	6.897E-05	0
Annual	TOG_DIURN	0.0580454	0.1947768	0.0911572	0.1101299	0.0026459	0.001226263	0.000472607	3.94308E-06	0.0026435	0.0023414	1.4188755	0.0013761	0
Annual	TOG_HTSK	0.0974081	0.2674807	0.134293	0.1633654	0.0757159	0.036651434	0.015875748	0.000140754	0.0261186	0.0126655	0.7887791	0.0098813	0
Annual	TOG_IDLEX	0	0	0	0	0.0287722	0.020561629	0.02450019	0.506316963	0.0701044	0	0	0.5861245	0
Annual	TOG_RESTL	0.0455731	0.1337545	0.0758853	0.0964648	0.0013629	0.000648262	0.000248078	2.41545E-06	0.0011509	0.0009242	0.7560103	0.0006865	0
Annual	TOG_RUNEX	0.0135459	0.0495254	0.0236115	0.0345861	0.0760853	0.072809677	0.125242913	0.120417782	0.1266797	3.1080874	2.6444979	0.1188842	0.0831746
Annual	TOG_RUNLS	0.2074115	0.8689034	0.4231306	0.4778896	0.4789654	0.220761369	0.080923677	0.000733329	0.2852975	0.0605858	1.8680431	0.0600276	0
Annual	TOG_STREX	0.2506823	0.4996802	0.3707884	0.4958327	0.0838127	0.04373711	0.042490935	1.19571E-06	0.1471708	0.1046595	2.0135751	0.051011	0
Summer	CH4_IDLEX	0	0	0	0	0.0047711	0.002907126	0.002746012	0.022396176	0.0088304	0	0	0.0871129	0
Summer	CH4_RUNEX	0.0024275	0.0076986	0.004003	0.0055311	0.0053525	0.003798716	0.005686654	0.027093468	0.0098616	3.0396179	0.3169159	0.007135	0.0033935
Summer	CH4_STREX	0.0521143	0.0891408	0.0732091	0.0915729	0.0153911	0.008146218	0.007101651	2.13107E-07	0.0251644	0.024549	0.2442196	0.0079942	0
Summer	CO_IDLEX	0	0	0	0	0.1692253	0.12735661	0.320717244	5.701876426	0.4835944	0	0	3.3751916	0

Summer	CO_RUNEX	0.6455849	1.5497736	0.9285359	1.151205	0.7245806	0.51888752	0.517973122	0.430127237	1.1148596	23.573333	19.49902	0.5895602	0.3484107
Summer	CO_STREX	2.1461939	2.4559317	2.7705676	3.3130931	0.9485847	0.509204368	0.847866769	0.005128654	2.8015784	1.9484088	8.603722	1.0950772	0
Summer	CO2_NBIO_IDLEX	0	0	0	0	9.4896098	15.14405494	73.08327844	1098.22623	68.902308	0	0	374.62421	0
Summer	CO2_NBIO_RUNEX	264.62422	313.72902	335.1684	419.22736	635.35809	629.0868517	977.3305337	1379.837173	1401.747	1641.5503	207.81278	1117.099	942.43147
Summer	CO2_NBIO_STREX	54.909258	66.962642	71.762295	89.124912	10.312151	6.609482886	7.017854677	0.043912883	21.766612	23.4275	60.962766	6.9700007	0
Summer	NOX_IDLEX	0	0	0	0	0.0870448	0.130106124	0.685894752	5.913487906	0.4135649	0	0	3.5294549	0
Summer	NOX_RUNEX	0.0393621	0.1406643	0.0846539	0.1173379	1.6821035	1.834779741	2.467383351	3.399015504	1.9605461	0.3004103	1.1320641	4.8002349	4.5334554
Summer	NOX_STREX[3]	0.1878088	0.3114534	0.3083019	0.3940027	0.3054891	0.171313939	1.177499564	2.012803622	0.5552841	0.2367755	0.2627139	0.653283	0
Summer	PM10_IDLEX	0	0	0	0	0.0009973	0.001501821	0.002455258	0.008120532	0.0017088	0	0	0.0039568	0
Summer	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060444872	0.13034	0.0918981	0.01176	0.7448002	0.13034
Summer	PM10_PMTW	0.008	0.008	0.008	0.008	0.0100527	0.010947756	0.012000003	0.035240808	0.012	0.0202294	0.004	0.0105772	0.016
Summer	PM10_RUNEX	0.0014413	0.0022623	0.0014809	0.0015592	0.0114908	0.014538988	0.085857098	0.057432454	0.0468547	0.0021611	0.0017168	0.0291807	0.1456508
Summer	PM10_STREX	0.0019145	0.0029788	0.0019495	0.0020458	0.0002285	0.000105451	8.30751E-05	6.96205E-07	0.0002094	0.0002091	0.0028688	4.408E-05	0
Summer	PM25_IDLEX	0	0	0	0	0.0009541	0.001436853	0.002349045	0.007769241	0.0016349	0	0	0.0037856	0
Summer	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025904945	0.05586	0.0393849	0.00504	0.3192001	0.05586
Summer	PM25_PMTW	0.002	0.002	0.002	0.002	0.0025132	0.002736939	0.003000001	0.008810202	0.003	0.0050573	0.001	0.0026443	0.004
Summer	PM25_RUNEX	0.0013279	0.002082	0.0013631	0.0014389	0.0109744	0.013901058	0.082140659	0.054947943	0.0448142	0.0020479	0.0016067	0.0279089	0.13935
Summer	PM25_STREX	0.0017604	0.0027391	0.0017925	0.0018823	0.0002101	9.69587E-05	7.63844E-05	6.40135E-07	0.0001926	0.0001923	0.002703	4.053E-05	0
Summer	ROG_DIURN	0.0580396	0.1947573	0.0911481	0.1101189	0.0026459	0.001226263	0.000472607	3.94308E-06	0.0026435	0.0023414	1.4188755	0.0013761	0
Summer	ROG_HTSK	0.0973983	0.2674539	0.1342796	0.1633491	0.0757159	0.036651434	0.015875748	0.000140754	0.0261186	0.0126655	0.7887791	0.0098813	0
Summer	ROG_IDLEX	0	0	0	0	0.0205999	0.01542314	0.019004387	0.443149907	0.0531544	0	0	0.4062588	0
Summer	ROG_RESTL	0.0455686	0.1337412	0.0758777	0.0964552	0.0013629	0.000648262	0.000248078	2.41545E-06	0.0011509	0.0009242	0.7560103	0.0006865	0
Summer	ROG_RUNEX	0.0093165	0.0339701	0.0162075	0.0244462	0.0626543	0.062582869	0.108888936	0.085297452	0.1022985	0.0487203	2.1526375	0.0999068	0.0730605
Summer	ROG_RUNLS	0.2073908	0.8688165	0.4230883	0.4778418	0.4789654	0.220761369	0.080923677	0.000733329	0.2852975	0.0605858	1.8680431	0.0600276	0
Summer	ROG_STREX	0.2289154	0.4562925	0.3385918	0.452814	0.0765501	0.039947158	0.038808968	1.0921E-06	0.134418	0.0955904	1.850541	0.0465908	0
Summer	SO2_IDLEX	0	0	0	0	9.168E-05	0.000144445	0.000692638	0.010323654	0.0006579	0	0	0.0035825	0
Summer	SO2_RUNEX	0.0026119	0.0030974	0.0033085	0.0041357	0.0061767	0.006052323	0.009282301	0.01288477	0.013618	0.0063901	0.0020565	0.0106965	0.0089094
Summer	SO2_STREX	0.0005421	0.0006611	0.0007085	0.0008799	0.000102	6.54062E-05	6.94474E-05	4.34554E-07	0.0002154	0.0002318	0.0006033	6.897E-05	0
Summer	TOG_DIURN	0.0580454	0.1947768	0.0911572	0.1101299	0.0026459	0.001226263	0.000472607	3.94308E-06	0.0026435	0.0023414	1.4188755	0.0013761	0
Summer	TOG_HTSK	0.0974081	0.2674807	0.134293	0.1633654	0.0757159	0.036651434	0.015875748	0.000140754	0.0261186	0.0126655	0.7887791	0.0098813	0
Summer	TOG_IDLEX	0	0	0	0	0.0287722	0.020561629	0.02450019	0.506316963	0.0701044	0	0	0.5861245	0
Summer	TOG_RESTL	0.0455731	0.1337545	0.0758853	0.0964648	0.0013629	0.000648262	0.000248078	2.41545E-06	0.0011509	0.0009242	0.7560103	0.0006865	0
Summer	TOG_RUNEX	0.0135459	0.0495254	0.0236115	0.0345861	0.0760853	0.072809677	0.125242913	0.120417782	0.1266797	3.1080874	2.6444979	0.1188842	0.0831746
Summer	TOG_RUNLS	0.2074115	0.8689034	0.4231306	0.4778896	0.4789654	0.220761369	0.080923677	0.000733329	0.2852975	0.0605858	1.8680431	0.0600276	0
Summer	TOG_STREX	0.2506823	0.4996802	0.3707884	0.4958327	0.0838127	0.04373711	0.042490935	1.19571E-06	0.1471708	0.1046595	2.0135751	0.051011	0

Winter	CH4_IDLEX	0	0	0	0	0.0047735	0.002908491	0.00294801	0.019407837	0.008832	0	0	0.0871284	0
Winter	CH4_RUNEX	0.0023855	0.0075727	0.0039361	0.0054334	0.0053625	0.003802297	0.00568783	0.003926385	0.0098763	3.039622	0.3141948	0.0071336	0.0033935
Winter	CH4_STREX	0.0521076	0.0891075	0.0732026	0.0915562	0.0152831	0.008090032	0.00703681	2.11449E-07	0.0250843	0.0244353	0.2390522	0.0081369	0
Winter	CO_IDLEX	0	0	0	0	0.1692253	0.12735661	0.398455367	5.861925233	0.5114079	0	0	3.4307176	0
Winter	CO_RUNEX	0.6221585	1.4977568	0.8959733	1.1095817	0.7256893	0.519238961	0.518190174	0.362304251	1.1165678	23.573519	18.911593	0.5893509	0.3484107
Winter	CO_STREX	2.1296909	2.4372842	2.7517407	3.2897993	0.9395294	0.504526407	0.838803911	0.005074006	2.7915976	1.9324211	8.3845122	1.1186012	0
Winter	CO2_NBIO_IDLEX	0	0	0	0	9.4896098	15.14405494	70.9978471	1095.987984	68.209662	0	0	360.10543	0
Winter	CO2_NBIO_RUNEX	260.99145	309.93589	331.49726	415.29705	635.36005	629.0874713	977.3309162	1363.803165	1401.7501	1641.5507	206.80037	1117.0987	942.43147
Winter	CO2_NBIO_STREX	54.882309	66.93069	71.731317	89.086093	10.295807	6.601046102	7.002510891	0.043826234	21.749284	23.400566	60.471793	7.0101088	0
Winter	NOX_IDLEX	0	0	0	0	0.0870448	0.130106124	0.672312483	6.104523641	0.4126483	0	0	3.4007497	0
Winter	NOX_RUNEX	0.0375915	0.1344902	0.0808664	0.112145	1.6547905	1.806241432	2.426310238	3.339598392	1.9250142	0.2983934	1.095297	4.7284247	4.4589462
Winter	NOX_STREX[3]	0.1859917	0.3085754	0.3053564	0.3902647	0.3009304	0.168749166	1.176655348	2.012797563	0.551905	0.2347073	0.2601148	0.6535514	0
Winter	PM10_IDLEX	0	0	0	0	0.0009973	0.001501821	0.002984034	0.008801332	0.002075	0	0	0.0048056	0
Winter	PM10_PMBW	0.03675	0.03675	0.03675	0.03675	0.07644	0.089180026	0.130340037	0.060141959	0.13034	0.0918981	0.01176	0.7448002	0.13034
Winter	PM10_PMTW	0.008	0.008	0.008	0.008	0.0100527	0.010947756	0.012000003	0.035064182	0.012	0.0202294	0.004	0.0105772	0.016
Winter	PM10_RUNEX	0.0014413	0.0022623	0.0014809	0.0015592	0.0114908	0.014538988	0.085857098	0.057405609	0.0468547	0.0021611	0.0017168	0.0291807	0.1456508
Winter	PM10_STREX	0.0019145	0.0029788	0.0019495	0.0020458	0.0002285	0.000105451	8.30751E-05	6.96205E-07	0.0002094	0.0002091	0.0028688	4.408E-05	0
Winter	PM25_IDLEX	0	0	0	0	0.0009541	0.001436853	0.002854946	0.00842059	0.0019852	0	0	0.0045978	0
Winter	PM25_PMBW	0.01575	0.01575	0.01575	0.01575	0.03276	0.038220011	0.055860016	0.025775125	0.05586	0.0393849	0.00504	0.3192001	0.05586
Winter	PM25_PMTW	0.002	0.002	0.002	0.002	0.0025132	0.002736939	0.003000001	0.008766046	0.003	0.0050573	0.001	0.0026443	0.004
Winter	PM25_RUNEX	0.0013279	0.002082	0.0013631	0.0014389	0.0109744	0.013901058	0.082140659	0.054922259	0.0448142	0.0020479	0.0016067	0.0279089	0.13935
Winter	PM25_STREX	0.0017604	0.0027391	0.0017925	0.0018823	0.0002101	9.69587E-05	7.63844E-05	6.40135E-07	0.0001926	0.0001923	0.002703	4.053E-05	0
Winter	ROG_DIURN	0.0573337	0.1989777	0.0881118	0.1045563	0.0028041	0.001271033	0.000505614	4.15805E-06	0.0027905	0.0024593	1.6284756	0.0013129	0
Winter	ROG_HTSK	0.107393	0.3093673	0.1483851	0.1776099	0.0888191	0.04243056	0.017756627	0.000159444	0.0281418	0.0145031	1.0568448	0.0101406	0
Winter	ROG_IDLEX	0	0	0	0	0.0205999	0.01542314	0.020096756	0.417845402	0.0531529	0	0	0.4069294	0
Winter	ROG_RESTL	0.045654	0.1334318	0.0760781	0.0969239	0.0014343	0.000674453	0.000263077	2.65086E-06	0.0012289	0.000977	0.762145	0.0007118	0
Winter	ROG_RUNEX	0.0091467	0.0333688	0.0159196	0.0239719	0.0627015	0.06259738	0.108897845	0.084076702	0.1023695	0.0487327	2.1299192	0.0999026	0.0730605
Winter	ROG_RUNLS	0.2340263	1.0149814	0.4887215	0.5480019	0.5154477	0.238349523	0.088038907	0.000776836	0.3038235	0.0711441	2.1327003	0.0730607	0
Winter	ROG_STREX	0.2286942	0.4555967	0.33827	0.4522682	0.075957	0.039642721	0.038517461	1.0839E-06	0.1339688	0.0951161	1.8073267	0.0474311	0
Winter	SO2_IDLEX	0	0	0	0	9.168E-05	0.000144445	0.000672807	0.010354351	0.0006513	0	0	0.0034454	0
Winter	SO2_RUNEX	0.002576	0.00306	0.0032722	0.0040969	0.0061767	0.006052329	0.009282304	0.012884771	0.013618	0.0063901	0.0020465	0.0106965	0.0089094
Winter	SO2_STREX	0.0005419	0.0006608	0.0007082	0.0008796	0.0001019	6.53227E-05	6.92955E-05	4.33696E-07	0.0002152	0.0002316	0.0005984	6.937E-05	0
Winter	TOG_DIURN	0.0573395	0.1989976	0.0881206	0.1045668	0.0028041	0.001271033	0.000505614	4.15805E-06	0.0027905	0.0024593	1.6284756	0.0013129	0
Winter	TOG_HTSK	0.1074037	0.3093982	0.1483999	0.1776276	0.0888191	0.04243056	0.017756627	0.000159444	0.0281418	0.0145031	1.0568448	0.0101406	0
Winter	TOG_IDLEX	0	0	0	0	0.0287722	0.020561629	0.025984426	0.475685183	0.0701028	0	0	0.586888	0
Winter	TOG_RESTL	0.0456585	0.1334451	0.0760857	0.0969336	0.0014343	0.000674453	0.000263077	2.65086E-06	0.0012289	0.000977	0.762145	0.0007118	0
Winter	TOG_RUNEX	0.0132987	0.0486496	0.0231921	0.0339196	0.0761542	0.072830852	0.125255912	0.095760371	0.1267834	3.1081055	2.6171625	0.1188781	0.0831746
Winter	TOG_RUNLS	0.2340498	1.0150829	0.4887703	0.5480567	0.5154477	0.238349523	0.088038907	0.000776836	0.3038235	0.0711441	2.1327003	0.0730607	0
Winter	TOG_STREX	0.25044	0.4989182	0.370436	0.4952363	0.0831634	0.04340379	0.042171772	1.18673E-06	0.146679	0.1041402	1.9665823	0.0519311	0

1 Source: California Air Resources Board. EMFAC2017 Web Database. https://www.arb.ca.gov/emfac/2017/; California Air Pollution Control Officers Association (CAPCOA). 2017, November. California Emissions Estimator Model User's Guide, Version 2016.3.2, Appendix A.

2 Unless otherwise noted, per CalEEMod methodology, the calculated CalEEMod emission rates are derived from the emission rates obtained using the EMFAC2017 Web Database for the Los Angeles (SC) region .

3 Because EMFAC2017 provides vehicle trips data for MHDT and HHDT diesel trucks, the formula provided in Appendix A of the CalEEMod User's Guide in calculating the NO_X STREX emission rates are utilized.

EMFAC2017 (v1.0.2) Emission Rates
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2021
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

Region	Calendar Y	Vehicle Cat	Model Yea	Speed	Fuel	Population	VMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RU	PM2.5_IDL	PM2.5_STR	PM2.5_DIU	PM10_RUN	PM10_IDL	PM10_STR	PM10_DIU	PM_PMT	PM_PMP	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTST	ROG_RUNL	ROG_RESTL	ROG_DIURN	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTST	TOG_RUNL	TOG_RESTL	TOG_DIURN	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
Riverside (S	2021	HHDT	Aggregate	Aggregate	Gas	7.215313	478.7903	144.364	4.932824	0	0.529172	0.00091	0	0.000719	0.005	0.02646	0.00099	0	0.000782	0.02	0.06174	2085.06	0	49.32987	0.110642	0	0.000239	0.165519	0	0.01149	0.563268	0	0.001227	0.158117	0.823791	0.05429	0.088625	0.821919	0	0.001343	0.158117	0.823791	0.05429	0.088625	30.13214	0	5.761312	0.020633	0	0.000488
Riverside (S	2021	HHDT	Aggregate	Aggregate	Dsl	15357.01	1897940	161128.4	3.40425	62.1127	2.025371	0.055207	0.081449	0	0.008881	0.025902	0.057703	0.085131	0	0.035241	0.060438	1370.347	11539.48	0	0.003919	0.217323	0	0.215399	1.813846	0	0.08437	4.678901	0	0	0	0	0	0.096049	5.326573	0	0	0	0	0	0.356566	59.88943	0	0.012946	0.109019	0	0
Riverside (S	2021	HHDT	Aggregate	Aggregate	Ng	230.6715	9360.06	899.6189	2.259193	22.27701	0	0.005235	0.039669	0	0.009	0.02646	0.005472	0.041462	0	0.036	0.06174	3268.076	3857.928	0	4.721954	1.277187	0	0.666219	0.786464	0	0.248879	0.055117	0	0	0	0	0	5.025797	1.34547	0	0	0	0	0	13.82684	21.51948	0	0	0	0	0
Riverside (S	2021	LDA	Aggregate	Aggregate	Gas	563361.5	23296505	2667609	0.039433	0	0.192209	0.001286	0	0.0018	0.002	0.01575	0.001399	0	0.001958	0.008	0.03675	267.9577	0	56.07784	0.002475	0	0.053346	0.004572	0	0.026772	0.009389	0	0.234325	0.09963	0.212292	0.220747	0.280942	0.013691	0	0.256555	0.09963	0.212292	0.220747	0.280942	0.65779	0	2.195813	0.002652	0	0.000555
Riverside (S	2021	LDA	Aggregate	Aggregate	Dsl	5219.693	226458.8	25000.69	0.082106	0	0	0.007228	0	0	0.002	0.01575	0.007555	0	0	0.008	0.03675	200.1768	0	0	0.000645	0	0	0.031465	0	0	0.013883	0	0	0	0	0	0	0.015805	0	0	0	0	0	0	0.190193	0	0	0.001892	0	0	0
Riverside (S	2021	LDA	Aggregate	Aggregate	Elec	7550.911	292574.3	38037.58	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.009436	0.028302	0	0	0	0	0.004888	0	0.009436	0.028302	0	0	0	0	0	0
Riverside (S	2021	LDT1	Aggregate	Aggregate	Gas	58475.43	2219909	265629.9	0.140904	0	0.312886	0.002043	0	0.00275	0.002	0.01575	0.002222	0	0.00299	0.008	0.03675	314.2889	0	67.12976	0.00773	0	0.089569	0.010253	0	0.032093	0.03406	0	0.458483	0.268716	0.872988	0.610411	0.888839	0.049666	0	0.501979	0.268716	0.872988	0.610411	0.888839	1.555533	0	2.46649	0.00311	0	0.000664
Riverside (S	2021	LDT1	Aggregate	Aggregate	Dsl	30.15411	650.1857	99.33221	1.229501	0	0	0.157347	0	0	0.002	0.01575	0.164462	0	0	0.008	0.03675	400.8075	0	0	0.009761	0	0	0.063001	0	0	0.210159	0	0	0	0	0	0	0.239252	0	0	0	0	0	0	1.293865	0	0	0.003789	0	0	0
Riverside (S	2021	LDT1	Aggregate	Aggregate	Elec	231.4029	9256.811	1176.077	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.009436	0.028302	0	0	0	0	0.004888	0	0.009436	0.028302	0	0	0	0	0	0
Riverside (S	2021	LDT2	Aggregate	Aggregate	Gas	177423.8	7067860	830513	0.085301	0	0.312251	0.00134	0	0.001814	0.002	0.01575	0.001457	0	0.001973	0.008	0.03675	336.6547	0	72.52933	0.004045	0	0.074162	0.007075	0	0.034752	0.016304	0	0.342998	0.13599	0.428594	0.359737	0.432018	0.023777	0	0.375538	0.13599	0.428594	0.359737	0.432018	0.93818	0	2.805219	0.003331	0	0.000718
Riverside (S	2021	LDT2	Aggregate	Aggregate	Dsl	927.6206	43422.05	4592.576	0.052361	0	0	0.006133	0	0	0.002	0.01575	0.00641	0	0	0.008	0.03675	267.2833	0	0	0.000697	0	0	0.042013	0	0	0.014997	0	0	0	0	0	0	0.017073	0	0	0	0	0	0	0.113702	0	0	0.002527	0	0	0
Riverside (S	2021	LDT2	Aggregate	Aggregate	Elec	1222.52	38876.44	6214.965	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.009436	0.028302	0	0	0	0	0.004888	0	0.009436	0.028302	0	0	0	0	0	0
Riverside (S	2021	LHDT1	Aggregate	Aggregate	Gas	15655.58	510348.4	233244.9	0.235786	0.03994	0.565571	0.00098	0	0.000389	0.002	0.03276	0.001065	0	0.000423	0.008	0.07644	791.066	122.5855	19.09152	0.006432	0.126457	0.028495	0.014213	0.003182	0.043472	0.030466	0.457519	0.141722	0.140178	0.886738	0.037593	0.072981	0.044457	0.66761	0.155168	0.140178	0.886738	0.037593	0.072981	0.820463	3.750302	1.756174	0.007828	0.001213	0.000189
Riverside (S	2021	LHDT1	Aggregate	Aggregate	Dsl	15786.62	537960.6	198575.8	3.054185	2.341379	0	0.020456	0.026099	0	0.003	0.03276	0.021381	0.027279	0	0.012	0.07644	487.6423	138.0069	0	0.004328	0.005098	0	0.076651	0.021693	0	0.09319	0.10976	0	0	0	0	0	0.106091	0.124954	0	0	0	0	0	0.63362	0.909745	0	0.00461	0.001305	0
Riverside (S	2021	LHDT2	Aggregate	Aggregate	Gas	2249.73	74170.49	33517.63	0.201184	0.039821	0.560717	0.000842	0	0.000317	0.002	0.03822	0.000916	0	0.000345	0.008	0.08918	904.2422	141.0784	21.63309	0.004251	0.128036	0.026663	0.013296	0.003191	0.043229	0.018526	0.456586	0.130749	0.119962	0.72256	0.031611	0.059797	0.027033	0.666249	0.143153	0.119962	0.72256	0.031611	0.059797	0.499548	3.761097	1.666646	0.008948	0.001396	0.000214
Riverside (S	2021	LHDT2	Aggregate	Aggregate	Dsl	6056.796	207780.3	76186.87	2.417918	2.341773	0	0.018563	0.026025	0	0.003	0.03822	0.019402	0.027202	0	0.012	0.08918	530.8658	221.8967	0	0.003637	0.005098	0	0.083445	0.034879	0	0.07831	0.10976	0	0	0	0	0	0.08915	0.124954	0	0	0	0	0	0.525791	0.909745	0	0.005019	0.002098	0
Riverside (S	2021	MCY	Aggregate	Aggregate	Gas	27861.55	183349	55723.09	1.132064	0	0.262714	0.001607	0	0.002703	0.001	0.00504	0.001717	0	0.002869	0.004	0.01176	207.8128	0	60.96277	0.316916	0	0.24422	0.065368	0	0.014966	2.152638	0	1.850541	0.788779	1.868043	1.512021	2.837751	2.644498	0	2.013575	0.788779	1.868043	1.512021	2.837751	15.49902	0	8.603722	0.002056	0	0.000603
Riverside (S	2021	MDV	Aggregate	Aggregate	Gas	154248.8	5679895	706953.5	0.118916	0	0.40377	0.001358	0	0.001928	0.002	0.01575	0.001476	0	0.002095	0.008	0.03675	420.9018	0	91.14296	0.005664	0	0.093862	0.009228	0	0.039032	0.024831	0	0.464132	0.167412	0.489785	0.453088	0.517207	0.035194	0	0.508124	0.167412	0.489785	0.453088	0.517207	1.17663	0	3.394207	0.004165	0	0.000902
Riverside (S	2021	MDV	Aggregate	Aggregate	Dsl	3020.679	130330.6	14741.57	0.064316	0	0	0.005137	0	0	0.002	0.01575	0.005369	0	0	0.008	0.03675	364.0787	0	0	0.00052	0	0	0.057228	0	0	0.011186	0	0	0	0	0	0	0.012735	0	0	0	0	0	0	0.182343	0	0	0.003442	0	0	0
Riverside (S	2021	MDV	Aggregate	Aggregate	Elec	571.2529	18657.55	2928.705	0	0	0	0	0	0	0.002	0.01575	0	0	0	0.008	0.03675	0	0	0	0	0	0	0	0	0	0	0	0	0.004888	0	0.009436	0.028302	0	0	0	0	0.004888	0	0.009436	0.028302	0	0	0	0	0	0
Riverside (S	2021	MH	Aggregate	Aggregate	Gas	5071.354	40199.39	507.3382	0.446639	0	0.326322	0.001088	0	0.000321	0.003	0.05586	0.001183	0	0.000349	0.012	0.13034	1681.378	0	26.36854	0.01308	0	0.033537	0.026888	0	0.034621	0.05643	0	0.137169	0.094396	2.064314	0.057978	0.159975	0.082343	0	0.150182	0.094396	2.064314	0.057978	0.159975	1.780532	0	2.974541	0.016639	0	0.000261
Riverside (S	2021	MH	Aggregate	Aggregate	Dsl	1991.437	16101.15	199.1437	4.533455	0	0	0.13935	0	0	0.004	0.05586	0.145651	0	0	0.016	0.13034	942.4315	0	0	0.003394	0	0	0.148137	0	0	0.073061	0	0	0	0	0	0	0.083175	0	0	0	0	0	0	0.348411	0	0	0.008909	0	0	0
Riverside (S	2021	MHDT	Aggregate	Aggregate	Gas	1296.813	52658.62	25946.64	0.484058	0.089219	0.376099	0.000845	0	0.000428	0.003	0.05586	0.000919	0	0.000466	0.012	0.13034	1627.628	546.4868	39.35402	0.012138	0.255609	0.039824	0.023531	0.007281	0.028331	0.009516	1.002157	0.217629	0.089026	0.453796	0.027834	0.053026	0.086846	1.462345	0.238276	0.089026	0.453796	0.027834	0.053026	1.623573	14.35068	4.754582	0.016107	0.005408	0.000389
Riverside (S	2021	MHDT	Aggregate	Aggregate	Dsl	12035.08	732039.4	119554.3	2.610052	8.282669	1.351426	0.087989	0.028399	0	0.003	0.05586	0.091967	0.029683	0	0.012	0.13034	930.552	824.6717	0	0.005223	0.005656	0	0.14627	0.129627	0	0.112441	0.121773	0	0	0	0	0	0.128005	0.138629	0	0	0	0	0	0.438443	2.33106	0	0.008791	0.007791	0
Riverside (S	2021	OBUS	Aggregate	Aggregate	Gas	440.9353	15660.95	8822.233	0.549286	0.064905	0.327468	0.000669	0	0.000239	0.003	0.05586	0.000727	0	0.00026	0.012	0.13034	1662.367	382.9488	27.06492	0.013098	0.192818	0.03129	0.026213	0.005238	0.024777	0.063329	0.743944	0.167137	0.032476	0.354743	0.028633	0.065767	0.09241	1.085561	0.182994	0.032476	0.354743	0.028633	0.065767	1.704936	5.760613	3.483524	0.01645	0.00379	0.000268
Riverside (S	2021	OBUS	Aggregate	Aggregate	Dsl	224.392	15466.2	2147.46	3.389576	20.09011	1.491201	0.089515	0.079924	0	0.003	0.05586	0.093563	0.083538	0	0.012	0.13034	1137.846	2615.875	0	0.006584	0.052795	0	0.178854	0.411179	0	0.141759	1.136654	0	0	0	0	0	0.161381	1.293994	0	0	0	0	0	0.517353	12.3214	0	0.01075	0.024713	0
Riverside (S	2021	SBUS	Aggregate	Aggregate	Gas	406.9192	14544.86	1627.677	0.351719	0.92653	0.561991	0.000653	0	0.00028	0.002	0.3192	0.00071	0	0.000304	0.008	0.7448	894.7774	2665.707	48.11185	0.009109	2.378522	0.055182	0.02173	0.085346	0.051387	0.045139	10.64152	0.321602	0.068207	0.414353	0.018954	0.037995	1.015127	82.24088	7.558992	0.068855	0.026379	0.000476
Riverside (S	2021	SBUS	Aggregate	Aggregate	Dsl	832.5657	26346.93	9607.692	7.256045	47.17671	0.668749	0.042956	0.051086	0	0.003	0.3192	0.044898	0.053396	0	0.012	0.7448	1239.832	3752.634	0	0.006045	0.013067	0	0.194884	0.589862	0	0.130153	0.281335	0	0	0	0	0	0.148169	0.320278	0	0	0	0	0	0.354626	5.35229	0	0.011713	0.035453	0
Riverside (S	2021	UBUS	Aggregate	Aggregate	Gas	163.4848	23017.82	653.9394	0.135055	0	0.532333	0.001049	0	0.000432	0.002387	0.045039	0.001141	0	0.00047	0.009546	0.105091	1393.599	0	52.67116	0.003861	0	0.055193	0.014101	0	0.057979	0.011495	0	0.214912	0.028475	0.136213	0.008311	0.013982	0.016773	0	0.235302	0.028475	0.136213	0.008311	0.013982	0.192054	0	4.380533	0.013791	0	0.000521
Riverside (S	2021	UBUS	Aggregate	Aggregate	Dsl	1.105798	58.5719	4.423192	0.477422	0	0	0.004107	0	0	0.003	0.05586	0.004293	0	0	0.012	0.13034	1141.144	0	0	0.037433	0	0	0.179372	0	0	0.000535	0	0	0	0	0	0	0.038203	0	0	0	0	0	0	0.057129	0	0	0.010788	0	0	0
Riverside (S	2021	UBUS	Aggregate	Aggregate	Elec	0.058469	1.251703	0.233878	0	0	0	0	0	0	0.003	0.05586	0	0	0	0.012	0.13034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (S	2021	UBUS	Aggregate	Aggregate	Ng	202.9077	26696.92	811.6306	0.442604	0	0	0.002905	0	0	0.007365	0.034473	0.003036	0	0	0.029459	0.080437	1856.506	0	0	5.663746	0	0	0.378461	0	0	0.080924	0	0	0	0	0	0	5.780268	0	0	0	0	0	0	43.78513	0	0	0	0	0	0

EMFAC2017 (v1.0.2) Emission Rates
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2021
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX
Riverside (SC)	2021	HHDT	Aggregated	Aggregated	GAS	7.215312711	478.7902746	144.3639767	4.932823744	0	0.529172188
Riverside (SC)	2021	HHDT	Aggregated	Aggregated	DSL	15357.01372	1897939.939	161128.3757	3.40424983	62.11270149	2.025370863
Riverside (SC)	2021	HHDT	Aggregated	Aggregated	NG	230.6715024	9360.06032	899.6188595	2.25919282	22.27701232	0
Riverside (SC)	2021	LDA	Aggregated	Aggregated	GAS	563361.5495	23296504.67	2667609.425	0.039433009	0	0.192208515
Riverside (SC)	2021	LDA	Aggregated	Aggregated	DSL	5219.69302	226458.8046	25000.68978	0.082105957	0	0
Riverside (SC)	2021	LDA	Aggregated	Aggregated	ELEC	7550.910561	292574.2633	38037.58496	0	0	0
Riverside (SC)	2021	LDT1	Aggregated	Aggregated	GAS	58475.42768	2219909.251	265629.8845	0.140903774	0	0.312886205
Riverside (SC)	2021	LDT1	Aggregated	Aggregated	DSL	30.15411229	650.1856866	99.3322056	1.229501198	0	0
Riverside (SC)	2021	LDT1	Aggregated	Aggregated	ELEC	231.4028554	9256.810891	1176.076849	0	0	0
Riverside (SC)	2021	LDT2	Aggregated	Aggregated	GAS	177423.7963	7067860.432	830512.9744	0.085300866	0	0.312251455
Riverside (SC)	2021	LDT2	Aggregated	Aggregated	DSL	927.6206127	43422.04823	4592.575857	0.052361277	0	0
Riverside (SC)	2021	LDT2	Aggregated	Aggregated	ELEC	1222.520063	38876.44228	6214.964587	0	0	0
Riverside (SC)	2021	LHDT1	Aggregated	Aggregated	GAS	15655.58333	510348.3794	233244.8648	0.235785958	0.039940289	0.565570857
Riverside (SC)	2021	LHDT1	Aggregated	Aggregated	DSL	15786.61692	537960.5827	198575.7812	3.054185088	2.341379359	0
Riverside (SC)	2021	LHDT2	Aggregated	Aggregated	GAS	2249.730422	74170.48849	33517.63119	0.201183508	0.039820926	0.560717148
Riverside (SC)	2021	LHDT2	Aggregated	Aggregated	DSL	6056.795838	207780.2758	76186.8722	2.417918011	2.341773073	0
Riverside (SC)	2021	MCY	Aggregated	Aggregated	GAS	27861.54696	183348.9736	55723.09393	1.13206414	0	0.262713868
Riverside (SC)	2021	MDV	Aggregated	Aggregated	GAS	154248.8417	5679894.563	706953.547	0.118916218	0	0.403770033
Riverside (SC)	2021	MDV	Aggregated	Aggregated	DSL	3020.678509	130330.5709	14741.57267	0.064315758	0	0
Riverside (SC)	2021	MDV	Aggregated	Aggregated	ELEC	571.2528957	18657.55493	2928.705005	0	0	0
Riverside (SC)	2021	MH	Aggregated	Aggregated	GAS	5071.35352	40199.38943	507.3382062	0.446639101	0	0.326322007
Riverside (SC)	2021	MH	Aggregated	Aggregated	DSL	1991.436876	16101.15039	199.1436876	4.533455413	0	0
Riverside (SC)	2021	MHDT	Aggregated	Aggregated	GAS	1296.813166	52658.61531	25946.63783	0.484058065	0.089219128	0.37609891
Riverside (SC)	2021	MHDT	Aggregated	Aggregated	DSL	12035.08457	732039.4237	119554.2954	2.610052119	8.282669346	1.351426
Riverside (SC)	2021	OBUS	Aggregated	Aggregated	GAS	440.9352614	15660.94555	8822.232709	0.549285951	0.064905489	0.327468188
Riverside (SC)	2021	OBUS	Aggregated	Aggregated	DSL	224.3920222	15466.20012	2147.460419	3.389576379	20.09011144	1.491201128
Riverside (SC)	2021	SBUS	Aggregated	Aggregated	GAS	406.9191801	14544.86274	1627.676721	0.351718965	0.9265304	0.561990899
Riverside (SC)	2021	SBUS	Aggregated	Aggregated	DSL	832.5656654	26346.9299	9607.692348	7.256044876	47.1767058	0.66874914
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	GAS	163.4848401	23017.81637	653.9393604	0.135055083	0	0.532333276
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	DSL	1.105797941	58.57190354	4.423191762	0.47742212	0	0
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	ELEC	0.058469431	1.251702935	0.233877724	0	0	0
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	NG	202.9076535	26696.92315	811.6306138	0.442603642	0	0

Vehicle Category	Fuel	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX
HHDT	GAS	0.000909933	0	0.0007191	0.005000001	0.026460008	0.000989635	0	0.000782087	0.020000006	0.061740018	2085.059949	0	49.32986747
HHDT	DSL	0.055206744	0.081448504	0	0.00881027	0.025902068	0.057702948	0.085131244	0	0.035240908	0.060438158	1370.34705	11539.48464	0
HHDT	NG	0.005234917	0.039668606	0	0.009000003	0.026460008	0.005471617	0.041462245	0	0.03600001	0.061740018	3268.07593	3857.927723	0
LDA	GAS	0.00128611	0	0.00180035	0.002000001	0.015750005	0.001398733	0	0.001957952	0.008000002	0.036750011	267.9577292	0	56.07784001
LDA	DSL	0.007228365	0	0	0.002000001	0.015750005	0.0075552	0	0	0.008000002	0.036750011	200.1768053	0	0
LDA	ELEC	0	0	0	0.002000001	0.015750005	0	0	0	0.008000002	0.036750011	0	0	0
LDT1	GAS	0.002043352	0	0.002749774	0.002000001	0.015750005	0.00222219	0	0.002990403	0.008000002	0.036750011	314.2888698	0	67.12976139
LDT1	DSL	0.157347346	0	0	0.002000001	0.015750005	0.164461895	0	0	0.008000002	0.036750011	400.8075057	0	0
LDT1	ELEC	0	0	0	0.002000001	0.015750005	0	0	0	0.008000002	0.036750011	0	0	0
LDT2	GAS	0.00134011	0	0.001814242	0.002000001	0.015750005	0.001457439	0	0.001973065	0.008000002	0.036750011	336.654731	0	72.52932702
LDT2	DSL	0.006132985	0	0	0.002000001	0.015750005	0.006410291	0	0	0.008000002	0.036750011	267.2833083	0	0
LDT2	ELEC	0	0	0	0.002000001	0.015750005	0	0	0	0.008000002	0.036750011	0	0	0
LHDT1	GAS	0.000979602	0	0.000389013	0.002000001	0.032760009	0.001065407	0	0.000423087	0.008000002	0.076440022	791.0659805	122.5855104	19.09152224
LHDT1	DSL	0.020456161	0.026099365	0	0.003000001	0.032760009	0.021381098	0.027279462	0	0.012000003	0.076440022	487.6423071	138.0068804	0
LHDT2	GAS	0.000841985	0	0.00031735	0.002000001	0.038220011	0.000915736	0	0.000345147	0.008000002	0.089180026	904.2421823	141.0783764	21.63309315
LHDT2	DSL	0.018562703	0.026025193	0	0.003000001	0.038220011	0.019402026	0.027201937	0	0.012000003	0.089180026	530.8657611	221.8966509	0
MCY	GAS	0.001606736	0	0.002703039	0.001	0.005040001	0.0017168	0	0.002868846	0.004000001	0.011760003	207.8127779	0	60.96276598
MDV	GAS	0.001357546	0	0.001927604	0.002000001	0.015750005	0.001475584	0	0.002095006	0.008000002	0.036750011	420.9018199	0	91.14295699
MDV	DSL	0.005136928	0	0	0.002000001	0.015750005	0.005369198	0	0	0.008000002	0.036750011	364.0787205	0	0
MDV	ELEC	0	0	0	0.002000001	0.015750005	0	0	0	0.008000002	0.036750011	0	0	0
MH	GAS	0.001087573	0	0.000320731	0.003000001	0.055860016	0.001182835	0	0.000348824	0.012000003	0.130340037	1681.378167	0	26.36853519
MH	DSL	0.139350012	0	0	0.004000001	0.055860016	0.145650801	0	0	0.016000005	0.130340037	942.4314672	0	0
MHDT	GAS	0.000845137	0	0.000428341	0.003000001	0.055860016	0.000919164	0	0.00046586	0.012000003	0.130340037	1627.627675	546.4867544	39.35401618
MHDT	DSL	0.087988581	0.028399317	0	0.003000001	0.055860016	0.091967034	0.029683408	0	0.012000003	0.130340037	930.551978	824.6717292	0
OBUS	GAS	0.000668733	0	0.000239453	0.003000001	0.055860016	0.000727308	0	0.000260427	0.012000003	0.130340037	1662.366672	382.9488247	27.06492323
OBUS	DSL	0.08951546	0.079923779	0	0.003000001	0.055860016	0.093562951	0.083537578	0	0.012000003	0.130340037	1137.845783	2615.875247	0
SBUS	GAS	0.000652873	0	0.000279746	0.002000001	0.319200087	0.000710059	0	0.000304249	0.008000002	0.744800204	894.7773974	2665.707193	48.11184535
SBUS	DSL	0.042955623	0.051086455	0	0.003000001	0.319200091	0.044897885	0.053396358	0	0.012000003	0.744800213	1239.832007	3752.633613	0
UBUS	GAS	0.001048982	0	0.000432305	0.002386561	0.045038932	0.001140864	0	0.000470171	0.009546243	0.105090841	1393.599069	0	52.67115841
UBUS	DSL	0.004107041	0	0	0.003000002	0.055860034	0.004292743	0	0	0.012000007	0.130340079	1141.143654	0	0
UBUS	ELEC	0	0	0	0.003000002	0.055860034	0	0	0	0.012000007	0.130340079	0	0	0
UBUS	NG	0.002904752	0	0	0.007364674	0.03447314	0.003036092	0	0	0.029458696	0.080437327	1856.506204	0	0

Vehicle Category	Fuel	CH4_RUNEX	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSOAK	ROG_RUNLOSS	ROG_RESTLOSS	ROG_DIURN
HHDT	GAS	0.110642135	0	0.000239395	0.165518761	0	0.011489698	0.563267522	0	0.001226817	0.158116711	0.823791188	0.054289909	0.088625153
HHDT	DSL	0.003918775	0.217322848	0	0.215399473	1.813846289	0	0.084370141	4.678901317	0	0	0	0	0
HHDT	NG	4.721953613	1.277187081	0	0.666218657	0.786463804	0	0.248879046	0.055116958	0	0	0	0	0
LDA	GAS	0.002475342	0	0.053345827	0.004571845	0	0.026771856	0.009389063	0	0.234324946	0.099630264	0.212291607	0.220747274	0.280941951
LDA	DSL	0.000644857	0	0	0.031465006	0	0	0.013883402	0	0	0	0	0	0
LDA	ELEC	0	0	0	0	0	0	0	0	0	0.004888026	0	0.00943641	0.028301668
LDT1	GAS	0.007730074	0	0.089568766	0.010253324	0	0.032093343	0.034060119	0	0.458483412	0.268716437	0.872988111	0.610410889	0.888838573
LDT1	DSL	0.009761469	0	0	0.063001358	0	0	0.210158677	0	0	0	0	0	0
LDT1	ELEC	0	0	0	0	0	0	0	0	0	0.004888026	0	0.00943641	0.028301668
LDT2	GAS	0.004045364	0	0.074161793	0.00707496	0	0.034752413	0.016304059	0	0.342997892	0.135990371	0.428594009	0.359737273	0.432017572
LDT2	DSL	0.000696567	0	0	0.042013214	0	0	0.014996684	0	0	0	0	0	0
LDT2	ELEC	0	0	0	0	0	0	0	0	0	0.004888026	0	0.00943641	0.028301668
LHDT1	GAS	0.006431849	0.126457488	0.028494512	0.014212892	0.003181727	0.043471692	0.030466405	0.457518616	0.1417219	0.140177618	0.8867383	0.037592835	0.072981081
LHDT1	DSL	0.004328499	0.005098128	0	0.07665058	0.02169276	0	0.093190045	0.109759705	0	0	0	0	0
LHDT2	GAS	0.004250808	0.128035995	0.026662887	0.013295754	0.003191224	0.043228607	0.018526032	0.456586144	0.130748595	0.119961561	0.722560499	0.031611436	0.059796769
LHDT2	DSL	0.003637334	0.005098128	0	0.083444705	0.034879063	0	0.078309661	0.109759705	0	0	0	0	0
MCY	GAS	0.316915859	0	0.244219612	0.065368456	0	0.014965686	2.152637537	0	1.850540969	0.788779131	1.868043132	1.512020652	2.837750955
MDV	GAS	0.005664224	0	0.093861716	0.009228042	0	0.039031646	0.024830717	0	0.464132079	0.167411729	0.489785488	0.453088322	0.517207151
MDV	DSL	0.000519582	0	0	0.057228105	0	0	0.011186284	0	0	0	0	0	0
MDV	ELEC	0	0	0	0	0	0	0	0	0	0.004888026	0	0.00943641	0.028301668
MH	GAS	0.013079513	0	0.033537405	0.026888498	0	0.034620532	0.056430203	0	0.137168589	0.094396139	2.064313805	0.057978223	0.159974826
MH	DSL	0.003393522	0	0	0.148137103	0	0	0.073060529	0	0	0	0	0	0
MHDT	GAS	0.012138147	0.255608561	0.039823922	0.023530755	0.007280634	0.028330564	0.059515975	1.002156773	0.217629011	0.089026416	0.453795618	0.027834076	0.053025968
MHDT	DSL	0.005222572	0.005656031	0	0.146269812	0.129626912	0	0.112440537	0.1217728	0	0	0	0	0
OBUS	GAS	0.013098083	0.192818466	0.031289735	0.026213197	0.005238454	0.024777276	0.063329015	0.743943967	0.16713729	0.032476301	0.354743127	0.028633498	0.065766824
OBUS	DSL	0.006584321	0.05279464	0	0.178853512	0.411179161	0	0.141758627	1.136654125	0	0	0	0	0
SBUS	GAS	0.00910903	2.378521511	0.055181605	0.0217299	0.08534605	0.051387333	0.045118793	10.64151815	0.321602211	0.068207372	0.414352929	0.018953896	0.037994634
SBUS	DSL	0.006045253	0.013067269	0	0.194884326	0.589861745	0	0.13015265	0.281334728	0	0	0	0	0
UBUS	GAS	0.003861045	0	0.055192551	0.014100645	0	0.057979306	0.011494717	0	0.214912296	0.028475413	0.136212861	0.008311322	0.013981999
UBUS	DSL	0.037433126	0	0	0.179371891	0	0	0.000534846	0	0	0	0	0	0
UBUS	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
UBUS	NG	5.663745923	0	0	0.378460935	0	0	0.080923754	0	0	0	0	0	0

Vehicle Category	Fuel	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTSOAK	TOG_RUNLOSS	TOG_RESTLOSS	TOG_DIURN	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
HHDT	GAS	0.821918646	0	0.00134321	0.158116711	0.823791188	0.054289909	0.088625153	30.13213732	0	5.76131188	0.020633358	0	0.000488159
HHDT	DSL	0.096048983	5.326572985	0	0	0	0	0	0.356565875	59.88943123	0	0.012946359	0.109019329	0
HHDT	NG	5.025796922	1.345470321	0	0	0	0	0	13.82683725	21.51948121	0	0	0	0
LDA	GAS	0.013691359	0	0.256554831	0.099630264	0.212291607	0.220747274	0.280941951	0.657790421	0	2.195812691	0.002651659	0	0.000554936
LDA	DSL	0.01580533	0	0	0	0	0	0	0.190193441	0	0	0.001892391	0	0
LDA	ELEC	0	0	0	0.004888026	0	0.00943641	0.028301668	0	0	0	0	0	0
LDT1	GAS	0.049666458	0	0.501978976	0.268716437	0.872988111	0.610410889	0.888838573	1.555533237	0	2.466490465	0.003110143	0	0.000664303
LDT1	DSL	0.239251681	0	0	0	0	0	0	1.293864803	0	0	0.003789072	0	0
LDT1	ELEC	0	0	0	0.004888026	0	0.00943641	0.028301668	0	0	0	0	0	0
LDT2	GAS	0.023776834	0	0.375538404	0.135990371	0.428594009	0.359737273	0.432017572	0.938180189	0	2.805218634	0.003331471	0	0.000717736
LDT2	DSL	0.017072727	0	0	0	0	0	0	0.113701732	0	0	0.002526788	0	0
LDT2	ELEC	0	0	0	0.004888026	0	0.00943641	0.028301668	0	0	0	0	0	0
LHDT1	GAS	0.044456507	0.66761009	0.155167641	0.140177618	0.8867383	0.037592835	0.072981081	0.820462844	3.750302238	1.756173559	0.007828239	0.001213083	0.000188926
LHDT1	DSL	0.106090671	0.124954127	0	0	0	0	0	0.633619774	0.909745076	0	0.004609973	0.001304661	0
LHDT2	GAS	0.027033142	0.66624943	0.143153254	0.119961561	0.722560499	0.031611436	0.059796769	0.49954771	3.76109659	1.666645592	0.008948209	0.001396085	0.000214077
LHDT2	DSL	0.089150342	0.124954127	0	0	0	0	0	0.525791174	0.909745076	0	0.005018591	0.002097721	0
MCY	GAS	2.644497871	0	2.013575135	0.788779131	1.868043132	1.512020652	2.837750955	19.49901995	0	8.603721961	0.002056476	0	0.000603276
MDV	GAS	0.035194024	0	0.508124391	0.167411729	0.489785488	0.453088322	0.517207151	1.176629708	0	3.394206614	0.004165165	0	0.000901933
MDV	DSL	0.012734841	0	0	0	0	0	0	0.182343216	0	0	0.003441853	0	0
MDV	ELEC	0	0	0	0.004888026	0	0.00943641	0.028301668	0	0	0	0	0	0
MH	GAS	0.082342819	0	0.150182339	0.094396139	2.064313805	0.057978223	0.159974826	1.780531678	0	2.974540888	0.0166386	0	0.000260938
MH	DSL	0.083174555	0	0	0	0	0	0	0.348410741	0	0	0.008909367	0	0
MHDT	GAS	0.086845571	1.46234481	0.238276374	0.089026416	0.453795618	0.027834076	0.053025968	1.623572797	14.35068497	4.754581575	0.016106695	0.005407929	0.00038944
MHDT	DSL	0.128004993	0.138629064	0	0	0	0	0	0.438442777	2.331059735	0	0.008791394	0.00779109	0
OBUS	GAS	0.092409551	1.08556129	0.182994295	0.032476301	0.354743127	0.028633498	0.065766824	1.704936011	5.760612681	3.483523506	0.016450466	0.003789589	0.000267829
OBUS	DSL	0.161381406	1.293994198	0	0	0	0	0	0.517353083	12.32140367	0	0.010749803	0.024713492	0
SBUS	GAS	0.065837236	15.5280783	0.352113941	0.068207372	0.414352929	0.018953896	0.037994634	1.01512668	82.24087757	7.55899247	0.008854548	0.026379334	0.000476106
SBUS	DSL	0.148168885	0.320278172	0	0	0	0	0	0.354625607	5.352289611	0	0.011713318	0.035453022	0
UBUS	GAS	0.016773063	0	0.235301913	0.028475413	0.136212861	0.008311322	0.013981999	0.192054476	0	4.380533465	0.013790793	0	0.000521224
UBUS	DSL	0.03820325	0	0	0	0	0	0	0.05712856	0	0	0.010787911	0	0
UBUS	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
UBUS	NG	5.780268135	0	0	0	0	0	0	43.78513323	0	0	0	0	0

EMFAC2017 (v1.0.2) Emission Rates
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2021
Season: Winter
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	NOx_RUNEX	NOx_IDLEX	NOx_STREX	PM2.5_RUNEX	PM2.5_IDLEX	PM2.5_STREX
Riverside (SC)	2021	HHDT	Aggregated	Aggregated	GAS	7.215312711	478.7902746	144.3639767	4.76781422	0	0.522365977	0.000909933	0	0.0007191
Riverside (SC)	2021	HHDT	Aggregated	Aggregated	DSL	15357.01372	1897939.939	161128.3757	3.355707978	64.46468139	2.025370863	0.055206744	0.088922692	0
Riverside (SC)	2021	HHDT	Aggregated	Aggregated	NG	230.6715024	9360.06032	899.6188595	2.227900864	23.05030249	0	0.005234917	0.047897361	0
Riverside (SC)	2021	LDA	Aggregated	Aggregated	GAS	563361.5495	23296504.67	2667609.425	0.03763659	0	0.190348845	0.00128611	0	0.00180035
Riverside (SC)	2021	LDA	Aggregated	Aggregated	DSL	5219.69302	226458.8046	25000.68978	0.080746281	0	0	0.007228365	0	0
Riverside (SC)	2021	LDA	Aggregated	Aggregated	ELEC	7550.910561	292574.2633	38037.58496	0	0	0	0	0	0
Riverside (SC)	2021	LDT1	Aggregated	Aggregated	GAS	58475.42768	2219909.251	265629.8845	0.134709353	0	0.309995054	0.002043352	0	0.002749774
Riverside (SC)	2021	LDT1	Aggregated	Aggregated	DSL	30.15411229	650.1856866	99.3322056	1.209156746	0	0	0.157347346	0	0
Riverside (SC)	2021	LDT1	Aggregated	Aggregated	ELEC	231.4028554	9256.810891	1176.076849	0	0	0	0	0	0
Riverside (SC)	2021	LDT2	Aggregated	Aggregated	GAS	177423.7963	7067860.432	830512.9744	0.081475336	0	0.309268213	0.00134011	0	0.001814242
Riverside (SC)	2021	LDT2	Aggregated	Aggregated	DSL	927.6206127	43422.04823	4592.575857	0.051493649	0	0	0.006132985	0	0
Riverside (SC)	2021	LDT2	Aggregated	Aggregated	ELEC	1222.520063	38876.44228	6214.964587	0	0	0	0	0	0
Riverside (SC)	2021	LHDT1	Aggregated	Aggregated	GAS	15655.58333	510348.3794	233244.8648	0.228057558	0.039940289	0.557131105	0.000979602	0	0.000389013
Riverside (SC)	2021	LHDT1	Aggregated	Aggregated	DSL	15786.61692	537960.5827	198575.7812	3.008292743	2.341379359	0	0.020456161	0.026099365	0
Riverside (SC)	2021	LHDT2	Aggregated	Aggregated	GAS	2249.730422	74170.48849	33517.63119	0.19444822	0.039820926	0.552322549	0.000841985	0	0.00031735
Riverside (SC)	2021	LHDT2	Aggregated	Aggregated	DSL	6056.795838	207780.2758	76186.8722	2.381596765	2.341773073	0	0.018562703	0.026025193	0
Riverside (SC)	2021	MCY	Aggregated	Aggregated	GAS	27861.54696	183348.9736	55723.09393	1.095297012	0	0.260114766	0.001606736	0	0.002703039
Riverside (SC)	2021	MDV	Aggregated	Aggregated	GAS	154248.8417	5679894.563	706953.547	0.113612626	0	0.39993935	0.001357546	0	0.001927604
Riverside (SC)	2021	MDV	Aggregated	Aggregated	DSL	3020.678509	130330.5709	14741.57267	0.063250414	0	0	0.005136928	0	0
Riverside (SC)	2021	MDV	Aggregated	Aggregated	ELEC	571.2528957	18657.55493	2928.705005	0	0	0	0	0	0
Riverside (SC)	2021	MH	Aggregated	Aggregated	GAS	5071.35352	40199.38943	507.3382062	0.431651677	0	0.322134874	0.001087573	0	0.000320731
Riverside (SC)	2021	MH	Aggregated	Aggregated	DSL	1991.436876	16101.15039	199.1436876	4.458946162	0	0	0.139350012	0	0
Riverside (SC)	2021	MHDT	Aggregated	Aggregated	GAS	1296.813166	52658.61531	25946.63783	0.467914509	0.084807459	0.371364803	0.000845137	0	0.000428341
Riverside (SC)	2021	MHDT	Aggregated	Aggregated	DSL	12035.08457	732039.4237	119554.2954	2.567185721	8.118938742	1.351426	0.087988581	0.034515529	0
Riverside (SC)	2021	OBUS	Aggregated	Aggregated	GAS	440.9352614	15660.94555	8822.232709	0.530968122	0.064905489	0.323266533	0.000668733	0	0.000239453
Riverside (SC)	2021	OBUS	Aggregated	Aggregated	DSL	224.3920222	15466.20012	2147.460419	3.33661362	20.04530346	1.491201128	0.08951546	0.097049152	0
Riverside (SC)	2021	SBUS	Aggregated	Aggregated	GAS	406.9191801	14544.86274	1627.676721	0.34292646	0.9265304	0.563843987	0.000652873	0	0.000279746
Riverside (SC)	2021	SBUS	Aggregated	Aggregated	DSL	832.5656654	26346.9299	9607.692348	7.149445736	45.4398449	0.66874914	0.042955623	0.06204608	0
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	GAS	163.4848401	23017.81637	653.9393604	0.13069372	0	0.527683417	0.001048982	0	0.000432305
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	DSL	1.105797941	58.57190354	4.423191762	0.47742212	0	0	0.004107041	0	0
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	ELEC	0.058469431	1.251702935	0.233877724	0	0	0	0	0	0
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	NG	202.9076535	26696.92315	811.6306138	0.442603642	0	0	0.002904752	0	0

Vehicle Category	Fuel	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CH4_RUNEX
HHDT	GAS	0.005000001	0.026460008	0.000989635	0	0.000782087	0.020000006	0.061740018	2085.160622	0	49.23252989	0.110854591
HHDT	DSL	0.008810227	0.025902068	0.057702948	0.092943382	0	0.035240908	0.060438158	1370.34705	11573.7968	0	0.003918775
HHDT	NG	0.009000003	0.026460008	0.005471617	0.050063067	0	0.03600001	0.061740018	3268.07593	3877.224015	0	4.721953613
LDA	GAS	0.002000001	0.015750005	0.001398733	0	0.001957952	0.008000002	0.036750011	264.2525489	0	56.05031667	0.002432353
LDA	DSL	0.002000001	0.015750005	0.0075552	0	0	0.008000002	0.036750011	200.1768053	0	0	0.000644857
LDA	ELEC	0.002000001	0.015750005	0	0	0	0.008000002	0.036750011	0	0	0	0
LDT1	GAS	0.002000001	0.015750005	0.00222219	0	0.002990403	0.008000002	0.036750011	310.4875541	0	67.09773011	0.007603681
LDT1	DSL	0.002000001	0.015750005	0.164461895	0	0	0.008000002	0.036750011	400.8075057	0	0	0.009761469
LDT1	ELEC	0.002000001	0.015750005	0	0	0	0.008000002	0.036750011	0	0	0	0
LDT2	GAS	0.002000001	0.015750005	0.001457439	0	0.001973065	0.008000002	0.036750011	332.949366	0	72.49801771	0.003977633
LDT2	DSL	0.002000001	0.015750005	0.006410291	0	0	0.008000002	0.036750011	267.2833083	0	0	0.000696567
LDT2	ELEC	0.002000001	0.015750005	0	0	0	0.008000002	0.036750011	0	0	0	0
LHDT1	GAS	0.002000001	0.032760009	0.001065407	0	0.000423087	0.008000002	0.076440022	791.0700082	122.5855104	19.0612635	0.006452484
LHDT1	DSL	0.003000001	0.032760009	0.021381098	0.027279462	0	0.012000003	0.076440022	487.6423071	138.0068804	0	0.004328499
LHDT2	GAS	0.002000001	0.038220011	0.000915736	0	0.000345147	0.008000002	0.089180026	904.2445378	141.0783764	21.60547923	0.00426442
LHDT2	DSL	0.003000001	0.038220011	0.019402026	0.027201937	0	0.012000003	0.089180026	530.8657611	221.8966509	0	0.003637334
MCY	GAS	0.001	0.005040001	0.0017168	0	0.002868846	0.004000001	0.011760003	206.800373	0	60.4717927	0.314194835
MDV	GAS	0.002000001	0.015750005	0.001475584	0	0.002095006	0.008000002	0.036750011	416.877673	0	91.10325909	0.005563998
MDV	DSL	0.002000001	0.015750005	0.005369198	0	0	0.008000002	0.036750011	364.0787205	0	0	0.000519582
MDV	ELEC	0.002000001	0.015750005	0	0	0	0.008000002	0.036750011	0	0	0	0
MH	GAS	0.003000001	0.055860016	0.001182835	0	0.000348824	0.012000003	0.130340037	1681.384797	0	26.34989436	0.013105724
MH	DSL	0.004000001	0.055860016	0.145650801	0	0	0.016000005	0.130340037	942.4314672	0	0	0.003393522
MHDT	GAS	0.003000001	0.055860016	0.000919164	0	0.00046586	0.012000003	0.130340037	1627.633374	514.0978948	39.26797285	0.012155671
MHDT	DSL	0.003000001	0.055860016	0.091967034	0.036076168	0	0.012000003	0.130340037	930.551978	802.9494134	0	0.005222572
OBUS	GAS	0.003000001	0.055860016	0.000727308	0	0.000260427	0.012000003	0.130340037	1662.372662	382.9488247	27.04337724	0.013127317
OBUS	DSL	0.003000001	0.055860016	0.093562951	0.101437284	0	0.012000003	0.130340037	1137.845783	2582.014341	0	0.006584321
SBUS	GAS	0.002000001	0.319200087	0.000710059	0	0.000304249	0.008000002	0.744800204	894.7764138	2665.707193	48.38869937	0.009105082
SBUS	DSL	0.003000001	0.319200091	0.044897885	0.064851529	0	0.012000003	0.744800213	1239.832007	3556.70449	0	0.006045253
UBUS	GAS	0.002386561	0.045038932	0.001140864	0	0.000470171	0.009546243	0.105090841	1393.599824	0	52.6106043	0.003869807
UBUS	DSL	0.003000002	0.055860034	0.004292743	0	0	0.012000007	0.130340079	1141.143654	0	0	0.037433126
UBUS	ELEC	0.003000002	0.055860034	0	0	0	0.012000007	0.130340079	0	0	0	0
UBUS	NG	0.007364674	0.03447314	0.003036092	0	0	0.029458696	0.080437327	1856.506204	0	0	5.663745923

Vehicle Category	Fuel	CH4_IDLEX	CH4_STREX	N2O_RUNEX	N2O_IDLEX	N2O_STREX	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_HOTSOAK	ROG_RUNLOSS	ROG_RESTLOSS	ROG_DIURN
HHDT	GAS	0	0.000237532	0.161637833	0	0.011417667	0.564521708	0	0.001217602	0.179112616	0.872664768	0.059581184	0.093456915
HHDT	DSL	0.204949654	0	0.215399473	1.819239683	0	0.084370141	4.412509855	0	0	0	0	0
HHDT	NG	1.211857962	0	0.666218657	0.790397479	0	0.248879046	0.057261122	0	0	0	0	0
LDA	GAS	0	0.053338977	0.00440535	0	0.026760985	0.009215576	0	0.23409847	0.109861112	0.239556625	0.221212857	0.277601639
LDA	DSL	0	0	0.031465006	0	0	0.013883402	0	0	0	0	0	0
LDA	ELEC	0	0	0	0	0	0	0	0	0.004888026	0	0.005572688	0.022266304
LDT1	GAS	0	0.08953538	0.009905902	0	0.032109959	0.033456148	0	0.457784215	0.31083103	1.019854814	0.609014172	0.90812567
LDT1	DSL	0	0	0.063001358	0	0	0.210158677	0	0	0	0	0	0
LDT1	ELEC	0	0	0	0	0	0	0	0	0.004888026	0	0.005572688	0.022266304
LDT2	GAS	0	0.074155182	0.006824189	0	0.03474187	0.016012801	0	0.34267191	0.150279461	0.495081247	0.360713883	0.417661333
LDT2	DSL	0	0	0.042013214	0	0	0.014996684	0	0	0	0	0	0
LDT2	ELEC	0	0	0	0	0	0	0	0	0.004888026	0	0.005572688	0.022266304
LHDT1	GAS	0.126524999	0.028294526	0.013862129	0.003201422	0.043086542	0.030563357	0.457518616	0.140623928	0.164436285	0.954280247	0.039561239	0.077345488
LHDT1	DSL	0.005098128	0	0.07665058	0.02169276	0	0.093190045	0.109759705	0	0	0	0	0
LHDT2	GAS	0.128102542	0.026478986	0.01294528	0.003212412	0.042859642	0.018581195	0.456586144	0.129752159	0.138876865	0.780127208	0.032888635	0.061979877
LHDT2	DSL	0.005098128	0	0.083444705	0.034879063	0	0.078309661	0.109759705	0	0	0	0	0
MCY	GAS	0	0.239052166	0.063851896	0	0.014958765	2.129919198	0	1.807326679	1.056844773	2.132700252	1.524289943	3.256951229
MDV	GAS	0	0.093844665	0.008903515	0	0.039033672	0.024344022	0	0.463572602	0.182028953	0.561699157	0.455304276	0.491097789
MDV	DSL	0	0	0.057228105	0	0	0.011186284	0	0	0	0	0	0
MDV	ELEC	0	0	0	0	0	0	0	0	0.004888026	0	0.005572688	0.022266304
MH	GAS	0	0.033417937	0.026255319	0	0.034520386	0.056561012	0	0.13671231	0.115797645	2.175462913	0.062696475	0.182441604
MH	DSL	0	0	0.148137103	0	0	0.073060529	0	0	0	0	0	0
MHDT	GAS	0.27648947	0.03946031	0.022939829	0.006967863	0.028168547	0.059648724	1.086332762	0.215994327	0.09957382	0.493695687	0.029516984	0.056729314
MHDT	DSL	0.005848149	0	0.146269812	0.126212466	0	0.112440537	0.12590905	0	0	0	0	0
OBUS	GAS	0.192858039	0.031190172	0.025558484	0.005274203	0.024628949	0.063470177	0.743943967	0.16657875	0.034991868	0.377778613	0.030573237	0.069422148
OBUS	DSL	0.052791308	0	0.178853512	0.405856698	0	0.141758627	1.13658238	0	0	0	0	0
SBUS	GAS	2.378090484	0.056166573	0.021307293	0.085733949	0.051790768	0.045107034	10.64151815	0.327402906	0.069997776	0.504316159	0.019652299	0.036249389
SBUS	DSL	0.013487631	0	0.194884326	0.559064416	0	0.13015265	0.290385006	0	0	0	0	0
UBUS	GAS	0	0.054937057	0.013771049	0	0.057996739	0.011521507	0	0.213845933	0.032606728	0.159950623	0.008786626	0.014685886
UBUS	DSL	0	0	0.179371891	0	0	0.000534846	0	0	0	0	0	0
UBUS	ELEC	0	0	0	0	0	0	0	0	0	0	0	0
UBUS	NG	0	0	0.378460935	0	0	0.080923754	0	0	0	0	0	0

Vehicle Category	Fuel	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_HOTSOAK	TOG_RUNLOSS	TOG_RESTLOSS	TOG_DIURN	CO_RUNEX	CO_IDLEX	CO_STREX	SOx_RUNEX	SOx_IDLEX	SOx_STREX
HHDT	GAS	0.823748751	0	0.001333121	0.179112616	0.872664768	0.059581184	0.093456915	30.19223823	0	5.699922671	0.020634355	0	0.000487196
HHDT	DSL	0.096048983	5.023306584	0	0	0	0	0	0.356565875	61.90280596	0	0.012946359	0.109343493	0
HHDT	NG	5.025796922	1.282303707	0	0	0	0	0	13.82683725	22.51829615	0	0	0	0
LDA	GAS	0.013438704	0	0.256306911	0.109861112	0.239556625	0.221212857	0.277601639	0.633854056	0	2.17892811	0.002614993	0	0.000554663
LDA	DSL	0.01580533	0	0	0	0	0	0	0.190193441	0	0	0.001892391	0	0
LDA	ELEC	0	0	0	0.004888026	0	0.005572688	0.022266304	0	0	0	0	0	0
LDT1	GAS	0.048786901	0	0.501213522	0.31083103	1.019854814	0.609014172	0.90812567	1.503310363	0	2.447762817	0.003072526	0	0.000663986
LDT1	DSL	0.239251681	0	0	0	0	0	0	1.293864803	0	0	0.003789072	0	0
LDT1	ELEC	0	0	0	0.004888026	0	0.005572688	0.022266304	0	0	0	0	0	0
LDT2	GAS	0.023352555	0	0.375181528	0.150279461	0.495081247	0.360713883	0.417661333	0.905254888	0	2.786156287	0.003294804	0	0.000717427
LDT2	DSL	0.017072727	0	0	0	0	0	0	0.113701732	0	0	0.002526788	0	0
LDT2	ELEC	0	0	0	0.004888026	0	0.005572688	0.022266304	0	0	0	0	0	0
LHDT1	GAS	0.044597979	0.66761009	0.1539655	0.164436285	0.954280247	0.039561239	0.077345488	0.822740137	3.750302238	1.739408853	0.007828279	0.001213083	0.000188627
LHDT1	DSL	0.106090671	0.124954127	0	0	0	0	0	0.633619774	0.909745076	0	0.004609973	0.001304661	0
LHDT2	GAS	0.027113636	0.66624943	0.142062282	0.138876865	0.780127208	0.032888635	0.061979877	0.500883671	3.76109659	1.651334446	0.008948233	0.001396085	0.000213804
LHDT2	DSL	0.089150342	0.124954127	0	0	0	0	0	0.525791174	0.909745076	0	0.005018591	0.002097721	0
MCY	GAS	2.617162543	0	1.966582313	1.056844773	2.132700252	1.524289943	3.256951229	18.91159321	0	8.384512213	0.002046457	0	0.000598417
MDV	GAS	0.034510264	0	0.507513168	0.182028953	0.561699157	0.455304276	0.491097789	1.133935928	0	3.370342549	0.004125343	0	0.000901541
MDV	DSL	0.012734841	0	0	0	0	0	0	0.182343216	0	0	0.003441853	0	0
MDV	ELEC	0	0	0	0.004888026	0	0.005572688	0.022266304	0	0	0	0	0	0
MH	GAS	0.082533696	0	0.149682771	0.115797645	2.175462913	0.062696475	0.182441604	1.784358794	0	2.963746895	0.016638666	0	0.000260754
MH	DSL	0.083174555	0	0	0	0	0	0	0.348410741	0	0	0.008909367	0	0
MHDT	GAS	0.087039279	1.585174216	0.2364866	0.09957382	0.493695687	0.029516984	0.056729314	1.626807221	19.83222784	4.703759794	0.016106752	0.005087415	0.000388588
MHDT	DSL	0.128004993	0.143337869	0	0	0	0	0	0.438442777	2.680241542	0	0.008791394	0.007585868	0
OBUS	GAS	0.092615533	1.08556129	0.182382764	0.034991868	0.377778613	0.030573237	0.069422148	1.708331279	5.760612681	3.471113241	0.016450525	0.003789589	0.000267616
OBUS	DSL	0.161381406	1.293912522	0	0	0	0	0	0.517353083	13.68110433	0	0.010749803	0.024393591	0
SBUS	GAS	0.065820079	15.5280783	0.358464972	0.069997776	0.504316159	0.019652299	0.036249389	1.014538099	82.24087757	7.721371788	0.008854538	0.026379334	0.000478845
SBUS	DSL	0.148168885	0.330581225	0	0	0	0	0	0.354625607	6.101606778	0	0.011713318	0.03360198	0
UBUS	GAS	0.016812156	0	0.234134379	0.032606728	0.159950623	0.008786626	0.014685886	0.192457395	0	4.34458896	0.0137908	0	0.000520625
UBUS	DSL	0.03820325	0	0	0	0	0	0	0.05712856	0	0	0.010787911	0	0
UBUS	ELEC	0	0	0	0	0	0	0	0	0	0	0	0	0
UBUS	NG	5.780268135	0	0	0	0	0	0	43.78513323	0	0	0	0	0

CalEEMod Construction Model

Beaumont High School Construction Run

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	50.00	1000sqft	0.57	50,000.00	0
Other Asphalt Surfaces	163.35	1000sqft	3.75	163,350.00	0
Other Non-Asphalt Surfaces	1,023.11	1000sqft	23.49	1,023,110.00	0
Parking Lot	269.58	1000sqft	6.19	269,580.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	531.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - 2 story classroom building

Construction Phase - based on data provided by district

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - overlapping construction equipment

Off-road Equipment -

Off-road Equipment - no additional equipment

Off-road Equipment - assuming 1 excavator

Off-road Equipment - overlapping equipment

Off-road Equipment - overlapping equipment

Off-road Equipment - overlapping construction equipment

Off-road Equipment -

Grading -

Demolition -

Trips and VMT - assuming 4vt/water truck/day

Architectural Coating - based on data provided by district, assuming all surfaces coated

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	25,000.00	16,750.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	75,000.00	60,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	150.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	500.00	1.00
tblConstructionPhase	NumDays	500.00	19.00
tblConstructionPhase	NumDays	35.00	89.00
tblConstructionPhase	NumDays	35.00	66.00
tblConstructionPhase	PhaseEndDate	10/12/2020	10/31/2020
tblGrading	MaterialExported	0.00	39,300.00
tblGrading	MaterialImported	0.00	27,600.00
tblLandUse	LotAcreage	1.15	0.57
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37

tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	HaulingTripNumber	450.00	456.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	247.00
tblTripsAndVMT	WorkerTripNumber	40.00	673.00

2.0 Emissions Summary

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/day					
2020	9.1469	167.5851	57.1719	0.3791	28.1136	3.8413	31.9548	12.1945	3.5446	15.7391	0.0000	39,408.8932	39,408.8932	4.5188	0.0000	39,521.8620
2021	22.4854	59.0298	69.9713	0.2073	10.5237	1.9305	12.4543	2.8269	1.8046	4.6314	0.0000	20,807.8385	20,807.8385	2.1964	0.0000	20,862.7476
Maximum	**22.4854**	**167.5851**	**69.9713**	**0.3791**	**28.1136**	**3.8413**	**31.9548**	**12.1945**	**3.5446**	**15.7391**	**0.0000**	**39,408.8932**	**39,408.8932**	**4.5188**	**0.0000**	**39,521.8620**

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	lb/day										lb/day					
2020	9.1469	167.5851	57.1719	0.3791	15.5521	3.8413	19.3934	6.1941	3.5446	9.7387	0.0000	39,408.8932	39,408.8932	4.5188	0.0000	39,521.8620
2021	22.4854	59.0298	69.9713	0.2073	9.7227	1.9305	11.6532	2.6302	1.8046	4.4348	0.0000	20,807.8385	20,807.8385	2.1964	0.0000	20,862.7476
Maximum	**22.4854**	**167.5851**	**69.9713**	**0.3791**	**15.5521**	**3.8413**	**19.3934**	**6.1941**	**3.5446**	**9.7387**	**0.0000**	**39,408.8932**	**39,408.8932**	**4.5188**	**0.0000**	**39,521.8620**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**34.58**	**0.00**	**30.09**	**41.26**	**0.00**	**30.42**	**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	Asphalt Demolition	Demolition	9/1/2020	10/31/2020	5	44	
2	Demolition Debris Haul	Demolition	9/1/2020	10/31/2020	5	44	
3	Site Preparation and Grading	Grading	11/1/2020	12/1/2020	5	22	
4	Grading Soil Haul	Grading	11/1/2020	12/1/2020	5	22	
5	Utilities Trenching	Trenching	1/1/2021	1/31/2021	5	21	
6	Utilities Trenching, Athletic Fields Installation, and Building	Building Construction	2/1/2021	2/1/2021	5	1	
7	Athletic Fields Installation and Building Construction	Building Construction	2/2/2021	2/28/2021	5	19	
8	Building Construction, Paving, and Finishing and Landscaping	Paving	3/1/2021	7/1/2021	5	89	
9	Architectural Coating	Architectural Coating	4/1/2021	7/1/2021	5	66	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 33.43

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 60,000; Non-Residential Outdoor: 16,750; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Asphalt Demolition	Excavators	3	8.00	158	0.38
Asphalt Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition Debris Haul	Concrete/Industrial Saws	0	8.00	81	0.73
Utilities Trenching, Athletic Fields Installation, and Building Construction	Cranes	1	7.00	231	0.29
Athletic Fields Installation and Building Construction	Cranes	1	7.00	231	0.29
Demolition Debris Haul	Excavators	0	8.00	158	0.38
Site Preparation and Grading	Excavators	2	8.00	158	0.38
Grading Soil Haul	Excavators	0	8.00	158	0.38
Asphalt Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Utilities Trenching, Athletic Fields Installation, and Building Construction	Forklifts	3	8.00	89	0.20
Athletic Fields Installation and Building Construction	Forklifts	3	8.00	89	0.20
Utilities Trenching, Athletic Fields Installation, and Building Construction	Generator Sets	1	8.00	84	0.74
Athletic Fields Installation and Building Construction	Generator Sets	1	8.00	84	0.74
Site Preparation and Grading	Graders	1	8.00	187	0.41
Grading Soil Haul	Graders	0	8.00	187	0.41
Building Construction, Paving, and Finishing and Landscaping	Pavers	2	8.00	130	0.42
Building Construction, Paving, and Finishing and Landscaping	Paving Equipment	2	8.00	132	0.36
Building Construction, Paving, and Finishing and Landscaping	Rollers	2	8.00	80	0.38
Demolition Debris Haul	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation and Grading	Rubber Tired Dozers	3	8.00	247	0.40
Grading Soil Haul	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation and Grading	Scrapers	2	8.00	367	0.48
Grading Soil Haul	Scrapers	0	8.00	367	0.48
Utilities Trenching, Athletic Fields Installation, and Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Athletic Fields Installation and Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Site Preparation and Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading Soil Haul	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Utilities Trenching, Athletic Fields Installation, and Building Construction	Welders	1	8.00	46	0.45
Athletic Fields Installation and Building Construction	Welders	1	8.00	46	0.45
Utilities Trenching	Excavators	1	8.00	158	0.38
Utilities Trenching, Athletic Fields Installation, and Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Utilities Trenching, Athletic Fields Installation, and Building Construction	Excavators	1	8.00	158	0.38
Athletic Fields Installation and Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction, Paving, and Finishing and Landscaping	Cranes	1	7.00	231	0.29
Building Construction, Paving, and Finishing and Landscaping	Forklifts	3	8.00	89	0.20
Building Construction, Paving, and Finishing and Landscaping	Generator Sets	1	8.00	84	0.74
Building Construction, Paving, and Finishing and Landscaping	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction, Paving, and Finishing and Landscaping	Welders	1	8.00	46	0.45
Building Construction, Paving, and Finishing and Landscaping	Excavators	1	8.00	158	0.38

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
Asphalt Demolition	6	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching, Athletic Fields	11	633.00	247.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Athletic Fields Installation and	10	633.00	247.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Debris Haul	0	0.00	0.00	456.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation and Grading	12	30.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	127.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading Soil Haul	0	0.00	0.00	8,363.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction, Paving, and Finishing	16	673.00	247.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Asphalt Demolition - 2020

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/day										lb/day					
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**		**1.6587**	**1.6587**		**1.5419**	**1.5419**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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/day										lb/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	0.0112	0.4116	0.0753	1.0400e-003	0.0256	2.3400e-003	0.0280	7.3700e-003	2.2400e-003	9.6100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.0763	0.0451	0.6048	1.6600e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		165.2392	165.2392	4.2400e-003		165.3451
Total	**0.0875**	**0.4567**	**0.6801**	**2.7000e-003**	**0.1933**	**3.3600e-003**	**0.1966**	**0.0518**	**3.1700e-003**	**0.0550**		**275.3956**	**275.3956**	**0.0125**		**275.7080**

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/day					
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**		**1.6587**	**1.6587**		**1.5419**	**1.5419**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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/day										lb/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	0.0112	0.4116	0.0753	1.0400e-003	0.0240	2.3400e-003	0.0263	6.9700e-003	2.2400e-003	9.2100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.0763	0.0451	0.6048	1.6600e-003	0.1546	1.0200e-003	0.1556	0.0413	9.3000e-004	0.0422		165.2392	165.2392	4.2400e-003		165.3451
Total	**0.0875**	**0.4567**	**0.6801**	**2.7000e-003**	**0.1785**	**3.3600e-003**	**0.1819**	**0.0482**	**3.1700e-003**	**0.0514**		**275.3956**	**275.3956**	**0.0125**		**275.7080**

3.3 Demolition Debris Haul - 2020

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/day										lb/day					
Fugitive Dust					2.2270	0.0000	2.2270	0.3372	0.0000	0.3372			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.2270**	**0.0000**	**2.2270**	**0.3372**	**0.0000**	**0.3372**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	0.0533	2.4540	0.3028	7.8900e-003	0.1813	7.8200e-003	0.1891	0.0497	7.4800e-003	0.0572		837.1406	837.1406	0.0499		838.3878
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	0.0000	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	**0.0533**	**2.4540**	**0.3028**	**7.8900e-003**	**0.1813**	**7.8200e-003**	**0.1891**	**0.0497**	**7.4800e-003**	**0.0572**		**837.1406**	**837.1406**	**0.0499**		**838.3878**

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/day					
Fugitive Dust					0.9520	0.0000	0.9520	0.1442	0.0000	0.1442			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.9520**	**0.0000**	**0.9520**	**0.1442**	**0.0000**	**0.1442**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	0.0533	2.4540	0.3028	7.8900e-003	0.1690	7.8200e-003	0.1768	0.0467	7.4800e-003	0.0542		837.1406	837.1406	0.0499		838.3878
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	0.0000	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	**0.0533**	**2.4540**	**0.3028**	**7.8900e-003**	**0.1690**	**7.8200e-003**	**0.1768**	**0.0467**	**7.4800e-003**	**0.0542**		**837.1406**	**837.1406**	**0.0499**		**838.3878**

3.4 Site Preparation and Grading - 2020

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/day										lb/day					
Fugitive Dust					20.7175	0.0000	20.7175	10.2170	0.0000	10.2170			0.0000			0.0000
Off-Road	7.0281	77.0723	44.7809	0.0853		3.5501	3.5501		3.2661	3.2661		8,262.0873	8,262.0873	2.6721		8,328.8905
Total	**7.0281**	**77.0723**	**44.7809**	**0.0853**	**20.7175**	**3.5501**	**24.2676**	**10.2170**	**3.2661**	**13.4831**		**8,262.0873**	**8,262.0873**	**2.6721**		**8,328.8905**

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/day										lb/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	0.0112	0.4116	0.0753	1.0400e-003	0.0256	2.3400e-003	0.0280	7.3700e-003	2.2400e-003	9.6100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.1527	0.0903	1.2096	3.3200e-003	0.3353	2.0300e-003	0.3374	0.0889	1.8700e-003	0.0908		330.4784	330.4784	8.4700e-003		330.6901
Total	**0.1638**	**0.5019**	**1.2849**	**4.3600e-003**	**0.3609**	**4.3700e-003**	**0.3653**	**0.0963**	**4.1100e-003**	**0.1004**		**440.6347**	**440.6347**	**0.0167**		**441.0531**

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/day					
Fugitive Dust					8.8567	0.0000	8.8567	4.3678	0.0000	4.3678			0.0000			0.0000
Off-Road	7.0281	77.0723	44.7809	0.0853		3.5501	3.5501		3.2661	3.2661	0.0000	8,262.0873	8,262.0873	2.6721		8,328.8905
Total	**7.0281**	**77.0723**	**44.7809**	**0.0853**	**8.8567**	**3.5501**	**12.4068**	**4.3678**	**3.2661**	**7.6338**	**0.0000**	**8,262.0873**	**8,262.0873**	**2.6721**		**8,328.8905**

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/day										lb/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	0.0112	0.4116	0.0753	1.0400e-003	0.0240	2.3400e-003	0.0263	6.9700e-003	2.2400e-003	9.2100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.1527	0.0903	1.2096	3.3200e-003	0.3091	2.0300e-003	0.3111	0.0825	1.8700e-003	0.0844		330.4784	330.4784	8.4700e-003		330.6901
Total	**0.1638**	**0.5019**	**1.2849**	**4.3600e-003**	**0.3331**	**4.3700e-003**	**0.3374**	**0.0895**	**4.1100e-003**	**0.0936**		**440.6347**	**440.6347**	**0.0167**		**441.0531**

3.5 Grading Soil Haul - 2020

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/day										lb/day					
Fugitive Dust					0.3851	0.0000	0.3851	0.0583	0.0000	0.0583			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.3851**	**0.0000**	**0.3851**	**0.0583**	**0.0000**	**0.0583**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day											lb/day				
Hauling	1.9550	90.0110	11.1061	0.2894	6.6500	0.2868	6.9368	1.8230	0.2744	2.0973		30,706.1712	30,706.1712	1.8299		30,751.9184
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	0.0000	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	**1.9550**	**90.0110**	**11.1061**	**0.2894**	**6.6500**	**0.2868**	**6.9368**	**1.8230**	**0.2744**	**2.0973**		**30,706.1712**	**30,706.1712**	**1.8299**		**30,751.9184**

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/day					
Fugitive Dust					0.1646	0.0000	0.1646	0.0249	0.0000	0.0249			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1646**	**0.0000**	**0.1646**	**0.0249**	**0.0000**	**0.0249**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	1.9550	90.0110	11.1061	0.2894	6.1977	0.2868	6.4845	1.7119	0.2744	1.9863		30,706.1712	30,706.1712	1.8299		30,751.9184
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	0.0000	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	**1.9550**	**90.0110**	**11.1061**	**0.2894**	**6.1977**	**0.2868**	**6.4845**	**1.7119**	**0.2744**	**1.9863**		**30,706.1712**	**30,706.1712**	**1.8299**		**30,751.9184**

3.6 Utilities Trenching - 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/day										lb/day					
Off-Road	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575
Total	**0.2303**	**2.1642**	**3.2882**	**5.1900e-003**		**0.1050**	**0.1050**		**0.0966**	**0.0966**		**502.6929**	**502.6929**	**0.1626**		**506.7575**

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/day										lb/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	0.0142	8.1000e-003	0.1109	3.2000e-004	0.0335	2.0000e-004	0.0337	8.8900e-003	1.8000e-004	9.0800e-003		31.9425	31.9425	7.6000e-004		31.9616
Total	**0.0142**	**8.1000e-003**	**0.1109**	**3.2000e-004**	**0.0335**	**2.0000e-004**	**0.0337**	**8.8900e-003**	**1.8000e-004**	**9.0800e-003**		**31.9425**	**31.9425**	**7.6000e-004**		**31.9616**

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/day					
Off-Road	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575
Total	**0.2303**	**2.1642**	**3.2882**	**5.1900e-003**		**0.1050**	**0.1050**		**0.0966**	**0.0966**	**0.0000**	**502.6929**	**502.6929**	**0.1626**		**506.7575**

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/day										lb/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	0.0142	8.1000e-003	0.1109	3.2000e-004	0.0309	2.0000e-004	0.0311	8.2500e-003	1.8000e-004	8.4300e-003		31.9425	31.9425	7.6000e-004		31.9616
Total	**0.0142**	**8.1000e-003**	**0.1109**	**3.2000e-004**	**0.0309**	**2.0000e-004**	**0.0311**	**8.2500e-003**	**1.8000e-004**	**8.4300e-003**		**31.9425**	**31.9425**	**7.6000e-004**		**31.9616**

3.7 Utilities Trenching, Athletic Fields Installation, and Building [illegible]

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/day										lb/day					
Off-Road	2.2065	20.5957	21.2477	0.0342		1.1043	1.1043		1.0353	1.0353		3,255.4436	3,255.4436	0.8431		3,276.5206
Total	**2.2065**	**20.5957**	**21.2477**	**0.0342**		**1.1043**	**1.1043**		**1.0353**	**1.0353**		**3,255.4436**	**3,255.4436**	**0.8431**		**3,276.5206**

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/day										lb/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	0.5766	22.8572	4.0781	0.0640	1.5816	0.0435	1.6251	0.4554	0.0416	0.4970		6,749.3002	6,749.3002	0.4829		6,761.3714
Worker	3.0010	1.7097	23.4028	0.0677	7.0755	0.0417	7.1171	1.8764	0.0384	1.9148		6,739.8733	6,739.8733	0.1607		6,743.8909
Total	**3.5777**	**24.5668**	**27.4809**	**0.1317**	**8.6571**	**0.0852**	**8.7423**	**2.3318**	**0.0800**	**2.4118**		**13,489.1735**	**13,489.1735**	**0.6436**		**13,505.2624**

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/day					
Off-Road	2.2065	20.5957	21.2477	0.0342		1.1043	1.1043		1.0353	1.0353	0.0000	3,255.4436	3,255.4436	0.8431		3,276.5206
Total	**2.2065**	**20.5957**	**21.2477**	**0.0342**		**1.1043**	**1.1043**		**1.0353**	**1.0353**	**0.0000**	**3,255.4436**	**3,255.4436**	**0.8431**		**3,276.5206**

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/day										lb/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	0.5766	22.8572	4.0781	0.0640	1.4802	0.0435	1.5237	0.4305	0.0416	0.4721		6,749.3002	6,749.3002	0.4829		6,761.3714
Worker	3.0010	1.7097	23.4028	0.0677	6.5218	0.0417	6.5635	1.7406	0.0384	1.7790		6,739.8733	6,739.8733	0.1607		6,743.8909
Total	**3.5777**	**24.5668**	**27.4809**	**0.1317**	**8.0021**	**0.0852**	**8.0872**	**2.1711**	**0.0800**	**2.2510**		**13,489.1735**	**13,489.1735**	**0.6436**		**13,505.2624**

3.8 Athletic Fields Installation and 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	lb/day										lb/day					
Off-Road	1.9764	18.4356	17.9651	0.0290		0.9995	0.9995		0.9388	0.9388		2,753.5623	2,753.5623	0.6808		2,770.5813
Total	**1.9764**	**18.4356**	**17.9651**	**0.0290**		**0.9995**	**0.9995**		**0.9388**	**0.9388**		**2,753.5623**	**2,753.5623**	**0.6808**		**2,770.5813**

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/day										lb/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	0.5766	22.8572	4.0781	0.0640	1.5816	0.0435	1.6251	0.4554	0.0416	0.4970		6,749.3002	6,749.3002	0.4829		6,761.3714

Worker	3.0010	1.7097	23.4028	0.0677	7.0755	0.0417	7.1171	1.8764	0.0384	1.9148		6,739.8733	6,739.8733	0.1607		6,743.8909
Total	**3.5777**	**24.5668**	**27.4809**	**0.1317**	**8.6571**	**0.0852**	**8.7423**	**2.3318**	**0.0800**	**2.4118**		**13,489.1735**	**13,489.1735**	**0.6436**		**13,505.2624**

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/day					
Off-Road	1.9764	18.4356	17.9651	0.0290		0.9995	0.9995		0.9388	0.9388	0.0000	2,753.5623	2,753.5623	0.6808		2,770.5813
Total	**1.9764**	**18.4356**	**17.9651**	**0.0290**		**0.9995**	**0.9995**		**0.9388**	**0.9388**	**0.0000**	**2,753.5623**	**2,753.5623**	**0.6808**		**2,770.5813**

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/day										lb/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	0.5766	22.8572	4.0781	0.0640	1.4802	0.0435	1.5237	0.4305	0.0416	0.4721		6,749.3002	6,749.3002	0.4829		6,761.3714
Worker	3.0010	1.7097	23.4028	0.0677	6.5218	0.0417	6.5635	1.7406	0.0384	1.7790		6,739.8733	6,739.8733	0.1607		6,743.8909
Total	**3.5777**	**24.5668**	**27.4809**	**0.1317**	**8.0021**	**0.0852**	**8.0872**	**2.1711**	**0.0800**	**2.2510**		**13,489.1735**	**13,489.1735**	**0.6436**		**13,505.2624**

3.9 Building Construction, Paving, and Finishing and

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/day										lb/day					
Off-Road	3.3844	32.4851	34.4987	0.0549		1.7402	1.7402		1.6204	1.6204		5,259.0829	5,259.0829	1.4911		5,296.3604
Paving	0.2926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.6770**	**32.4851**	**34.4987**	**0.0549**		**1.7402**	**1.7402**		**1.6204**	**1.6204**		**5,259.0829**	**5,259.0829**	**1.4911**		**5,296.3604**

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/day										lb/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	0.5766	22.8572	4.0781	0.0640	1.5816	0.0435	1.6251	0.4554	0.0416	0.4970		6,749.3002	6,749.3002	0.4829		6,761.3714
Worker	3.1907	1.8177	24.8816	0.0719	7.5226	0.0443	7.5669	1.9950	0.0408	2.0358		7,165.7736	7,165.7736	0.1709		7,170.0452
Total	**3.7673**	**24.6749**	**28.9597**	**0.1359**	**9.1042**	**0.0878**	**9.1920**	**2.4504**	**0.0824**	**2.5328**		**13,915.0739**	**13,915.0739**	**0.6537**		**13,931.4166**

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/day					
Off-Road	3.3844	32.4851	34.4987	0.0549		1.7402	1.7402		1.6204	1.6204	0.0000	5,259.0829	5,259.0829	1.4911		5,296.3604

Paving	0.2926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.6770**	**32.4851**	**34.4987**	**0.0549**		**1.7402**	**1.7402**		**1.6204**	**1.6204**	**0.0000**	**5,259.0829**	**5,259.0829**	**1.4911**		**5,296.3604**

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/day										lb/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	0.5766	22.8572	4.0781	0.0640	1.4802	0.0435	1.5237	0.4305	0.0416	0.4721		6,749.3002	6,749.3002	0.4829		6,761.3714
Worker	3.1907	1.8177	24.8816	0.0719	6.9340	0.0443	6.9783	1.8505	0.0408	1.8914		7,165.7736	7,165.7736	0.1709		7,170.0452
Total	**3.7673**	**24.6749**	**28.9597**	**0.1359**	**8.4142**	**0.0878**	**8.5020**	**2.2810**	**0.0824**	**2.3634**		**13,915.0739**	**13,915.0739**	**0.6537**		**13,931.4166**

3.10 Architectural Coating - 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/day										lb/day					
Archit. Coating	14.2201					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	**14.4390**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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/day										lb/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	0.6021	0.3430	4.6953	0.0136	1.4196	8.3700e-003	1.4279	0.3765	7.7000e-003	0.3842		1,352.2337	1,352.2337	0.0322		1,353.0397
Total	**0.6021**	**0.3430**	**4.6953**	**0.0136**	**1.4196**	**8.3700e-003**	**1.4279**	**0.3765**	**7.7000e-003**	**0.3842**		**1,352.2337**	**1,352.2337**	**0.0322**		**1,353.0397**

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/day					
Archit. Coating	14.2201					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	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**14.4390**	**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**

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/day										lb/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	0.6021	0.3430	4.6953	0.0136	1.3085	8.3700e-003	1.3169	0.3492	7.7000e-003	0.3569		1,352.2337	1,352.2337	0.0322		1,353.0397
Total	**0.6021**	**0.3430**	**4.6953**	**0.0136**	**1.3085**	**8.3700e-003**	**1.3169**	**0.3492**	**7.7000e-003**	**0.3569**		**1,352.2337**	**1,352.2337**	**0.0322**		**1,353.0397**

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

11.0 Vegetation

Beaumont High School Construction Run

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	50.00	1000sqft	0.57	50,000.00	0
Other Asphalt Surfaces	163.35	1000sqft	3.75	163,350.00	0
Other Non-Asphalt Surfaces	1,023.11	1000sqft	23.49	1,023,110.00	0
Parking Lot	269.58	1000sqft	6.19	269,580.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	531.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - 2 story classroom building

Construction Phase - based on data provided by district

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - overlapping construction equipment

Off-road Equipment -

Off-road Equipment - no additional equipment

Off-road Equipment - assuming 1 excavator

Off-road Equipment - overlapping equipment

Off-road Equipment - overlapping equipment

Off-road Equipment - overlapping construction equipment

Off-road Equipment -

Grading -

Demolition -

Trips and VMT - assuming 4vt/water truck/day

Architectural Coating - based on data provided by district, assuming all surfaces coated

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	25,000.00	16,750.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	75,000.00	60,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	150.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	500.00	1.00
tblConstructionPhase	NumDays	500.00	19.00
tblConstructionPhase	NumDays	35.00	89.00
tblConstructionPhase	NumDays	35.00	66.00
tblConstructionPhase	PhaseEndDate	10/12/2020	10/31/2020
tblGrading	MaterialExported	0.00	39,300.00
tblGrading	MaterialImported	0.00	27,600.00
tblLandUse	LotAcreage	1.15	0.57
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37

tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	HaulingTripNumber	450.00	456.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	247.00
tblTripsAndVMT	WorkerTripNumber	40.00	673.00

2.0 Emissions Summary

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/day					
2020	9.2458	168.3733	58.8551	0.3714	28.1136	3.8454	31.9589	12.1945	3.5485	15.7430	0.0000	38,602.5117	38,602.5117	4.6916	0.0000	38,719.8025
2021	22.4505	58.9068	65.0148	0.1961	10.5237	1.9318	12.4556	2.8269	1.8058	4.6327	0.0000	19,677.5179	19,677.5179	2.2250	0.0000	19,733.1430
Maximum	**22.4505**	**168.3733**	**65.0148**	**0.3714**	**28.1136**	**3.8454**	**31.9589**	**12.1945**	**3.5485**	**15.7430**	**0.0000**	**38,602.5117**	**38,602.5117**	**4.6916**	**0.0000**	**38,719.8025**

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	lb/day										lb/day					
2020	9.2458	168.3733	58.8551	0.3714	15.5521	3.8454	19.3975	6.1941	3.5485	9.7426	0.0000	38,602.5117	38,602.5117	4.6916	0.0000	38,719.8025
2021	22.4505	58.9068	65.0148	0.1961	9.7227	1.9318	11.6545	2.6302	1.8058	4.4361	0.0000	19,677.5179	19,677.5179	2.2250	0.0000	19,733.1430
Maximum	**22.4505**	**168.3733**	**65.0148**	**0.3714**	**15.5521**	**3.8454**	**19.3975**	**6.1941**	**3.5485**	**9.7426**	**0.0000**	**38,602.5117**	**38,602.5117**	**4.6916**	**0.0000**	**38,719.8025**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**34.58**	**0.00**	**30.09**	**41.26**	**0.00**	**30.41**	**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	Asphalt Demolition	Demolition	9/1/2020	10/31/2020	5	44	
2	Demolition Debris Haul	Demolition	9/1/2020	10/31/2020	5	44	
3	Site Preparation and Grading	Grading	11/1/2020	12/1/2020	5	22	
4	Grading Soil Haul	Grading	11/1/2020	12/1/2020	5	22	
5	Utilities Trenching	Trenching	1/1/2021	1/31/2021	5	21	
6	Utilities Trenching, Athletic Fields Installation, and Building	Building Construction	2/1/2021	2/1/2021	5	1	
7	Athletic Fields Installation and Building Construction	Building Construction	2/2/2021	2/28/2021	5	19	
8	Building Construction, Paving, and Finishing and Landscaping	Paving	3/1/2021	7/1/2021	5	89	
9	Architectural Coating	Architectural Coating	4/1/2021	7/1/2021	5	66	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 33.43

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 60,000; Non-Residential Outdoor: 16,750; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Asphalt Demolition	Excavators	3	8.00	158	0.38
Asphalt Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition Debris Haul	Concrete/Industrial Saws	0	8.00	81	0.73
Utilities Trenching, Athletic Fields Installation, and Building Construction	Cranes	1	7.00	231	0.29
Athletic Fields Installation and Building Construction	Cranes	1	7.00	231	0.29
Demolition Debris Haul	Excavators	0	8.00	158	0.38
Site Preparation and Grading	Excavators	2	8.00	158	0.38
Grading Soil Haul	Excavators	0	8.00	158	0.38
Asphalt Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Utilities Trenching, Athletic Fields Installation, and Building Construction	Forklifts	3	8.00	89	0.20
Athletic Fields Installation and Building Construction	Forklifts	3	8.00	89	0.20
Utilities Trenching, Athletic Fields Installation, and Building Construction	Generator Sets	1	8.00	84	0.74
Athletic Fields Installation and Building Construction	Generator Sets	1	8.00	84	0.74
Site Preparation and Grading	Graders	1	8.00	187	0.41
Grading Soil Haul	Graders	0	8.00	187	0.41
Building Construction, Paving, and Finishing and Landscaping	Pavers	2	8.00	130	0.42
Building Construction, Paving, and Finishing and Landscaping	Paving Equipment	2	8.00	132	0.36
Building Construction, Paving, and Finishing and Landscaping	Rollers	2	8.00	80	0.38
Demolition Debris Haul	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation and Grading	Rubber Tired Dozers	3	8.00	247	0.40
Grading Soil Haul	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation and Grading	Scrapers	2	8.00	367	0.48
Grading Soil Haul	Scrapers	0	8.00	367	0.48
Utilities Trenching, Athletic Fields Installation, and Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Athletic Fields Installation and Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Site Preparation and Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading Soil Haul	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Utilities Trenching, Athletic Fields Installation, and Building Construction	Welders	1	8.00	46	0.45
Athletic Fields Installation and Building Construction	Welders	1	8.00	46	0.45
Utilities Trenching	Excavators	1	8.00	158	0.38
Utilities Trenching, Athletic Fields Installation, and Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Utilities Trenching, Athletic Fields Installation, and Building Construction	Excavators	1	8.00	158	0.38
Athletic Fields Installation and Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction, Paving, and Finishing and Landscaping	Cranes	1	7.00	231	0.29
Building Construction, Paving, and Finishing and Landscaping	Forklifts	3	8.00	89	0.20
Building Construction, Paving, and Finishing and Landscaping	Generator Sets	1	8.00	84	0.74
Building Construction, Paving, and Finishing and Landscaping	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction, Paving, and Finishing and Landscaping	Welders	1	8.00	46	0.45
Building Construction, Paving, and Finishing and Landscaping	Excavators	1	8.00	158	0.38

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
Asphalt Demolition	6	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching, Athletic Fields	11	633.00	247.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Athletic Fields Installation and	10	633.00	247.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Debris Haul	0	0.00	0.00	456.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation and Grading	12	30.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	127.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading Soil Haul	0	0.00	0.00	8,363.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction, Paving, and Finishing	16	673.00	247.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Asphalt Demolition - 2020

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/day										lb/day					
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**		**1.6587**	**1.6587**		**1.5419**	**1.5419**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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/day										lb/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	0.0118	0.4094	0.0882	1.0100e-003	0.0256	2.3700e-003	0.0280	7.3700e-003	2.2700e-003	9.6400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.0748	0.0467	0.4893	1.4900e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		148.2354	148.2354	3.6800e-003		148.3274
Total	**0.0865**	**0.4561**	**0.5774**	**2.5000e-003**	**0.1933**	**3.3900e-003**	**0.1967**	**0.0518**	**3.2000e-003**	**0.0550**		**254.2525**	**254.2525**	**0.0129**		**254.5744**

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/day					
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**		**1.6587**	**1.6587**		**1.5419**	**1.5419**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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/day										lb/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	0.0118	0.4094	0.0882	1.0100e-003	0.0240	2.3700e-003	0.0263	6.9700e-003	2.2700e-003	9.2400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.0748	0.0467	0.4893	1.4900e-003	0.1546	1.0200e-003	0.1556	0.0413	9.3000e-004	0.0422		148.2354	148.2354	3.6800e-003		148.3274
Total	**0.0865**	**0.4561**	**0.5774**	**2.5000e-003**	**0.1785**	**3.3900e-003**	**0.1819**	**0.0482**	**3.2000e-003**	**0.0514**		**254.2525**	**254.2525**	**0.0129**		**254.5744**

3.3 Demolition Debris Haul - 2020

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/day										lb/day					
Fugitive Dust					2.2270	0.0000	2.2270	0.3372	0.0000	0.3372			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.2270**	**0.0000**	**2.2270**	**0.3372**	**0.0000**	**0.3372**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	0.0561	2.4754	0.3546	7.6900e-003	0.1813	7.9300e-003	0.1892	0.0497	7.5900e-003	0.0573		816.1963	816.1963	0.0546		817.5614
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	0.0000	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	**0.0561**	**2.4754**	**0.3546**	**7.6900e-003**	**0.1813**	**7.9300e-003**	**0.1892**	**0.0497**	**7.5900e-003**	**0.0573**		**816.1963**	**816.1963**	**0.0546**		**817.5614**

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/day					
Fugitive Dust					0.9520	0.0000	0.9520	0.1442	0.0000	0.1442			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.9520**	**0.0000**	**0.9520**	**0.1442**	**0.0000**	**0.1442**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	0.0561	2.4754	0.3546	7.6900e-003	0.1690	7.9300e-003	0.1769	0.0467	7.5900e-003	0.0543		816.1963	816.1963	0.0546		817.5614
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	0.0000	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	**0.0561**	**2.4754**	**0.3546**	**7.6900e-003**	**0.1690**	**7.9300e-003**	**0.1769**	**0.0467**	**7.5900e-003**	**0.0543**		**816.1963**	**816.1963**	**0.0546**		**817.5614**

3.4 Site Preparation and Grading - 2020

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/day										lb/day					
Fugitive Dust					20.7175	0.0000	20.7175	10.2170	0.0000	10.2170			0.0000			0.0000
Off-Road	7.0281	77.0723	44.7809	0.0853		3.5501	3.5501		3.2661	3.2661		8,262.0873	8,262.0873	2.6721		8,328.8905
Total	**7.0281**	**77.0723**	**44.7809**	**0.0853**	**20.7175**	**3.5501**	**24.2676**	**10.2170**	**3.2661**	**13.4831**		**8,262.0873**	**8,262.0873**	**2.6721**		**8,328.8905**

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/day										lb/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	0.0118	0.4094	0.0882	1.0100e-003	0.0256	2.3700e-003	0.0280	7.3700e-003	2.2700e-003	9.6400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.1495	0.0934	0.9785	2.9800e-003	0.3353	2.0300e-003	0.3374	0.0889	1.8700e-003	0.0908		296.4707	296.4707	7.3600e-003		296.6548
Total	**0.1613**	**0.5028**	**1.0667**	**3.9900e-003**	**0.3609**	**4.4000e-003**	**0.3653**	**0.0963**	**4.1400e-003**	**0.1004**		**402.4878**	**402.4878**	**0.0166**		**402.9018**

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/day					
Fugitive Dust					8.8567	0.0000	8.8567	4.3678	0.0000	4.3678			0.0000			0.0000
Off-Road	7.0281	77.0723	44.7809	0.0853		3.5501	3.5501		3.2661	3.2661	0.0000	8,262.0873	8,262.0873	2.6721		8,328.8905
Total	**7.0281**	**77.0723**	**44.7809**	**0.0853**	**8.8567**	**3.5501**	**12.4068**	**4.3678**	**3.2661**	**7.6338**	**0.0000**	**8,262.0873**	**8,262.0873**	**2.6721**		**8,328.8905**

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/day										lb/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	0.0118	0.4094	0.0882	1.0100e-003	0.0240	2.3700e-003	0.0263	6.9700e-003	2.2700e-003	9.2400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.1495	0.0934	0.9785	2.9800e-003	0.3091	2.0300e-003	0.3111	0.0825	1.8700e-003	0.0844		296.4707	296.4707	7.3600e-003		296.6548
Total	**0.1613**	**0.5028**	**1.0667**	**3.9900e-003**	**0.3331**	**4.4000e-003**	**0.3375**	**0.0895**	**4.1400e-003**	**0.0936**		**402.4878**	**402.4878**	**0.0166**		**402.9018**

3.5 Grading Soil Haul - 2020

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/day										lb/day					
Fugitive Dust					0.3851	0.0000	0.3851	0.0583	0.0000	0.0583			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.3851**	**0.0000**	**0.3851**	**0.0583**	**0.0000**	**0.0583**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	2.0564	90.7982	13.0075	0.2822	6.6500	0.2909	6.9409	1.8230	0.2783	2.1012		29,937.9365	29,937.9365	2.0030		29,988.0102
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	0.0000	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	**2.0564**	**90.7982**	**13.0075**	**0.2822**	**6.6500**	**0.2909**	**6.9409**	**1.8230**	**0.2783**	**2.1012**		**29,937.9365**	**29,937.9365**	**2.0030**		**29,988.0102**

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/day					
Fugitive Dust					0.1646	0.0000	0.1646	0.0249	0.0000	0.0249			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1646**	**0.0000**	**0.1646**	**0.0249**	**0.0000**	**0.0249**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	2.0564	90.7982	13.0075	0.2822	6.1977	0.2909	6.4886	1.7119	0.2783	1.9902		29,937.9365	29,937.9365	2.0030		29,988.0102
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	0.0000	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	**2.0564**	**90.7982**	**13.0075**	**0.2822**	**6.1977**	**0.2909**	**6.4886**	**1.7119**	**0.2783**	**1.9902**		**29,937.9365**	**29,937.9365**	**2.0030**		**29,988.0102**

3.6 Utilities Trenching - 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/day										lb/day					
Off-Road	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966		502.6929	502.6929	0.1626		506.7575
Total	**0.2303**	**2.1642**	**3.2882**	**5.1900e-003**		**0.1050**	**0.1050**		**0.0966**	**0.0966**		**502.6929**	**502.6929**	**0.1626**		**506.7575**

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/day										lb/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	0.0140	8.3800e-003	0.0895	2.9000e-004	0.0335	2.0000e-004	0.0337	8.8900e-003	1.8000e-004	9.0800e-003		28.6558	28.6558	6.6000e-004		28.6724
Total	**0.0140**	**8.3800e-003**	**0.0895**	**2.9000e-004**	**0.0335**	**2.0000e-004**	**0.0337**	**8.8900e-003**	**1.8000e-004**	**9.0800e-003**		**28.6558**	**28.6558**	**6.6000e-004**		**28.6724**

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/day					
Off-Road	0.2303	2.1642	3.2882	5.1900e-003		0.1050	0.1050		0.0966	0.0966	0.0000	502.6929	502.6929	0.1626		506.7575
Total	**0.2303**	**2.1642**	**3.2882**	**5.1900e-003**		**0.1050**	**0.1050**		**0.0966**	**0.0966**	**0.0000**	**502.6929**	**502.6929**	**0.1626**		**506.7575**

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/day										lb/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	0.0140	8.3800e-003	0.0895	2.9000e-004	0.0309	2.0000e-004	0.0311	8.2500e-003	1.8000e-004	8.4300e-003		28.6558	28.6558	6.6000e-004		28.6724
Total	**0.0140**	**8.3800e-003**	**0.0895**	**2.9000e-004**	**0.0309**	**2.0000e-004**	**0.0311**	**8.2500e-003**	**1.8000e-004**	**8.4300e-003**		**28.6558**	**28.6558**	**6.6000e-004**		**28.6724**

3.7 Utilities Trenching, Athletic Fields Installation, and Building Construction 2024

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/day										lb/day					
Off-Road	2.2065	20.5957	21.2477	0.0342		1.1043	1.1043		1.0353	1.0353		3,255.4436	3,255.4436	0.8431		3,276.5206
Total	**2.2065**	**20.5957**	**21.2477**	**0.0342**		**1.1043**	**1.1043**		**1.0353**	**1.0353**		**3,255.4436**	**3,255.4436**	**0.8431**		**3,276.5206**

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/day										lb/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	0.6124	22.6604	4.8242	0.0616	1.5816	0.0448	1.6264	0.4554	0.0428	0.4982		6,495.4385	6,495.4385	0.5380		6,508.8888
Worker	2.9451	1.7681	18.8906	0.0607	7.0755	0.0417	7.1171	1.8764	0.0384	1.9148		6,046.3752	6,046.3752	0.1397		6,049.8682
Total	**3.5575**	**24.4284**	**23.7148**	**0.1223**	**8.6571**	**0.0865**	**8.7436**	**2.3318**	**0.0812**	**2.4130**		**12,541.8137**	**12,541.8137**	**0.6777**		**12,558.7569**

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/day					
Off-Road	2.2065	20.5957	21.2477	0.0342		1.1043	1.1043		1.0353	1.0353	0.0000	3,255.4436	3,255.4436	0.8431		3,276.5206
Total	**2.2065**	**20.5957**	**21.2477**	**0.0342**		**1.1043**	**1.1043**		**1.0353**	**1.0353**	**0.0000**	**3,255.4436**	**3,255.4436**	**0.8431**		**3,276.5206**

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/day										lb/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	0.6124	22.6604	4.8242	0.0616	1.4802	0.0448	1.5250	0.4305	0.0428	0.4733		6,495.4385	6,495.4385	0.5380		6,508.8888
Worker	2.9451	1.7681	18.8906	0.0607	6.5218	0.0417	6.5635	1.7406	0.0384	1.7790		6,046.3752	6,046.3752	0.1397		6,049.8682
Total	**3.5575**	**24.4284**	**23.7148**	**0.1223**	**8.0021**	**0.0865**	**8.0886**	**2.1711**	**0.0812**	**2.2523**		**12,541.8137**	**12,541.8137**	**0.6777**		**12,558.7569**

3.8 Athletic Fields Installation and 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	lb/day										lb/day					
Off-Road	1.9764	18.4356	17.9651	0.0290		0.9995	0.9995		0.9388	0.9388		2,753.5623	2,753.5623	0.6808		2,770.5813
Total	**1.9764**	**18.4356**	**17.9651**	**0.0290**		**0.9995**	**0.9995**		**0.9388**	**0.9388**		**2,753.5623**	**2,753.5623**	**0.6808**		**2,770.5813**

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/day										lb/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	0.6124	22.6604	4.8242	0.0616	1.5816	0.0448	1.6264	0.4554	0.0428	0.4982		6,495.4385	6,495.4385	0.5380		6,508.8888

Worker	2.9451	1.7681	18.8906	0.0607	7.0755	0.0417	7.1171	1.8764	0.0384	1.9148		6,046.3752	6,046.3752	0.1397		6,049.8682
Total	**3.5575**	**24.4284**	**23.7148**	**0.1223**	**8.6571**	**0.0865**	**8.7436**	**2.3318**	**0.0812**	**2.4130**		**12,541.8137**	**12,541.8137**	**0.6777**		**12,558.7569**

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/day					
Off-Road	1.9764	18.4356	17.9651	0.0290		0.9995	0.9995		0.9388	0.9388	0.0000	2,753.5623	2,753.5623	0.6808		2,770.5813
Total	**1.9764**	**18.4356**	**17.9651**	**0.0290**		**0.9995**	**0.9995**		**0.9388**	**0.9388**	**0.0000**	**2,753.5623**	**2,753.5623**	**0.6808**		**2,770.5813**

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/day										lb/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	0.6124	22.6604	4.8242	0.0616	1.4802	0.0448	1.5250	0.4305	0.0428	0.4733		6,495.4385	6,495.4385	0.5380		6,508.8888
Worker	2.9451	1.7681	18.8906	0.0607	6.5218	0.0417	6.5635	1.7406	0.0384	1.7790		6,046.3752	6,046.3752	0.1397		6,049.8682
Total	**3.5575**	**24.4284**	**23.7148**	**0.1223**	**8.0021**	**0.0865**	**8.0886**	**2.1711**	**0.0812**	**2.2523**		**12,541.8137**	**12,541.8137**	**0.6777**		**12,558.7569**

3.9 Building Construction, Paving, and Finishing and

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/day										lb/day					
Off-Road	3.3844	32.4851	34.4987	0.0549		1.7402	1.7402		1.6204	1.6204		5,259.0829	5,259.0829	1.4911		5,296.3604
Paving	0.2926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.6770**	**32.4851**	**34.4987**	**0.0549**		**1.7402**	**1.7402**		**1.6204**	**1.6204**		**5,259.0829**	**5,259.0829**	**1.4911**		**5,296.3604**

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/day										lb/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	0.6124	22.6604	4.8242	0.0616	1.5816	0.0448	1.6264	0.4554	0.0428	0.4982		6,495.4385	6,495.4385	0.5380		6,508.8888
Worker	3.1312	1.8798	20.0843	0.0645	7.5226	0.0443	7.5669	1.9950	0.0408	2.0358		6,428.4526	6,428.4526	0.1486		6,432.1663
Total	**3.7436**	**24.5402**	**24.9085**	**0.1261**	**9.1042**	**0.0891**	**9.1933**	**2.4504**	**0.0837**	**2.5340**		**12,923.8911**	**12,923.8911**	**0.6866**		**12,941.0551**

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/day					
Off-Road	3.3844	32.4851	34.4987	0.0549		1.7402	1.7402		1.6204	1.6204	0.0000	5,259.0829	5,259.0829	1.4911		5,296.3604

Paving	0.2926					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.6770**	**32.4851**	**34.4987**	**0.0549**		**1.7402**	**1.7402**		**1.6204**	**1.6204**	**0.0000**	**5,259.0829**	**5,259.0829**	**1.4911**		**5,296.3604**

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/day										lb/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	0.6124	22.6604	4.8242	0.0616	1.4802	0.0448	1.5250	0.4305	0.0428	0.4733		6,495.4385	6,495.4385	0.5380		6,508.8888
Worker	3.1312	1.8798	20.0843	0.0645	6.9340	0.0443	6.9783	1.8505	0.0408	1.8914		6,428.4526	6,428.4526	0.1486		6,432.1663
Total	**3.7436**	**24.5402**	**24.9085**	**0.1261**	**8.4142**	**0.0891**	**8.5033**	**2.2810**	**0.0837**	**2.3647**		**12,923.8911**	**12,923.8911**	**0.6866**		**12,941.0551**

3.10 Architectural Coating - 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/day										lb/day					
Archit. Coating	14.2201					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	**14.4390**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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/day										lb/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	0.5909	0.3547	3.7901	0.0122	1.4196	8.3700e-003	1.4279	0.3765	7.7000e-003	0.3842		1,213.0958	1,213.0958	0.0280		1,213.7966
Total	**0.5909**	**0.3547**	**3.7901**	**0.0122**	**1.4196**	**8.3700e-003**	**1.4279**	**0.3765**	**7.7000e-003**	**0.3842**		**1,213.0958**	**1,213.0958**	**0.0280**		**1,213.7966**

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/day					
Archit. Coating	14.2201					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	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**14.4390**	**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**

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/day										lb/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	0.5909	0.3547	3.7901	0.0122	1.3085	8.3700e-003	1.3169	0.3492	7.7000e-003	0.3569		1,213.0958	1,213.0958	0.0280		1,213.7966
Total	**0.5909**	**0.3547**	**3.7901**	**0.0122**	**1.3085**	**8.3700e-003**	**1.3169**	**0.3492**	**7.7000e-003**	**0.3569**		**1,213.0958**	**1,213.0958**	**0.0280**		**1,213.7966**

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

11.0 Vegetation

Beaumont High School Construction Run - Riverside-South Coast County, Annual

Beaumont High School Construction Run

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	50.00	1000sqft	0.57	50,000.00	0
Other Asphalt Surfaces	163.35	1000sqft	3.75	163,350.00	0
Other Non-Asphalt Surfaces	1,023.11	1000sqft	23.49	1,023,110.00	0
Parking Lot	269.58	1000sqft	6.19	269,580.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	531.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - 2 story classroom building

Construction Phase - based on data provided by district

Off-road Equipment - no additional equipment required for Demo Haul

Off-road Equipment - overlapping construction equipment

Off-road Equipment -

Off-road Equipment - no additional equipment

Off-road Equipment - assuming 1 excavator

Off-road Equipment - overlapping equipment

Off-road Equipment - overlapping equipment

Off-road Equipment - overlapping construction equipment

Off-road Equipment -

Grading -

Demolition -

Trips and VMT - assuming 4vt/water truck/day

Architectural Coating - based on data provided by district, assuming all surfaces coated

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	25,000.00	16,750.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	75,000.00	60,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	150.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	500.00	1.00
tblConstructionPhase	NumDays	500.00	19.00
tblConstructionPhase	NumDays	35.00	89.00
tblConstructionPhase	NumDays	35.00	66.00
tblConstructionPhase	PhaseEndDate	10/12/2020	10/31/2020
tblGrading	MaterialExported	0.00	39,300.00
tblGrading	MaterialImported	0.00	27,600.00
tblLandUse	LotAcreage	1.15	0.57
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.37	0.37

tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.29	0.29
tblOffRoadEquipment	LoadFactor	0.20	0.20
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	HaulingTripNumber	450.00	456.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	247.00
tblTripsAndVMT	WorkerTripNumber	40.00	673.00

2.0 Emissions Summary

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	tons/yr										MT/yr					
2020	0.1768	2.6632	1.1349	5.2100e-003	0.3652	0.0790	0.4442	0.1435	0.0732	0.2167	0.0000	486.2898	486.2898	0.0682	0.0000	487.9956
2021	0.8682	3.0763	3.3275	0.0103	0.5302	0.0968	0.6269	0.1427	0.0904	0.2332	0.0000	939.1456	939.1456	0.1020	0.0000	941.6958
Maximum	**0.8682**	**3.0763**	**3.3275**	**0.0103**	**0.5302**	**0.0968**	**0.6269**	**0.1435**	**0.0904**	**0.2332**	**0.0000**	**939.1456**	**939.1456**	**0.1020**	**0.0000**	**941.6958**

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	tons/yr										MT/yr					
2020	0.1768	2.6632	1.1349	5.2100e-003	0.1985	0.0790	0.2775	0.0731	0.0732	0.1463	0.0000	486.2896	486.2896	0.0682	0.0000	487.9954
2021	0.8682	3.0763	3.3275	0.0103	0.4900	0.0968	0.5868	0.1329	0.0904	0.2233	0.0000	939.1453	939.1453	0.1020	0.0000	941.6955
Maximum	**0.8682**	**3.0763**	**3.3275**	**0.0103**	**0.4900**	**0.0968**	**0.5868**	**0.1329**	**0.0904**	**0.2233**	**0.0000**	**939.1453**	**939.1453**	**0.1020**	**0.0000**	**941.6955**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**23.10**	**0.00**	**19.31**	**28.03**	**0.00**	**17.84**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2020	11-30-2020	2.7653	2.7653
2	12-1-2020	2-28-2021	1.1373	1.1373
3	3-1-2021	5-31-2021	2.4894	2.4894
4	6-1-2021	8-31-2021	0.9025	0.9025

		Highest	2.7653	2.7653

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Asphalt Demolition	Demolition	9/1/2020	10/31/2020	5	44	
2	Demolition Debris Haul	Demolition	9/1/2020	10/31/2020	5	44	
3	Site Preparation and Grading	Grading	11/1/2020	12/1/2020	5	22	
4	Grading Soil Haul	Grading	11/1/2020	12/1/2020	5	22	
5	Utilities Trenching	Trenching	1/1/2021	1/31/2021	5	21	
6	Utilities Trenching, Athletic Fields Installation, and Building	Building Construction	2/1/2021	2/1/2021	5	1	
7	Athletic Fields Installation and Building Construction	Building Construction	2/2/2021	2/28/2021	5	19	
8	Building Construction, Paving, and Finishing and Landscaping	Paving	3/1/2021	7/1/2021	5	89	
9	Architectural Coating	Architectural Coating	4/1/2021	7/1/2021	5	66	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 33.43

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 60,000; Non-Residential Outdoor: 16,750; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Asphalt Demolition	Excavators	3	8.00	158	0.38
Asphalt Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition Debris Haul	Concrete/Industrial Saws	0	8.00	81	0.73
Utilities Trenching, Athletic Fields Installation, and Building Construction	Cranes	1	7.00	231	0.29
Athletic Fields Installation and Building Construction	Cranes	1	7.00	231	0.29
Demolition Debris Haul	Excavators	0	8.00	158	0.38
Site Preparation and Grading	Excavators	2	8.00	158	0.38
Grading Soil Haul	Excavators	0	8.00	158	0.38

Asphalt Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Utilities Trenching, Athletic Fields Installation, and Building Construction	Forklifts	3	8.00	89	0.20
Athletic Fields Installation and Building Construction	Forklifts	3	8.00	89	0.20
Utilities Trenching, Athletic Fields Installation, and Building Construction	Generator Sets	1	8.00	84	0.74
Athletic Fields Installation and Building Construction	Generator Sets	1	8.00	84	0.74
Site Preparation and Grading	Graders	1	8.00	187	0.41
Grading Soil Haul	Graders	0	8.00	187	0.41
Building Construction, Paving, and Finishing and Landscaping	Pavers	2	8.00	130	0.42
Building Construction, Paving, and Finishing and Landscaping	Paving Equipment	2	8.00	132	0.36
Building Construction, Paving, and Finishing and Landscaping	Rollers	2	8.00	80	0.38
Demolition Debris Haul	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation and Grading	Rubber Tired Dozers	3	8.00	247	0.40
Grading Soil Haul	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation and Grading	Scrapers	2	8.00	367	0.48
Grading Soil Haul	Scrapers	0	8.00	367	0.48
Utilities Trenching, Athletic Fields Installation, and Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Athletic Fields Installation and Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Site Preparation and Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading Soil Haul	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Utilities Trenching, Athletic Fields Installation, and Building Construction	Welders	1	8.00	46	0.45
Athletic Fields Installation and Building Construction	Welders	1	8.00	46	0.45
Utilities Trenching	Excavators	1	8.00	158	0.38
Utilities Trenching, Athletic Fields Installation, and Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Utilities Trenching, Athletic Fields Installation, and Building Construction	Excavators	1	8.00	158	0.38
Athletic Fields Installation and Building Construction	Skid Steer Loaders	1	8.00	65	0.37
Building Construction, Paving, and Finishing and Landscaping	Cranes	1	7.00	231	0.29
Building Construction, Paving, and Finishing and Landscaping	Forklifts	3	8.00	89	0.20
Building Construction, Paving, and Finishing and Landscaping	Generator Sets	1	8.00	84	0.74
Building Construction, Paving, and Finishing and Landscaping	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction, Paving, and Finishing and Landscaping	Welders	1	8.00	46	0.45
Building Construction, Paving, and Finishing and Landscaping	Excavators	1	8.00	158	0.38

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
Asphalt Demolition	6	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching, Athletic Fields	11	633.00	247.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Athletic Fields Installation and	10	633.00	247.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition Debris Haul	0	0.00	0.00	456.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation and Grading	12	30.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	127.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading Soil Haul	0	0.00	0.00	8,363.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction, Paving, and Finishing	16	673.00	247.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utilities Trenching	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Asphalt Demolition - 2020

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	tons/yr										MT/yr					
Off-Road	0.0729	0.7304	0.4786	8.5000e-004		0.0365	0.0365		0.0339	0.0339	0.0000	74.7969	74.7969	0.0211	0.0000	75.3248
Total	**0.0729**	**0.7304**	**0.4786**	**8.5000e-004**		**0.0365**	**0.0365**		**0.0339**	**0.0339**	**0.0000**	**74.7969**	**74.7969**	**0.0211**	**0.0000**	**75.3248**

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	tons/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	2.5000e-004	9.1500e-003	1.7900e-003	2.0000e-005	5.6000e-004	5.0000e-005	6.1000e-004	1.6000e-004	5.0000e-005	2.1000e-004	0.0000	2.1638	2.1638	1.7000e-004	0.0000	2.1681
Worker	1.5200e-003	1.0600e-003	0.0114	3.0000e-005	3.6300e-003	2.0000e-005	3.6500e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.0347	3.0347	8.0000e-005	0.0000	3.0366
Total	**1.7700e-003**	**0.0102**	**0.0131**	**5.0000e-005**	**4.1900e-003**	**7.0000e-005**	**4.2600e-003**	**1.1200e-003**	**7.0000e-005**	**1.1900e-003**	**0.0000**	**5.1985**	**5.1985**	**2.5000e-004**	**0.0000**	**5.2047**

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	tons/yr										MT/yr					
Off-Road	0.0729	0.7304	0.4786	8.5000e-004		0.0365	0.0365		0.0339	0.0339	0.0000	74.7969	74.7969	0.0211	0.0000	75.3247
Total	**0.0729**	**0.7304**	**0.4786**	**8.5000e-004**		**0.0365**	**0.0365**		**0.0339**	**0.0339**	**0.0000**	**74.7969**	**74.7969**	**0.0211**	**0.0000**	**75.3247**

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	tons/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	2.5000e-004	9.1500e-003	1.7900e-003	2.0000e-005	5.2000e-004	5.0000e-005	5.7000e-004	1.5000e-004	5.0000e-005	2.0000e-004	0.0000	2.1638	2.1638	1.7000e-004	0.0000	2.1681
Worker	1.5200e-003	1.0600e-003	0.0114	3.0000e-005	3.3400e-003	2.0000e-005	3.3700e-003	8.9000e-004	2.0000e-005	9.1000e-004	0.0000	3.0347	3.0347	8.0000e-005	0.0000	3.0366
Total	**1.7700e-003**	**0.0102**	**0.0131**	**5.0000e-005**	**3.8600e-003**	**7.0000e-005**	**3.9400e-003**	**1.0400e-003**	**7.0000e-005**	**1.1100e-003**	**0.0000**	**5.1985**	**5.1985**	**2.5000e-004**	**0.0000**	**5.2047**

3.3 Demolition Debris Haul - 2020

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	tons/yr										MT/yr					
Fugitive Dust					0.0490	0.0000	0.0490	7.4200e-003	0.0000	7.4200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0490**	**0.0000**	**0.0490**	**7.4200e-003**	**0.0000**	**7.4200e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	tons/yr										MT/yr					
Hauling	1.2000e-003	0.0553	7.1500e-003	1.7000e-004	3.9300e-003	1.7000e-004	4.1000e-003	1.0800e-003	1.7000e-004	1.2400e-003	0.0000	16.5321	16.5321	1.0400e-003	0.0000	16.5581
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	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

Total	**1.2000e-003**	**0.0553**	**7.1500e-003**	**1.7000e-004**	**3.9300e-003**	**1.7000e-004**	**4.1000e-003**	**1.0800e-003**	**1.7000e-004**	**1.2400e-003**	**0.0000**	**16.5321**	**16.5321**	**1.0400e-003**	**0.0000**	**16.5581**

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	tons/yr										MT/yr					
Fugitive Dust					0.0209	0.0000	0.0209	3.1700e-003	0.0000	3.1700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0209**	**0.0000**	**0.0209**	**3.1700e-003**	**0.0000**	**3.1700e-003**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	tons/yr										MT/yr					
Hauling	1.2000e-003	0.0553	7.1500e-003	1.7000e-004	3.6600e-003	1.7000e-004	3.8400e-003	1.0100e-003	1.7000e-004	1.1800e-003	0.0000	16.5321	16.5321	1.0400e-003	0.0000	16.5581
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	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
Total	**1.2000e-003**	**0.0553**	**7.1500e-003**	**1.7000e-004**	**3.6600e-003**	**1.7000e-004**	**3.8400e-003**	**1.0100e-003**	**1.7000e-004**	**1.1800e-003**	**0.0000**	**16.5321**	**16.5321**	**1.0400e-003**	**0.0000**	**16.5581**

3.4 Site Preparation and Grading - 2020

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	tons/yr										MT/yr					
Fugitive Dust					0.2279	0.0000	0.2279	0.1124	0.0000	0.1124	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0773	0.8478	0.4926	9.4000e-004		0.0391	0.0391		0.0359	0.0359	0.0000	82.4476	82.4476	0.0267	0.0000	83.1143
Total	**0.0773**	**0.8478**	**0.4926**	**9.4000e-004**	**0.2279**	**0.0391**	**0.2669**	**0.1124**	**0.0359**	**0.1483**	**0.0000**	**82.4476**	**82.4476**	**0.0267**	**0.0000**	**83.1143**

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	tons/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	1.3000e-004	4.5800e-003	9.0000e-004	1.0000e-005	2.8000e-004	3.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0819	1.0819	9.0000e-005	0.0000	1.0841
Worker	1.5200e-003	1.0600e-003	0.0114	3.0000e-005	3.6300e-003	2.0000e-005	3.6500e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.0347	3.0347	8.0000e-005	0.0000	3.0366
Total	**1.6500e-003**	**5.6400e-003**	**0.0123**	**4.0000e-005**	**3.9100e-003**	**5.0000e-005**	**3.9500e-003**	**1.0400e-003**	**4.0000e-005**	**1.0800e-003**	**0.0000**	**4.1166**	**4.1166**	**1.7000e-004**	**0.0000**	**4.1206**

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	tons/yr										MT/yr					
Fugitive Dust					0.0974	0.0000	0.0974	0.0481	0.0000	0.0481	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0773	0.8478	0.4926	9.4000e-004		0.0391	0.0391		0.0359	0.0359	0.0000	82.4475	82.4475	0.0267	0.0000	83.1142

Total	**0.0773**	**0.8478**	**0.4926**	**9.4000e-004**	**0.0974**	**0.0391**	**0.1365**	**0.0481**	**0.0359**	**0.0840**	**0.0000**	**82.4475**	**82.4475**	**0.0267**	**0.0000**	**83.1142**

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	tons/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	1.3000e-004	4.5800e-003	9.0000e-004	1.0000e-005	2.6000e-004	3.0000e-005	2.9000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0819	1.0819	9.0000e-005	0.0000	1.0841
Worker	1.5200e-003	1.0600e-003	0.0114	3.0000e-005	3.3400e-003	2.0000e-005	3.3700e-003	8.9000e-004	2.0000e-005	9.1000e-004	0.0000	3.0347	3.0347	8.0000e-005	0.0000	3.0366
Total	**1.6500e-003**	**5.6400e-003**	**0.0123**	**4.0000e-005**	**3.6000e-003**	**5.0000e-005**	**3.6600e-003**	**9.7000e-004**	**4.0000e-005**	**1.0100e-003**	**0.0000**	**4.1166**	**4.1166**	**1.7000e-004**	**0.0000**	**4.1206**

3.5 Grading Soil Haul - 2020

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	tons/yr										MT/yr					
Fugitive Dust					4.2400e-003	0.0000	4.2400e-003	6.4000e-004	0.0000	6.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**4.2400e-003**	**0.0000**	**4.2400e-003**	**6.4000e-004**	**0.0000**	**6.4000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	tons/yr										MT/yr					
Hauling	0.0220	1.0139	0.1312	3.1500e-003	0.0721	3.1700e-003	0.0753	0.0198	3.0400e-003	0.0228	0.0000	303.1981	303.1981	0.0190	0.0000	303.6731
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	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
Total	**0.0220**	**1.0139**	**0.1312**	**3.1500e-003**	**0.0721**	**3.1700e-003**	**0.0753**	**0.0198**	**3.0400e-003**	**0.0228**	**0.0000**	**303.1981**	**303.1981**	**0.0190**	**0.0000**	**303.6731**

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	tons/yr										MT/yr					
Fugitive Dust					1.8100e-003	0.0000	1.8100e-003	2.7000e-004	0.0000	2.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**1.8100e-003**	**0.0000**	**1.8100e-003**	**2.7000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	tons/yr										MT/yr					
Hauling	0.0220	1.0139	0.1312	3.1500e-003	0.0672	3.1700e-003	0.0704	0.0186	3.0400e-003	0.0216	0.0000	303.1981	303.1981	0.0190	0.0000	303.6731
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	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
Total	**0.0220**	**1.0139**	**0.1312**	**3.1500e-003**	**0.0672**	**3.1700e-003**	**0.0704**	**0.0186**	**3.0400e-003**	**0.0216**	**0.0000**	**303.1981**	**303.1981**	**0.0190**	**0.0000**	**303.6731**

3.6 Utilities Trenching - 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	tons/yr										MT/yr					
Off-Road	2.4200e-003	0.0227	0.0345	5.0000e-005		1.1000e-003	1.1000e-003		1.0100e-003	1.0100e-003	0.0000	4.7884	4.7884	1.5500e-003	0.0000	4.8271
Total	**2.4200e-003**	**0.0227**	**0.0345**	**5.0000e-005**		**1.1000e-003**	**1.1000e-003**		**1.0100e-003**	**1.0100e-003**	**0.0000**	**4.7884**	**4.7884**	**1.5500e-003**	**0.0000**	**4.8271**

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	tons/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	1.4000e-004	9.0000e-005	9.9000e-004	0.0000	3.5000e-004	0.0000	3.5000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2800	0.2800	1.0000e-005	0.0000	0.2802
Total	**1.4000e-004**	**9.0000e-005**	**9.9000e-004**	**0.0000**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2800**	**0.2800**	**1.0000e-005**	**0.0000**	**0.2802**

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	tons/yr										MT/yr					
Off-Road	2.4200e-003	0.0227	0.0345	5.0000e-005		1.1000e-003	1.1000e-003		1.0100e-003	1.0100e-003	0.0000	4.7884	4.7884	1.5500e-003	0.0000	4.8271
Total	**2.4200e-003**	**0.0227**	**0.0345**	**5.0000e-005**		**1.1000e-003**	**1.1000e-003**		**1.0100e-003**	**1.0100e-003**	**0.0000**	**4.7884**	**4.7884**	**1.5500e-003**	**0.0000**	**4.8271**

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	tons/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	1.4000e-004	9.0000e-005	9.9000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2800	0.2800	1.0000e-005	0.0000	0.2802
Total	**1.4000e-004**	**9.0000e-005**	**9.9000e-004**	**0.0000**	**3.2000e-004**	**0.0000**	**3.2000e-004**	**9.0000e-005**	**0.0000**	**9.0000e-005**	**0.0000**	**0.2800**	**0.2800**	**1.0000e-005**	**0.0000**	**0.2802**

3.7 Utilities Trenching, Athletic Fields Installation, and Building

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	tons/yr										MT/yr					
Off-Road	1.1000e-003	0.0103	0.0106	2.0000e-005		5.5000e-004	5.5000e-004		5.2000e-004	5.2000e-004	0.0000	1.4766	1.4766	3.8000e-004	0.0000	1.4862

Total	**1.1000e-003**	**0.0103**	**0.0106**	**2.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**1.4766**	**1.4766**	**3.8000e-004**	**0.0000**	**1.4862**

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	tons/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	2.9000e-004	0.0115	2.2200e-003	3.0000e-005	7.8000e-004	2.0000e-005	8.0000e-004	2.3000e-004	2.0000e-005	2.5000e-004	0.0000	3.0131	3.0131	2.3000e-004	0.0000	3.0188
Worker	1.3600e-003	9.1000e-004	9.9600e-003	3.0000e-005	3.4800e-003	2.0000e-005	3.5000e-003	9.2000e-004	2.0000e-005	9.4000e-004	0.0000	2.8132	2.8132	7.0000e-005	0.0000	2.8148
Total	**1.6500e-003**	**0.0124**	**0.0122**	**6.0000e-005**	**4.2600e-003**	**4.0000e-005**	**4.3000e-003**	**1.1500e-003**	**4.0000e-005**	**1.1900e-003**	**0.0000**	**5.8263**	**5.8263**	**3.0000e-004**	**0.0000**	**5.8337**

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	tons/yr										MT/yr					
Off-Road	1.1000e-003	0.0103	0.0106	2.0000e-005		5.5000e-004	5.5000e-004		5.2000e-004	5.2000e-004	0.0000	1.4766	1.4766	3.8000e-004	0.0000	1.4862
Total	**1.1000e-003**	**0.0103**	**0.0106**	**2.0000e-005**		**5.5000e-004**	**5.5000e-004**		**5.2000e-004**	**5.2000e-004**	**0.0000**	**1.4766**	**1.4766**	**3.8000e-004**	**0.0000**	**1.4862**

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	tons/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	2.9000e-004	0.0115	2.2200e-003	3.0000e-005	7.3000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	3.0131	3.0131	2.3000e-004	0.0000	3.0188
Worker	1.3600e-003	9.1000e-004	9.9600e-003	3.0000e-005	3.2100e-003	2.0000e-005	3.2300e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.8132	2.8132	7.0000e-005	0.0000	2.8148
Total	**1.6500e-003**	**0.0124**	**0.0122**	**6.0000e-005**	**3.9400e-003**	**4.0000e-005**	**3.9800e-003**	**1.0700e-003**	**4.0000e-005**	**1.1100e-003**	**0.0000**	**5.8263**	**5.8263**	**3.0000e-004**	**0.0000**	**5.8337**

3.8 Athletic Fields Installation and 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	tons/yr										MT/yr					
Off-Road	0.0188	0.1751	0.1707	2.8000e-004		9.4900e-003	9.4900e-003		8.9200e-003	8.9200e-003	0.0000	23.7309	23.7309	5.8700e-003	0.0000	23.8776
Total	**0.0188**	**0.1751**	**0.1707**	**2.8000e-004**		**9.4900e-003**	**9.4900e-003**		**8.9200e-003**	**8.9200e-003**	**0.0000**	**23.7309**	**23.7309**	**5.8700e-003**	**0.0000**	**23.8776**

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	tons/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	5.6000e-003	0.2188	0.0421	6.0000e-004	0.0148	4.2000e-004	0.0152	4.2800e-003	4.0000e-004	4.6800e-003	0.0000	57.2483	57.2483	4.3700e-003	0.0000	57.3575
Worker	0.0258	0.0174	0.1893	5.9000e-004	0.0661	4.0000e-004	0.0665	0.0176	3.6000e-004	0.0179	0.0000	53.4508	53.4508	1.2500e-003	0.0000	53.4819
Total	**0.0314**	**0.2362**	**0.2314**	**1.1900e-003**	**0.0809**	**8.2000e-004**	**0.0817**	**0.0218**	**7.6000e-004**	**0.0226**	**0.0000**	**110.6991**	**110.6991**	**5.6200e-003**	**0.0000**	**110.8394**

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	tons/yr										MT/yr					
Off-Road	0.0188	0.1751	0.1707	2.8000e-004		9.4900e-003	9.4900e-003		8.9200e-003	8.9200e-003	0.0000	23.7309	23.7309	5.8700e-003	0.0000	23.8776
Total	**0.0188**	**0.1751**	**0.1707**	**2.8000e-004**		**9.4900e-003**	**9.4900e-003**		**8.9200e-003**	**8.9200e-003**	**0.0000**	**23.7309**	**23.7309**	**5.8700e-003**	**0.0000**	**23.8776**

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	tons/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	5.6000e-003	0.2188	0.0421	6.0000e-004	0.0139	4.2000e-004	0.0143	4.0400e-003	4.0000e-004	4.4400e-003	0.0000	57.2483	57.2483	4.3700e-003	0.0000	57.3575
Worker	0.0258	0.0174	0.1893	5.9000e-004	0.0609	4.0000e-004	0.0613	0.0163	3.6000e-004	0.0167	0.0000	53.4508	53.4508	1.2500e-003	0.0000	53.4819
Total	**0.0314**	**0.2362**	**0.2314**	**1.1900e-003**	**0.0748**	**8.2000e-004**	**0.0756**	**0.0203**	**7.6000e-004**	**0.0211**	**0.0000**	**110.6991**	**110.6991**	**5.6200e-003**	**0.0000**	**110.8394**

3.9 Building Construction, Paving, and Finishing and

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	tons/yr										MT/yr					
Off-Road	0.1506	1.4456	1.5352	2.4400e-003		0.0774	0.0774		0.0721	0.0721	0.0000	212.3077	212.3077	0.0602	0.0000	213.8126
Paving	0.0130					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1636**	**1.4456**	**1.5352**	**2.4400e-003**		**0.0774**	**0.0774**		**0.0721**	**0.0721**	**0.0000**	**212.3077**	**212.3077**	**0.0602**	**0.0000**	**213.8126**

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	tons/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	0.0262	1.0249	0.1972	2.8000e-003	0.0694	1.9600e-003	0.0714	0.0200	1.8700e-003	0.0219	0.0000	268.1631	268.1631	0.0205	0.0000	268.6746
Worker	0.1284	0.0865	0.9428	2.9400e-003	0.3292	1.9700e-003	0.3311	0.0874	1.8200e-003	0.0892	0.0000	266.1962	266.1962	6.2000e-003	0.0000	266.3512
Total	**0.1546**	**1.1114**	**1.1400**	**5.7400e-003**	**0.3986**	**3.9300e-003**	**0.4025**	**0.1074**	**3.6900e-003**	**0.1111**	**0.0000**	**534.3593**	**534.3593**	**0.0267**	**0.0000**	**535.0257**

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	tons/yr										MT/yr					

Off-Road	0.1506	1.4456	1.5352	2.4400e-003		0.0774	0.0774		0.0721	0.0721	0.0000	212.3075	212.3075	0.0602	0.0000	213.8123
Paving	0.0130					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1636**	**1.4456**	**1.5352**	**2.4400e-003**		**0.0774**	**0.0774**		**0.0721**	**0.0721**	**0.0000**	**212.3075**	**212.3075**	**0.0602**	**0.0000**	**213.8123**

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	tons/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	0.0262	1.0249	0.1972	2.8000e-003	0.0650	1.9600e-003	0.0670	0.0189	1.8700e-003	0.0208	0.0000	268.1631	268.1631	0.0205	0.0000	268.6746
Worker	0.1284	0.0865	0.9428	2.9400e-003	0.3035	1.9700e-003	0.3055	0.0811	1.8200e-003	0.0829	0.0000	266.1962	266.1962	6.2000e-003	0.0000	266.3512
Total	**0.1546**	**1.1114**	**1.1400**	**5.7400e-003**	**0.3685**	**3.9300e-003**	**0.3724**	**0.1000**	**3.6900e-003**	**0.1037**	**0.0000**	**534.3593**	**534.3593**	**0.0267**	**0.0000**	**535.0257**

3.10 Architectural Coating - 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	tons/yr										MT/yr					
Archit. Coating	0.4693					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2200e-003	0.0504	0.0600	1.0000e-004		3.1100e-003	3.1100e-003		3.1100e-003	3.1100e-003	0.0000	8.4257	8.4257	5.8000e-004	0.0000	8.4402
Total	**0.4765**	**0.0504**	**0.0600**	**1.0000e-004**		**3.1100e-003**	**3.1100e-003**		**3.1100e-003**	**3.1100e-003**	**0.0000**	**8.4257**	**8.4257**	**5.8000e-004**	**0.0000**	**8.4402**

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	tons/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	0.0180	0.0121	0.1319	4.1000e-004	0.0461	2.8000e-004	0.0463	0.0122	2.5000e-004	0.0125	0.0000	37.2516	37.2516	8.7000e-004	0.0000	37.2732
Total	**0.0180**	**0.0121**	**0.1319**	**4.1000e-004**	**0.0461**	**2.8000e-004**	**0.0463**	**0.0122**	**2.5000e-004**	**0.0125**	**0.0000**	**37.2516**	**37.2516**	**8.7000e-004**	**0.0000**	**37.2732**

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	tons/yr										MT/yr					
Archit. Coating	0.4693					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.2200e-003	0.0504	0.0600	1.0000e-004		3.1100e-003	3.1100e-003		3.1100e-003	3.1100e-003	0.0000	8.4257	8.4257	5.8000e-004	0.0000	8.4402
Total	**0.4765**	**0.0504**	**0.0600**	**1.0000e-004**		**3.1100e-003**	**3.1100e-003**		**3.1100e-003**	**3.1100e-003**	**0.0000**	**8.4257**	**8.4257**	**5.8000e-004**	**0.0000**	**8.4402**

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	tons/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	0.0180	0.0121	0.1319	4.1000e-004	0.0425	2.8000e-004	0.0428	0.0114	2.5000e-004	0.0116	0.0000	37.2516	37.2516	8.7000e-004	0.0000	37.2732
Total	**0.0180**	**0.0121**	**0.1319**	**4.1000e-004**	**0.0425**	**2.8000e-004**	**0.0428**	**0.0114**	**2.5000e-004**	**0.0116**	**0.0000**	**37.2516**	**37.2516**	**8.7000e-004**	**0.0000**	**37.2732**

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

11.0 Vegetation

CalEEMod Mitigated Construction Model

Beaumont High School Mitigated Construction Run

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	50.00	1000sqft	0.57	50,000.00	0
Other Asphalt Surfaces	163.35	1000sqft	3.75	163,350.00	0
Other Non-Asphalt Surfaces	1,023.11	1000sqft	23.49	1,023,110.00	0
Parking Lot	269.58	1000sqft	6.19	269,580.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	531.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - 2 story classroom building

Construction Phase - based on data provided by district, MM: extend grading soil haul

Off-road Equipment -

Off-road Equipment - overlapping construction equipment

Trips and VMT - assuming 4vt/water truck/day

Demolition -

Grading -

Architectural Coating - based on data provided by district, assuming all surfaces coated

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	45.00	44.00
tblGrading	MaterialExported	0.00	39,300.00
tblGrading	MaterialImported	0.00	27,600.00
tblLandUse	LotAcreage	1.15	0.57
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	VendorTripNumber	0.00	4.00

2.0 Emissions Summary

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/day					
2020	8.1694	122.5796	51.6189	0.2344	24.5960	3.6979	28.2939	11.2539	3.4074	14.6613	0.0000	24,055.8076	24,055.8076	3.6038	0.0000	24,145.9027
Maximum	**8.1694**	**122.5796**	**51.6189**	**0.2344**	**24.5960**	**3.6979**	**28.2939**	**11.2539**	**3.4074**	**14.6613**	**0.0000**	**24,055.8076**	**24,055.8076**	**3.6038**	**0.0000**	**24,145.9027**

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	lb/day										lb/day					
2020	3.2345	87.0397	57.3059	0.2344	12.3710	1.9969	14.3679	5.3256	1.9905	7.3161	0.0000	24,055.8076	24,055.8076	3.6038	0.0000	24,145.9027
Maximum	**3.2345**	**87.0397**	**57.3059**	**0.2344**	**12.3710**	**1.9969**	**14.3679**	**5.3256**	**1.9905**	**7.3161**	**0.0000**	**24,055.8076**	**24,055.8076**	**3.6038**	**0.0000**	**24,145.9027**

	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	N20	CO2e
Percent Reduction	**60.41**	**28.99**	**-11.02**	**0.00**	**49.70**	**46.00**	**49.22**	**52.68**	**41.58**	**50.10**	**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 and Grading	Grading	11/1/2020	12/1/2020	5	22	c
2	Grading Soil Haul 2020	Grading	11/1/2020	12/31/2020	5	44	d

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 33.43

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation and Grading	Excavators	2	8.00	158	0.38
Site Preparation and Grading	Graders	1	8.00	187	0.41
Site Preparation and Grading	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation and Grading	Scrapers	2	8.00	367	0.48
Site Preparation and Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading Soil Haul 2020	Excavators	0	8.00	158	0.38
Grading Soil Haul 2020	Graders	0	8.00	187	0.41
Grading Soil Haul 2020	Rubber Tired Dozers	0	8.00	247	0.40
Grading Soil Haul 2020	Scrapers	0	8.00	367	0.48
Grading Soil Haul 2020	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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 and Grading	12	30.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading Soil Haul 2020	0	0.00	0.00	8,363.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation and Grading - 2020

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/day										lb/day					
Fugitive Dust					20.7175	0.0000	20.7175	10.2170	0.0000	10.2170			0.0000			0.0000
Off-Road	7.0281	77.0723	44.7809	0.0853		3.5501	3.5501		3.2661	3.2661		8,262.0873	8,262.0873	2.6721		8,328.8905
Total	**7.0281**	**77.0723**	**44.7809**	**0.0853**	**20.7175**	**3.5501**	**24.2676**	**10.2170**	**3.2661**	**13.4831**		**8,262.0873**	**8,262.0873**	**2.6721**		**8,328.8905**

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/day										lb/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	0.0112	0.4116	0.0753	1.0400e-003	0.0256	2.3400e-003	0.0280	7.3700e-003	2.2400e-003	9.6100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.1527	0.0903	1.2096	3.3200e-003	0.3353	2.0300e-003	0.3374	0.0889	1.8700e-003	0.0908		330.4784	330.4784	8.4700e-003		330.6901
Total	**0.1638**	**0.5019**	**1.2849**	**4.3600e-003**	**0.3609**	**4.3700e-003**	**0.3653**	**0.0963**	**4.1100e-003**	**0.1004**		**440.6347**	**440.6347**	**0.0167**		**441.0531**

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/day					
Fugitive Dust					8.8567	0.0000	8.8567	4.3678	0.0000	4.3678			0.0000			0.0000
Off-Road	2.0932	41.5324	50.4679	0.0853		1.8492	1.8492		1.8492	1.8492	0.0000	8,262.0873	8,262.0873	2.6721		8,328.8905
Total	**2.0932**	**41.5324**	**50.4679**	**0.0853**	**8.8567**	**1.8492**	**10.7059**	**4.3678**	**1.8492**	**6.2169**	**0.0000**	**8,262.0873**	**8,262.0873**	**2.6721**		**8,328.8905**

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/day										lb/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	0.0112	0.4116	0.0753	1.0400e-003	0.0240	2.3400e-003	0.0263	6.9700e-003	2.2400e-003	9.2100e-003		110.1564	110.1564	8.2600e-003		110.3629
Worker	0.1527	0.0903	1.2096	3.3200e-003	0.3091	2.0300e-003	0.3111	0.0825	1.8700e-003	0.0844		330.4784	330.4784	8.4700e-003		330.6901
Total	**0.1638**	**0.5019**	**1.2849**	**4.3600e-003**	**0.3331**	**4.3700e-003**	**0.3374**	**0.0895**	**4.1100e-003**	**0.0936**		**440.6347**	**440.6347**	**0.0167**		**441.0531**

3.3 Grading Soil Haul 2020 - 2020

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/day										lb/day					
Fugitive Dust					0.1925	0.0000	0.1925	0.0292	0.0000	0.0292			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1925**	**0.0000**	**0.1925**	**0.0292**	**0.0000**	**0.0292**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	0.9775	45.0055	5.5530	0.1447	3.3250	0.1434	3.4684	0.9115	0.1372	1.0487		15,353.0856	15,353.0856	0.9149		15,375.9592
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	0.0000	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	**0.9775**	**45.0055**	**5.5530**	**0.1447**	**3.3250**	**0.1434**	**3.4684**	**0.9115**	**0.1372**	**1.0487**		**15,353.0856**	**15,353.0856**	**0.9149**		**15,375.9592**

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/day					
Fugitive Dust					0.0823	0.0000	0.0823	0.0125	0.0000	0.0125			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0823**	**0.0000**	**0.0823**	**0.0125**	**0.0000**	**0.0125**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	0.9775	45.0055	5.5530	0.1447	3.0989	0.1434	3.2422	0.8560	0.1372	0.9932		15,353.0856	15,353.0856	0.9149		15,375.9592
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	0.0000	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	**0.9775**	**45.0055**	**5.5530**	**0.1447**	**3.0989**	**0.1434**	**3.2422**	**0.8560**	**0.1372**	**0.9932**		**15,353.0856**	**15,353.0856**	**0.9149**		**15,375.9592**

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

11.0 Vegetation

Beaumont High School Mitigated Construction Run - Riverside-South Coast County, Winter

Beaumont High School Mitigated Construction Run

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	50.00	1000sqft	0.57	50,000.00	0
Other Asphalt Surfaces	163.35	1000sqft	3.75	163,350.00	0
Other Non-Asphalt Surfaces	1,023.11	1000sqft	23.49	1,023,110.00	0
Parking Lot	269.58	1000sqft	6.19	269,580.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	531.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - 2 story classroom building

Construction Phase - based on data provided by district, MM: extend grading soil haul

Off-road Equipment -

Off-road Equipment - overlapping construction equipment

Trips and VMT - assuming 4vt/water truck/day

Demolition -

Grading -

Architectural Coating - based on data provided by district, assuming all surfaces coated

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	45.00	22.00
tblConstructionPhase	NumDays	45.00	44.00
tblGrading	MaterialExported	0.00	39,300.00
tblGrading	MaterialImported	0.00	27,600.00
tblLandUse	LotAcreage	1.15	0.57
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	VendorTripNumber	0.00	4.00

2.0 Emissions Summary

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/day					
2020	8.2176	122.9742	52.3513	0.2304	24.5960	3.6999	28.2959	11.2539	3.4094	14.6633	0.0000	23,633.5434	23,633.5434	3.6902	0.0000	23,725.7974
Maximum	**8.2176**	**122.9742**	**52.3513**	**0.2304**	**24.5960**	**3.6999**	**28.2959**	**11.2539**	**3.4094**	**14.6633**	**0.0000**	**23,633.5434**	**23,633.5434**	**3.6902**	**0.0000**	**23,725.7974**

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	lb/day										lb/day					
2020	3.2827	87.4342	58.0384	0.2304	12.3710	1.9990	14.3700	5.3256	1.9925	7.3181	0.0000	23,633.5434	23,633.5434	3.6902	0.0000	23,725.7974
Maximum	**3.2827**	**87.4342**	**58.0384**	**0.2304**	**12.3710**	**1.9990**	**14.3700**	**5.3256**	**1.9925**	**7.3181**	**0.0000**	**23,633.5434**	**23,633.5434**	**3.6902**	**0.0000**	**23,725.7974**

	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	N20	CO2e
Percent Reduction	**60.05**	**28.90**	**-10.86**	**0.00**	**49.70**	**45.97**	**49.22**	**52.68**	**41.56**	**50.09**	**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 and Grading	Grading	11/1/2020	12/1/2020	5	22	c
2	Grading Soil Haul 2020	Grading	11/1/2020	12/31/2020	5	44	d

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 33.43

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation and Grading	Excavators	2	8.00	158	0.38
Site Preparation and Grading	Graders	1	8.00	187	0.41
Site Preparation and Grading	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation and Grading	Scrapers	2	8.00	367	0.48
Site Preparation and Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading Soil Haul 2020	Excavators	0	8.00	158	0.38
Grading Soil Haul 2020	Graders	0	8.00	187	0.41
Grading Soil Haul 2020	Rubber Tired Dozers	0	8.00	247	0.40
Grading Soil Haul 2020	Scrapers	0	8.00	367	0.48
Grading Soil Haul 2020	Tractors/Loaders/Backhoes	0	8.00	97	0.37

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 and Grading	12	30.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading Soil Haul 2020	0	0.00	0.00	8,363.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation and Grading - 2020

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/day										lb/day					
Fugitive Dust					20.7175	0.0000	20.7175	10.2170	0.0000	10.2170			0.0000			0.0000
Off-Road	7.0281	77.0723	44.7809	0.0853		3.5501	3.5501		3.2661	3.2661		8,262.0873	8,262.0873	2.6721		8,328.8905
Total	**7.0281**	**77.0723**	**44.7809**	**0.0853**	**20.7175**	**3.5501**	**24.2676**	**10.2170**	**3.2661**	**13.4831**		**8,262.0873**	**8,262.0873**	**2.6721**		**8,328.8905**

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/day										lb/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	0.0118	0.4094	0.0882	1.0100e-003	0.0256	2.3700e-003	0.0280	7.3700e-003	2.2700e-003	9.6400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.1495	0.0934	0.9785	2.9800e-003	0.3353	2.0300e-003	0.3374	0.0889	1.8700e-003	0.0908		296.4707	296.4707	7.3600e-003		296.6548

Total	**0.1613**	**0.5028**	**1.0667**	**3.9900e-003**	**0.3609**	**4.4000e-003**	**0.3653**	**0.0963**	**4.1400e-003**	**0.1004**		**402.4878**	**402.4878**	**0.0166**		**402.9018**

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/day					
Fugitive Dust					8.8567	0.0000	8.8567	4.3678	0.0000	4.3678			0.0000			0.0000
Off-Road	2.0932	41.5324	50.4679	0.0853		1.8492	1.8492		1.8492	1.8492	0.0000	8,262.0873	8,262.0873	2.6721		8,328.8905
Total	**2.0932**	**41.5324**	**50.4679**	**0.0853**	**8.8567**	**1.8492**	**10.7059**	**4.3678**	**1.8492**	**6.2169**	**0.0000**	**8,262.0873**	**8,262.0873**	**2.6721**		**8,328.8905**

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/day										lb/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	0.0118	0.4094	0.0882	1.0100e-003	0.0240	2.3700e-003	0.0263	6.9700e-003	2.2700e-003	9.2400e-003		106.0171	106.0171	9.1900e-003		106.2470
Worker	0.1495	0.0934	0.9785	2.9800e-003	0.3091	2.0300e-003	0.3111	0.0825	1.8700e-003	0.0844		296.4707	296.4707	7.3600e-003		296.6548
Total	**0.1613**	**0.5028**	**1.0667**	**3.9900e-003**	**0.3331**	**4.4000e-003**	**0.3375**	**0.0895**	**4.1400e-003**	**0.0936**		**402.4878**	**402.4878**	**0.0166**		**402.9018**

3.3 Grading Soil Haul 2020 - 2020

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/day										lb/day					
Fugitive Dust					0.1925	0.0000	0.1925	0.0292	0.0000	0.0292			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.1925**	**0.0000**	**0.1925**	**0.0292**	**0.0000**	**0.0292**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	1.0282	45.3991	6.5038	0.1411	3.3250	0.1454	3.4704	0.9115	0.1391	1.0506		14,968.9683	14,968.9683	1.0015		14,994.0051
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	0.0000	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	**1.0282**	**45.3991**	**6.5038**	**0.1411**	**3.3250**	**0.1454**	**3.4704**	**0.9115**	**0.1391**	**1.0506**		**14,968.9683**	**14,968.9683**	**1.0015**		**14,994.0051**

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/day					
Fugitive Dust					0.0823	0.0000	0.0823	0.0125	0.0000	0.0125			0.0000			0.0000
Off-Road	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	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0823**	**0.0000**	**0.0823**	**0.0125**	**0.0000**	**0.0125**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

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/day										lb/day					
Hauling	1.0282	45.3991	6.5038	0.1411	3.0989	0.1454	3.2443	0.8560	0.1391	0.9951		14,968.9683	14,968.9683	1.0015		14,994.0051
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	0.0000	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	**1.0282**	**45.3991**	**6.5038**	**0.1411**	**3.0989**	**0.1454**	**3.2443**	**0.8560**	**0.1391**	**0.9951**		**14,968.9683**	**14,968.9683**	**1.0015**		**14,994.0051**

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

11.0 Vegetation

CalEEMod Operations Model

Beaumont High School Operations Run (Max Daily Emissions)

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	2,254.00	Student	0.57	50,000.00	0
Other Asphalt Surfaces	163.35	1000sqft	3.75	163,350.00	0
Other Non-Asphalt Surfaces	1,023.11	1000sqft	23.49	1,023,110.00	0
Parking Lot	269.58	1000sqft	6.19	269,580.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	531.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - 2 story classroom building

Construction Phase -

Vehicle Trips - based on data provided by Garland Associates

Area Coating - based on info provided by applicant

Energy Use -

Water And Wastewater - assumes 100% aerobic treatment

Energy Mitigation -

Water Mitigation -

Fleet Mix - see fleet mix adjustment in assumptions file

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	150
tblAreaCoating	Area_EF_Nonresidential_Interior	100	150
tblAreaCoating	Area_Nonresidential_Exterior	25000	16750
tblAreaCoating	Area_Nonresidential_Interior	75000	60000
tblFleetMix	HHD	0.07	6.1340e-003
tblFleetMix	LDA	0.54	0.68
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.23
tblFleetMix	LHD1	0.02	1.4500e-003
tblFleetMix	LHD2	5.1410e-003	4.5900e-004
tblFleetMix	MCY	4.5820e-003	5.7770e-003
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MH	1.0380e-003	9.3000e-005
tblFleetMix	MHD	0.02	1.5530e-003
tblFleetMix	OBUS	1.3830e-003	0.00
tblFleetMix	SBUS	9.4500e-004	8.4000e-005
tblFleetMix	UBUS	1.1830e-003	0.00
tblLandUse	LandUseSquareFeet	299,017.84	50,000.00
tblLandUse	LotAcreage	6.86	0.57
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblVehicleEF	HHD	1.43	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	2.1311e-007
tblVehicleEF	HHD	3.28	5.70
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.46	5.1287e-003
tblVehicleEF	HHD	6,485.38	1,098.23

tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	26.41	5.91
tblVehicleEF	HHD	2.69	3.40
tblVehicleEF	HHD	20.32	2.01
tblVehicleEF	HHD	0.01	8.1205e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.01	7.7692e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8102e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	8.4000e-005	3.9431e-006
tblVehicleEF	HHD	2.5800e-003	1.4075e-004
tblVehicleEF	HHD	0.85	0.44
tblVehicleEF	HHD	4.8000e-005	2.4154e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8000e-004	7.3333e-004
tblVehicleEF	HHD	0.05	1.0921e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	4.3455e-007
tblVehicleEF	HHD	8.4000e-005	3.9431e-006
tblVehicleEF	HHD	2.5800e-003	1.4075e-004
tblVehicleEF	HHD	0.97	0.51
tblVehicleEF	HHD	4.8000e-005	2.4154e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8000e-004	7.3333e-004

tblVehicleEF	HHD	0.05	1.1957e-006
tblVehicleEF	HHD	1.35	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	2.1311e-007
tblVehicleEF	HHD	2.39	5.70
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.39	5.1287e-003
tblVehicleEF	HHD	6,867.98	1,098.23
tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	27.25	5.91
tblVehicleEF	HHD	2.54	3.40
tblVehicleEF	HHD	20.32	2.01
tblVehicleEF	HHD	0.01	8.1205e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.01	7.7692e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8102e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	1.6300e-004	3.9431e-006
tblVehicleEF	HHD	2.9560e-003	1.4075e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	9.2000e-005	2.4154e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8400e-004	7.3333e-004
tblVehicleEF	HHD	0.04	1.0921e-006
tblVehicleEF	HHD	0.06	0.01

tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	4.3455e-007
tblVehicleEF	HHD	1.6300e-004	3.9431e-006
tblVehicleEF	HHD	2.9560e-003	1.4075e-004
tblVehicleEF	HHD	0.92	0.51
tblVehicleEF	HHD	9.2000e-005	2.4154e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8400e-004	7.3333e-004
tblVehicleEF	HHD	0.05	1.1957e-006
tblVehicleEF	HHD	1.54	0.02
tblVehicleEF	HHD	0.03	3.9264e-003
tblVehicleEF	HHD	0.10	2.1145e-007
tblVehicleEF	HHD	4.51	5.86
tblVehicleEF	HHD	0.45	0.36
tblVehicleEF	HHD	1.47	5.0740e-003
tblVehicleEF	HHD	5,957.03	1,095.99
tblVehicleEF	HHD	1,461.92	1,363.80
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	25.25	6.10
tblVehicleEF	HHD	2.67	3.34
tblVehicleEF	HHD	20.32	2.01
tblVehicleEF	HHD	0.02	8.8013e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.02	8.4206e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.7660e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007

tblVehicleEF	HHD	6.7000e-005	4.1581e-006
tblVehicleEF	HHD	2.7490e-003	1.5944e-004
tblVehicleEF	HHD	0.91	0.42
tblVehicleEF	HHD	4.1000e-005	2.6509e-006
tblVehicleEF	HHD	0.07	0.08
tblVehicleEF	HHD	1.9200e-004	7.7684e-004
tblVehicleEF	HHD	0.05	1.0839e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	4.3370e-007
tblVehicleEF	HHD	6.7000e-005	4.1581e-006
tblVehicleEF	HHD	2.7490e-003	1.5944e-004
tblVehicleEF	HHD	1.05	0.48
tblVehicleEF	HHD	4.1000e-005	2.6509e-006
tblVehicleEF	HHD	0.11	0.10
tblVehicleEF	HHD	1.9200e-004	7.7684e-004
tblVehicleEF	HHD	0.05	1.1867e-006
tblVehicleEF	LDA	4.0430e-003	2.4275e-003
tblVehicleEF	LDA	5.4670e-003	0.05
tblVehicleEF	LDA	0.58	0.65
tblVehicleEF	LDA	1.16	2.15
tblVehicleEF	LDA	255.91	264.62
tblVehicleEF	LDA	58.81	54.91
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003

tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	9.3165e-003
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	2.5630e-003	2.6119e-003
tblVehicleEF	LDA	6.0800e-004	5.4212e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDA	4.5900e-003	2.4275e-003
tblVehicleEF	LDA	4.7470e-003	0.05
tblVehicleEF	LDA	0.71	0.65
tblVehicleEF	LDA	1.02	2.15
tblVehicleEF	LDA	278.73	264.62
tblVehicleEF	LDA	58.81	54.91
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003

tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.10	0.06
tblVehicleEF	LDA	0.12	0.10
tblVehicleEF	LDA	0.07	0.05
tblVehicleEF	LDA	0.01	9.3165e-003
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.06	0.23
tblVehicleEF	LDA	2.7930e-003	2.6119e-003
tblVehicleEF	LDA	6.0500e-004	5.4212e-004
tblVehicleEF	LDA	0.10	0.06
tblVehicleEF	LDA	0.12	0.10
tblVehicleEF	LDA	0.07	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.25
tblVehicleEF	LDA	3.8980e-003	2.3855e-003
tblVehicleEF	LDA	5.6140e-003	0.05
tblVehicleEF	LDA	0.54	0.62
tblVehicleEF	LDA	1.19	2.13
tblVehicleEF	LDA	249.57	260.99
tblVehicleEF	LDA	58.81	54.88
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003

tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	9.8140e-003	9.1467e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.23
tblVehicleEF	LDA	2.4990e-003	2.5760e-003
tblVehicleEF	LDA	6.0800e-004	5.4186e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDT1	0.01	7.6986e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.46	1.55
tblVehicleEF	LDT1	3.40	2.46
tblVehicleEF	LDT1	315.98	313.73
tblVehicleEF	LDT1	72.28	66.96
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.21	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.21	0.19

tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.24	0.46
tblVehicleEF	LDT1	3.1780e-003	3.0974e-003
tblVehicleEF	LDT1	7.8300e-004	6.6113e-004
tblVehicleEF	LDT1	0.21	0.19
tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.26	0.50
tblVehicleEF	LDT1	0.01	7.6986e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.76	1.55
tblVehicleEF	LDT1	2.99	2.46
tblVehicleEF	LDT1	343.19	313.73
tblVehicleEF	LDT1	72.28	66.96
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.20	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.41	0.19
tblVehicleEF	LDT1	0.43	0.27

tblVehicleEF	LDT1	0.27	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.21	0.46
tblVehicleEF	LDT1	3.4550e-003	3.0974e-003
tblVehicleEF	LDT1	7.7500e-004	6.6113e-004
tblVehicleEF	LDT1	0.41	0.19
tblVehicleEF	LDT1	0.43	0.27
tblVehicleEF	LDT1	0.27	0.13
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.23	0.50
tblVehicleEF	LDT1	0.01	7.5727e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.37	1.50
tblVehicleEF	LDT1	3.46	2.44
tblVehicleEF	LDT1	307.88	309.94
tblVehicleEF	LDT1	72.28	66.93
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.21	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13

tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.23	1.01
tblVehicleEF	LDT1	0.25	0.46
tblVehicleEF	LDT1	3.0960e-003	3.0600e-003
tblVehicleEF	LDT1	7.8400e-004	6.6081e-004
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.23	1.02
tblVehicleEF	LDT1	0.27	0.50
tblVehicleEF	LDT2	5.6080e-003	4.0030e-003
tblVehicleEF	LDT2	7.2840e-003	0.07
tblVehicleEF	LDT2	0.76	0.93
tblVehicleEF	LDT2	1.53	2.77
tblVehicleEF	LDT2	355.02	335.17
tblVehicleEF	LDT2	81.24	71.76
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.13	0.31
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.01	0.02

tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	3.5560e-003	3.3085e-003
tblVehicleEF	LDT2	8.3800e-004	7.0852e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	6.3630e-003	4.0030e-003
tblVehicleEF	LDT2	6.3270e-003	0.07
tblVehicleEF	LDT2	0.93	0.93
tblVehicleEF	LDT2	1.35	2.77
tblVehicleEF	LDT2	386.34	335.17
tblVehicleEF	LDT2	81.24	71.76
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.31
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.14	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.10	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42

tblVehicleEF	LDT2	0.09	0.34
tblVehicleEF	LDT2	3.8710e-003	3.3085e-003
tblVehicleEF	LDT2	8.3500e-004	7.0852e-004
tblVehicleEF	LDT2	0.14	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.10	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.09	0.37
tblVehicleEF	LDT2	5.3900e-003	3.9361e-003
tblVehicleEF	LDT2	7.4940e-003	0.07
tblVehicleEF	LDT2	0.71	0.90
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tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.13	0.31
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.10	0.34

tblVehicleEF	LDT2	3.4620e-003	3.2722e-003
tblVehicleEF	LDT2	8.3900e-004	7.0821e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LHD1	5.4460e-003	4.7711e-003
tblVehicleEF	LHD1	0.01	5.3525e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.96	0.72
tblVehicleEF	LHD1	2.41	0.95
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.31
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.21	1.68
tblVehicleEF	LHD1	0.99	0.31
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	3.8710e-003	2.6459e-003

tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9010e-003	1.3629e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.48
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1767e-003
tblVehicleEF	LHD1	3.4900e-004	1.0205e-004
tblVehicleEF	LHD1	3.8710e-003	2.6459e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9010e-003	1.3629e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.48
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	5.4460e-003	4.7711e-003
tblVehicleEF	LHD1	0.01	5.3525e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.97	0.72
tblVehicleEF	LHD1	2.29	0.95
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.31
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.08	1.68
tblVehicleEF	LHD1	0.96	0.31
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	7.2450e-003	2.6459e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6380e-003	1.3629e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.32	0.48
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1767e-003
tblVehicleEF	LHD1	3.4700e-004	1.0205e-004
tblVehicleEF	LHD1	7.2450e-003	2.6459e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6380e-003	1.3629e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.32	0.48
tblVehicleEF	LHD1	0.27	0.08
tblVehicleEF	LHD1	5.4460e-003	4.7735e-003
tblVehicleEF	LHD1	0.01	5.3625e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.96	0.73
tblVehicleEF	LHD1	2.41	0.94
tblVehicleEF	LHD1	9.26	9.49

tblVehicleEF	LHD1	607.95	635.36
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tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.18	1.65
tblVehicleEF	LHD1	0.99	0.30
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	3.4570e-003	2.8041e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7350e-003	1.4343e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.52
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1767e-003
tblVehicleEF	LHD1	3.4900e-004	1.0189e-004
tblVehicleEF	LHD1	3.4570e-003	2.8041e-003
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tblVehicleEF	LHD1	0.02	0.03
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tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.33	0.52

tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD2	3.6660e-003	2.9071e-003
tblVehicleEF	LHD2	4.5290e-003	3.7987e-003
tblVehicleEF	LHD2	8.3110e-003	8.1462e-003
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.15	0.51
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.61
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.71	1.83
tblVehicleEF	LHD2	0.53	0.17
tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
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tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	1.4980e-003	1.2263e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
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tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
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tblVehicleEF	LHD2	1.4980e-003	1.2263e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	7.7800e-004	6.4826e-004
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tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	3.6660e-003	2.9071e-003
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tblVehicleEF	LHD2	8.0210e-003	8.1462e-003
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tblVehicleEF	LHD2	0.51	0.52
tblVehicleEF	LHD2	1.10	0.51
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.61
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.62	1.83
tblVehicleEF	LHD2	0.51	0.17
tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005

tblVehicleEF	LHD2	2.8320e-003	1.2263e-003
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tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.4720e-003	6.4826e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
tblVehicleEF	LHD2	5.8740e-003	6.0523e-003
tblVehicleEF	LHD2	2.5600e-004	6.5406e-005
tblVehicleEF	LHD2	2.8320e-003	1.2263e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4720e-003	6.4826e-004
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	LHD2	3.6660e-003	2.9085e-003
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tblVehicleEF	LHD2	8.3600e-003	8.0900e-003
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tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.16	0.50
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.60
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.70	1.81
tblVehicleEF	LHD2	0.53	0.17
tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
tblVehicleEF	LHD2	0.09	0.09

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7445e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.24
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
tblVehicleEF	LHD2	5.8740e-003	6.0523e-003
tblVehicleEF	LHD2	2.5700e-004	6.5323e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7445e-004
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.24
tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	MCY	0.42	0.32
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.52	19.50
tblVehicleEF	MCY	9.67	8.60
tblVehicleEF	MCY	165.74	207.81
tblVehicleEF	MCY	46.23	60.96

tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	1.69	1.42
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.15	2.15
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.0380e-003	2.0565e-003
tblVehicleEF	MCY	6.8100e-004	6.0328e-004
tblVehicleEF	MCY	1.69	1.42
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.65	2.64
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MCY	0.42	0.32
tblVehicleEF	MCY	0.14	0.24
tblVehicleEF	MCY	20.23	19.50
tblVehicleEF	MCY	9.11	8.60
tblVehicleEF	MCY	165.74	207.81
tblVehicleEF	MCY	46.23	60.96
tblVehicleEF	MCY	0.98	1.13

tblVehicleEF	MCY	0.29	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	3.35	1.42
tblVehicleEF	MCY	1.24	0.79
tblVehicleEF	MCY	2.10	0.76
tblVehicleEF	MCY	2.13	2.15
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	1.86	1.85
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tblVehicleEF	MCY	6.6500e-004	6.0328e-004
tblVehicleEF	MCY	3.35	1.42
tblVehicleEF	MCY	1.24	0.79
tblVehicleEF	MCY	2.10	0.76
tblVehicleEF	MCY	2.62	2.64
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.02	2.01
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.04	18.91
tblVehicleEF	MCY	9.62	8.38
tblVehicleEF	MCY	165.74	206.80
tblVehicleEF	MCY	46.23	60.47
tblVehicleEF	MCY	1.12	1.10
tblVehicleEF	MCY	0.31	0.26

tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
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tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	1.60	1.63
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tblVehicleEF	MCY	2.08	1.81
tblVehicleEF	MCY	2.0310e-003	2.0465e-003
tblVehicleEF	MCY	6.8100e-004	5.9842e-004
tblVehicleEF	MCY	1.60	1.63
tblVehicleEF	MCY	1.05	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.64	2.62
tblVehicleEF	MCY	0.65	2.13
tblVehicleEF	MCY	2.27	1.97
tblVehicleEF	MDV	0.01	5.5311e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.42	1.15
tblVehicleEF	MDV	3.18	3.31
tblVehicleEF	MDV	488.89	419.23
tblVehicleEF	MDV	110.15	89.12
tblVehicleEF	MDV	0.17	0.12
tblVehicleEF	MDV	0.31	0.39
tblVehicleEF	MDV	0.04	0.04

tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MDV	4.9000e-003	4.1357e-003
tblVehicleEF	MDV	1.1570e-003	8.7994e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.27	0.50
tblVehicleEF	MDV	0.01	5.5311e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.73	1.15
tblVehicleEF	MDV	2.81	3.31
tblVehicleEF	MDV	530.71	419.23
tblVehicleEF	MDV	110.15	89.12
tblVehicleEF	MDV	0.16	0.12
tblVehicleEF	MDV	0.30	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003

tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.22	0.11
tblVehicleEF	MDV	0.23	0.16
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.04	0.02
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.21	0.45
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tblVehicleEF	MDV	0.23	0.16
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.05	0.03
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tblVehicleEF	MDV	0.23	0.50
tblVehicleEF	MDV	0.01	5.4334e-003
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tblVehicleEF	MDV	1.33	1.11
tblVehicleEF	MDV	3.24	3.29
tblVehicleEF	MDV	476.42	415.30
tblVehicleEF	MDV	110.15	89.09
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	0.31	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003

tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.55
tblVehicleEF	MDV	0.25	0.45
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tblVehicleEF	MDV	1.1590e-003	8.7956e-004
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tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.13	0.55
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tblVehicleEF	MH	0.03	0.00
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tblVehicleEF	MH	1.67	4.53
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tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00

tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9094e-003
tblVehicleEF	MH	6.8100e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.78	0.35
tblVehicleEF	MH	5.56	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.55	4.53
tblVehicleEF	MH	0.83	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06

tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	9.9470e-003	8.9094e-003
tblVehicleEF	MH	6.7400e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	6.02	0.00
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tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.65	4.46
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tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003

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tblVehicleEF	MH	1.58	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9094e-003
tblVehicleEF	MH	6.8200e-004	0.00
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tblVehicleEF	MH	0.10	0.00
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tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
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tblVehicleEF	MHD	3.7220e-003	5.6867e-003
tblVehicleEF	MHD	0.06	7.1017e-003
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tblVehicleEF	MHD	0.01	0.01

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tblVehicleEF	MHD	0.02	2.7460e-003
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tblVehicleEF	MHD	0.05	7.1017e-003
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tblVehicleEF	MHD	0.28	0.52
tblVehicleEF	MHD	5.78	0.85
tblVehicleEF	MHD	160.96	73.08

tblVehicleEF	MHD	1,066.63	977.33
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3075e-005
tblVehicleEF	MHD	8.6100e-004	2.3490e-003
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tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6384e-005
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tblVehicleEF	MHD	0.06	0.02
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tblVehicleEF	MHD	0.01	9.2823e-003
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tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	1.6840e-003	2.4808e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.08

tblVehicleEF	MHD	0.39	0.04
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
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tblVehicleEF	MHD	1.2430e-003	2.8549e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
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tblVehicleEF	MHD	0.02	0.09
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tblVehicleEF	OBUS	1.1600e-004	1.6349e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
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tblVehicleEF	OBUS	0.04	0.10
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tblVehicleEF	OBUS	7.2800e-004	6.5786e-004
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tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
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tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.45	23.57
tblVehicleEF	UBUS	15.26	1.95
tblVehicleEF	UBUS	1,822.40	1,641.55

tblVehicleEF	UBUS	153.45	23.43
tblVehicleEF	UBUS	4.95	0.30
tblVehicleEF	UBUS	12.47	0.24
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	9.7430e-003	2.3414e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2419e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3901e-003
tblVehicleEF	UBUS	1.8100e-003	2.3183e-004
tblVehicleEF	UBUS	9.7430e-003	2.3414e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2419e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.28	0.10
tblVehicleEF	UBUS	1.52	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	8.53	23.57
tblVehicleEF	UBUS	13.06	1.95
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.43

tblVehicleEF	UBUS	4.62	0.30
tblVehicleEF	UBUS	12.38	0.24
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	0.02	2.3414e-003
tblVehicleEF	UBUS	0.14	0.01
tblVehicleEF	UBUS	9.6600e-003	9.2419e-004
tblVehicleEF	UBUS	0.53	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.06	0.10
tblVehicleEF	UBUS	9.9970e-003	6.3901e-003
tblVehicleEF	UBUS	1.7720e-003	2.3183e-004
tblVehicleEF	UBUS	0.02	2.3414e-003
tblVehicleEF	UBUS	0.14	0.01
tblVehicleEF	UBUS	9.6600e-003	9.2419e-004
tblVehicleEF	UBUS	2.09	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.44	23.57
tblVehicleEF	UBUS	15.44	1.93
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.40
tblVehicleEF	UBUS	4.92	0.30

tblVehicleEF	UBUS	12.47	0.23
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	8.9770e-003	2.4593e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7705e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.18	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3901e-003
tblVehicleEF	UBUS	1.8130e-003	2.3157e-004
tblVehicleEF	UBUS	8.9770e-003	2.4593e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7705e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.29	0.10
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	17.20	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	16.60	4.48
tblVehicleTrips	CW_TTP	77.80	100.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00

tblVehicleTrips	PR_TP	75.00	100.00
tblVehicleTrips	ST_TR	0.61	1.79
tblVehicleTrips	SU_TR	0.25	1.79
tblVehicleTrips	WD_TR	1.71	1.79
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated 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/day					
Area	1.7984	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659
Energy	0.0129	0.1177	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.1765	141.1765	2.7100e-003	2.5900e-003	142.0154
Mobile	8.5360	6.1095	56.1336	0.1220	13.7929	0.0981	13.8910	3.6582	0.0911	3.7493		12,384.5346	12,384.5346	0.7418		12,403.0798
Total	**10.3474**	**6.2307**	**56.6127**	**0.1227**	**13.7929**	**0.1084**	**13.9013**	**3.6582**	**0.1014**	**3.7596**		**12,526.5230**	**12,526.5230**	**0.7467**	**2.5900e-003**	**12,545.9611**

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/day					
Area	1.7984	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659
Energy	9.8500e-003	0.0896	0.0752	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003		107.4778	107.4778	2.0600e-003	1.9700e-003	108.1165
Mobile	8.5360	6.1095	56.1336	0.1220	13.7929	0.0981	13.8910	3.6582	0.0911	3.7493		12,384.5346	12,384.5346	0.7418		12,403.0798
Total	**10.3443**	**6.2026**	**56.5891**	**0.1226**	**13.7929**	**0.1063**	**13.8992**	**3.6582**	**0.0993**	**3.7575**		**12,492.8244**	**12,492.8244**	**0.7460**	**1.9700e-003**	**12,512.0622**

	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	N20	CO2e
Percent Reduction	**0.03**	**0.45**	**0.04**	**0.14**	**0.00**	**1.96**	**0.02**	**0.00**	**2.10**	**0.06**	**0.00**	**0.27**	**0.27**	**0.09**	**23.94**	**0.27**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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/day					
Mitigated	8.5360	6.1095	56.1336	0.1220	13.7929	0.0981	13.8910	3.6582	0.0911	3.7493		12,384.5346	12,384.5346	0.7418		12,403.0798
Unmitigated	8.5360	6.1095	56.1336	0.1220	13.7929	0.0981	13.8910	3.6582	0.0911	3.7493		12,384.5346	12,384.5346	0.7418		12,403.0798

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	4,045.51	4,045.51	4045.51	6,599,901	6,599,901
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	4,045.51	4,045.51	4,045.51	6,599,901	6,599,901

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High School	4.48	0.00	0.00	100.00	0.00	0.00	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.683544	0.047381	0.233519	0.020005	0.001450	0.000459	0.001553	0.006134	0.000000	0.000000	0.005777	0.000084	0.000093

Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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/day					
NaturalGas Mitigated	9.8500e-003	0.0896	0.0752	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003		107.4778	107.4778	2.0600e-003	1.9700e-003	108.1165
NaturalGas Unmitigated	0.0129	0.1177	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.1765	141.1765	2.7100e-003	2.5900e-003	142.0154

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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/day										lb/day					
High School	1200	0.0129	0.1177	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.1765	141.1765	2.7100e-003	2.5900e-003	142.0154
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
Parking Lot	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		**0.0129**	**0.1177**	**0.0988**	**7.1000e-004**		**8.9400e-003**	**8.9400e-003**		**8.9400e-003**	**8.9400e-003**		**141.1765**	**141.1765**	**2.7100e-003**	**2.5900e-003**	**142.0154**

Mitigated

	NaturalGas 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/day										lb/day					
High School	0.913562	9.8500e-003	0.0896	0.0752	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003		107.4778	107.4778	2.0600e-003	1.9700e-003	108.1165
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
Parking Lot	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		**9.8500e-003**	**0.0896**	**0.0752**	**5.4000e-004**		**6.8100e-003**	**6.8100e-003**		**6.8100e-003**	**6.8100e-003**		**107.4778**	**107.4778**	**2.0600e-003**	**1.9700e-003**	**108.1165**

6.0 Area Detail

6.1 Mitigation Measures Area

	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/day					
Mitigated	1.7984	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659
Unmitigated	1.7984	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659

6.2 Area by SubCategory

Unmitigated

	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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0355	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659
Total	**1.7984**	**3.4900e-003**	**0.3803**	**3.0000e-005**		**1.3600e-003**	**1.3600e-003**		**1.3600e-003**	**1.3600e-003**		**0.8120**	**0.8120**	**2.1600e-003**		**0.8659**

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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0355	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659
Total	**1.7984**	**3.4900e-003**	**0.3803**	**3.0000e-005**		**1.3600e-003**	**1.3600e-003**		**1.3600e-003**	**1.3600e-003**		**0.8120**	**0.8120**	**2.1600e-003**		**0.8659**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

Beaumont High School Operations Run (Max Daily Emissions)

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	2,254.00	Student	0.57	50,000.00	0
Other Asphalt Surfaces	163.35	1000sqft	3.75	163,350.00	0
Other Non-Asphalt Surfaces	1,023.11	1000sqft	23.49	1,023,110.00	0
Parking Lot	269.58	1000sqft	6.19	269,580.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	531.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - 2 story classroom building

Construction Phase -

Vehicle Trips - based on data provided by Garland Associates

Area Coating - based on info provided by applicant

Energy Use -

Water And Wastewater - assumes 100% aerobic treatment

Energy Mitigation -

Water Mitigation -

Fleet Mix - see fleet mix adjustment in assumptions file

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	150
tblAreaCoating	Area_EF_Nonresidential_Interior	100	150
tblAreaCoating	Area_Nonresidential_Exterior	25000	16750
tblAreaCoating	Area_Nonresidential_Interior	75000	60000
tblFleetMix	HHD	0.07	6.1340e-003
tblFleetMix	LDA	0.54	0.68
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.23
tblFleetMix	LHD1	0.02	1.4500e-003
tblFleetMix	LHD2	5.1410e-003	4.5900e-004
tblFleetMix	MCY	4.5820e-003	5.7770e-003
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MH	1.0380e-003	9.3000e-005
tblFleetMix	MHD	0.02	1.5530e-003
tblFleetMix	OBUS	1.3830e-003	0.00
tblFleetMix	SBUS	9.4500e-004	8.4000e-005
tblFleetMix	UBUS	1.1830e-003	0.00
tblLandUse	LandUseSquareFeet	299,017.84	50,000.00
tblLandUse	LotAcreage	6.86	0.57
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblVehicleEF	HHD	1.43	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	2.1311e-007
tblVehicleEF	HHD	3.28	5.70
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.46	5.1287e-003
tblVehicleEF	HHD	6,485.38	1,098.23

tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	26.41	5.91
tblVehicleEF	HHD	2.69	3.40
tblVehicleEF	HHD	20.32	2.01
tblVehicleEF	HHD	0.01	8.1205e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.01	7.7692e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8102e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	8.4000e-005	3.9431e-006
tblVehicleEF	HHD	2.5800e-003	1.4075e-004
tblVehicleEF	HHD	0.85	0.44
tblVehicleEF	HHD	4.8000e-005	2.4154e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8000e-004	7.3333e-004
tblVehicleEF	HHD	0.05	1.0921e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	4.3455e-007
tblVehicleEF	HHD	8.4000e-005	3.9431e-006
tblVehicleEF	HHD	2.5800e-003	1.4075e-004
tblVehicleEF	HHD	0.97	0.51
tblVehicleEF	HHD	4.8000e-005	2.4154e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8000e-004	7.3333e-004

tblVehicleEF	HHD	0.05	1.1957e-006
tblVehicleEF	HHD	1.35	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	2.1311e-007
tblVehicleEF	HHD	2.39	5.70
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.39	5.1287e-003
tblVehicleEF	HHD	6,867.98	1,098.23
tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	27.25	5.91
tblVehicleEF	HHD	2.54	3.40
tblVehicleEF	HHD	20.32	2.01
tblVehicleEF	HHD	0.01	8.1205e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.01	7.7692e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8102e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	1.6300e-004	3.9431e-006
tblVehicleEF	HHD	2.9560e-003	1.4075e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	9.2000e-005	2.4154e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8400e-004	7.3333e-004
tblVehicleEF	HHD	0.04	1.0921e-006
tblVehicleEF	HHD	0.06	0.01

tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	4.3455e-007
tblVehicleEF	HHD	1.6300e-004	3.9431e-006
tblVehicleEF	HHD	2.9560e-003	1.4075e-004
tblVehicleEF	HHD	0.92	0.51
tblVehicleEF	HHD	9.2000e-005	2.4154e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8400e-004	7.3333e-004
tblVehicleEF	HHD	0.05	1.1957e-006
tblVehicleEF	HHD	1.54	0.02
tblVehicleEF	HHD	0.03	3.9264e-003
tblVehicleEF	HHD	0.10	2.1145e-007
tblVehicleEF	HHD	4.51	5.86
tblVehicleEF	HHD	0.45	0.36
tblVehicleEF	HHD	1.47	5.0740e-003
tblVehicleEF	HHD	5,957.03	1,095.99
tblVehicleEF	HHD	1,461.92	1,363.80
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	25.25	6.10
tblVehicleEF	HHD	2.67	3.34
tblVehicleEF	HHD	20.32	2.01
tblVehicleEF	HHD	0.02	8.8013e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.02	8.4206e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.7660e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007

tblVehicleEF	HHD	6.7000e-005	4.1581e-006
tblVehicleEF	HHD	2.7490e-003	1.5944e-004
tblVehicleEF	HHD	0.91	0.42
tblVehicleEF	HHD	4.1000e-005	2.6509e-006
tblVehicleEF	HHD	0.07	0.08
tblVehicleEF	HHD	1.9200e-004	7.7684e-004
tblVehicleEF	HHD	0.05	1.0839e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	4.3370e-007
tblVehicleEF	HHD	6.7000e-005	4.1581e-006
tblVehicleEF	HHD	2.7490e-003	1.5944e-004
tblVehicleEF	HHD	1.05	0.48
tblVehicleEF	HHD	4.1000e-005	2.6509e-006
tblVehicleEF	HHD	0.11	0.10
tblVehicleEF	HHD	1.9200e-004	7.7684e-004
tblVehicleEF	HHD	0.05	1.1867e-006
tblVehicleEF	LDA	4.0430e-003	2.4275e-003
tblVehicleEF	LDA	5.4670e-003	0.05
tblVehicleEF	LDA	0.58	0.65
tblVehicleEF	LDA	1.16	2.15
tblVehicleEF	LDA	255.91	264.62
tblVehicleEF	LDA	58.81	54.91
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003

tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	9.3165e-003
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	2.5630e-003	2.6119e-003
tblVehicleEF	LDA	6.0800e-004	5.4212e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDA	4.5900e-003	2.4275e-003
tblVehicleEF	LDA	4.7470e-003	0.05
tblVehicleEF	LDA	0.71	0.65
tblVehicleEF	LDA	1.02	2.15
tblVehicleEF	LDA	278.73	264.62
tblVehicleEF	LDA	58.81	54.91
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003

tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.10	0.06
tblVehicleEF	LDA	0.12	0.10
tblVehicleEF	LDA	0.07	0.05
tblVehicleEF	LDA	0.01	9.3165e-003
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.06	0.23
tblVehicleEF	LDA	2.7930e-003	2.6119e-003
tblVehicleEF	LDA	6.0500e-004	5.4212e-004
tblVehicleEF	LDA	0.10	0.06
tblVehicleEF	LDA	0.12	0.10
tblVehicleEF	LDA	0.07	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.25
tblVehicleEF	LDA	3.8980e-003	2.3855e-003
tblVehicleEF	LDA	5.6140e-003	0.05
tblVehicleEF	LDA	0.54	0.62
tblVehicleEF	LDA	1.19	2.13
tblVehicleEF	LDA	249.57	260.99
tblVehicleEF	LDA	58.81	54.88
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003

tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	9.8140e-003	9.1467e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.23
tblVehicleEF	LDA	2.4990e-003	2.5760e-003
tblVehicleEF	LDA	6.0800e-004	5.4186e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDT1	0.01	7.6986e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.46	1.55
tblVehicleEF	LDT1	3.40	2.46
tblVehicleEF	LDT1	315.98	313.73
tblVehicleEF	LDT1	72.28	66.96
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.21	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.21	0.19

tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.24	0.46
tblVehicleEF	LDT1	3.1780e-003	3.0974e-003
tblVehicleEF	LDT1	7.8300e-004	6.6113e-004
tblVehicleEF	LDT1	0.21	0.19
tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.26	0.50
tblVehicleEF	LDT1	0.01	7.6986e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.76	1.55
tblVehicleEF	LDT1	2.99	2.46
tblVehicleEF	LDT1	343.19	313.73
tblVehicleEF	LDT1	72.28	66.96
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.20	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.41	0.19
tblVehicleEF	LDT1	0.43	0.27

tblVehicleEF	LDT1	0.27	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.21	0.46
tblVehicleEF	LDT1	3.4550e-003	3.0974e-003
tblVehicleEF	LDT1	7.7500e-004	6.6113e-004
tblVehicleEF	LDT1	0.41	0.19
tblVehicleEF	LDT1	0.43	0.27
tblVehicleEF	LDT1	0.27	0.13
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.23	0.50
tblVehicleEF	LDT1	0.01	7.5727e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.37	1.50
tblVehicleEF	LDT1	3.46	2.44
tblVehicleEF	LDT1	307.88	309.94
tblVehicleEF	LDT1	72.28	66.93
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.21	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13

tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.23	1.01
tblVehicleEF	LDT1	0.25	0.46
tblVehicleEF	LDT1	3.0960e-003	3.0600e-003
tblVehicleEF	LDT1	7.8400e-004	6.6081e-004
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.23	1.02
tblVehicleEF	LDT1	0.27	0.50
tblVehicleEF	LDT2	5.6080e-003	4.0030e-003
tblVehicleEF	LDT2	7.2840e-003	0.07
tblVehicleEF	LDT2	0.76	0.93
tblVehicleEF	LDT2	1.53	2.77
tblVehicleEF	LDT2	355.02	335.17
tblVehicleEF	LDT2	81.24	71.76
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.13	0.31
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.01	0.02

tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	3.5560e-003	3.3085e-003
tblVehicleEF	LDT2	8.3800e-004	7.0852e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	6.3630e-003	4.0030e-003
tblVehicleEF	LDT2	6.3270e-003	0.07
tblVehicleEF	LDT2	0.93	0.93
tblVehicleEF	LDT2	1.35	2.77
tblVehicleEF	LDT2	386.34	335.17
tblVehicleEF	LDT2	81.24	71.76
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.31
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.14	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.10	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42

tblVehicleEF	LDT2	0.09	0.34
tblVehicleEF	LDT2	3.8710e-003	3.3085e-003
tblVehicleEF	LDT2	8.3500e-004	7.0852e-004
tblVehicleEF	LDT2	0.14	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.10	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.09	0.37
tblVehicleEF	LDT2	5.3900e-003	3.9361e-003
tblVehicleEF	LDT2	7.4940e-003	0.07
tblVehicleEF	LDT2	0.71	0.90
tblVehicleEF	LDT2	1.57	2.75
tblVehicleEF	LDT2	345.65	331.50
tblVehicleEF	LDT2	81.24	71.73
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.13	0.31
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.10	0.34

tblVehicleEF	LDT2	3.4620e-003	3.2722e-003
tblVehicleEF	LDT2	8.3900e-004	7.0821e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LHD1	5.4460e-003	4.7711e-003
tblVehicleEF	LHD1	0.01	5.3525e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.96	0.72
tblVehicleEF	LHD1	2.41	0.95
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.31
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.21	1.68
tblVehicleEF	LHD1	0.99	0.31
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	3.8710e-003	2.6459e-003

tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9010e-003	1.3629e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.48
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1767e-003
tblVehicleEF	LHD1	3.4900e-004	1.0205e-004
tblVehicleEF	LHD1	3.8710e-003	2.6459e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9010e-003	1.3629e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.48
tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD1	5.4460e-003	4.7711e-003
tblVehicleEF	LHD1	0.01	5.3525e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
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tblVehicleEF	LHD1	2.29	0.95
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.31
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tblVehicleEF	LHD1	2.08	1.68
tblVehicleEF	LHD1	0.96	0.31
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	7.2450e-003	2.6459e-003
tblVehicleEF	LHD1	0.12	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6380e-003	1.3629e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.32	0.48
tblVehicleEF	LHD1	0.25	0.08
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
tblVehicleEF	LHD1	5.9620e-003	6.1767e-003
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tblVehicleEF	LHD1	0.02	0.03
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tblVehicleEF	LHD1	0.01	5.3625e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
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tblVehicleEF	LHD1	2.41	0.94
tblVehicleEF	LHD1	9.26	9.49

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tblVehicleEF	LHD1	2.18	1.65
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tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
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tblVehicleEF	LHD1	0.01	0.01
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tblVehicleEF	LHD1	8.7100e-004	2.2853e-004
tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
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tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	3.4570e-003	2.8041e-003
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.02	0.02
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tblVehicleEF	LHD1	0.33	0.52
tblVehicleEF	LHD1	0.26	0.08
tblVehicleEF	LHD1	9.3000e-005	9.1676e-005
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tblVehicleEF	LHD1	0.02	0.03
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tblVehicleEF	LHD1	0.10	0.08
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tblVehicleEF	LHD1	0.28	0.08
tblVehicleEF	LHD2	3.6660e-003	2.9071e-003
tblVehicleEF	LHD2	4.5290e-003	3.7987e-003
tblVehicleEF	LHD2	8.3110e-003	8.1462e-003
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tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.15	0.51
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.61
tblVehicleEF	LHD2	0.12	0.13
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tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
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tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	1.4980e-003	1.2263e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	7.7800e-004	6.4826e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
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tblVehicleEF	LHD2	0.09	0.22
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tblVehicleEF	LHD2	8.0210e-003	8.1462e-003
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tblVehicleEF	LHD2	0.51	0.52
tblVehicleEF	LHD2	1.10	0.51
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
tblVehicleEF	LHD2	23.56	6.61
tblVehicleEF	LHD2	0.12	0.13
tblVehicleEF	LHD2	1.62	1.83
tblVehicleEF	LHD2	0.51	0.17
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tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
tblVehicleEF	LHD2	5.8740e-003	6.0523e-003
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tblVehicleEF	LHD2	2.8320e-003	1.2263e-003
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tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4720e-003	6.4826e-004
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tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.12	0.04
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tblVehicleEF	LHD2	4.5170e-003	3.8023e-003
tblVehicleEF	LHD2	8.3600e-003	8.0900e-003
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tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.16	0.50
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
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tblVehicleEF	LHD2	0.12	0.13
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tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
tblVehicleEF	LHD2	0.09	0.09

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
tblVehicleEF	LHD2	1.2780e-003	1.4369e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7445e-004
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.24
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
tblVehicleEF	LHD2	5.8740e-003	6.0523e-003
tblVehicleEF	LHD2	2.5700e-004	6.5323e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7445e-004
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tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	MCY	0.42	0.32
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.52	19.50
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tblVehicleEF	MCY	165.74	207.81
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tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	1.69	1.42
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tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.15	2.15
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.0380e-003	2.0565e-003
tblVehicleEF	MCY	6.8100e-004	6.0328e-004
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tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.65	2.64
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tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MCY	0.42	0.32
tblVehicleEF	MCY	0.14	0.24
tblVehicleEF	MCY	20.23	19.50
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tblVehicleEF	MCY	165.74	207.81
tblVehicleEF	MCY	46.23	60.96
tblVehicleEF	MCY	0.98	1.13

tblVehicleEF	MCY	0.29	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	3.35	1.42
tblVehicleEF	MCY	1.24	0.79
tblVehicleEF	MCY	2.10	0.76
tblVehicleEF	MCY	2.13	2.15
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	1.86	1.85
tblVehicleEF	MCY	2.0490e-003	2.0565e-003
tblVehicleEF	MCY	6.6500e-004	6.0328e-004
tblVehicleEF	MCY	3.35	1.42
tblVehicleEF	MCY	1.24	0.79
tblVehicleEF	MCY	2.10	0.76
tblVehicleEF	MCY	2.62	2.64
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.02	2.01
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.04	18.91
tblVehicleEF	MCY	9.62	8.38
tblVehicleEF	MCY	165.74	206.80
tblVehicleEF	MCY	46.23	60.47
tblVehicleEF	MCY	1.12	1.10
tblVehicleEF	MCY	0.31	0.26

tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
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tblVehicleEF	MCY	1.0000e-003	1.0000e-003
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tblVehicleEF	MCY	1.05	1.06
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tblVehicleEF	MCY	0.65	2.13
tblVehicleEF	MCY	2.08	1.81
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tblVehicleEF	MCY	6.8100e-004	5.9842e-004
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tblVehicleEF	MCY	1.05	1.06
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tblVehicleEF	MCY	2.27	1.97
tblVehicleEF	MDV	0.01	5.5311e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.42	1.15
tblVehicleEF	MDV	3.18	3.31
tblVehicleEF	MDV	488.89	419.23
tblVehicleEF	MDV	110.15	89.12
tblVehicleEF	MDV	0.17	0.12
tblVehicleEF	MDV	0.31	0.39
tblVehicleEF	MDV	0.04	0.04

tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MDV	4.9000e-003	4.1357e-003
tblVehicleEF	MDV	1.1570e-003	8.7994e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.27	0.50
tblVehicleEF	MDV	0.01	5.5311e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.73	1.15
tblVehicleEF	MDV	2.81	3.31
tblVehicleEF	MDV	530.71	419.23
tblVehicleEF	MDV	110.15	89.12
tblVehicleEF	MDV	0.16	0.12
tblVehicleEF	MDV	0.30	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003

tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.22	0.11
tblVehicleEF	MDV	0.23	0.16
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.04	0.02
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.21	0.45
tblVehicleEF	MDV	5.3230e-003	4.1357e-003
tblVehicleEF	MDV	1.1510e-003	8.7994e-004
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tblVehicleEF	MDV	0.23	0.16
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.23	0.50
tblVehicleEF	MDV	0.01	5.4334e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.33	1.11
tblVehicleEF	MDV	3.24	3.29
tblVehicleEF	MDV	476.42	415.30
tblVehicleEF	MDV	110.15	89.09
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	0.31	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003

tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.55
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MDV	4.7750e-003	4.0969e-003
tblVehicleEF	MDV	1.1590e-003	8.7956e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.13	0.55
tblVehicleEF	MDV	0.28	0.50
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	5.98	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.67	4.53
tblVehicleEF	MH	0.86	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00

tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9094e-003
tblVehicleEF	MH	6.8100e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.78	0.35
tblVehicleEF	MH	5.56	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.55	4.53
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06

tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
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tblVehicleEF	MH	6.7400e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	0.03	3.3935e-003
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tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	6.02	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.65	4.46
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tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003

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tblVehicleEF	MH	1.58	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
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tblVehicleEF	MH	6.8200e-004	0.00
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tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
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tblVehicleEF	MHD	3.7220e-003	5.6867e-003
tblVehicleEF	MHD	0.06	7.1017e-003
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tblVehicleEF	MHD	1,066.63	977.33
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tblVehicleEF	MHD	0.01	0.01

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tblVehicleEF	MHD	3.0000e-003	3.0000e-003
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tblVehicleEF	MHD	1.7450e-003	4.7261e-004
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tblVehicleEF	MHD	0.37	0.04
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tblVehicleEF	MHD	0.01	9.2823e-003
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tblVehicleEF	MHD	1.7450e-003	4.7261e-004
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tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.5800e-004	2.4808e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.40	0.04
tblVehicleEF	MHD	0.02	2.7460e-003
tblVehicleEF	MHD	3.7740e-003	5.6867e-003
tblVehicleEF	MHD	0.05	7.1017e-003
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tblVehicleEF	MHD	0.28	0.52
tblVehicleEF	MHD	5.78	0.85
tblVehicleEF	MHD	160.96	73.08

tblVehicleEF	MHD	1,066.63	977.33
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tblVehicleEF	MHD	11.45	1.18
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
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tblVehicleEF	MHD	3.0000e-003	3.0000e-003
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tblVehicleEF	MHD	1.6840e-003	2.4808e-004
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tblVehicleEF	MHD	3.3760e-003	4.7261e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	1.6840e-003	2.4808e-004
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tblVehicleEF	MHD	0.02	0.08

tblVehicleEF	MHD	0.39	0.04
tblVehicleEF	MHD	0.02	2.9480e-003
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3075e-005
tblVehicleEF	MHD	1.2430e-003	2.8549e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6384e-005
tblVehicleEF	MHD	1.3320e-003	5.0561e-004
tblVehicleEF	MHD	0.05	0.02
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tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	MHD	1.3440e-003	6.7281e-004

tblVehicleEF	MHD	0.01	9.2823e-003
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tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.7900e-004	2.6308e-004
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tblVehicleEF	OBUS	7.5700e-004	1.9258e-004

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tblVehicleEF	OBUS	5.7680e-003	0.04
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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
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tblVehicleEF	SBUS	8.7240e-003	3.7856e-003
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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2400e-004	6.8974e-005
tblVehicleEF	SBUS	8.4640e-003	1.3761e-003
tblVehicleEF	SBUS	0.03	9.8813e-003
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	4.0830e-003	6.8647e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.34	0.05
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.1336e-003
tblVehicleEF	SBUS	0.07	8.1369e-003
tblVehicleEF	SBUS	8.00	3.43
tblVehicleEF	SBUS	0.63	0.59
tblVehicleEF	SBUS	7.02	1.12
tblVehicleEF	SBUS	1,074.07	360.11
tblVehicleEF	SBUS	1,103.40	1,117.10
tblVehicleEF	SBUS	53.92	7.01
tblVehicleEF	SBUS	9.56	3.40
tblVehicleEF	SBUS	4.60	4.73
tblVehicleEF	SBUS	12.46	0.65
tblVehicleEF	SBUS	0.01	4.8056e-003

tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4077e-005
tblVehicleEF	SBUS	0.01	4.5978e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6950e-003	2.6443e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.0527e-005
tblVehicleEF	SBUS	4.1680e-003	1.3129e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.94	0.41
tblVehicleEF	SBUS	2.1000e-003	7.1176e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.38	0.05
tblVehicleEF	SBUS	0.01	3.4454e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6100e-004	6.9371e-005
tblVehicleEF	SBUS	4.1680e-003	1.3129e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	2.1000e-003	7.1176e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.45	23.57
tblVehicleEF	UBUS	15.26	1.95
tblVehicleEF	UBUS	1,822.40	1,641.55

tblVehicleEF	UBUS	153.45	23.43
tblVehicleEF	UBUS	4.95	0.30
tblVehicleEF	UBUS	12.47	0.24
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	9.7430e-003	2.3414e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2419e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3901e-003
tblVehicleEF	UBUS	1.8100e-003	2.3183e-004
tblVehicleEF	UBUS	9.7430e-003	2.3414e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2419e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.28	0.10
tblVehicleEF	UBUS	1.52	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	8.53	23.57
tblVehicleEF	UBUS	13.06	1.95
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.43

tblVehicleEF	UBUS	4.62	0.30
tblVehicleEF	UBUS	12.38	0.24
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	0.02	2.3414e-003
tblVehicleEF	UBUS	0.14	0.01
tblVehicleEF	UBUS	9.6600e-003	9.2419e-004
tblVehicleEF	UBUS	0.53	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.06	0.10
tblVehicleEF	UBUS	9.9970e-003	6.3901e-003
tblVehicleEF	UBUS	1.7720e-003	2.3183e-004
tblVehicleEF	UBUS	0.02	2.3414e-003
tblVehicleEF	UBUS	0.14	0.01
tblVehicleEF	UBUS	9.6600e-003	9.2419e-004
tblVehicleEF	UBUS	2.09	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.44	23.57
tblVehicleEF	UBUS	15.44	1.93
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.40
tblVehicleEF	UBUS	4.92	0.30

tblVehicleEF	UBUS	12.47	0.23
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	8.9770e-003	2.4593e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7705e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.18	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3901e-003
tblVehicleEF	UBUS	1.8130e-003	2.3157e-004
tblVehicleEF	UBUS	8.9770e-003	2.4593e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7705e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.29	0.10
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	17.20	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	16.60	4.48
tblVehicleTrips	CW_TTP	77.80	100.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00

tblVehicleTrips	PR_TP	75.00	100.00
tblVehicleTrips	ST_TR	0.61	1.79
tblVehicleTrips	SU_TR	0.25	1.79
tblVehicleTrips	WD_TR	1.71	1.79
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated 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/day					
Area	1.7984	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659
Energy	0.0129	0.1177	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.1765	141.1765	2.7100e-003	2.5900e-003	142.0154
Mobile	9.0296	5.9726	54.7521	0.1206	13.7927	0.0982	13.8909	3.6581	0.0912	3.7493		12,236.0769	12,236.0769	0.7329		12,254.3996
Total	**10.8409**	**6.0937**	**55.2312**	**0.1213**	**13.7927**	**0.1085**	**13.9012**	**3.6581**	**0.1015**	**3.7596**		**12,378.0653**	**12,378.0653**	**0.7378**	**2.5900e-003**	**12,397.2809**

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/day					
Area	1.7984	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659
Energy	9.8500e-003	0.0896	0.0752	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003		107.4778	107.4778	2.0600e-003	1.9700e-003	108.1165
Mobile	9.0296	5.9726	54.7521	0.1206	13.7927	0.0982	13.8909	3.6581	0.0912	3.7493		12,236.0769	12,236.0769	0.7329		12,254.3996
Total	**10.8378**	**6.0656**	**55.2076**	**0.1212**	**13.7927**	**0.1063**	**13.8991**	**3.6581**	**0.0993**	**3.7575**		**12,344.3667**	**12,344.3667**	**0.7371**	**1.9700e-003**	**12,363.3820**

	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	N20	CO2e
Percent Reduction	**0.03**	**0.46**	**0.04**	**0.14**	**0.00**	**1.96**	**0.02**	**0.00**	**2.10**	**0.06**	**0.00**	**0.27**	**0.27**	**0.09**	**23.94**	**0.27**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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/day					
Mitigated	9.0296	5.9726	54.7521	0.1206	13.7927	0.0982	13.8909	3.6581	0.0912	3.7493		12,236.0769	12,236.0769	0.7329		12,254.3996
Unmitigated	9.0296	5.9726	54.7521	0.1206	13.7927	0.0982	13.8909	3.6581	0.0912	3.7493		12,236.0769	12,236.0769	0.7329		12,254.3996

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	4,045.51	4,045.51	4045.51	6,599,901	6,599,901
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	4,045.51	4,045.51	4,045.51	6,599,901	6,599,901

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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
High School	4.48	0.00	0.00	100.00	0.00	0.00	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.683544	0.047381	0.233519	0.020005	0.001450	0.000459	0.001553	0.006134	0.000000	0.000000	0.005777	0.000084	0.000093

Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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/day					
NaturalGas Mitigated	9.8500e-003	0.0896	0.0752	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003		107.4778	107.4778	2.0600e-003	1.9700e-003	108.1165
NaturalGas Unmitigated	0.0129	0.1177	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.1765	141.1765	2.7100e-003	2.5900e-003	142.0154

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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/day										lb/day					
High School	1200	0.0129	0.1177	0.0988	7.1000e-004		8.9400e-003	8.9400e-003		8.9400e-003	8.9400e-003		141.1765	141.1765	2.7100e-003	2.5900e-003	142.0154
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
Parking Lot	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		**0.0129**	**0.1177**	**0.0988**	**7.1000e-004**		**8.9400e-003**	**8.9400e-003**		**8.9400e-003**	**8.9400e-003**		**141.1765**	**141.1765**	**2.7100e-003**	**2.5900e-003**	**142.0154**

Mitigated

	NaturalGas 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/day										lb/day					
High School	0.913562	9.8500e-003	0.0896	0.0752	5.4000e-004		6.8100e-003	6.8100e-003		6.8100e-003	6.8100e-003		107.4778	107.4778	2.0600e-003	1.9700e-003	108.1165
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
Parking Lot	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		**9.8500e-003**	**0.0896**	**0.0752**	**5.4000e-004**		**6.8100e-003**	**6.8100e-003**		**6.8100e-003**	**6.8100e-003**		**107.4778**	**107.4778**	**2.0600e-003**	**1.9700e-003**	**108.1165**

6.0 Area Detail

6.1 Mitigation Measures Area

	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/day					
Mitigated	1.7984	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659
Unmitigated	1.7984	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659

6.2 Area by SubCategory

Unmitigated

	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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0355	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659

Total	**1.7984**	**3.4900e-003**	**0.3803**	**3.0000e-005**		**1.3600e-003**	**1.3600e-003**		**1.3600e-003**	**1.3600e-003**		**0.8120**	**0.8120**	**2.1600e-003**		**0.8659**

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	0.2571					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.5057					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0355	3.4900e-003	0.3803	3.0000e-005		1.3600e-003	1.3600e-003		1.3600e-003	1.3600e-003		0.8120	0.8120	2.1600e-003		0.8659
Total	**1.7984**	**3.4900e-003**	**0.3803**	**3.0000e-005**		**1.3600e-003**	**1.3600e-003**		**1.3600e-003**	**1.3600e-003**		**0.8120**	**0.8120**	**2.1600e-003**		**0.8659**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

Beaumont High School Operations Run (Annual Emissions) - Riverside-South Coast County, Annual

Beaumont High School Operations Run (Annual Emissions)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
High School	2,254.00	Student	0.57	50,000.00	0
Other Asphalt Surfaces	163.35	1000sqft	3.75	163,350.00	0
Other Non-Asphalt Surfaces	1,023.11	1000sqft	23.49	1,023,110.00	0
Parking Lot	269.58	1000sqft	6.19	269,580.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	531.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - 2 story classroom building

Construction Phase -

Vehicle Trips - based on data provided by Garland Associates

Area Coating - based on info provided by applicant

Energy Use -

Water And Wastewater - assumes 100% aerobic treatment

Energy Mitigation -

Water Mitigation -

Fleet Mix - see fleet mix adjustment in assumptions file

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	150
tblAreaCoating	Area_EF_Nonresidential_Interior	100	150
tblAreaCoating	Area_Nonresidential_Exterior	25000	16750
tblAreaCoating	Area_Nonresidential_Interior	75000	60000
tblFleetMix	HHD	0.07	6.1340e-003
tblFleetMix	LDA	0.54	0.68
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.23
tblFleetMix	LHD1	0.02	1.4500e-003
tblFleetMix	LHD2	5.1410e-003	4.5900e-004
tblFleetMix	MCY	4.5820e-003	5.7770e-003
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MH	1.0380e-003	9.3000e-005
tblFleetMix	MHD	0.02	1.5530e-003
tblFleetMix	OBUS	1.3830e-003	0.00
tblFleetMix	SBUS	9.4500e-004	8.4000e-005
tblFleetMix	UBUS	1.1830e-003	0.00
tblLandUse	LandUseSquareFeet	299,017.84	50,000.00
tblLandUse	LotAcreage	6.86	0.57
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblVehicleEF	HHD	1.43	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	2.1311e-007
tblVehicleEF	HHD	3.28	5.70
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.46	5.1287e-003
tblVehicleEF	HHD	6,485.38	1,098.23

tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	26.41	5.91
tblVehicleEF	HHD	2.69	3.40
tblVehicleEF	HHD	20.32	2.01
tblVehicleEF	HHD	0.01	8.1205e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.01	7.7692e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8102e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	8.4000e-005	3.9431e-006
tblVehicleEF	HHD	2.5800e-003	1.4075e-004
tblVehicleEF	HHD	0.85	0.44
tblVehicleEF	HHD	4.8000e-005	2.4154e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8000e-004	7.3333e-004
tblVehicleEF	HHD	0.05	1.0921e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	4.3455e-007
tblVehicleEF	HHD	8.4000e-005	3.9431e-006
tblVehicleEF	HHD	2.5800e-003	1.4075e-004
tblVehicleEF	HHD	0.97	0.51
tblVehicleEF	HHD	4.8000e-005	2.4154e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8000e-004	7.3333e-004

tblVehicleEF	HHD	0.05	1.1957e-006
tblVehicleEF	HHD	1.35	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.10	2.1311e-007
tblVehicleEF	HHD	2.39	5.70
tblVehicleEF	HHD	0.46	0.43
tblVehicleEF	HHD	1.39	5.1287e-003
tblVehicleEF	HHD	6,867.98	1,098.23
tblVehicleEF	HHD	1,461.92	1,379.84
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	27.25	5.91
tblVehicleEF	HHD	2.54	3.40
tblVehicleEF	HHD	20.32	2.01
tblVehicleEF	HHD	0.01	8.1205e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.01	7.7692e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.8102e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007
tblVehicleEF	HHD	1.6300e-004	3.9431e-006
tblVehicleEF	HHD	2.9560e-003	1.4075e-004
tblVehicleEF	HHD	0.80	0.44
tblVehicleEF	HHD	9.2000e-005	2.4154e-006
tblVehicleEF	HHD	0.07	0.09
tblVehicleEF	HHD	1.8400e-004	7.3333e-004
tblVehicleEF	HHD	0.04	1.0921e-006
tblVehicleEF	HHD	0.06	0.01

tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	6.9000e-005	4.3455e-007
tblVehicleEF	HHD	1.6300e-004	3.9431e-006
tblVehicleEF	HHD	2.9560e-003	1.4075e-004
tblVehicleEF	HHD	0.92	0.51
tblVehicleEF	HHD	9.2000e-005	2.4154e-006
tblVehicleEF	HHD	0.11	0.12
tblVehicleEF	HHD	1.8400e-004	7.3333e-004
tblVehicleEF	HHD	0.05	1.1957e-006
tblVehicleEF	HHD	1.54	0.02
tblVehicleEF	HHD	0.03	3.9264e-003
tblVehicleEF	HHD	0.10	2.1145e-007
tblVehicleEF	HHD	4.51	5.86
tblVehicleEF	HHD	0.45	0.36
tblVehicleEF	HHD	1.47	5.0740e-003
tblVehicleEF	HHD	5,957.03	1,095.99
tblVehicleEF	HHD	1,461.92	1,363.80
tblVehicleEF	HHD	4.62	0.04
tblVehicleEF	HHD	25.25	6.10
tblVehicleEF	HHD	2.67	3.34
tblVehicleEF	HHD	20.32	2.01
tblVehicleEF	HHD	0.02	8.8013e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.01	0.06
tblVehicleEF	HHD	3.8000e-005	6.9620e-007
tblVehicleEF	HHD	0.02	8.4206e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8680e-003	8.7660e-003
tblVehicleEF	HHD	0.01	0.05
tblVehicleEF	HHD	3.5000e-005	6.4013e-007

tblVehicleEF	HHD	6.7000e-005	4.1581e-006
tblVehicleEF	HHD	2.7490e-003	1.5944e-004
tblVehicleEF	HHD	0.91	0.42
tblVehicleEF	HHD	4.1000e-005	2.6509e-006
tblVehicleEF	HHD	0.07	0.08
tblVehicleEF	HHD	1.9200e-004	7.7684e-004
tblVehicleEF	HHD	0.05	1.0839e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	4.3370e-007
tblVehicleEF	HHD	6.7000e-005	4.1581e-006
tblVehicleEF	HHD	2.7490e-003	1.5944e-004
tblVehicleEF	HHD	1.05	0.48
tblVehicleEF	HHD	4.1000e-005	2.6509e-006
tblVehicleEF	HHD	0.11	0.10
tblVehicleEF	HHD	1.9200e-004	7.7684e-004
tblVehicleEF	HHD	0.05	1.1867e-006
tblVehicleEF	LDA	4.0430e-003	2.4275e-003
tblVehicleEF	LDA	5.4670e-003	0.05
tblVehicleEF	LDA	0.58	0.65
tblVehicleEF	LDA	1.16	2.15
tblVehicleEF	LDA	255.91	264.62
tblVehicleEF	LDA	58.81	54.91
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003

tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	9.3165e-003
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.23
tblVehicleEF	LDA	2.5630e-003	2.6119e-003
tblVehicleEF	LDA	6.0800e-004	5.4212e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDA	4.5900e-003	2.4275e-003
tblVehicleEF	LDA	4.7470e-003	0.05
tblVehicleEF	LDA	0.71	0.65
tblVehicleEF	LDA	1.02	2.15
tblVehicleEF	LDA	278.73	264.62
tblVehicleEF	LDA	58.81	54.91
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003

tblVehicleEF	LDA	2.0830e-003	1.7604e-003
tblVehicleEF	LDA	0.10	0.06
tblVehicleEF	LDA	0.12	0.10
tblVehicleEF	LDA	0.07	0.05
tblVehicleEF	LDA	0.01	9.3165e-003
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.06	0.23
tblVehicleEF	LDA	2.7930e-003	2.6119e-003
tblVehicleEF	LDA	6.0500e-004	5.4212e-004
tblVehicleEF	LDA	0.10	0.06
tblVehicleEF	LDA	0.12	0.10
tblVehicleEF	LDA	0.07	0.05
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.21
tblVehicleEF	LDA	0.07	0.25
tblVehicleEF	LDA	3.8980e-003	2.3855e-003
tblVehicleEF	LDA	5.6140e-003	0.05
tblVehicleEF	LDA	0.54	0.62
tblVehicleEF	LDA	1.19	2.13
tblVehicleEF	LDA	249.57	260.99
tblVehicleEF	LDA	58.81	54.88
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.07	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6140e-003	1.4413e-003
tblVehicleEF	LDA	2.2650e-003	1.9145e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.4880e-003	1.3279e-003
tblVehicleEF	LDA	2.0830e-003	1.7604e-003

tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	9.8140e-003	9.1467e-003
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.23
tblVehicleEF	LDA	2.4990e-003	2.5760e-003
tblVehicleEF	LDA	6.0800e-004	5.4186e-004
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.25
tblVehicleEF	LDT1	0.01	7.6986e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.46	1.55
tblVehicleEF	LDT1	3.40	2.46
tblVehicleEF	LDT1	315.98	313.73
tblVehicleEF	LDT1	72.28	66.96
tblVehicleEF	LDT1	0.14	0.14
tblVehicleEF	LDT1	0.21	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.21	0.19

tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.24	0.46
tblVehicleEF	LDT1	3.1780e-003	3.0974e-003
tblVehicleEF	LDT1	7.8300e-004	6.6113e-004
tblVehicleEF	LDT1	0.21	0.19
tblVehicleEF	LDT1	0.35	0.27
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.26	0.50
tblVehicleEF	LDT1	0.01	7.6986e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.76	1.55
tblVehicleEF	LDT1	2.99	2.46
tblVehicleEF	LDT1	343.19	313.73
tblVehicleEF	LDT1	72.28	66.96
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.20	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.41	0.19
tblVehicleEF	LDT1	0.43	0.27

tblVehicleEF	LDT1	0.27	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.21	0.46
tblVehicleEF	LDT1	3.4550e-003	3.0974e-003
tblVehicleEF	LDT1	7.7500e-004	6.6113e-004
tblVehicleEF	LDT1	0.41	0.19
tblVehicleEF	LDT1	0.43	0.27
tblVehicleEF	LDT1	0.27	0.13
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.20	0.87
tblVehicleEF	LDT1	0.23	0.50
tblVehicleEF	LDT1	0.01	7.5727e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.37	1.50
tblVehicleEF	LDT1	3.46	2.44
tblVehicleEF	LDT1	307.88	309.94
tblVehicleEF	LDT1	72.28	66.93
tblVehicleEF	LDT1	0.14	0.13
tblVehicleEF	LDT1	0.21	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.5300e-003	2.2623e-003
tblVehicleEF	LDT1	3.6970e-003	2.9788e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.3290e-003	2.0820e-003
tblVehicleEF	LDT1	3.4000e-003	2.7391e-003
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13

tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.23	1.01
tblVehicleEF	LDT1	0.25	0.46
tblVehicleEF	LDT1	3.0960e-003	3.0600e-003
tblVehicleEF	LDT1	7.8400e-004	6.6081e-004
tblVehicleEF	LDT1	0.18	0.20
tblVehicleEF	LDT1	0.39	0.31
tblVehicleEF	LDT1	0.12	0.13
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.23	1.02
tblVehicleEF	LDT1	0.27	0.50
tblVehicleEF	LDT2	5.6080e-003	4.0030e-003
tblVehicleEF	LDT2	7.2840e-003	0.07
tblVehicleEF	LDT2	0.76	0.93
tblVehicleEF	LDT2	1.53	2.77
tblVehicleEF	LDT2	355.02	335.17
tblVehicleEF	LDT2	81.24	71.76
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.13	0.31
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.01	0.02

tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.10	0.34
tblVehicleEF	LDT2	3.5560e-003	3.3085e-003
tblVehicleEF	LDT2	8.3800e-004	7.0852e-004
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	0.12	0.13
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	6.3630e-003	4.0030e-003
tblVehicleEF	LDT2	6.3270e-003	0.07
tblVehicleEF	LDT2	0.93	0.93
tblVehicleEF	LDT2	1.35	2.77
tblVehicleEF	LDT2	386.34	335.17
tblVehicleEF	LDT2	81.24	71.76
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.31
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.14	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.10	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42

tblVehicleEF	LDT2	0.09	0.34
tblVehicleEF	LDT2	3.8710e-003	3.3085e-003
tblVehicleEF	LDT2	8.3500e-004	7.0852e-004
tblVehicleEF	LDT2	0.14	0.09
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.10	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.42
tblVehicleEF	LDT2	0.09	0.37
tblVehicleEF	LDT2	5.3900e-003	3.9361e-003
tblVehicleEF	LDT2	7.4940e-003	0.07
tblVehicleEF	LDT2	0.71	0.90
tblVehicleEF	LDT2	1.57	2.75
tblVehicleEF	LDT2	345.65	331.50
tblVehicleEF	LDT2	81.24	71.73
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.13	0.31
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.4809e-003
tblVehicleEF	LDT2	2.3320e-003	1.9495e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.3631e-003
tblVehicleEF	LDT2	2.1450e-003	1.7925e-003
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.10	0.34

tblVehicleEF	LDT2	3.4620e-003	3.2722e-003
tblVehicleEF	LDT2	8.3900e-004	7.0821e-004
tblVehicleEF	LDT2	0.06	0.09
tblVehicleEF	LDT2	0.13	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.49
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LHD1	5.4460e-003	4.7711e-003
tblVehicleEF	LHD1	0.01	5.3525e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
tblVehicleEF	LHD1	0.96	0.72
tblVehicleEF	LHD1	2.41	0.95
tblVehicleEF	LHD1	9.26	9.49
tblVehicleEF	LHD1	607.95	635.36
tblVehicleEF	LHD1	30.36	10.31
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	2.21	1.68
tblVehicleEF	LHD1	0.99	0.31
tblVehicleEF	LHD1	9.7200e-004	9.9729e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
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tblVehicleEF	LHD1	9.3000e-004	9.5415e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5390e-003	2.5132e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	8.0100e-004	2.1012e-004
tblVehicleEF	LHD1	3.8710e-003	2.6459e-003

tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9010e-003	1.3629e-003
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tblVehicleEF	LHD1	0.31	0.48
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tblVehicleEF	LHD1	3.8710e-003	2.6459e-003
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tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.17
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tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6380e-003	1.3629e-003
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tblVehicleEF	LHD1	0.32	0.48
tblVehicleEF	LHD1	0.25	0.08
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tblVehicleEF	LHD1	3.6380e-003	1.3629e-003
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tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.01
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tblVehicleEF	LHD1	0.33	0.52
tblVehicleEF	LHD1	0.26	0.08
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tblVehicleEF	LHD2	4.5290e-003	3.7987e-003
tblVehicleEF	LHD2	8.3110e-003	8.1462e-003
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tblVehicleEF	LHD2	1.15	0.51
tblVehicleEF	LHD2	14.48	15.14
tblVehicleEF	LHD2	604.20	629.09
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tblVehicleEF	LHD2	1.3360e-003	1.5018e-003
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tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	7.7800e-004	6.4826e-004
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tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.11	0.04
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tblVehicleEF	LHD2	1.4980e-003	1.2263e-003
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tblVehicleEF	LHD2	0.02	0.02
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tblVehicleEF	LHD2	0.09	0.22
tblVehicleEF	LHD2	0.12	0.04
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tblVehicleEF	LHD2	8.0210e-003	8.1462e-003
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tblVehicleEF	LHD2	1.10	0.51
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tblVehicleEF	LHD2	0.51	0.17
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tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.8700e-004	1.0545e-004
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tblVehicleEF	LHD2	0.09	0.22
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tblVehicleEF	LHD2	2.8320e-003	1.2263e-003
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tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.4720e-003	6.4826e-004
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tblVehicleEF	LHD2	0.09	0.22
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tblVehicleEF	LHD2	2.6970e-003	2.7369e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5600e-004	9.6959e-005
tblVehicleEF	LHD2	1.1910e-003	1.2710e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7445e-004
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tblVehicleEF	LHD2	0.09	0.24
tblVehicleEF	LHD2	0.11	0.04
tblVehicleEF	LHD2	1.4100e-004	1.4445e-004
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tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.6000e-004	6.7445e-004
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tblVehicleEF	LHD2	0.12	0.04
tblVehicleEF	MCY	0.42	0.32
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.52	19.50
tblVehicleEF	MCY	9.67	8.60
tblVehicleEF	MCY	165.74	207.81
tblVehicleEF	MCY	46.23	60.96

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tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
tblVehicleEF	MCY	1.69	1.42
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.15	2.15
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.08	1.85
tblVehicleEF	MCY	2.0380e-003	2.0565e-003
tblVehicleEF	MCY	6.8100e-004	6.0328e-004
tblVehicleEF	MCY	1.69	1.42
tblVehicleEF	MCY	0.85	0.79
tblVehicleEF	MCY	0.92	0.76
tblVehicleEF	MCY	2.65	2.64
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.26	2.01
tblVehicleEF	MCY	0.42	0.32
tblVehicleEF	MCY	0.14	0.24
tblVehicleEF	MCY	20.23	19.50
tblVehicleEF	MCY	9.11	8.60
tblVehicleEF	MCY	165.74	207.81
tblVehicleEF	MCY	46.23	60.96
tblVehicleEF	MCY	0.98	1.13

tblVehicleEF	MCY	0.29	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
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tblVehicleEF	MCY	1.0000e-003	1.0000e-003
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tblVehicleEF	MCY	1.24	0.79
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tblVehicleEF	MCY	2.13	2.15
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tblVehicleEF	MCY	1.86	1.85
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tblVehicleEF	MCY	1.24	0.79
tblVehicleEF	MCY	2.10	0.76
tblVehicleEF	MCY	2.62	2.64
tblVehicleEF	MCY	0.57	1.87
tblVehicleEF	MCY	2.02	2.01
tblVehicleEF	MCY	0.42	0.31
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.04	18.91
tblVehicleEF	MCY	9.62	8.38
tblVehicleEF	MCY	165.74	206.80
tblVehicleEF	MCY	46.23	60.47
tblVehicleEF	MCY	1.12	1.10
tblVehicleEF	MCY	0.31	0.26

tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7750e-003	1.7168e-003
tblVehicleEF	MCY	3.4010e-003	2.8688e-003
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tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6600e-003	1.6067e-003
tblVehicleEF	MCY	3.2060e-003	2.7030e-003
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tblVehicleEF	MCY	1.05	1.06
tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.15	2.13
tblVehicleEF	MCY	0.65	2.13
tblVehicleEF	MCY	2.08	1.81
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tblVehicleEF	MCY	6.8100e-004	5.9842e-004
tblVehicleEF	MCY	1.60	1.63
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tblVehicleEF	MCY	0.74	0.76
tblVehicleEF	MCY	2.64	2.62
tblVehicleEF	MCY	0.65	2.13
tblVehicleEF	MCY	2.27	1.97
tblVehicleEF	MDV	0.01	5.5311e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.42	1.15
tblVehicleEF	MDV	3.18	3.31
tblVehicleEF	MDV	488.89	419.23
tblVehicleEF	MDV	110.15	89.12
tblVehicleEF	MDV	0.17	0.12
tblVehicleEF	MDV	0.31	0.39
tblVehicleEF	MDV	0.04	0.04

tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MDV	4.9000e-003	4.1357e-003
tblVehicleEF	MDV	1.1570e-003	8.7994e-004
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.20	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.27	0.50
tblVehicleEF	MDV	0.01	5.5311e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.73	1.15
tblVehicleEF	MDV	2.81	3.31
tblVehicleEF	MDV	530.71	419.23
tblVehicleEF	MDV	110.15	89.12
tblVehicleEF	MDV	0.16	0.12
tblVehicleEF	MDV	0.30	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003

tblVehicleEF	MDV	1.7110e-003	1.5592e-003
tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.22	0.11
tblVehicleEF	MDV	0.23	0.16
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.04	0.02
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.21	0.45
tblVehicleEF	MDV	5.3230e-003	4.1357e-003
tblVehicleEF	MDV	1.1510e-003	8.7994e-004
tblVehicleEF	MDV	0.22	0.11
tblVehicleEF	MDV	0.23	0.16
tblVehicleEF	MDV	0.17	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.11	0.48
tblVehicleEF	MDV	0.23	0.50
tblVehicleEF	MDV	0.01	5.4334e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.33	1.11
tblVehicleEF	MDV	3.24	3.29
tblVehicleEF	MDV	476.42	415.30
tblVehicleEF	MDV	110.15	89.09
tblVehicleEF	MDV	0.16	0.11
tblVehicleEF	MDV	0.31	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7110e-003	1.5592e-003

tblVehicleEF	MDV	2.4630e-003	2.0458e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.5780e-003	1.4389e-003
tblVehicleEF	MDV	2.2660e-003	1.8823e-003
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.13	0.55
tblVehicleEF	MDV	0.25	0.45
tblVehicleEF	MDV	4.7750e-003	4.0969e-003
tblVehicleEF	MDV	1.1590e-003	8.7956e-004
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.21	0.18
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.05	0.03
tblVehicleEF	MDV	0.13	0.55
tblVehicleEF	MDV	0.28	0.50
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	5.98	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.67	4.53
tblVehicleEF	MH	0.86	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00

tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9094e-003
tblVehicleEF	MH	6.8100e-004	0.00
tblVehicleEF	MH	1.56	0.00
tblVehicleEF	MH	0.08	0.00
tblVehicleEF	MH	0.54	0.00
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tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.02	0.00
tblVehicleEF	MH	2.78	0.35
tblVehicleEF	MH	5.56	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.55	4.53
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tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06

tblVehicleEF	MH	3.2460e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.14
tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.10	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.34	0.00
tblVehicleEF	MH	9.9470e-003	8.9094e-003
tblVehicleEF	MH	6.7400e-004	0.00
tblVehicleEF	MH	2.87	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.06	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	0.03	3.3935e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	2.70	0.35
tblVehicleEF	MH	6.02	0.00
tblVehicleEF	MH	1,002.10	942.43
tblVehicleEF	MH	57.67	0.00
tblVehicleEF	MH	1.65	4.46
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tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.04	0.15
tblVehicleEF	MH	1.0860e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2460e-003	4.0000e-003

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tblVehicleEF	MH	9.9800e-004	0.00
tblVehicleEF	MH	1.58	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.35	0.00
tblVehicleEF	MH	9.9460e-003	8.9094e-003
tblVehicleEF	MH	6.8200e-004	0.00
tblVehicleEF	MH	1.58	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	0.53	0.00
tblVehicleEF	MH	0.13	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MHD	0.02	2.7460e-003
tblVehicleEF	MHD	3.7220e-003	5.6867e-003
tblVehicleEF	MHD	0.06	7.1017e-003
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tblVehicleEF	MHD	151.96	73.08
tblVehicleEF	MHD	1,066.63	977.33
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tblVehicleEF	MHD	0.01	0.01

tblVehicleEF	MHD	6.4490e-003	0.09
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tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
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tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	MHD	1.4610e-003	6.9264e-004
tblVehicleEF	MHD	0.01	9.2823e-003
tblVehicleEF	MHD	6.6100e-004	6.9447e-005
tblVehicleEF	MHD	1.7450e-003	4.7261e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	8.5800e-004	2.4808e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.40	0.04
tblVehicleEF	MHD	0.02	2.7460e-003
tblVehicleEF	MHD	3.7740e-003	5.6867e-003
tblVehicleEF	MHD	0.05	7.1017e-003
tblVehicleEF	MHD	0.26	0.32
tblVehicleEF	MHD	0.28	0.52
tblVehicleEF	MHD	5.78	0.85
tblVehicleEF	MHD	160.96	73.08

tblVehicleEF	MHD	1,066.63	977.33
tblVehicleEF	MHD	55.49	7.02
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tblVehicleEF	MHD	0.93	2.47
tblVehicleEF	MHD	11.45	1.18
tblVehicleEF	MHD	9.0000e-004	2.4553e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3075e-005
tblVehicleEF	MHD	8.6100e-004	2.3490e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6384e-005
tblVehicleEF	MHD	3.3760e-003	4.7261e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.6840e-003	2.4808e-004
tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.08
tblVehicleEF	MHD	0.36	0.04
tblVehicleEF	MHD	1.5460e-003	6.9264e-004
tblVehicleEF	MHD	0.01	9.2823e-003
tblVehicleEF	MHD	6.5600e-004	6.9447e-005
tblVehicleEF	MHD	3.3760e-003	4.7261e-004
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	1.6840e-003	2.4808e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.08

tblVehicleEF	MHD	0.39	0.04
tblVehicleEF	MHD	0.02	2.9480e-003
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tblVehicleEF	MHD	0.27	0.52
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tblVehicleEF	MHD	1.2990e-003	2.9840e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.4490e-003	0.09
tblVehicleEF	MHD	7.8800e-004	8.3075e-005
tblVehicleEF	MHD	1.2430e-003	2.8549e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	6.1670e-003	0.08
tblVehicleEF	MHD	7.2400e-004	7.6384e-005
tblVehicleEF	MHD	1.3320e-003	5.0561e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.7900e-004	2.6308e-004
tblVehicleEF	MHD	0.03	0.11
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.37	0.04
tblVehicleEF	MHD	1.3440e-003	6.7281e-004

tblVehicleEF	MHD	0.01	9.2823e-003
tblVehicleEF	MHD	6.6300e-004	6.9296e-005
tblVehicleEF	MHD	1.3320e-003	5.0561e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.7900e-004	2.6308e-004
tblVehicleEF	MHD	0.04	0.13
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.41	0.04
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tblVehicleEF	OBUS	8.0950e-003	9.8616e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.27	0.48
tblVehicleEF	OBUS	0.54	1.11
tblVehicleEF	OBUS	6.17	2.80
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tblVehicleEF	OBUS	1,098.07	1,401.75
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tblVehicleEF	OBUS	0.35	0.41
tblVehicleEF	OBUS	1.12	1.96
tblVehicleEF	OBUS	2.18	0.56
tblVehicleEF	OBUS	1.2100e-004	1.7088e-003
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tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.0450e-003	0.05
tblVehicleEF	OBUS	8.2300e-004	2.0944e-004
tblVehicleEF	OBUS	1.1600e-004	1.6349e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	5.7680e-003	0.04
tblVehicleEF	OBUS	7.5700e-004	1.9258e-004

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tblVehicleEF	OBUS	0.04	0.10
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tblVehicleEF	OBUS	7.2800e-004	6.5786e-004
tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	2.1800e-003	2.6435e-003
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tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	9.3000e-004	1.1509e-003
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tblVehicleEF	OBUS	0.05	0.29
tblVehicleEF	OBUS	0.42	0.15
tblVehicleEF	OBUS	0.01	8.8304e-003
tblVehicleEF	OBUS	8.2540e-003	9.8616e-003
tblVehicleEF	OBUS	0.03	0.03
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tblVehicleEF	OBUS	5.76	2.80
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tblVehicleEF	OBUS	1,098.07	1,401.75
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tblVehicleEF	OBUS	1.0200e-004	1.7088e-003
tblVehicleEF	OBUS	0.13	0.13

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.0450e-003	0.05
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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
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tblVehicleEF	OBUS	8.0660e-003	9.8763e-003
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tblVehicleEF	OBUS	2.17	0.55
tblVehicleEF	OBUS	1.4700e-004	2.0750e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.0450e-003	0.05
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tblVehicleEF	OBUS	1.4100e-004	1.9852e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	5.7680e-003	0.04
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tblVehicleEF	OBUS	0.39	0.13
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tblVehicleEF	OBUS	1.8870e-003	2.7905e-003
tblVehicleEF	OBUS	0.02	0.03
tblVehicleEF	OBUS	0.05	0.07
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tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4077e-005
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tblVehicleEF	SBUS	2.6950e-003	2.6443e-003
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tblVehicleEF	SBUS	4.2000e-004	4.0527e-005
tblVehicleEF	SBUS	4.6830e-003	1.3761e-003
tblVehicleEF	SBUS	0.03	9.8813e-003
tblVehicleEF	SBUS	0.94	0.41
tblVehicleEF	SBUS	2.1770e-003	6.8647e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.37	0.05

tblVehicleEF	SBUS	0.01	3.5825e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5500e-004	6.8974e-005
tblVehicleEF	SBUS	4.6830e-003	1.3761e-003
tblVehicleEF	SBUS	0.03	9.8813e-003
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	2.1770e-003	6.8647e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	0.40	0.05
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.1350e-003
tblVehicleEF	SBUS	0.05	7.9942e-003
tblVehicleEF	SBUS	7.71	3.38
tblVehicleEF	SBUS	0.65	0.59
tblVehicleEF	SBUS	4.83	1.10
tblVehicleEF	SBUS	1,198.60	374.62
tblVehicleEF	SBUS	1,103.40	1,117.10
tblVehicleEF	SBUS	53.92	6.97
tblVehicleEF	SBUS	10.32	3.53
tblVehicleEF	SBUS	4.37	4.80
tblVehicleEF	SBUS	12.42	0.65
tblVehicleEF	SBUS	9.1190e-003	3.9568e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4077e-005
tblVehicleEF	SBUS	8.7240e-003	3.7856e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6950e-003	2.6443e-003
tblVehicleEF	SBUS	0.02	0.03

tblVehicleEF	SBUS	4.2000e-004	4.0527e-005
tblVehicleEF	SBUS	8.4640e-003	1.3761e-003
tblVehicleEF	SBUS	0.03	9.8813e-003
tblVehicleEF	SBUS	0.93	0.41
tblVehicleEF	SBUS	4.0830e-003	6.8647e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.31	0.05
tblVehicleEF	SBUS	0.01	3.5825e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.2400e-004	6.8974e-005
tblVehicleEF	SBUS	8.4640e-003	1.3761e-003
tblVehicleEF	SBUS	0.03	9.8813e-003
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	4.0830e-003	6.8647e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.34	0.05
tblVehicleEF	SBUS	0.84	0.09
tblVehicleEF	SBUS	0.01	7.1336e-003
tblVehicleEF	SBUS	0.07	8.1369e-003
tblVehicleEF	SBUS	8.00	3.43
tblVehicleEF	SBUS	0.63	0.59
tblVehicleEF	SBUS	7.02	1.12
tblVehicleEF	SBUS	1,074.07	360.11
tblVehicleEF	SBUS	1,103.40	1,117.10
tblVehicleEF	SBUS	53.92	7.01
tblVehicleEF	SBUS	9.56	3.40
tblVehicleEF	SBUS	4.60	4.73
tblVehicleEF	SBUS	12.46	0.65
tblVehicleEF	SBUS	0.01	4.8056e-003

tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.5700e-004	4.4077e-005
tblVehicleEF	SBUS	0.01	4.5978e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6950e-003	2.6443e-003
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	4.2000e-004	4.0527e-005
tblVehicleEF	SBUS	4.1680e-003	1.3129e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.94	0.41
tblVehicleEF	SBUS	2.1000e-003	7.1176e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.38	0.05
tblVehicleEF	SBUS	0.01	3.4454e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.6100e-004	6.9371e-005
tblVehicleEF	SBUS	4.1680e-003	1.3129e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.35	0.59
tblVehicleEF	SBUS	2.1000e-003	7.1176e-004
tblVehicleEF	SBUS	0.13	0.12
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.41	0.05
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.45	23.57
tblVehicleEF	UBUS	15.26	1.95
tblVehicleEF	UBUS	1,822.40	1,641.55

tblVehicleEF	UBUS	153.45	23.43
tblVehicleEF	UBUS	4.95	0.30
tblVehicleEF	UBUS	12.47	0.24
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	9.7430e-003	2.3414e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2419e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3901e-003
tblVehicleEF	UBUS	1.8100e-003	2.3183e-004
tblVehicleEF	UBUS	9.7430e-003	2.3414e-003
tblVehicleEF	UBUS	0.11	0.01
tblVehicleEF	UBUS	4.7860e-003	9.2419e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.28	0.10
tblVehicleEF	UBUS	1.52	3.04
tblVehicleEF	UBUS	0.08	0.02
tblVehicleEF	UBUS	8.53	23.57
tblVehicleEF	UBUS	13.06	1.95
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.43

tblVehicleEF	UBUS	4.62	0.30
tblVehicleEF	UBUS	12.38	0.24
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	0.02	2.3414e-003
tblVehicleEF	UBUS	0.14	0.01
tblVehicleEF	UBUS	9.6600e-003	9.2419e-004
tblVehicleEF	UBUS	0.53	0.05
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.06	0.10
tblVehicleEF	UBUS	9.9970e-003	6.3901e-003
tblVehicleEF	UBUS	1.7720e-003	2.3183e-004
tblVehicleEF	UBUS	0.02	2.3414e-003
tblVehicleEF	UBUS	0.14	0.01
tblVehicleEF	UBUS	9.6600e-003	9.2419e-004
tblVehicleEF	UBUS	2.09	3.11
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	1.17	0.10
tblVehicleEF	UBUS	1.51	3.04
tblVehicleEF	UBUS	0.09	0.02
tblVehicleEF	UBUS	8.44	23.57
tblVehicleEF	UBUS	15.44	1.93
tblVehicleEF	UBUS	1,822.40	1,641.55
tblVehicleEF	UBUS	153.45	23.40
tblVehicleEF	UBUS	4.92	0.30

tblVehicleEF	UBUS	12.47	0.23
tblVehicleEF	UBUS	0.50	0.09
tblVehicleEF	UBUS	0.01	0.02
tblVehicleEF	UBUS	0.06	2.1611e-003
tblVehicleEF	UBUS	1.4200e-003	2.0913e-004
tblVehicleEF	UBUS	0.21	0.04
tblVehicleEF	UBUS	3.0000e-003	5.0573e-003
tblVehicleEF	UBUS	0.05	2.0479e-003
tblVehicleEF	UBUS	1.3060e-003	1.9228e-004
tblVehicleEF	UBUS	8.9770e-003	2.4593e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7705e-004
tblVehicleEF	UBUS	0.52	0.05
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.18	0.10
tblVehicleEF	UBUS	9.9960e-003	6.3901e-003
tblVehicleEF	UBUS	1.8130e-003	2.3157e-004
tblVehicleEF	UBUS	8.9770e-003	2.4593e-003
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	4.3820e-003	9.7705e-004
tblVehicleEF	UBUS	2.08	3.11
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.29	0.10
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	17.20	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	16.60	5.35
tblVehicleTrips	CW_TTP	77.80	100.00
tblVehicleTrips	DV_TP	19.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00

tblVehicleTrips	PR_TP	75.00	100.00
tblVehicleTrips	ST_TR	0.61	1.40
tblVehicleTrips	SU_TR	0.25	1.40
tblVehicleTrips	WD_TR	1.71	1.40
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated 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	tons/yr										MT/yr					
Area	0.3262	4.4000e-004	0.0475	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0921	0.0921	2.4000e-004	0.0000	0.0982
Energy	2.3600e-003	0.0215	0.0180	1.3000e-004		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	134.1037	134.1037	6.4900e-003	1.6800e-003	134.7662
Mobile	1.2414	0.9663	8.9176	0.0205	2.2982	0.0161	2.3143	0.6103	0.0150	0.6253	0.0000	1,886.7464	1,886.7464	0.1005	0.0000	1,889.2593
Waste						0.0000	0.0000		0.0000	0.0000	83.5024	0.0000	83.5024	4.9349	0.0000	206.8736
Water						0.0000	0.0000		0.0000	0.0000	3.5128	99.5406	103.0534	0.0175	8.7600e-003	106.1029
Total	**1.5699**	**0.9882**	**8.9832**	**0.0206**	**2.2982**	**0.0179**	**2.3161**	**0.6103**	**0.0168**	**0.6271**	**87.0152**	**2,120.4828**	**2,207.4980**	**5.0596**	**0.0104**	**2,337.1001**

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	tons/yr										MT/yr					
Area	0.3262	4.4000e-004	0.0475	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0921	0.0921	2.4000e-004	0.0000	0.0982
Energy	1.8000e-003	0.0164	0.0137	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	118.4724	118.4724	5.8300e-003	1.4600e-003	119.0542
Mobile	1.2414	0.9663	8.9176	0.0205	2.2982	0.0161	2.3143	0.6103	0.0150	0.6253	0.0000	1,886.7464	1,886.7464	0.1005	0.0000	1,889.2593
Waste						0.0000	0.0000		0.0000	0.0000	83.5024	0.0000	83.5024	4.9349	0.0000	206.8736
Water						0.0000	0.0000		0.0000	0.0000	2.8103	89.1368	91.9470	0.0145	7.1200e-003	94.4315
Total	**1.5694**	**0.9831**	**8.9789**	**0.0206**	**2.2982**	**0.0175**	**2.3157**	**0.6103**	**0.0164**	**0.6267**	**86.3126**	**2,094.4477**	**2,180.7603**	**5.0560**	**8.5800e-003**	**2,309.7168**

	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	N20	CO2e
Percent Reduction	**0.04**	**0.52**	**0.05**	**0.15**	**0.00**	**2.18**	**0.02**	**0.00**	**2.33**	**0.06**	**0.81**	**1.23**	**1.21**	**0.07**	**17.82**	**1.17**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	tons/yr										MT/yr					
Mitigated	1.2414	0.9663	8.9176	0.0205	2.2982	0.0161	2.3143	0.6103	0.0150	0.6253	0.0000	1,886.7464	1,886.7464	0.1005	0.0000	1,889.2593
Unmitigated	1.2414	0.9663	8.9176	0.0205	2.2982	0.0161	2.3143	0.6103	0.0150	0.6253	0.0000	1,886.7464	1,886.7464	0.1005	0.0000	1,889.2593

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	3,156.91	3,156.91	3156.91	6,144,718	6,144,718
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,156.91	3,156.91	3,156.91	6,144,718	6,144,718

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
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
High School	5.35	0.00	0.00	100.00	0.00	0.00	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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.683544	0.047381	0.233519	0.020005	0.001450	0.000459	0.001553	0.006134	0.000000	0.000000	0.005777	0.000084	0.000093
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	100.6782	100.6782	5.4900e-003	1.1400e-003	101.1543
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	110.7303	110.7303	6.0400e-003	1.2500e-003	111.2539
NaturalGas Mitigated	1.8000e-003	0.0164	0.0137	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.7942	17.7942	3.4000e-004	3.3000e-004	17.8999
NaturalGas Unmitigated	2.3600e-003	0.0215	0.0180	1.3000e-004		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	23.3734	23.3734	4.5000e-004	4.3000e-004	23.5122

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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	tons/yr										MT/yr					
High School	438000	2.3600e-003	0.0215	0.0180	1.3000e-004		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	23.3734	23.3734	4.5000e-004	4.3000e-004	23.5122
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
Parking Lot	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		**2.3600e-003**	**0.0215**	**0.0180**	**1.3000e-004**		**1.6300e-003**	**1.6300e-003**		**1.6300e-003**	**1.6300e-003**	**0.0000**	**23.3734**	**23.3734**	**4.5000e-004**	**4.3000e-004**	**23.5122**

Mitigated

	NaturalGas 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	tons/yr										MT/yr					
High School	333450	1.8000e-003	0.0164	0.0137	1.0000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	17.7942	17.7942	3.4000e-004	3.3000e-004	17.8999
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
Parking Lot	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		**1.8000e-003**	**0.0164**	**0.0137**	**1.0000e-004**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**17.7942**	**17.7942**	**3.4000e-004**	**3.3000e-004**	**17.8999**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e

Land Use	kWh/yr	MT/yr			
High School	365000	87.9859	4.8000e-003	9.9000e-004	88.4019
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
Parking Lot	94353	22.7445	1.2400e-003	2.6000e-004	22.8520
Total		**110.7303**	**6.0400e-003**	**1.2500e-003**	**111.2539**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High School	323300	77.9338	4.2500e-003	8.8000e-004	78.3023
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
Parking Lot	94353	22.7445	1.2400e-003	2.6000e-004	22.8520
Total		**100.6782**	**5.4900e-003**	**1.1400e-003**	**101.1543**

6.0 Area Detail

6.1 Mitigation Measures Area

	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	tons/yr										MT/yr					
Mitigated	0.3262	4.4000e-004	0.0475	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0921	0.0921	2.4000e-004	0.0000	0.0982
Unmitigated	0.3262	4.4000e-004	0.0475	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0921	0.0921	2.4000e-004	0.0000	0.0982

6.2 Area by SubCategory

Unmitigated

	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	tons/yr										MT/yr					
Architectural Coating	0.0469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2748					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.4400e-003	4.4000e-004	0.0475	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0921	0.0921	2.4000e-004	0.0000	0.0982
Total	**0.3262**	**4.4000e-004**	**0.0475**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.0921**	**0.0921**	**2.4000e-004**	**0.0000**	**0.0982**

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	tons/yr										MT/yr					
Architectural Coating	0.0469					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2748					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.4400e-003	4.4000e-004	0.0475	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.0921	0.0921	2.4000e-004	0.0000	0.0982
Total	**0.3262**	**4.4000e-004**	**0.0475**	**0.0000**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**0.0921**	**0.0921**	**2.4000e-004**	**0.0000**	**0.0982**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	91.9470	0.0145	7.1200e-003	94.4315
Unmitigated	103.0534	0.0175	8.7600e-003	106.1029

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High School	9.92878 / 25.5311	103.0534	0.0175	8.7600e-003	106.1029
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
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**103.0534**	**0.0175**	**8.7600e-003**	**106.1029**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High School	7.94302 / 23.9737	91.9470	0.0145	7.1200e-003	94.4315
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
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000

Total		**91.9470**	**0.0145**	**7.1200e-003**	**94.4315**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	83.5024	4.9349	0.0000	206.8736
Unmitigated	83.5024	4.9349	0.0000	206.8736

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High School	411.36	83.5024	4.9349	0.0000	206.8736
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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**83.5024**	**4.9349**	**0.0000**	**206.8736**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Land Use	tons	MT/yr			
High School	411.36	83.5024	4.9349	0.0000	206.8736
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
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**83.5024**	**4.9349**	**0.0000**	**206.8736**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

LST Worksheets

Construction Localized Significance Thresholds: Demolition and Debris Haul

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
29	1.00	25	82	34

Source Receptor	Banning Airport	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625			0
NOx	**103**	Graders	0.5	0.0625			0
CO	**1,000**	Dozers	0.5	0.0625	8	2	1
PM10	**6.00**	Scrapers	1	0.125			0
PM2.5	**4.00**					**Acres**	1.00

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	103	131	189	299	585
	1	103	131	189	299	585
		103	131	189	299	585
CO	1	1000	1420	2623	6154	25057
	1	1000	1420	2623	6154	25057
		1000	1420	2623	6154	25057
PM10	1	6	19	55	129	348
	1	6	19	55	129	348
		6	19	55	129	348
PM2.5	1	4	7	14	36	156
	1	4	7	14	36	156
		4	7	14	36	156

Banning Airport

1.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	103	131	189	299	585
CO	1000	1420	2623	6154	25057
PM10	6	19	55	129	348
PM2.5	4	7	14	36	156

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
29	1	29	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Site Preparation and Grading/Grading Soil Haul

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
29	6.00	25	82	34

Source Receptor	**Banning Airport**	**Equipment**	**Acres/8-hr Day**		**Daily hours**	**Equipment Used**	**Acres**
Distance (meters)	25	Tractors	0.5	0.0625	8	4	2
NOx	**236**	Graders	0.5	0.0625	8	1	0.5
CO	**2,817**	Dozers	0.5	0.0625	8	3	1.5
PM10	**20.99**	Scrapers	1	0.125	8	2	2
PM2.5	**11.00**					**Acres**	6.00

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	5	236	265	333	434	698
	5	236	265	333	434	698
		236	265	333	434	698
CO	5	2817	3575	5534	10383	31903
	5	2817	3575	5534	10383	31903
		2817	3575	5534	10383	31903
PM10	5	21	67	104	180	405
	5	21	67	104	180	405
		21	67	104	180	405
PM2.5	5	11	14	25	55	189
	5	11	14	25	55	189
		11	14	25	55	189

Banning Airport

6.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	236	265	333	434	698
CO	2817	3575	5534	10383	31903
PM10	21	67	104	180	405
PM2.5	11	14	25	55	189

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
29	5	29	5
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Utilities Trenching

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
29	0.00	25	82	34

Source Receptor	Banning Airport	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625			0
NOx	**103**	Graders	0.5	0.0625			0
CO	**1,000**	Dozers	0.5	0.0625			0
PM10	**6.00**	Scrapers	1	0.125			0
PM2.5	**4.00**					**Acres**	0.00

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	103	131	189	299	585
	1	103	131	189	299	585
		103	131	189	299	585
CO	1	1000	1420	2623	6154	25057
	1	1000	1420	2623	6154	25057
		1000	1420	2623	6154	25057
PM10	1	6	19	55	129	348
	1	6	19	55	129	348
		6	19	55	129	348
PM2.5	1	4	7	14	36	156
	1	4	7	14	36	156
		4	7	14	36	156

Banning Airport

0.00 Acres

	25	**50**	**100**	**200**	**500**
NOx	103	131	189	299	585
CO	1000	1420	2623	6154	25057
PM10	6	19	55	129	348
PM2.5	4	7	14	36	156

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
29	1	29	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Utilities Trenching, Athletic Fields Installation, and Building Construction

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
29	1.81	25	82	34

Source Receptor	Banning Airport	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	7	3	1.3125
NOx	**140**	Loader	0.5	0.0625	8	1	0.5
CO	**1,439**	Dozers	0.5	0.0625			0
PM10	**9.24**	Scrapers	1	0.125			0
PM2.5	**5.62**					**Acres**	1.81

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	103	131	189	299	585
	2	149	176	234	340	614
		140	168	226	332	609
CO	1	1000	1420	2623	6154	25057
	2	1541	2049	3458	7395	26890
		1440	1931	3301	7162	26546
PM10	1	6	19	55	129	348
	2	10	32	73	157	407
		9	30	70	152	396
PM2.5	1	4	7	14	36	156
	2	6	9	17	41	166
		6	9	16	40	164

Banning Airport

1.81 Acres

	25	**50**	**100**	**200**	**500**
NOx	140	168	226	332	609
CO	1440	1931	3301	7162	26546
PM10	9	30	70	152	396
PM2.5	6	9	16	40	164

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
29	1	29	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Athletic Fields Installation and Building Construction

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
29	1.81	25	82	34

Source Receptor	Banning Airport	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25	Tractors	0.5	0.0625	7	3	1.3125
NOx	**140**	Loader	0.5	0.0625	8	1	0.5
CO	**1,439**	Dozers	0.5	0.0625			0
PM10	**9.24**	Scrapers	1	0.125			0
PM2.5	**5.62**					**Acres**	1.81

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	103	131	189	299	585
	2	149	176	234	340	614
		140	168	226	332	609
CO	1	1000	1420	2623	6154	25057
	2	1541	2049	3458	7395	26890
		1440	1931	3301	7162	26546
PM10	1	6	19	55	129	348
	2	10	32	73	157	407
		9	30	70	152	396
PM2.5	1	4	7	14	36	156
	2	6	9	17	41	166
		6	9	16	40	164

Banning Airport

1.81 Acres

	25	**50**	**100**	**200**	**500**
NOx	140	168	226	332	609
CO	1440	1931	3301	7162	26546
PM10	9	30	70	152	396
PM2.5	6	9	16	40	164

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
29	1	29	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction, Paving, and Finishing and Landscaping

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
29	1.31	25	82	34

Source Receptor	**Banning Airport**	**Equipment**	**Acres/8-hr Day**		**Daily hours**	**Equipment Used**	**Acres**
Distance (meters)	25	Tractors	0.5	0.0625	7	3	1.3125
NOx	**117**	Loader	0.5	0.0625			0
CO	**1,169**	Dozers	0.5	0.0625			0
PM10	**7.25**	Scrapers	1	0.125			0
PM2.5	**4.62**					**Acres**	1.31

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	103	131	189	299	585
	2	149	176	234	340	614
		117	145	203	312	594
CO	1	1000	1420	2623	6154	25057
	2	1541	2049	3458	7395	26890
		1169	1617	2884	6542	25630
PM10	1	6	19	55	129	348
	2	10	32	73	157	407
		7	23	61	138	366
PM2.5	1	4	7	14	36	156
	2	6	9	17	41	166
		5	8	15	38	159

Banning Airport

1.31 Acres

	25	**50**	**100**	**200**	**500**
NOx	117	145	203	312	594
CO	1169	1617	2884	6542	25630
PM10	7	23	61	138	366
PM2.5	5	8	15	38	159

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
29	1	29	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Building Construction, Paving, Finishing and Landscaping, and Architectural Coating

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
29	1.31	25	82	34

Source Receptor	**Banning Airport**	**Equipment**	**Acres/8-hr Day**		**Daily hours**	**Equipment Used**	**Acres**
Distance (meters)	25	Tractors	0.5	0.0625	7	3	1.3125
NOx	**117**	Loader	0.5	0.0625			0
CO	**1,169**	Dozers	0.5	0.0625			0
PM10	**7.25**	Scrapers	1	0.125			0
PM2.5	**4.62**					**Acres**	1.31

	Acres	**25**	**50**	**100**	**200**	**500**
NOx	1	103	131	189	299	585
	2	149	176	234	340	614
		117	145	203	312	594
CO	1	1000	1420	2623	6154	25057
	2	1541	2049	3458	7395	26890
		1169	1617	2884	6542	25630
PM10	1	6	19	55	129	348
	2	10	32	73	157	407
		7	23	61	138	366
PM2.5	1	4	7	14	36	156
	2	6	9	17	41	166
		5	8	15	38	159

Banning Airport

1.31 Acres

	25	**50**	**100**	**200**	**500**
NOx	117	145	203	312	594
CO	1169	1617	2884	6542	25630
PM10	7	23	61	138	366
PM2.5	5	8	15	38	159

Acre Below		**Acre Above**	
SRA No.	Acres	SRA No.	Acres
29	1	29	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Energy Modeling

Construction-Related Fuel/Energy Usage

CONSTRUCTION WORKER COMMUTE

Year	Gas		Diesel		Electricity	
	VMT	Gallons	VMT	Gallons	VMT	kWh
2020	19,163	696	116	3	105	35
2021	1,173,005	41,525	7,556	162	8,550	2,834
Total	**1,192,168**	**42,221**	**7,672**	**165**	**8,655**	**2,869**

CONSTRUCTION VENDOR TRIPS

Year	Gas		Diesel	
	VMT	Gallons	VMT	Gallons
2020	61	12	1,757	212
2021	6,257	1,210	179,046	21,212
Total	**6,318**	**1,222**	**180,803**	**21,424**

CONSTRUCTION TRUCK HAUL TRIPS

Year	Gas		Diesel	
	VMT	Gallons	VMT	Gallons
2020	48	12	175,564	25,452
2021	0	0	0	0
Total	**48**	**12**	**175,564**	**25,452**

CONSTRUCTION OFF-ROAD EQUIPMENT

Year	Gasoline gallons	Diesel gallons
2020	1,657	15,199
2021	6,007	24,501
Total	**7,664**	**39,700**

Operation-Related Vehicle Fuel/Energy Usage

Proposed Project -- Passenger Vehicles

PROPOSED COMMUTE

Vehicle Type	Gas		Diesel		CNG		Electricity	
	VMT	Gallons	VMT	Gallons	VMT	Gallons	VMT	kWh
Passenger Vehicles	5,978,491	206,674	105,029	7,678	189	81	61,003	20,221
Total	**5,978,491**	**206,674**	**105,029**	**7,678**	**189**	**81**	**61,003**	**20,221**

Construction Worker Trips Fuel Usage Worksheet

Note: Worker vehicles are "LD_Mix", which is 50% LDA, 25% LDT1, and 25% LDT2

Activity[1]	Daily trips[1,2]	Trip miles[2]	Trip days[1]	Annual VMT
2020				
Asphalt Demolition	15	14.7	44	9,702
Demolition Debris Haul	0	14.7	44	0
Site Preparation and Grading	30	14.7	22	9,702
Grading Soil Haul	0	14.7	22	0
2021				
Utilities Trenching	3	14.7	21	926
Utilities Trenching, Athletic Fields Installation, and Building Construction	633	14.7	1	9,305
Athletic Fields Installation and Building Construction	633	14.7	19	176,797
Building Construction, Paving, and Finishing and Landscaping	673	14.7	89	880,486
Architectural Coating	127	14.7	66	123,215

[1] *Based on information provided.*

[2] *Based on CalEEMod defaults.*

Year	LDA VMT	LDT1 VMT	LDT2 VMT	Gasoline[1]						Diesel[1]						Electricity[1]			
				LDA mpg	LDA gallons	LDT1 mpg	LDT1 gallons	LDT2 mpg	LDT2 gallons	LDA mpg	LDA gallons	LDT1 mpg	LDT1 gallons	LDT2 mpg	LDT2 gallons	LDA m/kWh	LDA kWh	LDT1 m/kWh	LDT1 kWh
2020	9,702	4,851	4,851	30.62	311	26.04	186	24.10	199	49.78	2	25.18	0	37.02	1	2.99	31	2.99	4
2021	595,365	297,682	297,682	31.32	18,593	26.66	11,114	24.90	11,818	50.85	111	25.40	3	38.08	47	3.02	2,424	3.02	410

Gasoline		Diesel		Electricity	
VMT	Gallons	VMT	Gallons	VMT	kWh
19,163	696	116	3	105	35
1,173,005	41,525	7,556	162	8,550	2,834
1,192,168	**42,221**	**7,672**	**165**	**8,655**	**2,869**

[1] *EMFAC2017 v1.0.2.*

Year	VMT from gasoline			VMT from diesel			VMT from electricity	
	LDA	LDT1	LDT2	LDA	LDT1	LDT2	LDA	LDT1
2020	98.12%	99.74%	99.06%	0.91%	0.03%	0.55%	0.97%	0.23%
2021	97.82%	99.56%	98.85%	0.95%	0.03%	0.61%	1.23%	0.42%

Appendix C: Evidence Used to Define the Average Number of KWH Required to Displace a Gallong of Gasoline

Table A 3: Evidence from U.S. Department of Energy and U.S. Environmental Protection Agency's fuel economy website[32]

Vehicle	Model year	Electric consumption	Gasoline fuel economy	Number of kWh that are equivalent to 1 gallon
Ford Fusion Energi & Ford C-Max Energi	2013	0.34 kWh per mile	43 mpg	14.6
Chevrolet Volt	2013	0.35 kWh per mile	37 mpg	12.9
Chevrolet Volt	2012	0.36 kWh per mile	37 mpg	13.3
Fisker Karma	2012	0.62 kWh per mile	20 mpg	12.4
Toyota Prius	2013	0.29 kWh per mile & 0.2 gal	50 mpg	13.1
Average for five models	-	-	-	13.3 +/- 0.8

Table A 5: Average power consumption per mile traveled over time for different PEV categories

Year range	2012- 2020	2020-2030	2030-2040	2040-2050	2050
Efficiency improvement per year	0.3%	0.8%	0.9%	0.9%	
Year	2012	2020	2030	2040	2050
Relative energy efficiency	1.000	0.976	0.901	0.823	0.752

https://www.fhwa.dot.gov/environment/climate_change/mitigation/publications_and_tools/ev_deployment/page08.cfm

0.34	14.6
0.35	12.9
0.36	13.3
0.34	13.3

Year	Estimated Electric Consumption
2013	0.34
2014	0.34
2015	0.34
2016	0.34
2017	0.34
2018	0.34
2019	0.34
2020	0.33
2021	0.33
2022	0.33
2023	0.33
2024	0.32
2025	0.32
2026	0.32
2027	0.32
2028	0.31
2029	0.31
2030	0.31
2031	0.31
2032	0.30
2033	0.30
2034	0.30
2035	0.29

Vendor Trips Fuel Usage Worksheet

Note: Hauling vehicles are "HDT_Mix", which is 50% HHDT (T7), and 50% MHDT (T6)

Activity[1]	Daily trips[1,2]	Trip miles[2]	Trip days[1]	Annual VMT
2020				
Asphalt Demolition	4	6.9	44	1,214
Demolition Debris Haul	0	6.9	44	0
Site Preparation and Grading	4	6.9	22	607
Grading Soil Haul	0	6.9	22	0
				0
2021				
Utilities Trenching	0	6.9	21	0
Utilities Trenching, Athletic Fields Installation, and Building Construction	247	6.9	1	1,704
Athletic Fields Installation and Building Construction	247	6.9	19	32,382
Building Construction, Paving, and Finishing and Landscaping	247	6.9	89	151,683
Architectural Coating	0	6.9	66	0
				0

[1] *Based on information provided.*

[2] *Based on CalEEMod defaults.*

Year	HHDT (T7) VMT	MHDT (T6) VMT	Gasoline[1]				Diesel[1]			
			HHDT (T7) mpg	HHDT (T7) gallons	MHDT (T6) mpg	MHDT (T6) gallons	HHDT (T7) mpg	HHDT (T7) gallons	MHDT (T6) mpg	MHDT (T6) gallons
2020	911	911	3.99	0	5.11	12	6.90	131	10.56	81
2021	92,884	92,884	4.09	6	5.18	1,204	7.01	13,175	10.78	8,037

[1] *EMFAC2017 v1.0.2.*

Year	VMT from gasoline		VMT from diesel	
	HHDT (T7)	MHDT (T6)	HHDT (T7)	MHDT (T6)
2020	0.03%	6.62%	99.54%	93.38%
2021	0.03%	6.71%	99.47%	93.29%

VENDOR

Gasoline		Diesel	
VMT	Gallons	VMT	Gallons
61	12	1,757	212
6,257	1,210	179,046	21,212
6,318	**1,222**	**180,803**	**21,424**

Truck Haul Trips Fuel Usage Worksheet

Note: Hauling vehicles are HHDT (T7)

Activity	Total Trips[1]	Mi/Trip[1]	Annual VMT
2020			
Asphalt Demolition Debris Haul	456	20	9,120
Rough Grading Soil Haul	8,363	20	167,260
			0
			0
			0

[1] *Based on information provided.*

[2] *Based on CalEEMod defaults.*

Year	VMT	Gasoline[1]		Diesel[1]	
		HHDT (T7) mpg	HHDT (T7) gallons	HHDT (T7) mpg	HHDT (T7) gallons
2020	176,380	3.99	12	6.90	25,452

Gasoline		Diesel	
VMT	Gallons	VMT	Gallons
48	12	175,564	25,452
48	**12**	**175,564**	**25,452**

[1] *EMFAC2017 v1.0.2.*

Year	VMT from gasoline	VMT from diesel
2020	0.03%	99.54%

Off-Road Construction Equipment Fuel Usage Worksheet

Year	Total Gasoline	Total Diesel	Total Natural Gas
		Gallons	
2020	1,657	15,199	0
2021	6,007	24,501	0
Total	**7,664**	**39,700**	**0**

Equipment Type[1]	Number of Equipment[1]	Horsepower	OFFROAD2017 Horsepower Category	Fuel Type	Working days[1]	Hours Per Day	Total Hours of Operation	Gasoline Gal/Hr[2]	Total Gasoline gallons	Diesel Gal/Hr[2]	Total Diesel gallons	Natural Gas Gal/Hr[2]	Total Natural Gas gallons
						2020							
Asphalt Demolition													
Concrete/Industrial Saws	1	81	*100*	*Gasoline*	44	8	352	4.71	1,657	0.00	0	0.00	0
Rubber Tired Dozers	2	247	*300*	*Diesel*	44	8	704	0.00	0	4.46	3,143	0.00	0
Excavators	3	158	*175*	*Diesel*	44	8	1,056	0.00	0	2.89	3,047	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	44		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	44		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	44		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	44		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	44		0	0.00	0	0.00	0	0.00	0
Site Preparation and Grading													
Tractors/Loaders/Backhoes	4	97	*100*	*Diesel*	22	8	704	0.00	0	1.59	1,118	0.00	0
Rubber Tired Dozers	3	247	*300*	*Diesel*	22	8	528	0.00	0	4.46	2,357	0.00	0
Excavators	2	158	*175*	*Diesel*	22	8	352	0.00	0	2.89	1,016	0.00	0
Scrapers	2	367	*600*	*Diesel*	22	8	352	0.00	0	10.54	3,710	0.00	0
Graders	1	187	*300*	*Diesel*	22	8	176	0.00	0	4.58	807	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	22		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	22		0	0.00	0	0.00	0	0.00	0
							TOTAL		**1,657**		**15,199**		**0**
						2021							
Utilities Trenching													
Excavators	1	89	*100*	*Diesel*	21	8	168	0.00	0	1.61	270	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	21		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	21		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	21		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	21		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	21		0	0.00	0	0.00	0	0.00	0
Utilities Trenching, Athletic Fields Installation, and Building Constructior													
Forklifts	3	89	*100*	*Diesel*	1	8	24	0.00	0	1.41	34	0.00	0
Tractors/Loaders/Backhoes	3	97	*100*	*Diesel*	1	7	21	0.00	0	1.59	33	0.00	0
Cranes	1	231	*300*	*Diesel*	1	7	7	0.00	0	3.29	23	0.00	0
Generator Sets	1	84	*100*	*Gasoline*	1	8	8	5.19	42	0.00	0	0.00	0
Welders	1	46	*50*	*Diesel*	1	8	8	0.00	0	1.19	10	0.00	0
Skid Steer Loaders	1	65	*75*	*Diesel*	1	8	8	0.00	0	1.34	11	0.00	0
Excavators	1	158	*175*	*Diesel*	1	8	8	0.00	0	2.89	23	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	1		0	0.00	0	0.00	0	0.00	0
Athletic Fields Installation and Building Constructior													
Forklifts	3	89	*100*	*Diesel*	19	8	456	0.00	0	1.41	645	0.00	0
Tractors/Loaders/Backhoes	3	97	*100*	*Diesel*	19	7	399	0.00	0	1.59	634	0.00	0
Cranes	1	231	*300*	*Diesel*	19	7	133	0.00	0	3.29	437	0.00	0
Generator Sets	1	84	*100*	*Gasoline*	19	8	152	5.19	789	0.00	0	0.00	0
Welders	1	46	*50*	*Diesel*	19	8	152	0.00	0	1.19	181	0.00	0
Skid Steer Loaders	1	65	*75*	*Diesel*	19	8	152	0.00	0	1.34	204	0.00	0
Building Construction, Paving, and Finishing and Landscapinք													
Forklifts	3	89	*100*	*Diesel*	89	8	2,136	0.00	0	1.41	3,020	0.00	0
Tractors/Loaders/Backhoes	3	97	*100*	*Diesel*	89	7	1,869	0.00	0	1.59	2,970	0.00	0
Pavers	2	130	*175*	*Diesel*	89	8	1,424	0.00	0	3.40	4,836	0.00	0
Paving Equipment	2	132	*175*	*Diesel*	89	8	1,424	0.00	0	2.67	3,808	0.00	0
Rollers	2	80	*100*	*Diesel*	89	8	1,424	0.00	0	1.69	2,411	0.00	0
Cranes	1	231	*300*	*Diesel*	89	7	623	0.00	0	3.29	2,049	0.00	0
Generator Sets	1	84	*100*	*Gasoline*	89	8	712	5.19	3,695	0.00	0	0.00	0
Welders	1	46	*50*	*Diesel*	89	8	712	0.00	0	1.19	847	0.00	0
Excavators	1	158	*175*	*Diesel*	89	8	712	0.00	0	2.89	2,055	0.00	0
Architectural Coating													
Air Compressors	1	78	*100*	*Gasoline*	66	6	396	3.74	1,481	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	66		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	66		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	66		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	66		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	66		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	66		0	0.00	0	0.00	0	0.00	0
Select Equipment Type			*25*	*Select Fuel Type*	66		0	0.00	0	0.00	0	0.00	0
							TOTAL		**6,007**		**24,501**		**0**

[1] Based on information provided.
[2] OFFROAD2017 v.1.0.1

OFFROAD 2020

	Equipment Type	Horsepower	Gas				Diesel				Natural Gas			
		HP	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr
Air Compressors25	Air Compressors	25	46004.6	318.88	154143.15	0.298453743	2226.5	4.98	4084.35	0.54512958	0	0	0	0
Air Compressors50	Air Compressors	50	14114.55	13.21	6376.55	2.213508872	25243.4	30.31	24670.35	1.023228288	0	0	0	0
Air Compressors75	Air Compressors	75	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors100	Air Compressors	100	77708.5	42.85	20710.1	3.752203031	0	0	0	0	0	0	0	0
Air Compressors175	Air Compressors	175	9515.55	2.89	1383.35	6.878627968	0	0	0	0	0	0	0	0
Air Compressors300	Air Compressors	300	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors600	Air Compressors	600	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors750	Air Compressors	750	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors9999	Air Compressors	9999	0	0	0	0	0	0	0	0	0	0	0	0
Aerial Lifts25	Aerial Lifts	25	4828.95	15.1	5664.8	0.852448454	4157.35	22.6	9026.45	0.460574201	9398.75	21.18	7953.35	1.181734741
Aerial Lifts50	Aerial Lifts	50	10296.65	18.06	6515.25	1.580392157	25049.27237	103.6794845	30637.92408	0.817590392	0	0	0	0
Aerial Lifts75	Aerial Lifts	75	0	0	0	0	28924.87999	85.2823697	25117.95993	1.151561674	0	0	0	0
Aerial Lifts100	Aerial Lifts	100	18552.95	18.06	6515.25	2.847619048	14783.13747	40.31708126	11915.22428	1.240693177	0	0	0	0
Aerial Lifts175	Aerial Lifts	175	0	0	0	0	2671.258283	4.354636204	1284.837121	2.079063749	0	0	0	0
Aerial Lifts300	Aerial Lifts	300	0	0	0	0	159.628476	0.14678549	43.55195068	3.665242855	0	0	0	0
Aerial Lifts600	Aerial Lifts	600	0	0	0	0	113.3593526	0.048928497	14.51731689	7.808560865	0	0	0	0
Bore/Drill rigs25	Bore/Drill rigs	25	434.35	2.75	335.8	1.293478261	1273.85	2.39	1927.2	0.660984848	0	0	0	0
Bore/Drill rigs50	Bore/Drill rigs	50	62.05	0.24	0	0	5071.54435	12.62922951	4389.966073	1.155258211	0	0	0	0
Bore/Drill rigs75	Bore/Drill rigs	75	0	0	0	0	8834.962793	10.63514064	4686.238737	1.885299339	0	0	0	0
Bore/Drill rigs100	Bore/Drill rigs	100	726.35	1.04	109.5	6.633333333	22704.86112	27.91724418	10359.16331	2.191765921	0	0	0	0
Bore/Drill rigs175	Bore/Drill rigs	175	248.2	0.26	21.9	11.33333333	36666.43206	30.44309008	9410.141766	3.896480305	0	0	0	0
Bore/Drill rigs300	Bore/Drill rigs	300	0	0	0	0	51778.19983	30.44309008	9703.745307	5.33589848	0	0	0	0
Bore/Drill rigs600	Bore/Drill rigs	600	0	0	0	0	99065.24238	26.32197308	9190.383964	10.77922781	0	0	0	0
Bore/Drill rigs750	Bore/Drill rigs	750	0	0	0	0	37390.03442	5.051691804	2205.288817	16.95471093	0	0	0	0
Bore/Drill rigs9999	Bore/Drill rigs	9999	0	0	0	0	27419.13185	0.797635548	568.078366	48.26646021	0	0	0	0
Cement and Mortar Mixers25	Cement and Mortar Mixers	25	14512.4	413.26	38033	0.381573896	3266.75	33.05	9924.35	0.329165134	0	0	0	0
Cement and Mortar Mixers50	Cement and Mortar Mixers	50	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers75	Cement and Mortar Mixers	75	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers100	Cement and Mortar Mixers	100	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers175	Cement and Mortar Mixers	175	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers300	Cement and Mortar Mixers	300	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers600	Cement and Mortar Mixers	600	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers750	Cement and Mortar Mixers	750	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers9999	Cement and Mortar Mixers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws25	Concrete/Industrial Saws	25	12935.6	58.17	16527.2	0.782685512	105.85	0.23	138.7	0.763157895	0	0	0	0
Concrete/Industrial Saws50	Concrete/Industrial Saws	50	1438.1	0.86	521.95	2.755244755	1671.7	2.07	1204.5	1.387878788	0	0	0	0
Concrete/Industrial Saws75	Concrete/Industrial Saws	75	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws100	Concrete/Industrial Saws	100	1408.9	0.49	299.3	4.707317073	0	0	0	0	0	0	0	0
Concrete/Industrial Saws175	Concrete/Industrial Saws	175	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws300	Concrete/Industrial Saws	300	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws600	Concrete/Industrial Saws	600	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws750	Concrete/Industrial Saws	750	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws9999	Concrete/Industrial Saws	9999	0	0	0	0	0	0	0	0	0	0	0	0
Cranes25	Cranes	25	0	0	0	0	96.98683904	0.50088218	234.2814026	0.413975834	0	0	0	0
Cranes50	Cranes	50	208.05	0.26	109.5	1.9	1571.519838	5.342743252	2278.936028	0.689584885	0	0	0	0
Cranes75	Cranes	75	0	0	0	0	706.5290052	1.836567993	672.4881913	1.050619199	0	0	0	0
Cranes100	Cranes	100	708.1	0.55	208.05	3.403508772	36472.41206	64.44684048	27823.4307	1.310852441	0	0	0	0
Cranes175	Cranes	175	40.15	0	0	0	107688.9602	109.8601581	49139.4999	2.191494833	0	0	0	0
Cranes300	Cranes	300	0	0	0	0	193956.6277	126.3892701	58562.34261	3.311968392	0	0	0	0
Cranes600	Cranes	600	0	0	0	0	322029.5829	121.547409	58507.21758	5.504100113	0	0	0	0
Cranes750	Cranes	750	0	0	0	0	5158.996945	1.335685813	538.9589658	9.572151633	0	0	0	0
Cranes9999	Cranes	9999	0	0	0	0	18058.88086	2.671371626	1292.644845	13.97048921	0	0	0	0
Crawler Tractors25	Crawler Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0
Crawler Tractors50	Crawler Tractors	50	0	0	0	0	5084.624545	14.8182171	4937.454447	1.029806877	0	0	0	0
Crawler Tractors75	Crawler Tractors	75	0	0	0	0	1678.286962	5.038193813	1038.994331	1.615299441	0	0	0	0
Crawler Tractors100	Crawler Tractors	100	0	0	0	0	223075.8518	249.0942294	114666.3961	1.94543353	0	0	0	0
Crawler Tractors175	Crawler Tractors	175	0	0	0	0	245100.6368	167.7422175	74128.59267	3.306425065	0	0	0	0
Crawler Tractors300	Crawler Tractors	300	0	0	0	0	262011.3457	133.512136	57151.13439	4.58453447	0	0	0	0
Crawler Tractors600	Crawler Tractors	600	0	0	0	0	886864.1209	221.5323456	103828.6902	8.541609442	0	0	0	0
Crawler Tractors750	Crawler Tractors	750	0	0	0	0	19054.71658	3.11182559	1387.254123	13.73556312	0	0	0	0
Crawler Tractors9999	Crawler Tractors	9999	0	0	0	0	52237.8846	4.445465129	2402.942982	21.73912781	0	0	0	0
Crushing/Proc. Equipment25	Crushing/Proc. Equipment	25	189.8	0.69	200.75	0.945454545	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment50	Crushing/Proc. Equipment	50	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment75	Crushing/Proc. Equipment	75	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment100	Crushing/Proc. Equipment	100	551.15	0.3	62.05	8.882352941	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment175	Crushing/Proc. Equipment	175	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment300	Crushing/Proc. Equipment	300	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment600	Crushing/Proc. Equipment	600	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment750	Crushing/Proc. Equipment	750	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment9999	Crushing/Proc. Equipment	9999	0	0	0	0	0	0	0	0	0	0	0	0
Dumpers/Tenders25	Dumpers/Tenders	25	1376.05	27.54	4113.55	0.334516415	328.5	1.42	945.35	0.347490347	0	0	0	0
Dumpers/Tenders100	Dumpers/Tenders	100	62.05	0.17	0	0	0	0	0	0	0	0	0	0
Excavators25	Excavators	25	0	0	0	0	2320.997207	2.35847848	3115.526062	0.744977625	0	0	0	0
Excavators50	Excavators	50	0	0	0	0	203499.7326	362.5844482	258941.0551	0.785892112	0	0	0	0
Excavators75	Excavators	75	0	0	0	0	6426.436699	6.53305312	4426.791547	1.451714324	0	0	0	0
Excavators100	Excavators	100	0	0	0	0	257982.6872	254.6405932	160704.8385	1.605319973	0	0	0	0
Excavators175	Excavators	175	0	0	0	0	557559.1148	334.5220154	193214.0734	2.885706537	0	0	0	0
Excavators300	Excavators	300	0	0	0	0	709101.7143	287.7512942	164255.182	4.317073627	0	0	0	0
Excavators600	Excavators	600	0	0	0	0	1257230.745	301.8567498	188873.403	6.656473196	0	0	0	0
Excavators750	Excavators	750	0	0	0	0	22300.00116	3.26652656	1805.728169	12.34958923	0	0	0	0
Excavators9999	Excavators	9999	0	0	0	0	35141.01868	2.2271772	1476.149241	23.80587118	0	0	0	0
Forklifts25	Forklifts	25	208.05	0.35	313.9	0.662790698	30.95656937	0.172001481	53.52778061	0.578327161	251.85	0.2	251.85	1
Forklifts50	Forklifts	50	171597.45	60.25	108405	1.582929293	23680.21231	69.25348592	41214.55265	0.574559489	331131.65	137.73	248112.4	1.334603389
Forklifts75	Forklifts	75	0	0	0	0	2678.371285	7.087694152	2938.347145	0.911523095	0	0	0	0
Forklifts100	Forklifts	100	798904.7	212.56	380917.65	2.097316047	651508.3057	1129.689559	460360.4159	1.415213566	2071550.2	483.37	870802.4	2.378898129
Forklifts175	Forklifts	175	56016.55	7.71	13899.2	4.03019958	170233.4048	215.2441773	84842.12558	2.006472653	155519.2	17.7	31864.5	4.880641466
Forklifts300	Forklifts	300	0	0	0	0	21350.77718	15.61887537	8083.687436	2.641217556	0	0	0	0
Forklifts600	Forklifts	600	0	0	0	0	6250.918242	2.726556158	1296.407104	4.821724768	0	0	0	0
Forklifts750	Forklifts	750	0	0	0	0	470.7928034	0.172001481	36.2607546	12.98353574	0	0	0	0
Forklifts9999	Forklifts	9999	0	0	0	0	279.5650506	0.039721892	30.57185986	9.144522179	0	0	0	0
Generator Sets25	Generator Sets	25	667804	8375.63	962366.3	0.693918729	58542.35	285.16	96276.05	0.608067635	0	0	0	0
Generator Sets50	Generator Sets	50	110627.85	434.78	49935.65	2.21540823	69499.65	147.13	49661.9	1.399456122	0	0	0	0
Generator Sets75	Generator Sets	75	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets100	Generator Sets	100	50121.8	83.97	9650.6	5.193645991	0	0	0	0	4478.55	6.28	719.05	6.228426396
Generator Sets175	Generator Sets	175	8161.4	7.94	908.85	8.979919679	0	0	0	0	6497	5.19	580.35	11.19496855
Generator Sets300	Generator Sets	300	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets600	Generator Sets	600	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets750	Generator Sets	750	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets9999	Generator Sets	9999	0	0	0	0	0	0	0	0	0	0	0	0
Graders25	Graders	25	0	0	0	0	0	0	0	0	0	0	0	0
Graders50	Graders	50	0	0	0	0	1265.552837	4.326986954	1487.713737	0.850669591	0	0	0	0
Graders75	Graders	75	0	0	0	0	2085.708251	3.730161167	1373.210208	1.518855772	0	0	0	0
Graders100	Graders	100	0	0	0	0	28098.16217	41.47939218	14934.88843	1.881377441	0	0	0	0
Graders175	Graders	175	0	0	0	0	340484.1312	234.7017406	108214.157	3.146391754	0	0	0	0
Graders300	Graders	300	0	0	0	0	718883.5072	211.2763285	156804.7616	4.584577023	0	0	0	0
Graders600	Graders	600	0	0	0	0	31352.91146	5.819051421	4206.839706	7.452841955	0	0	0	0
Graders750	Graders	750	0	0	0	0	0	0	0	0	0	0	0	0
Graders9999	Graders	9999	0	0	0	0	24371.12346	0.89523868	637.092313	38.25367684	0	0	0	0
Pavers25	Pavers	25	1178.95	2.68	1062.15	1.109965636	620.5	0.89	733.65	0.845771144	0	0	0	0
Pavers50	Pavers	50	667.95	0.76	284.7	2.346153846	5574.627522	17.38771421	6024.025379	0.925399076	0	0	0	0
Pavers75	Pavers	75	0	0	0	0	9130.580066	16.80812374	5901.191635	1.547243443	0	0	0	0
Pavers100	Pavers	100	602.25	0.42	160.6	3.75	44483.04386	66.94269971	25660.29227	1.733536134	0	0	0	0
Pavers175	Pavers	175	0	0	0	0	73899.34412	57.81414975	21765.33123	3.395277716	0	0	0	0
Pavers300	Pavers	300	0	0	0	0	57641.91686	27.67544512	12130.64029	4.751762107	0	0	0	0
Pavers600	Pavers	600	0	0	0	0	10430.48786	3.042849987	1319.169756	7.906857944	0	0	0	0
Pavers750	Pavers	750	0	0	0	0	2158.884168	0.289795237	133.9857544	16.11278884	0	0	0	0
Pavers9999	Pavers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Paving Equipment25	Paving Equipment	25	25049.95	293.8	55582.2	0.450682952	733.65	1.53	1281.15	0.572649573	0	0	0	0
Paving Equipment50	Paving Equipment	50	781.1	2.02	346.75	2.252631579	6942.600987	21.41036087	9850.914747	0.704767137	0	0	0	0
Paving Equipment75	Paving Equipment	75	0	0	0	0	846.6865557	1.880639806	688.215034	1.230264545	0	0	0	0
Paving Equipment100	Paving Equipment	100	332.15	0.51	83.95	3.956521739	29016.98825	39.34877133	17741.90926	1.635505392	0	0	0	0
Paving Equipment175	Paving Equipment	175	0	0	0	0	31430.70646	26.32895728	11841.81676	2.654213209	0	0	0	0
Paving Equipment300	Paving Equipment	300	0	0	0	0	22293.4769	11.28383884	5186.059315	4.29873157	0	0	0	0
Paving Equipment600	Paving Equipment	600	0	0	0	0	22967.60108	6.654571621	3024.757517	7.593204066	0	0	0	0
Paving Equipment750	Paving Equipment	750	0	0	0	0	2739.488987	0.433993801	218.163359	12.55705358	0	0	0	0
Paving Equipment9999	Paving Equipment	9999	0	0	0	0	2039.563051	0.289329201	131.6725598	15.489659	0	0	0	0
Rollers25	Rollers	25	5832.7	31.78	7916.85	0.736745044	13563.07225	51.07904513	35467.44992	0.382409005	0	0	0	0
Rollers50	Rollers	50	857.75	0.55	317.55	2.701149425	114552.7588	439.5340908	148601.8833	0.770870169	0	0	0	0
Rollers75	Rollers	75	0	0	0	0	1031.101025	3.428038009	765.9119628	1.346239614	0	0	0	0
Rollers100	Rollers	100	2741.15	0.96	605.9	4.524096386	177976.7298	324.4712498	105094.3598	1.693494591	0	0	0	0
Rollers175	Rollers	175	0	0	0	0	185095.788	189.5854064	66396.93632	2.787715793	0	0	0	0
Rollers300	Rollers	300	0	0	0	0	30648.30775	24.29435632	7304.841705	4.195615591	0	0	0	0
Rollers600	Rollers	600	0	0	0	0	17981.91602	8.793662718	2636.885097	6.819377923	0	0	0	0
Rollers750	Rollers	750	0	0	0	0	0	0	0	0	0	0	0	0
Rollers9999	Rollers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Rough Terrain Forklifts25	Rough Terrain Forklifts	25	0	0	0	0	30.95656937	0.172001481	53.52778061	0.578327161	0	0	0	0
Rough Terrain Forklifts50	Rough Terrain Forklifts	50	142.35	0.09	36.5	3.9	5203.648509	17.71615251	4755.147105	1.094319144	0	0	0	0
Rough Terrain Forklifts75	Rough Terrain Forklifts	75	0	0	0	0	821.1424322	2.752023691	672.262879	1.221460321	0	0	0	0
Rough Terrain Forklifts100	Rough Terrain Forklifts	100	3117.1	1.45	609.55	5.113772455	449901.8845	812.8789976	224846.9918	2.000924633	0	0	0	0
Rough Terrain Forklifts175	Rough Terrain Forklifts	175	178.85	0	0	0	106090.0118	155.66134	41155.38091	2.577792004	0	0	0	0
Rough Terrain Forklifts300	Rough Terrain Forklifts	300	0	0	0	0	7359.585796	6.880059226	1683.535035	4.371507359	0	0	0	0
Rough Terrain Forklifts600	Rough Terrain Forklifts	600	0	0	0	0	2730.956941	1.376011845	343.8056733	7.943315521	0	0	0	0
Rough Terrain Forklifts750	Rough Terrain Forklifts	750	0	0	0	0	470.7928034	0.172001481	36.2607546	12.98353574	0	0	0	0
Rough Terrain Forklifts9999	Rough Terrain Forklifts	9999	0	0	0	0	0	0	0	0	0	0	0	0
Rubber Tired Dozers25	Rubber Tired Dozers	25	0	0	0	0	0	0	0	0	0	0	0	0
Rubber Tired Dozers50	Rubber Tired Dozers	50	0	0	0	0	5083.600738	5.813896734	5390.618957	0.943045832	0	0	0	0
Rubber Tired Dozers75	Rubber Tired Dozers	75	0	0	0	0	3961.1252	4.112268421	2737.778338	1.446839266	0	0	0	0
Rubber Tired Dozers100	Rubber Tired Dozers	100	0	0	0	0	19359.28578	12.76221234	11160.68966	1.734595833	0	0	0	0
Rubber Tired Dozers175	Rubber Tired Dozers	175	0	0	0	0	20824.70613	9.358955718	6885.965678	3.024224503	0	0	0	0
Rubber Tired Dozers300	Rubber Tired Dozers	300	0	0	0	0	23263.68682	7.799129765	5210.462418	4.464802728	0	0	0	0
Rubber Tired Dozers600	Rubber Tired Dozers	600	0	0	0	0	258569.4131	47.7873951	34032.81969	7.597648843	0	0	0	0
Rubber Tired Dozers750	Rubber Tired Dozers	750	0	0	0	0	7345.20641	0.567209437	552.3324256	13.29852471	0	0	0	0
Rubber Tired Dozers9999	Rubber Tired Dozers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Scrapers25	Scrapers	25	0	0	0	0	40.70134248	0.146137286	58.68219988	0.693589241	0	0	0	0
Scrapers50	Scrapers	50	0	0	0	0	323.9514701	0.876823716	306.6144944	1.056543236	0	0	0	0
Scrapers75	Scrapers	75	0	0	0	0	2755.442039	3.945706721	1629.735095	1.690730013	0	0	0	0
Scrapers100	Scrapers	100	0	0	0	0	13536.34671	10.52188459	5968.794758	2.267852601	0	0	0	0
Scrapers175	Scrapers	175	0	0	0	0	175972.3871	95.13537317	41905.28494	4.199288641	0	0	0	0
Scrapers300	Scrapers	300	0	0	0	0	202009.4174	92.06649016	36228.92315	5.575915589	0	0	0	0
Scrapers600	Scrapers	600	0	0	0	0	2533752.415	513.088011	240397.337	10.53985226	0	0	0	0
Scrapers750	Scrapers	750	0	0	0	0	40898.45858	6.868452441	2622.116298	15.59749986	0	0	0	0
Scrapers9999	Scrapers	9999	0	0	0	0	58666.59296	3.799569435	1472.760211	39.83444999	0	0	0	0
Skid Steer Loaders25	Skid Steer Loaders	25	19100.45	55.51	17720.75	1.077857878	59724.95	113.97	95129.95	0.627824886	0	0	0	0
Skid Steer Loaders50	Skid Steer Loaders	50	4190.2	7.09	2197.3	1.906976744	86709.85576	304.3289898	93561.51817	0.926768371	0	0	0	0
Skid Steer Loaders75	Skid Steer Loaders	75	0	0	0	0	450433.0775	962.6271468	335445.3558	1.342791217	0	0	0	0
Skid Steer Loaders100	Skid Steer Loaders	100	5621	4.25	1328.6	4.230769231	9426.5311	19.46377773	6553.039133	1.438497605	0	0	0	0
Skid Steer Loaders175	Skid Steer Loaders	175	0	0	0	0	3108.212708	4.073813944	1074.417696	2.892927695	0	0	0	0
Skid Steer Loaders300	Skid Steer Loaders	300	0	0	0	0	2886.981097	2.564993965	739.1670614	3.905722059	0	0	0	0
Skid Steer Loaders600	Skid Steer Loaders	600	0	0	0	0	835.1752588	0.301763996	92.56418119	9.022661336	0	0	0	0
Skid Steer Loaders750	Skid Steer Loaders	750	0	0	0	0	0	0	0	0	0	0	0	0
Skid Steer Loaders9999	Skid Steer Loaders	9999	0	0	0	0	1130.524885	0.301763996	59.40937447	19.02940227	0	0	0	0
Surfacing Equipment25	Surfacing Equipment	25	12223.85	79.28	33923.1	0.360340004	0	0	0	0	0	0	0	0
Surfacing Equipment50	Surfacing Equipment	50	0	0	0	0	802.471471	5.338365312	1271.073818	0.631333491	0	0	0	0
Surfacing Equipment75	Surfacing Equipment	75	0	0	0	0	611.4616525	2.326979751	587.9766094	1.039942138	0	0	0	0
Surfacing Equipment100	Surfacing Equipment	100	0	0	0	0	4607.638274	12.45618573	3288.760365	1.401025846	0	0	0	0
Surfacing Equipment175	Surfacing Equipment	175	0	0	0	0	4313.090432	8.075988549	2041.657549	2.112543524	0	0	0	0
Surfacing Equipment300	Surfacing Equipment	300	0	0	0	0	8523.441957	9.992324815	2396.489447	3.556636549	0	0	0	0
Surfacing Equipment600	Surfacing Equipment	600	0	0	0	0	27022.99342	15.19380897	4267.754398	6.331899848	0	0	0	0
Surfacing Equipment750	Surfacing Equipment	750	0	0	0	0	13324.97226	4.790840665	1343.750231	9.916256721	0	0	0	0
Surfacing Equipment9999	Surfacing Equipment	9999	0	0	0	0	4422.91159	1.231930457	323.8375457	13.65780975	0	0	0	0
Tractors/Loaders/Backhoes25	Tractors/Loaders/Backhoes	25	0	0	0	0	11391.65	16.74	15778.95	0.721952348	0	0	0	0
Tractors/Loaders/Backhoes50	Tractors/Loaders/Backhoes	50	0	0	0	0	171558.3119	425.9177989	214999.7965	0.797946392	0	0	0	0
Tractors/Loaders/Backhoes75	Tractors/Loaders/Backhoes	75	0	0	0	0	27237.1179	90.5260827	19838.56635	1.372937813	0	0	0	0
Tractors/Loaders/Backhoes100	Tractors/Loaders/Backhoes	100	2328.7	0.91	803	2.9	2726158.829	2801.411251	1716338.42	1.588357399	0	0	0	0
Tractors/Loaders/Backhoes175	Tractors/Loaders/Backhoes	175	0	0	0	0	476503.8507	323.5194431	175360.24	2.717285575	0	0	0	0
Tractors/Loaders/Backhoes300	Tractors/Loaders/Backhoes	300	0	0	0	0	294710.8491	135.4923172	74622.31558	3.949366175	0	0	0	0
Tractors/Loaders/Backhoes600	Tractors/Loaders/Backhoes	600	0	0	0	0	392050.1804	117.2386973	61679.55716	6.356241816	0	0	0	0
Tractors/Loaders/Backhoes750	Tractors/Loaders/Backhoes	750	0	0	0	0	13260.02897	1.632437557	1108.745535	11.95948804	0	0	0	0
Tractors/Loaders/Backhoes9999	Tractors/Loaders/Backhoes	9999	0	0	0	0	133988.4776	6.232943399	3797.511395	35.28323254	0	0	0	0
Trenchers25	Trenchers	25	11763.95	28.5	12380.8	0.950176887	5416.6	9.14	5650.2	0.958656331	0	0	0	0
Trenchers50	Trenchers	50	4168.3	4.72	1901.65	2.19193858	60668.72735	139.6624711	52543.78487	1.154631847	0	0	0	0
Trenchers75	Trenchers	75	0	0	0	0	4049.062295	8.411489734	2199.031359	1.841293567	0	0	0	0
Trenchers100	Trenchers	100	2602.45	1.55	631.45	4.121387283	39913.66116	56.34111048	18276.63786	2.183862342	0	0	0	0
Trenchers175	Trenchers	175	0	0	0	0	8976.913349	8.570197087	2422.262605	3.706003358	0	0	0	0
Trenchers300	Trenchers	300	0	0	0	0	21794.71515	11.90305151	3654.548653	5.963722806	0	0	0	0
Trenchers600	Trenchers	600	0	0	0	0	29255.75574	8.094075027	2886.781868	10.13438392	0	0	0	0
Trenchers750	Trenchers	750	0	0	0	0	9549.724785	1.269658828	567.7260963	16.82100726	0	0	0	0
Trenchers9999	Trenchers	9999	0	0	0	0	791.5927167	0.158707353	35.40543164	22.35794566	0	0	0	0
Welders25	Welders	25	166516.65	1023.51	212627.1	0.783139355	26440.6	105.11	67539.6	0.391482923	0	0	0	0
Welders50	Welders	50	34386.65	69.06	14344.5	2.397201018	115869.25	151.51	97283.45	1.191047912	0	0	0	0
Welders75	Welders	75	0	0	0	0	0	0	0	0	0	0	0	0
Welders100	Welders	100	48614.35	70.46	14643.8	3.319790628	0	0	0	0	0	0	0	0
Welders175	Welders	175	6055.35	4.86	1003.75	6.032727273	0	0	0	0	0	0	0	0
Welders300	Welders	300	0	0	0	0	0	0	0	0	0	0	0	0
Welders600	Welders	600	0	0	0	0	0	0	0	0	0	0	0	0
Welders750	Welders	750	0	0	0	0	0	0	0	0	0	0	0	0
Welders9999	Welders	9999	0	0	0	0	0	0	0	0	0	0	0	0

OFFROAD2017 (v1.0.1) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2020
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2017 Equipment Types
Units: Emissions: tons/day, Fuel Consumption: gallons/year, Activity: hours/year, HP-Hours: HP-hours/year

Region	CalYr	VehClass	MdlYr	HP_Bin	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2_5_tpd	PM_tpd	SOx_tpd	NH3_tpd	Fuel_gpy	Total_Activity_hpy	Total_Population	Horsepower_Hours_hhpy
Riverside (SC)	2020	Agricultural - Agricultural Tractors	Aggregated	50	Diesel	0.021226893	0.025684541	0.030566726	0.065595728	0.060022404	0.818681171	0.00571953	0.005261968	0.00571953	6.98308E-06	6.72678E-06	189679.2401	169965.0367	527.2627825	6936662.336
Riverside (SC)	2020	Agricultural - Agricultural Tractors	Aggregated	75	Diesel	0.020584296	0.024906998	0.029641386	0.079584143	0.152929091	1.512927653	0.011861453	0.010912537	0.011861453	1.34641E-05	1.24311E-05	350528.3593	198367.3343	566.4539498	12511537.48
Riverside (SC)	2020	Agricultural - Agricultural Tractors	Aggregated	100	Diesel	0.024858313	0.030078559	0.035795971	0.155846388	0.210808012	3.434829743	0.016756699	0.015416163	0.016756699	3.1224E-05	2.82227E-05	795811.5058	332544.3398	596.1441941	28494245.78
Riverside (SC)	2020	Agricultural - Agricultural Tractors	Aggregated	175	Diesel	0.015520304	0.018779567	0.022349237	0.094643551	0.14770065	2.029296431	0.00848158	0.007803054	0.00848158	1.84221E-05	1.66739E-05	470165.2104	150400.8752	228.946657	18237732.69
Riverside (SC)	2020	Agricultural - Agricultural Tractors	Aggregated	300	Diesel	0.01240132	0.015005597	0.0178579	0.045540963	0.13485351	2.078016082	0.005742128	0.005282758	0.005742128	1.89691E-05	1.70742E-05	481453.0067	87217.57221	104.4537408	18900808.19
Riverside (SC)	2020	Agricultural - Agricultural Tractors	Aggregated	600	Diesel	0.006603227	0.007989904	0.009508646	0.028354192	0.066319682	1.704397924	0.002931495	0.002696976	0.002931495	1.56656E-05	1.40044E-05	394889.8724	42797.01011	38.45978559	15727466.55
Riverside (SC)	2020	Agricultural - Bale Wagons (Self Propelled)	Aggregated	50	Diesel	1.31528E-05	1.59149E-05	1.89401E-05	7.75506E-05	8.30174E-05	0.001332591	4.90296E-06	4.51072E-06	4.90296E-06	1.20085E-08	1.09494E-08	308.7463549	302.6925102	0.472806779	10594.23786
Riverside (SC)	2020	Agricultural - Bale Wagons (Self Propelled)	Aggregated	100	Diesel	6.99637E-05	8.46561E-05	0.000100748	0.000610943	0.000653867	0.014103064	5.3772E-05	4.94702E-05	5.3772E-05	1.29165E-07	1.15879E-07	3267.521703	1337.95928	2.14689489	112096.2807
Riverside (SC)	2020	Agricultural - Bale Wagons (Self Propelled)	Aggregated	175	Diesel	0.000176318	0.000213345	0.000253898	0.00169309	0.001798026	0.040667955	0.000107858	9.92289E-05	0.000107858	3.73228E-07	3.34153E-07	9422.308857	2814.322015	4.50204662	363550.1339
Riverside (SC)	2020	Agricultural - Bale Wagons (Self Propelled)	Aggregated	300	Diesel	4.3948E-05	5.31771E-05	6.32851E-05	0.000185327	0.000529146	0.01230945	2.0714E-05	1.90569E-05	2.0714E-05	1.13252E-07	1.01142E-07	2851.961518	562.355543	0.904055693	108794.1652
Riverside (SC)	2020	Agricultural - Balers (Self Propelled)	Aggregated	50	Diesel	0.000143056	0.000173097	0.000206	0.000617589	0.00070073	0.011056078	4.73223E-05	4.35365E-05	4.73223E-05	9.86129E-08	9.08435E-08	2561.569276	1901.407347	5.837219588	87480.81487
Riverside (SC)	2020	Agricultural - Balers (Self Propelled)	Aggregated	75	Diesel	7.02515E-05	8.50043E-05	0.000101162	0.000463428	0.000666024	0.010779056	4.38168E-05	4.03115E-05	4.38168E-05	9.82186E-08	8.85673E-08	2497.386407	1323.048957	4.031957006	85897.07301
Riverside (SC)	2020	Agricultural - Balers (Self Propelled)	Aggregated	100	Diesel	1.51001E-05	1.82711E-05	2.17441E-05	0.00010022	0.000139389	0.002331049	1.0191E-05	9.37567E-06	1.0191E-05	2.12433E-08	1.91533E-08	540.0779087	234.2942765	0.718503336	18559.13042
Riverside (SC)	2020	Agricultural - Balers (Self Propelled)	Aggregated	175	Diesel	8.12555E-06	9.83191E-06	1.17008E-05	6.41107E-05	9.20216E-05	0.001567929	4.72865E-06	4.35036E-06	4.72865E-06	1.43497E-08	1.28831E-08	363.2714996	132.022762	0.40516309	13949.73682
Riverside (SC)	2020	Agricultural - Combine Harvesters	Aggregated	75	Diesel	1.64791E-05	1.99397E-05	2.37298E-05	9.22064E-05	0.000139244	0.002067586	1.04904E-05	9.65118E-06	1.04904E-05	1.87497E-08	1.69885E-08	479.0364011	325.6550123	0.894951463	18521.9777
Riverside (SC)	2020	Agricultural - Combine Harvesters	Aggregated	100	Diesel	0.000112567	0.000136206	0.000162096	0.00062998	0.000946298	0.01410939	7.56188E-05	6.95693E-05	7.56188E-05	1.27946E-07	1.15931E-07	3268.98726	1456.447888	4.022706166	123324.0652
Riverside (SC)	2020	Agricultural - Combine Harvesters	Aggregated	175	Diesel	0.000163553	0.000197899	0.000235517	0.001097874	0.001728444	0.026412639	9.17161E-05	8.43788E-05	9.17161E-05	2.40929E-07	2.17022E-07	6119.512012	1925.460298	5.386113383	268293.3473

Riverside (SC)	2020 Agricultural - Combine Harvesters	Aggregated	300 Diesel	0.000817353	0.000988997	0.001176988	0.003418205	0.03209278	0.194761644	0.000402666	0.000370453	0.000402666	1.788231-06	1.60028E-06	45124.08729	8306.281941	22.01985162	1920722.318
Riverside (SC)	2020 Agricultural - Combine Harvesters	Aggregated	600 Diesel	0.000166083	0.000200916	0.000239131	0.001108736	0.002361788	0.069590766	9.69006E-05	8.91488E-05	9.69006E-05	6.45899E-07	5.7459A-07	16202.17572	2031.239485	4.479223632	672613.3453
Riverside (SC)	2020 Agricultural - Construction Equipment	Aggregated	50 Diesel	0.001532825	0.001854718	0.002207268	0.005184738	0.004864905	0.069167483	0.000430608	0.00039616	0.000430608	5.97792E-07	5.68322E-07	16025.32956	1548?.08905	40.05904717	685865.4216
Riverside (SC)	2020 Agricultural - Construction Equipment	Aggregated	75 Diesel	0.001047209	0.001267123	0.001507981	0.005164866	0.003854746	0.109160585	0.000626106	0.000576037	0.000626106	9.84597E-07	8.96581E-07	25291.28255	17139.24393	47.25595041	1078018.285
Riverside (SC)	2020 Agricultural - Construction Equipment	Aggregated	100 Diesel	0.002071057	0.002505979	0.002982322	0.011920453	0.017083898	0.253785081	0.001379738	0.001269359	0.001379738	2.34651E-06	2.12634E-06	59957.59822	30436.99115	62.49174828	2566960.629
Riverside (SC)	2020 Agricultural - Construction Equipment	Aggregated	175 Diesel	0.004119008	0.00498	0.005931372	0.027935755	0.039024425	0.596380023	0.002279707	0.002097331	0.002279707	5.42724E-06	4.90022E-06	138174.562	51795.10023	85.31534792	6595473.921
Riverside (SC)	2020 Agricultural - Construction Equipment	Aggregated	300 Diesel	0.00220743	0.002670966	0.00317867?	0.008397238	0.025083845	0.399529932	0.001058133	0.000973442	0.001058133	3.53850E-06	3.20838E-06	90481.19412	21846.26209	39.02041987	4300314.946
Riverside (SC)	2020 Agricultural - Construction Equipment	Aggregated	600 Diesel	0.000308093	0.000372793	0.000443655	0.00148053	0.003145403	0.047101312	0.000135943	0.00012424	0.000135943	4.29153E-07	3.87013E-07	10912.84539	1492.741251	1.689903855	526648.0653
Riverside (SC)	2020 Agricultural - Cotton Pickers	Aggregated	100 Diesel	2.772646-05	3.3549E-05	3.992161E-05	0.00030324	0.000302807	0.007363872	2.28946E-05	2.10616E-05	2.28946E-05	6.77975E-08	6.05061E-08	1706.126318	712.9722233	1.614575176	85967.50009
Riverside (SC)	2020 Agricultural - Cotton Pickers	Aggregated	175 Diesel	6.346746-05	7.67955E-05	9.1339E-05	0.000754596	0.000765368	0.019184125	4.23049E-05	3.89205E-05	4.23049E-05	1.76052E-07	1.57628E-07	4444.76659	1542.953097	3.366657243	187836.004
Riverside (SC)	2020 Agricultural - Cotton Pickers	Aggregated	300 Diesel	6.4637BE-05	7.784E-05	9.2646E-05	0.000329463	0.000819748	0.020830152	3.41283E-05	3.1998E-05	3.41283E-05	1.94193E-07	1.73957E-07	4903.50168	952.8026066	1.060650601	103284.4

Riverside (SC)	2020	ConstMin - Rubber Tired Dozers	Aggregated	600	Diesel	0.006495245	0.007859246	0.009353152	0.062702735	0.084429002	7.969739258	0.003799334	0.003495387	0.003799334	7.34893E-05	6.50479E-05	258569.4131	34032.81969	47.7873951	12575366.97
Riverside (SC)	2020	ConstMin - Rubber Tired Dozers	Aggregated	750	Diesel	8.50981E-05	0.000102969	0.000122541	0.000458914	0.00154925	0.226397156	4.33544E-05	3.9886E-05	4.33544E-05	2.0906E-06	1.84782E-06	7345.20641	552.3324256	0.567209437	359265.9865
Riverside (SC)	2020	ConstMin - Rubber Tired Loaders	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2020	ConstMin - Rubber Tired Loaders	Aggregated	50	Diesel	0.001023199	0.001238071	0.001473407	0.005659708	0.004393419	0.490803088	0.000396502	0.000364782	0.000396502	4.50702E-06	4.00587E-06	15923.56567	18356.38289	21.87455144	763834.304
Riverside (SC)	2020	ConstMin - Rubber Tired Loaders	Aggregated	100	Diesel	0.010507306	0.012713841	0.015130521	0.090393136	0.10725985	11.92614508	0.008399753	0.007727773	0.008399753	0.000109948	9.73396E-05	386930.6428	243252.4079	271.8060817	20887816.08
Riverside (SC)	2020	ConstMin - Rubber Tired Loaders	Aggregated	175	Diesel	0.016837504	0.02037338	0.024246005	0.181150885	0.189211929	28.34706461	0.01041486	0.009581671	0.01041486	0.000261578	0.000231365	919689.2927	328165.3514	356.496068	49245332.87
Riverside (SC)	2020	ConstMin - Rubber Tired Loaders	Aggregated	300	Diesel	0.018404893	0.02226992	0.026503045	0.10217271	0.258931503	42.37761104	0.008596063	0.007908378	0.008596063	0.00039125	0.00034588	1374894.92	349847.9879	332.5523023	73645117.56
Riverside (SC)	2020	ConstMin - Rubber Tired Loaders	Aggregated	600	Diesel	0.024995317	0.030244333	0.035993256	0.161924147	0.3155902	52.64999601	0.011870841	0.010921174	0.011870841	0.000486025	0.000429722	1708171.137	275592.5416	292.498225	91799059.47
Riverside (SC)	2020	ConstMin - Rubber Tired Loaders	Aggregated	750	Diesel	0.001691115	0.00204625	0.002435206	0.013457204	0.021928846	3.899214468	0.000778104	0.000715856	0.000778104	3.59994E-05	3.18249E-05	126505.7192	10256.5531	11.97188288	6782202.561
Riverside (SC)	2020	ConstMin - Rubber Tired Loaders	Aggregated	9999	Diesel	0.001637811	0.001981752	0.002358448	0.008087718	0.034299972	3.657436042	0.000867206	0.00079783	0.000867206	3.37657E-05	2.98515E-05	118661.4844	6637.834497	5.764239906	6344142.362
Riverside (SC)	2020	ConstMin - Scrapers	Aggregated	25	Diesel	7.01659E-06	8.49007E-06	1.01039E-05	2.38417E-05	1.61943E-05	0.001254515	2.257E-06	2.07644E-06	2.257E-06	1.13881E-08	1.02392E-08	40.70134248	58.68219988	0.146137286	1467.054997
Riverside (SC)	2020	ConstMin - Scrapers	Aggregated	50	Diesel	4.70801E-05	5.69669E-05	6.77954E-05	0.000160763	0.000115486	0.009984974	1.59242E-05	1.46503E-05	1.59242E-05	9.09036E-08	8.1496E-08	323.9514701	306.6144944	0.876823716	11875.15818
Riverside (SC)	2020	ConstMin - Scrapers	Aggregated	75	Diesel	0.00015564	0.000188325	0.000224122	0.000735161	0.001440145	0.084929437	0.000125852	0.000115784	0.000125852	7.80546E-07	6.93183E-07	2755.442039	1629.735095	3.945706721	110233.0997
Riverside (SC)	2020	ConstMin - Scrapers	Aggregated	100	Diesel	0.00039134	0.000473521	0.000563529	0.003176616	0.004851642	0.417223184	0.000356939	0.000328384	0.000356939	3.8457E-06	3.40532E-06	13536.34671	5968.794758	10.52188459	540721.3065
Riverside (SC)	2020	ConstMin - Scrapers	Aggregated	175	Diesel	0.003993613	0.004832272	0.005750803	0.035468216	0.04926382	5.423897686	0.002649582	0.002437616	0.002649582	5.00268E-05	4.42691E-05	175972.3871	41905.28494	95.13537317	7027754.603
Riverside (SC)	2020	ConstMin - Scrapers	Aggregated	300	Diesel	0.004376978	0.005296144	0.006302849	0.024505939	0.060401599	6.226422393	0.002649406	0.002437453	0.002649406	5.74351E-05	5.08192E-05	202009.4174	36228.92315	92.06649016	8125167.762
Riverside (SC)	2020	ConstMin - Scrapers	Aggregated	600	Diesel	0.036102103	0.043683545	0.051987029	0.313487794	0.515051045	78.09642233	0.019638898	0.018067787	0.019638898	0.000720957	0.000637413	2533752.415	240397.337	513.088011	101412113.8
Riverside (SC)	2020	ConstMin - Scrapers	Aggregated	750	Diesel	0.001352932	0.001637048	0.001948222	0.0154266	0.022449012	1.260590133	0.000914176	0.000841042	0.000914176	1.16142E-05	1.02888E-05	40898.45858	2622.116298	6.868452441	1631536.422
Riverside (SC)	2020	ConstMin - Scrapers	Aggregated	9999	Diesel	0.001975921	0.002390865	0.002845326	0.023951016	0.03026205	1.808247323	0.001264541	0.001163378	0.001264541	1.66589E-05	1.47587E-05	58666.59296	1472.760211	3.799569435	2352308.583
Riverside (SC)	2020	ConstMin - Skid Steer Loaders	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2020	ConstMin - Skid Steer Loaders	Aggregated	50	Diesel	0.001643572	0.001988723	0.002366744	0.017040646	0.016710875	2.672609003	0.000655111	0.000602702	0.000655111	2.46603E-05	2.18135E-05	86709.85576	93561.51817	304.3289898	4077222.185
Riverside (SC)	2020	ConstMin - Skid Steer Loaders	Aggregated	75	Diesel	0.004090503	0.004949509	0.005890325	0.08612299	0.065561227	13.88344483	0.002801506	0.002577385	0.002801506	0.000128237	0.000113315	450433.0775	335445.3558	962.6271468	23636309.81
Riverside (SC)	2020	ConstMin - Skid Steer Loaders	Aggregated	100	Diesel	8.98607E-05	0.000108731	0.000129399	0.001873338	0.001691913	0.290548654	0.000109779	0.000100996	0.000109779	2.68357E-06	2.37142E-06	9426.5311	6553.039133	19.46377773	500186.297
Riverside (SC)	2020	ConstMin - Skid Steer Loaders	Aggregated	175	Diesel	2.3219E-05	2.8095E-05	3.34354E-05	0.000516611	0.000310744	0.095802688	1.30701E-05	1.20245E-05	1.30701E-05	8.85047E-07	7.81929E-07	3108.212708	1074.417696	4.073813944	163553.4189
Riverside (SC)	2020	ConstMin - Skid Steer Loaders	Aggregated	300	Diesel	1.35234E-05	1.63633E-05	1.94736E-05	0.000163497	0.00020659	0.088983791	5.85889E-06	5.39017E-06	5.85889E-06	8.22294E-07	7.26274E-07	2886.981097	739.1670614	2.564993965	151515.2788
Riverside (SC)	2020	ConstMin - Skid Steer Loaders	Aggregated	600	Diesel	6.1815E-06	7.47962E-06	8.90137E-06	4.80361E-05	0.000100834	0.025742136	4.32953E-06	3.98317E-06	4.32953E-06	2.37813E-07	2.10104E-07	835.1752588	92.56418119	0.301763996	43764.34487
Riverside (SC)	2020	ConstMin - Skid Steer Loaders	Aggregated	9999	Diesel	1.57922E-05	1.91085E-05	2.27407E-05	0.00010935	0.000290471	0.034845531	9.53131E-06	8.7688E-06	9.53131E-06	3.2169E-07	2.84405E-07	1130.524885	59.40937447	0.301763996	59409.37447
Riverside (SC)	2020	ConstMin - Surfacing Equipment	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2020	ConstMin - Surfacing Equipment	Aggregated	50	Diesel	1.82771E-05	2.21153E-05	2.6319E-05	0.00016242	0.000175034	0.024734126	8.93605E-06	8.22116E-06	8.93605E-06	2.28131E-07	2.01877E-07	802.471471	1271.073818	5.338365312	45768.368
Riverside (SC)	2020	ConstMin - Surfacing Equipment	Aggregated	75	Diesel	1.54869E-05	1.87392E-05	2.23012E-05	0.000132164	0.000220192	0.018846738	1.37492E-05	1.26493E-05	1.37492E-05	1.73783E-07	1.53825E-07	611.4616525	587.9766094	2.326979751	39097.87439
Riverside (SC)	2020	ConstMin - Surfacing Equipment	Aggregated	100	Diesel	6.88437E-05	8.33009E-05	9.91349E-05	0.000919696	0.000905013	0.142018637	5.10966E-05	4.70088E-05	5.10966E-05	1.31097E-06	1.15914E-06	4607.638274	3288.760365	12.45618573	295338.2314
Riverside (SC)	2020	ConstMin - Surfacing Equipment	Aggregated	175	Diesel	6.37287E-05	7.71117E-05	9.17693E-05	0.000764489	0.000895312	0.132939955	4.38474E-05	4.03396E-05	4.38474E-05	1.22718E-06	1.08504E-06	4313.090432	2041.657549	8.075988549	276968.5932
Riverside (SC)	2020	ConstMin - Surfacing Equipment	Aggregated	300	Diesel	9.3303E-05	0.000112897	0.000134356	0.000710642	0.001705391	0.262713247	5.50701E-05	5.06645E-05	5.50701E-05	2.42612E-06	2.14423E-06	8523.441957	2396.489447	9.992324815	546451.4014
Riverside (SC)	2020	ConstMin - Surfacing Equipment	Aggregated	600	Diesel	0.000167182	0.00020229	0.000240742	0.001712022	0.002530175	0.832914493	9.10157E-05	8.37344E-05	9.10157E-05	7.69569E-06	6.79814E-06	27022.99342	4267.754398	15.19380897	1734072.149
Riverside (SC)	2020	ConstMin - Surfacing Equipment	Aggregated	750	Diesel	0.000101366	0.000122653	0.000145967	0.000795527	0.001866795	0.410708108	6.58226E-05	6.05568E-05	6.58226E-05	3.79416E-06	3.35214E-06	13324.97226	1343.750231	4.790840665	854637.7049
Riverside (SC)	2020	ConstMin - Surfacing Equipment	Aggregated	9999	Diesel	5.22279E-05	6.31958E-05	7.52082E-05	0.000297133	0.001237583	0.136324911	2.95467E-05	2.71829E-05	2.95467E-05	1.25882E-06	1.11267E-06	4422.91159	323.8375457	1.231930457	283719.2497
Riverside (SC)	2020	ConstMin - Sweepers/Scrubbers	Aggregated	25	Diesel	2.45066E-05	2.96529E-05	3.52895E-05	8.1484E-05	5.61083E-05	0.004287569	7.71378E-06	7.09668E-06	7.71378E-06	3.89055E-08	3.49946E-08	139.1054505	212.3353514	0.29018544	5308.383786
Riverside (SC)	2020	ConstMin - Sweepers/Scrubbers	Aggregated	50	Diesel	0.003052718	0.003693789	0.004395914	0.016974417	0.014061966	1.623920254	0.001275059	0.001173054	0.001275059	1.49224E-05	1.32542E-05	52686.30422	56377.62526	81.68720133	2011802.477
Riverside (SC)	2020	ConstMin - Sweepers/Scrubbers	Aggregated	75	Diesel	0.000476699	0.000576805	0.000686446	0.00335704	0.004749909	0.441616043	0.000382694	0.000352078	0.000382694	4.06866E-06	3.60441E-06	14327.74617	8361.351826	14.65436471	605795.7507
Riverside (SC)	2020	ConstMin - Sweepers/Scrubbers	Aggregated	100	Diesel	0.001562239	0.001890309	0.002249624	0.01480483	0.016517967	2.074833144	0.001325863	0.001219794	0.001325863	1.9136E-05	1.69345E-05	67315.67633	36121.60957	52.08828646	2857815.876
Riverside (SC)	2020	ConstMin - Sweepers/Scrubbers	Aggregated	175	Diesel	0.000452436	0.000547448	0.000651508	0.003984204	0.005465646	0.627702946	0.000281192	0.000258697	0.000281192	5.78985E-06	5.12323E-06	20365.13081	5405.488367	7.689914157	863971.8293
Riverside (SC)	2020	ConstMin - Sweepers/Scrubbers	Aggregated	300	Diesel	0.000131628	0.00015927	0.000189544	0.000812473	0.001973876	0.376964183	6.33838E-05	5.83131E-05	6.33838E-05	3.48127E-06	3.07673E-06	12230.18778	2474.224735	3.482225279	518854.3785
Riverside (SC)	2020	ConstMin - Sweepers/Scrubbers	Aggregated	600	Diesel	4.09756E-05	4.95805E-05	5.90049E-05	0.000674576	0.000568958	0.050908575	2.87216E-05	2.64239E-05	2.87216E-05	4.69446E-07	4.15509E-07	1651.672658	212.3353514	0.29018544	70070.66597
Riverside (SC)	2020	ConstMin - Sweepers/Scrubbers	Aggregated	9999	Diesel	2.50095E-05	3.02615E-05	3.60137E-05	0.000130236	0.000524049	0.065409806	1.48701E-05	1.36805E-05	1.48701E-05	6.03996E-07	5.33866E-07	2122.149112	106.1676757	0.14509272	90030.18901
Riverside (SC)	2020	ConstMin - Tractors/Loaders/Backhoes	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2020	ConstMin - Tractors/Loaders/Backhoes	Aggregated	50	Diesel	0.006282626	0.007601978	0.009046982	0.046138763	0.04030078	5.287845137	0.002637771	0.002426749	0.002637771	4.87003E-05	4.31587E-05	171558.3119	214999.7965	425.9177989	8150431.032
Riverside (SC)	2020	ConstMin - Tractors/Loaders/Backhoes	Aggregated	75	Diesel	0.002113837	0.002557743	0.003043925	0.008518854	0.02008263	0.839514331	0.001610707	0.00148185	0.001610707	7.69831E-06	6.852E-06	27237.1179	19838.56635	90.5260827	1429157.046
Riverside (SC)	2020	ConstMin - Tractors/Loaders/Backhoes	Aggregated	100	Diesel	0.041562395	0.050290498	0.059849848	0.566549777	0.510954397	84.02685676	0.031969605	0.029412037	0.031969605	0.000775623	0.000685816	2726158.829	1716338.42	2801.411251	142691957.6
Riverside (SC)	2020	ConstMin - Tractors/Loaders/Backhoes	Aggregated	175	Diesel	0.005698391	0.006895053	0.008205683	0.087209789	0.067816697	14.68700957	0.003416862	0.003143513	0.003416862	0.000135618	0.000119873	476503.8507	175360.24	323.5194431	25143395.81
Riverside (SC)	2020	ConstMin - Tractors/Loaders/Backhoes	Aggregated	300	Diesel	0.003242683	0.003923647	0.004669464	0.021373764	0.047464535	9.083706364	0.001584552	0.001457788	0.001584552	8.38861E-05	7.414E-05	294710.8491	74622.31558	135.4923172	15491782.96
Riverside (SC)	2020	ConstMin - Tractors/Loaders/Backhoes	Aggregated	600	Diesel	0.003864624	0.004676195	0.005565058	0.031794241	0.050986222	12.0839417	0.001801443	0.001657328	0.001801443	0.000111606	9.86275E-05	392050.1804	61679.55716	117.2386973	20762335.03
Riverside (SC)	2020	ConstMin - Tractors/Loaders/Backhoes	Aggregated	750	Diesel	8.79213E-05	0.000106385	0.000126607	0.000821598	0.000979157	0.408706398	2.7001E-05	2.48409E-05	2.7001E-05	3.77606E-06	3.33581E-06	13260.02897	1108.745535	1.632437557	704255.6696
Riverside (SC)	2020	ConstMin - Tractors/Loaders/Backhoes	Aggregated	9999	Diesel	0.001135516	0.001373975	0.001635144	0.008100502	0.026606208	4.129851313	0.00054001	0.000496809	0.00054001	3.81485E-05	3.37073E-05	133988.4776	3797.511395	6.232943399	7026758.7
Riverside (SC)	2020	ConstMin - Trenchers	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2020	ConstMin - Trenchers	Aggregated	50	Diesel	0.002371917	0.002870019	0.00341556	0.015328773	0.014832115	1.869957982	0.001129323	0.001038977	0.001129323	1.72175E-05	1.52623E-05	60668.72735	52543.78487	139.6624711	2096283.948
Riverside (SC)	2020	ConstMin - Trenchers	Aggregated	75	Diesel	0.000185131	0.000224009	0.000266589	0.00106253	0.001873032	0.124801965	0.00012854	0.000118257	0.00012854	1.1483E-06	1.01862E-06	4049.062295	2199.031359	8.411489734	155243.152
Riverside (SC)	2020	ConstMin - Trenchers	Aggregated	100	Diesel	0.001100726	0.001331878	0.001585045	0.008709598	0.012199856	1.230236278	0.000925086	0.000851079	0.000925086	1.13411E-05	1.0041E-05	39913.66116	18276.63786	56.34111048	1533316.248
Riverside (SC)	2020	ConstMin - Trenchers	Aggregated	175	Diesel	0.000183889	0.000222506	0.000264801	0.001760906	0.0023589	0.27669034	0.000120611	0.000110963	0.000120611	2.55262E-06	2.25831E-06	8976.913349	2422.262605	8.570197087	346609.7933
Riverside (SC)	2020	ConstMin - Trenchers	Aggregated	300	Diesel	0.000366802	0.00044383	0.000528194	0.002092134	0.00543945	0.671766219	0.000219161	0.000201628	0.000219161	6.19981E-06	5.48287E-06	21794.71515	3654.548653	11.90305151	836280.417
Riverside (SC)	2020	ConstMin - Trenchers	Aggregated	600	Diesel	0.000309725	0.000374767	0.000446004	0.003161292	0.004394046	0.901733667	0.000165178	0.000151964	0.000165178	8.32768E-06	7.35983E-06	29255.75574	2886.781868	8.094075027	1121471.397
Riverside (SC)	2020	ConstMin - Trenchers	Aggregated	750	Diesel	3.40658E-05	4.12197E-05	4.90548E-05	0.00053076	0.000347059	0.294345784	5.06381E-06	4.65871E-06	5.06381E-06	2.72035E-06	2.40241E-06	9549.724785	567.7260963	1.269658828	367155.9193
Riverside (SC)	2020	ConstMin - Trenchers	Aggregated	9999	Diesel	4.42525E-05	5.35455E-05	6.37236E-05	0.00063557	0.00061438	0.024398816	2.83689E-05	2.60994E-05	2.83689E-05	2.24252E-07	1.9914E-07	791.5927167	35.40543164	0.158707353	30448.67121
Riverside (SC)	2020	Industrial - Aerial Lifts	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2020	Industrial - Aerial Lifts	Aggregated	50	Diesel	0.000182073	0.000220308	0.000262185	0.004074378	0.003884348	0.772079601	4.0598E-05	3.73501E-05	4.0598E-05	7.1328E-06	6.30161E-06	25049.27237	30637.92408	103.6794845	1413287.763
Riverside (SC)	2020	Industrial - Aerial Lifts	Aggregated	75	Diesel	0.000162906	0.000197116	0.000234585	0.005365214	0.003046249	0.89153527	8.36224E-05	7.69326E-05	8.36224E-05	8.2378E-06	7.27659E-06	28924.87999	25117.95993	85.2823697	1814201.407
Riverside (SC)	2020	Industrial - Aerial Lifts	Aggregated	100	Diesel	7.94057E-05	9.60809E-05	0.000114344	0.002738996	0.001720629	0.455652312	2.24369E-05	2.06419E-05	2.24369E-05	4.21035E-06	3.71897E-06	14783.13747	11915.22428	40.31708126	927249.6127
Riverside (SC)	2020	Industrial - Aerial Lifts	Aggregated	175	Diesel	1.25611E-05	1.5199E-05	1.8088E-05	0.000442912	0.00015354	0.082334688	4.99302E-06	4.59358E-06	4.99302E-06	7.60848E-07	6.72005E-07	2671.258283	1284.837121	4.354636204	167624.1449
Riverside (SC)	2020	Industrial - Aerial Lifts	Aggregated	300	Diesel	5.22185E-07	6.31844E-07	7.51947E-07	8.8062E-06	6.2949E-06	0.004920139	8.30831E-08	7.64364E-08	8.30831E-08	4.54735E-08	4.01575E-08	159.628476	43.55195068	0.14678549	10016.94866
Riverside (SC)	2020	Industrial - Aerial Lifts	Aggregated	600	Diesel	2.97493E-07	3.59967E-07	4.2839E-07	6.21585E-06	1.71874E-06	0.003494011	5.86263E-08	5.39362E-08	5.86263E-08	3.22949E-08	2.85177E-08	113.3593526	14.51731689	0.048928497	7113.485277
Riverside (SC)	2020	Industrial - Forklifts	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2020	Industrial - Forklifts	Aggregated	50	Diesel	0.000821073	0.000993498	0.001182345	0.005044138	0.004142477	0.519640585	0.000318382	0.000292912	0.000318382	4.7797E-06	4.24124E-06	16859.1665	34364.98584	48.06348877	1457075.374
Riverside (SC)	2020	Industrial - Forklifts	Aggregated	75	Diesel	0.000118757	0.000143696	0.00017101	0.000481415	0.001123583	0.049204105	9.29168E-05	8.54834E-05	9.29168E-05	4.51354E-07	4.01597E-07	1596.372985	2093.950865	4.131076721	154021.538
Riverside (SC)	2020	Industrial - Forklifts	Aggregated	100	Diesel	0.004380139	0.005299969	0.006307401	0.044138336	0.047923485	6.2108056	0.003561097	0.00327621	0.003561097	5.72906E-05	5.06918E-05	201502.7477	235456.0463	316.7423632	19411928.54
Riverside (SC)	2020	Industrial - Forklifts	Aggregated	175	Diesel	0.001046847	0.001266685	0.00150746	0.012164961	0.012434985	1.977055643	0.000673286	0.000619423	0.000673286	1.82475E-05	1.61365E-05	64143.39299	43686.74467	59.58283732	6173731.205
Riverside (SC)	2020	Industrial - Forklifts	Aggregated	300	Diesel	0.000202651	0.000245208	0.000291817	0.001228854	0.002709508	0.431242605	0.000106551	9.80267E-05	0.000106551	3.98097E-06	3.51974E-06	13991.19138	6400.152401	8.738816141	1343264.207
Riverside (SC)	2020	Industrial - Forklifts	Aggregated	600	Diesel	3.61027E-05	4.36843E-05	5.19879E-05	0.000249111	0.000409778	0.108493783	1.50012E-05	1.38011E-05	1.50012E-05	1.002E-06	8.85512E-07	3519.961301	952.6014304	1.350544313	336521.0028
Riverside (SC)	2020	Industrial - Forklifts	Aggregated	9999	Diesel	1.06151E-06	1.28443E-06	1.52857E-06	1.60377E-05	3.81108E-05	0.008616876	3.2602E-07	2.99939E-07	3.2602E-07	7.96354E-08	7.03298E-08	279.5650506	30.57185986	0.039721892	26903.23668
Riverside (SC)	2020	Industrial - Other General Industrial Equipment	Aggregated	25	Diesel	6.78316E-07	8.20763E-07	9.76776E-07	2.25539E-06	1.55302E-06	0.000118675	2.1351E-07	1.96429E-07	2.1351E-07	1.07686E-09	9.68613E-10	3.85029491	7.836416851	0.035127293	195.9104213
Riverside (SC)	2020	Industrial - Other General Industrial Equipment	Aggregated	50	Diesel	0.001483863	0.001795474	0.002136762	0.010448381	0.008774818	1.11740986	0.000633927	0.000583213	0.000633927	1.02865E-05	9.12015E-06	36253.13229	52393.81288	64.07218286	1839450.36
Riverside (SC)	2020	Industrial - Other General Industrial Equipment	Aggregated	75	Diesel	0.000385191	0.000466082	0.000554676	0.005060515	0.004713572	0.728027309	0.000301808	0.000277664	0.000301808	6.71942E-06	5.94206E-06	23620.04428	18655.53068	22.58684955	1334556.517
Riverside (SC)	2020	Industrial - Other General Industrial Equipment	Aggregated	100	Diesel	0.00023598	0.000285536	0.000339812	0.001373117	0.002148098	0.171704702	0.000198064	0.000182219	0.000198064	1.58042E-06	1.40143E-06	5570.769973	4029.799002	5.339348571	315553.8057
Riverside (SC)	2020	Industrial - Other General Industrial Equipment	Aggregated	175	Diesel	0.00018751	0.000226887	0.000270014	0.002598117	0.002152332	0.420730738	0.000115319	0.000106093	0.000115319	3.88424E-06	3.43395E-06	13650.14544	5196.328014	6.393167368	771628.1479
Riverside (SC)	2020	Industrial - Other General Industrial Equipment	Aggregated	300	Diesel	0.000190048	0.000229958	0.000273668	0.001154765	0.002894868	0.452379277	9.41283E-05	8.6598E-05	9.41283E-05	4.17677E-06	3.69226E-06	14676.94742	3793.531033	4.77731188	828771.5667
Riverside (SC)	2020	Industrial - Other General Industrial Equipment	Aggregated	600	Diesel	0.000389047	0.000470746	0.000560227	0.003139373	0.004380028	1.30777071	0.000154368	0.000142018	0.000154368	1.20793E-05	1.06738E-05	42429.18045	6275.480979	7.552368045	2397838.509
Riverside (SC)	2020	Industrial - Other General Industrial Equipment	Aggregated	750	Diesel	5.82642E-05	7.04997E-05	8.39004E-05	0.000754134	0.000564876	0.219783208	2.69107E-05	2.47578E-05	2.69107E-05	2.03026E-06	1.79384E-06	7130.624151	638.1194242	0.772800451	402340.3702
Riverside (SC)	2020	Industrial - Other General Industrial Equipment	Aggregated	9999	Diesel	2.14342E-05	2.59354E-05	3.08653E-05	0.000147984	0.000540872	0.07615213	1.08961E-05	1.00244E-05	1.08961E-05	7.03421E-07	6.21543E-07	2470.671982	120.0539062	0.140509173	139712.7333
Riverside (SC)	2020	Industrial - Other Material Handling Equipment	Aggregated	25	Diesel	8.76227E-07	1.06023E-06	1.26177E-06	2.97734E-06	2.02234E-06	0.000156663	2.81853E-07	2.59305E-07	2.81853E-07	1.42214E-09	1.27866E-09	5.082757647	8.942132516	0.040083742	223.5533129
Riverside (SC)	2020	Industrial - Other Material Handling Equipment	Aggregated	50	Diesel	9.09306E-05	0.000110026	0.00013094	0.000547212	0.000456468	0.052104795	3.89041E-05	3.57917E-05	3.89041E-05	4.79007E-07	4.25272E-07	1690.482698	2082.44382	2.805861938	73911.62852
Riverside (SC)	2020	Industrial - Other Material Handling Equipment	Aggregated	75	Diesel	1.26615E-05	1.53204E-05	1.82325E-05	0.000108268	0.000136543	0.014178199	1.09838E-05	1.01051E-05	1.09838E-05	1.30705E-07	1.15721E-07	459.9960364	312.1251355	0.481004904	22600.77494
Riverside (SC)	2020	Industrial - Other Material Handling Equipment	Aggregated	100	Diesel	0.000211575	0.000256006	0.000304669	0.003787054	0.002913893	0.571717912	0.000133663	0.00012297	0.000133663	5.27947E-06	4.66628E-06	18548.75803	9725.373903	12.78671369	906281.8788
Riverside (SC)	2020	Industrial - Other Material Handling Equipment	Aggregated	175	Diesel	0.000215266	0.000260471	0.000309982	0.002477705	0.002211737	0.394599651	0.000150534	0.000138491	0.000150534	3.64181E-06	3.22067E-06	12802.3511	4507.907844	6.333231231	625259.207
Riverside (SC)	2020	Industrial - Other Material Handling Equipment	Aggregated	300	Diesel	0.000321767	0.000389338	0.000463345	0.001745593	0.004459418	0.693158427	0.000163023	0.000149981	0.000163023	6.39894E-06	5.65747E-06	22488.76178	4585.92795	6.172896263	1099743.786
Riverside (SC)	2020	Industrial - Other Material Handling Equipment	Aggregated	600	Diesel	0.000332623	0.000402474	0.000478977	0.00235078	0.004771432	0.811239027	0.000164154	0.000151022	0.000164154	7.49033E-06	6.62122E-06	26319.75681	3490.248453	4.729881553	1283966.559
Riverside (SC)	2020	Industrial - Other Material Handling Equipment	Aggregated	750	Diesel	1.62008E-05	1.9603E-05	2.33292E-05	7.63106E-05	0.000182901	0.037351662	8.96489E-06	8.2477E-06	8.96489E-06	3.44849E-07	3.04859E-07	1211.83353	95.09957931	0.120251226	59278.73777
Riverside (SC)	2020	Industrial - Other Material Handling Equipment	Aggregated	9999	Diesel	1.56633E-05	1.89525E-05	2.25551E-05	0.000118155	0.000369437	0.060381857	6.9386E-06	6.38352E-06	6.9386E-06	5.5779E-07	4.92829E-07	1959.022866	95.09957931	0.120251226	95828.67609
Riverside (SC)	2020	Locomotive - Line haul	Aggregated	9999	Diesel	0.067029581	0.081105793	0.096522596	0.782479431	2.315654253	0	0.034323801	0.031352445	0.034323801	0.003052528	0.002448187	0	0	0	0
Riverside (SC)	2020	Locomotive - Passenger	Aggregated	9999	Diesel	0.00458538	3.26958E-06	3.89107E-06	0.050234233	0.104165385	0	0.001908881	0.001756171	0.001908881	0.000146147	0.000161049	0	0	0	0
Riverside (SC)	2020	OFF - Agricultural - 2-Wheel Tractors	Aggregated	25	Gasoline	0.001623075	0.001492904	0.001786095	0.058341704	0.001214926	0.109338753	0.000694705	0.000524889	0.000771895	3.2109E-06	2.753E-06	7858.45	19432.6	76.47	136042.8
Riverside (SC)	2020	OFF - Agricultural - Agricultural Mowers	Aggregated	25	Gasoline	0.001294129	0.001190339	0.00142411	0.05416329	0.0009849	0.092294618	0.000696336	0.000526121	0.000773707	2.44212E-06	2.41926E-06	6905.8	11869.8	65.79	148394.4
Riverside (SC)	2020	OFF - Agricultural - Agricultural Tractors	Aggregated	25	Diesel	0.008062715	0.009595297	0.011610309	0.045794624	0.073176619	9.72552914	0.00276913	0.002547599	0.00276913	0.000131705	8.14126E-05	323619.95	447884.2	840.66	8095134.25
Riverside (SC)	2020	OFF - Agricultural - Agricultural Tractors	Aggregated	100	Gasoline	0.001242364	0.001142726	0.001367146	0.045233064	0.003311808	0.847756676	5.91076E-05	4.46591E-05	6.56751E-05	8.19051E-06	1.22408E-05	34941.45	7124.8	12.93	584233.6
Riverside (SC)	2020	OFF - Agricultural - Agricultural Tractors	Aggregated	175	Gasoline	0.000163096	0.000150016	0.000179477	0.006173201	0.000775181	0.172245624	1.23482E-05	9.32973E-06	1.37202E-05	1.71108E-06	2.42054E-06	6909.45	974.55	1.76	121818.75
Riverside (SC)	2020	OFF - Agricultural - Balers	Aggregated	50	Gasoline	0.000216281	0.000198935	0.000238004	0.010865667	0.00041986	0.146540209	1.01024E-05	7.63289E-06	1.12248E-05	1.78166E-06	2.18271E-06	6230.55	3219.3	47.23	112675.5
Riverside (SC)	2020	OFF - Agricultural - Balers	Aggregated	100	Gasoline	0.000102615	9.43852E-05	0.000112921	0.002982953	0.000402009	0.135504637	9.44771E-06	7.13827E-06	1.04975E-05	1.30916E-06	1.86048E-06	5310.75	1649.8	24.16	105587.2
Riverside (SC)	2020	OFF - Agricultural - Combines	Aggregated	100	Gasoline	2.82719E-05	2.60045E-05	3.11115E-05	0.001288247	7.46715E-05	0.072368723	5.04572E-06	3.81232E-06	5.60636E-06	6.99183E-07	9.85863E-07	2814.15	408.8	3.25	42106.4
Riverside (SC)	2020	OFF - Agricultural - Combines	Aggregated	175	Gasoline	1.79917E-05	1.65488E-05	1.97988E-05	0.001906079	7.11651E-05	0.062259087	4.46331E-06	3.37228E-06	4.95924E-06	6.18479E-07	8.65667E-07	2471.05	233.6	1.8	38310.4
Riverside (SC)	2020	OFF - Agricultural - Combines	Aggregated	300	Gasoline	3.28579E-06	3.02227E-06	3.61581E-06	0.000416262	3.90073E-05	0.01321297	9.74727E-07	7.36461E-07	1.08303E-06	1.35067E-07	1.86687E-07	532.9	32.85	0.34	6372.9
Riverside (SC)	2020	OFF - Agricultural - Hydro Power Units	Aggregated	25	Gasoline	0.001269422	0.001167614	0.001396922	0.048813698	0.000960184	0.085984167	0.000610539	0.000461296	0.000678377	2.36889E-06	2.22491E-06	6351	12052.3	31.08	118406
Riverside (SC)	2020	OFF - Agricultural - Hydro Power Units	Aggregated	25	Diesel	5.46349E-05	6.502E-05	7.86742E-05	0.000289293	0.000496514	0.065556633	1.86641E-05	1.7171E-05	1.86641E-05	8.59762E-07	5.49099E-07	2182.7	4741.35	5.82	79475.1
Riverside (SC)	2020	OFF - Agricultural - Hydro Power Units	Aggregated	50	Gasoline	1.17852E-05	1.084E-05	1.29689E-05	0.000930978	1.8573E-05	0.010059974	6.93526E-07	5.23997E-07	7.70584E-07	1.22311E-07	1.53442E-07	438	200.75	0.44	7628.5
Riverside (SC)	2020	OFF - Agricultural - Hydro Power Units	Aggregated	100	Gasoline	8.91533E-07	8.20032E-07	9.81078E-07	4.35312E-05	2.28234E-06	0.002159536	1.50568E-07	1.13763E-07	1.67298E-07	2.08641E-08	2.94097E-08	83.95	25.55	0.05	1686.3
Riverside (SC)	2020	OFF - Agricultural - Other Agricultural Equipment	Aggregated	25	Gasoline	0.000166882	0.000153498	0.000183643	0.005846228	0.000117294	0.010944241	6.52382E-05	4.92911E-05	7.24869E-05	3.1589E-07	2.74916E-07	784.75	1762.95	12.11	15384.75
Riverside (SC)	2020	OFF - Agricultural - Other Agricultural Equipment	Aggregated	25	Diesel	0.000126953	0.000151084	0.000182812	0.000674609	0.001156497	0.151718525	4.55147E-05	4.18735E-05	4.55147E-05	1.99645E-06	1.26991E-06	5047.95	8953.45	20.04	173287.4
Riverside (SC)	2020	OFF - Agricultural - Other Agricultural Equipment	Aggregated	50	Gasoline	9.50065E-06	8.7387E-06	1.04549E-05	0.000552471	1.67693E-05	0.006882576	4.74479E-07	3.58495E-07	5.27199E-07	8.36796E-08	9.97371E-08	284.7	186.15	1.46	5398.35
Riverside (SC)	2020	OFF - Agricultural - Other Agricultural Equipment	Aggregated	100	Gasoline	6.00295E-05	5.52151E-05	6.60588E-05	0.002064829	0.00019734	0.091071746	6.34974E-06	4.79758E-06	7.05527E-06	8.7988E-07	1.25566E-06	3584.3	1051.2	8.5	70430.4
Riverside (SC)	2020	OFF - Agricultural - Other Agricultural Equipment	Aggregated	175	Gasoline	8.95487E-06	8.23669E-06	9.85429E-06	0.000634109	4.98719E-05	0.020497229	1.46943E-06	1.11024E-06	1.6327E-06	2.03619E-07	2.83867E-07	810.3	116.8	1	15884.8
Riverside (SC)	2020	OFF - Agricultural - Other Agricultural Equipment	Aggregated	300	Gasoline	4.87163E-06	4.48093E-06	5.36093E-06	0.000426025	5.02577E-05	0.013382542	9.87237E-07	7.45912E-07	1.09693E-06	1.36801E-07	1.85409E-07	529.25	43.8	0.36	10774.8
Riverside (SC)	2020	OFF - Agricultural - Sprayers	Aggregated	25	Gasoline	0.002810089	0.00258472	0.003092332	0.097157635	0.001752813	0.173580826	0.001054044	0.000796389	0.00117116	4.78078E-06	4.47922E-06	12785.95	28513.8	290.57	267610.7
Riverside (SC)	2020	OFF - Agricultural - Sprayers	Aggregated	25	Diesel	1.33116E-05	1.5842E-05	1.91688E-05	6.11679E-05	0.000111548	0.013918998	5.32024E-06	4.89462E-06	5.32024E-06	1.76606E-07	1.14778E-07	456.25	861.4	7.8	16366.6
Riverside (SC)	2020	OFF - Agricultural - Sprayers	Aggregated	50	Gasoline	4.19124E-05	3.8551E-05	4.6122E-05	0.002130097	8.05053E-05	0.027820936	1.91795E-06	1.44912E-06	2.13106E-06	3.38252E-07	4.14293E-07	1182.6	719.05	8.88	23728.65
Riverside (SC)	2020	OFF - Agricultural - Sprayers	Aggregated	100	Gasoline	7.4021E-05	6.80845E-05	8.14556E-05	0.002177176	0.000285643	0.095532744	6.66077E-06	5.03258E-06	7.40086E-06	9.2298E-07	1.31576E-06	3755.85	1200.85	14.97	81657.8
Riverside (SC)	2020	OFF - Agricultural - Sprayers	Aggregated	175	Gasoline	2.12265E-05	1.95242E-05	2.33585E-05	0.001320978	0.000145794	0.043137173	3.09248E-06	2.33654E-06	3.43608E-06	4.28523E-07	5.99701E-07	1711.85	262.8	3.37	36792
Riverside (SC)	2020	OFF - Agricultural - Swathers	Aggregated	100	Gasoline	0.000393062	0.000361538	0.000432541	0.011721543	0.001489388	0.493329538	3.43961E-05	2.59882E-05	3.82179E-05	4.76625E-06	6.80386E-06	19421.65	4606.3	48.41	405354.4
Riverside (SC)	2020	OFF - Agricultural - Swathers	Aggregated	175	Gasoline	0.000273096	0.000251194	0.000300526	0.016598686	0.001841435	0.539169461	3.86527E-05	2.92043E-05	4.29474E-05	5.35608E-06	7.5033E-06	21418.2	3533.2	37.14	455782.8
Riverside (SC)	2020	OFF - Agricultural - Tillers	Aggregated	25	Gasoline	0.022812253	0.02098271	0.025103492	1.230745976	0.016550691	2.141790307	0.000978353	0.0007392	0.001087058	6.10683E-05	5.52723E-05	157774.9	332288.7	4673.14	2326020.9
Riverside (SC)	2020	OFF - ConstMin - Asphalt Pavers	Aggregated	25	Gasoline	0.000223039	0.000205151	0.000245441	0.009291352	0.000166104	0.015662289	0.000118167	8.9282E-05	0.000131297	4.06533E-07	4.13014E-07	1178.95	1062.15	2.68	18290.15
Riverside (SC)	2020	OFF - ConstMin - Asphalt Pavers	Aggregated	50	Gasoline	2.97986E-05	2.74088E-05	3.27916E-05	0.001908592	4.42732E-05	0.014487872	9.98781E-07	7.54634E-07	1.10976E-06	1.76146E-07	2.33999E-07	667.95	284.7	0.76	9110.4
Riverside (SC)	2020	OFF - ConstMin - Asphalt Pavers	Aggregated	100	Gasoline	1.585E-05	1.45788E-05	1.7442E-05	0.000593914	4.42574E-05	0.01499975	1.04582E-06	7.90174E-07	1.16202E-06	1.44919E-07	2.10982E-07	602.25	160.6	0.42	9796.6
Riverside (SC)	2020	OFF - ConstMin - Bore/Drill Rigs	Aggregated	25	Gasoline	7.93585E-05	7.29939E-05	8.73292E-05	0.003458186	5.83996E-05	0.005806494	4.38083E-05	3.30996E-05	4.86759E-05	1.49013E-07	1.52163E-07	434.35	335.8	2.75	5606.4
Riverside (SC)	2020	OFF - ConstMin - Bore/Drill Rigs	Aggregated	25	Diesel	3.20136E-05	3.80989E-05	4.60996E-05	0.000171895	0.000290862	0.038452517	1.09485E-05	1.00726E-05	1.09485E-05	5.07488E-07	3.20461E-07	1273.85	1927.2	2.39	29871.6
Riverside (SC)	2020	OFF - ConstMin - Bore/Drill Rigs	Aggregated	50	Gasoline	2.31058E-06	2.12527E-06	2.54265E-06	0.000120274	4.33846E-06	0.001466729	1.01115E-07	7.6398E-08	1.1235E-07	1.78327E-08	2.17376E-08	62.05	0	0.24	0
Riverside (SC)	2020	OFF - ConstMin - Bore/Drill Rigs	Aggregated	100	Gasoline	1.49093E-05	1.37136E-05	1.64068E-05	0.000449244	5.57026E-05	0.018309417	1.27658E-06	9.64524E-07	1.41842E-06	1.76894E-07	2.54458E-07	726.35	109.5	1.04	9636
Riverside (SC)	2020	OFF - ConstMin - Bore/Drill Rigs	Aggregated	175	Gasoline	3.26953E-06	3.00731E-06	3.59791E-06	0.000195111	2.17335E-05	0.006311008	4.52432E-07	3.41838E-07	5.02702E-07	6.26933E-08	8.69503E-08	248.2	21.9	0.26	2759.4
Riverside (SC)	2020	OFF - ConstMin - Cement and Mortar Mixers	Aggregated	25	Gasoline	0.003164168	0.002910402	0.003481974	0.107058228	0.002136955	0.201896386	0.001131791	0.000855131	0.001257545	6.0749E-06	5.08404E-06	14512.4	38033	413.26	263497.15
Riverside (SC)	2020	OFF - ConstMin - Cement and Mortar Mixers	Aggregated	25	Diesel	8.10857E-05	9.64987E-05	0.000116763	0.000564118	0.000728329	0.098481026	2.8942E-05	2.66266E-05	2.8942E-05	1.47586E-06	8.21812E-07	3266.75	9924.35	33.05	102400.75
Riverside (SC)	2020	OFF - ConstMin - Concrete/Industrial Saws	Aggregated	25	Gasoline	0.002432827	0.002237714	0.002677178	0.100049327	0.00189526	0.174704261	0.001285933	0.000971594	0.001428814	4.80761E-06	4.53165E-06	12935.6	16527.2	58.17	172655.95
Riverside (SC)	2020	OFF - ConstMin - Concrete/Industrial Saws	Aggregated	25	Diesel	2.65797E-06	3.16321E-06	3.82748E-06	1.30637E-05	2.41866E-05	0.003172693	9.0374E-07	8.31441E-07	9.0374E-07	4.02555E-08	2.66285E-08	105.85	138.7	0.23	2496.6
Riverside (SC)	2020	OFF - ConstMin - Concrete/Industrial Saws	Aggregated	50	Gasoline	3.62363E-05	3.33302E-05	3.98759E-05	0.002672803	5.95395E-05	0.033656777	2.32027E-06	1.75309E-06	2.57808E-06	4.09205E-07	5.038E-07	1438.1	521.95	0.86	18268.25
Riverside (SC)	2020	OFF - ConstMin - Concrete/Industrial Saws	Aggregated	50	Diesel	4.89463E-05	5.82502E-05	7.04827E-05	0.000399655	0.000367848	0.04986362	1.86332E-05	1.71425E-05	1.86332E-05	6.44612E-07	4.20547E-07	1671.7	1204.5	2.07	39748.5
Riverside (SC)	2020	OFF - ConstMin - Concrete/Industrial Saws	Aggregated	100	Gasoline	1.48918E-05	1.36974E-05	1.63875E-05	0.000728494	3.81113E-05	0.035968781	2.50783E-06	1.8948E-06	2.78648E-06	3.47509E-07	4.93571E-07	1408.9	299.3	0.49	19753.8
Riverside (SC)	2020	OFF - ConstMin - Cranes	Aggregated	50	Gasoline	1.05106E-05	9.66763E-06	1.15662E-05	0.000641571	1.64256E-05	0.000446865	3.06563E-07	2.31625E-07	3.40625E-07	5.40658E-08	7.28848E-08	208.05	109.5	0.26	4051.5
Riverside (SC)	2020	OFF - ConstMin - Cranes	Aggregated	100	Gasoline	2.22708E-05	2.04846E-05	2.45076E-05	0.000783268	6.40555E-05	0.017587627	1.22625E-06	9.26501E-07	1.3625E-06	1.69921E-07	2.48064E-07	708.1	208.05	0.55	15395.7
Riverside (SC)	2020	OFF - ConstMin - Cranes	Aggregated	175	Gasoline	9.42756E-07	8.67147E-07	1.03745E-06	3.96664E-05	4.82772E-06	0.001155748	8.28548E-08	6.26014E-08	9.20609E-08	1.14811E-08	1.40655E-08	40.15	0	0	0
Riverside (SC)	2020	OFF - ConstMin - Crushing/Proc. Equipment	Aggregated	25	Gasoline	3.57144E-05	3.28501E-05	3.93015E-05	0.00150741	2.75822E-05	0.002585415	1.95062E-05	1.4738E-05	2.16736E-05	6.93101E-08	6.64914E-08	189.8	200.75	0.69	2368.85
Riverside (SC)	2020	OFF - ConstMin - Crushing/Proc. Equipment	Aggregated	100	Gasoline	1.40402E-05	1.29142E-05	1.54504E-05	0.000461477	4.58903E-05	0.013898398	9.6903E-07	7.32156E-07	1.0767E-06	1.34278E-07	1.93081E-07	551.15	62.05	0.3	5956.8
Riverside (SC)	2020	OFF - ConstMin - Dumpers/Tenders	Aggregated	25	Gasoline	0.00029143	0.000268057	0.000320701	0.010459975	0.000207714	0.019005426	0.000125434	9.47727E-05	0.000139372	5.42074E-07	4.82063E-07	1376.05	4113.55	27.54	35744.45
Riverside (SC)	2020	OFF - ConstMin - Dumpers/Tenders	Aggregated	25	Diesel	8.25548E-06	9.82471E-06	1.18879E-05	4.05566E-05	7.51619E-05	0.009849718	2.86344E-06	2.63436E-06	2.86344E-06	1.24974E-07	8.26403E-08	328.5	945.35	1.42	15125.6
Riverside (SC)	2020	OFF - ConstMin - Dumpers/Tenders	Aggregated	100	Gasoline	1.27165E-06	1.16966E-06	1.39937E-06	3.89391E-05	4.64472E-06	0.001507522	1.05108E-07	7.9415E-08	1.16787E-07	1.45648E-08	2.17376E-08	62.05	0	0.17	0
Riverside (SC)	2020	OFF - ConstMin - Excavators	Aggregated	25	Diesel	5.78446E-05	6.88399E-05	8.32963E-05	0.000284301	0.000526366	0.069046371	1.96678E-05	1.80944E-05	1.96678E-05	8.76067E-07	5.77564E-07	2295.85	3069.65	2.21	70601.95
Riverside (SC)	2020	OFF - ConstMin - Other Construction Equipment	Aggregated	25	Diesel	0.00018652	0.000221975	0.000268589	0.001317068	0.001684855	0.229226316	6.52889E-05	6.00658E-05	6.52889E-05	3.44767E-06	1.92001E-06	7632.15	15859.25	22.98	215339.05
Riverside (SC)	2020	OFF - ConstMin - Other Construction Equipment	Aggregated	175	Gasoline	1.38872E-05	1.27734E-05	1.5282E-05	0.001173877	4.6699E-05	0.037227252	2.6688E-06	2.01642E-06	2.96533E-06	3.69814E-07	5.19145E-07	1481.9	270.1	0.74	34032.6
Riverside (SC)	2020	OFF - ConstMin - Pavers	Aggregated	25	Diesel	1.56756E-05	1.86553E-05	2.25729E-05	7.69355E-05	0.000142879	0.018684794	5.51379E-06	5.07269E-06	5.51379E-06	2.37075E-07	1.56098E-07	620.5	733.65	0.89	17607.6
Riverside (SC)	2020	OFF - ConstMin - Paving Equipment	Aggregated	25	Gasoline	0.005136145	0.004724226	0.005652014	0.185895869	0.003849204	0.348612594	0.00222368	0.001680114	0.002470755	1.02341E-05	8.77559E-06	25049.95	55582.2	293.8	455695.2
Riverside (SC)	2020	OFF - ConstMin - Paving Equipment	Aggregated	25	Diesel	1.85409E-05	2.20652E-05	2.66989E-05	9.11269E-05	0.000168716	0.022131371	6.30084E-06	5.79678E-06	6.30084E-06	2.80805E-07	1.84563E-07	733.65	1281.15	1.53	24341.85
Riverside (SC)	2020	OFF - ConstMin - Paving Equipment	Aggregated	50	Gasoline	2.2255E-05	2.04701E-05	2.44902E-05	0.001541307	3.73655E-05	0.018266685	1.25929E-06	9.51463E-07	1.39921E-06	2.2209E-07	2.73638E-07	781.1	346.75	2.02	12829.75
Riverside (SC)	2020	OFF - ConstMin - Paving Equipment	Aggregated	100	Gasoline	4.2843E-06	3.9407E-06	4.71461E-06	0.000186749	1.23879E-05	0.008303545	5.78943E-07	4.37424E-07	6.4327E-07	8.02238E-08	1.1636E-07	332.15	83.95	0.51	5540.7
Riverside (SC)	2020	OFF - ConstMin - Plate Compactors	Aggregated	25	Gasoline	0.002163886	0.001990343	0.002381225	0.069345897	0.001517787	0.137496162	0.00075066	0.000567165	0.000834066	4.18335E-06	3.38595E-06	9665.2	31371.75	161.85	192778.4
Riverside (SC)	2020	OFF - ConstMin - Plate Compactors	Aggregated	25	Diesel	5.47806E-05	6.51934E-05	7.88841E-05	0.000413779	0.000494002	0.067766735	1.93033E-05	1.77591E-05	1.93033E-05	1.05451E-06	5.67463E-07	2255.7	11475.6	19.12	91804.8
Riverside (SC)	2020	OFF - ConstMin - Rollers	Aggregated	25	Gasoline	0.001106448	0.001017711	0.001217579	0.045343856	0.000834254	0.078341116	0.000570312	0.000430902	0.00063368	2.11043E-06	2.04333E-06	5832.7	7916.85	31.78	97422.15
Riverside (SC)	2020	OFF - ConstMin - Rollers	Aggregated	25	Diesel	0.000334491	0.000398072	0.000481668	0.002104873	0.003029463	0.40684821	0.000115862	0.000106593	0.000115862	5.78289E-06	3.40753E-06	13545.15	35434.2	50.93	423443.8
Riverside (SC)	2020	OFF - ConstMin - Rollers	Aggregated	50	Gasoline	5.08034E-05	4.67289E-05	5.5906E-05	0.00326886	7.35304E-05	0.017555826	1.21028E-06	9.14436E-07	1.34476E-06	2.13447E-07	3.0049E-07	857.75	317.55	0.55	11749.35
Riverside (SC)	2020	OFF - ConstMin - Rollers	Aggregated	100	Gasoline	0.000103872	9.55414E-05	0.000114305	0.003836538	0.000267612	0.06615032	4.61216E-06	3.48474E-06	5.12462E-06	6.39104E-07	9.6029E-07	2741.15	605.9	0.96	45442.5
Riverside (SC)	2020	OFF - ConstMin - Rough Terrain Forklifts	Aggregated	50	Gasoline	7.10852E-06	6.53841E-06	7.82249E-06	0.000433628	1.11187E-05	0.003014079	2.07788E-07	1.56995E-07	2.30875E-07	3.66457E-08	4.98686E-08	142.35	36.5	0.09	1715.5
Riverside (SC)	2020	OFF - ConstMin - Rough Terrain Forklifts	Aggregated	100	Gasoline	9.66876E-05	8.89332E-05	0.000106399	0.003398468	0.000278444	0.076534532	5.33617E-06	4.03177E-06	5.92908E-06	7.3943E-07	1.09199E-06	3117.1	609.55	1.45	51811.75
Riverside (SC)	2020	OFF - ConstMin - Rough Terrain Forklifts	Aggregated	175	Gasoline	3.56308E-06	3.27732E-06	3.92095E-06	0.000150175	1.82686E-05	0.004378508	3.13892E-07	2.37163E-07	3.48769E-07	4.34959E-08	6.26554E-08	178.85	0	0	0
Riverside (SC)	2020	OFF - ConstMin - Rubber Tired Loaders	Aggregated	25	Diesel	1.54507E-05	1.83876E-05	2.2249E-05	7.59387E-05	0.000140596	0.018442709	5.2534E-06	4.83313E-06	5.2534E-06	2.34003E-07	1.53344E-07	609.55	792.05	0.84	19801.25
Riverside (SC)	2020	OFF - ConstMin - Rubber Tired Loaders	Aggregated	50	Gasoline	1.67541E-05	1.54104E-05	1.84369E-05	0.001070913	2.42195E-05	0.006814437	4.69781E-07	3.54946E-07	5.21979E-07	8.28511E-08	1.09967E-07	313.9	135.05	0.26	5402
Riverside (SC)	2020	OFF - ConstMin - Rubber Tired Loaders	Aggregated	100	Gasoline	0.000105094	9.66651E-05	0.000115649	0.003886644	0.000280196	0.08053114	5.61483E-06	4.24231E-06	6.23869E-06	7.78043E-07	1.15465E-06	3295.95	890.6	1.72	64123.2
Riverside (SC)	2020	OFF - ConstMin - Signal Boards	Aggregated	25	Gasoline	5.52787E-05	5.08453E-05	6.08308E-05	0.002258626	4.48132E-05	0.004048433	2.94099E-05	2.22208E-05	3.26776E-05	1.16373E-07	1.02294E-07	292	525.6	1.99	4106.25
Riverside (SC)	2020	OFF - ConstMin - Signal Boards	Aggregated	25	Diesel	0.000856182	0.001018927	0.001232901	0.00646707	0.007720898	1.05914577	0.000301697	0.000277561	0.000301697	1.64812E-05	8.88383E-06	35313.75	125428.6	167.09	752571.6
Riverside (SC)	2020	OFF - ConstMin - Signal Boards	Aggregated	50	Diesel	2.13631E-05	2.54239E-05	3.07629E-05	0.000172593	0.000160118	0.022040888	8.00192E-06	7.36177E-06	8.00192E-06	2.84934E-07	1.84563E-07	733.65	441.65	0.83	16341.05
Riverside (SC)	2020	OFF - ConstMin - Skid Steer Loaders	Aggregated	25	Gasoline	0.003638459	0.003346655	0.004003902	0.151058404	0.002645112	0.252311068	0.001903614	0.001438286	0.002115126	6.40345E-06	6.69134E-06	19100.45	17720.75	55.51	335398.5
Riverside (SC)	2020	OFF - ConstMin - Skid Steer Loaders	Aggregated	25	Diesel	0.001547351	0.001841475	0.002228185	0.007480987	0.013931543	1.796019063	0.00056657	0.000521244	0.00056657	2.27881E-05	1.50249E-05	59724.95	95129.95	113.97	1902599
Riverside (SC)	2020	OFF - ConstMin - Skid Steer Loaders	Aggregated	50	Gasoline	0.000110916	0.000102021	0.000122056	0.008628411	0.000176564	0.096714202	6.66739E-06	5.03758E-06	7.40821E-06	1.17587E-06	1.46793E-06	4190.2	2197.3	7.09	70313.6
Riverside (SC)	2020	OFF - ConstMin - Skid Steer Loaders	Aggregated	100	Gasoline	6.37543E-05	5.86412E-05	7.01577E-05	0.003320163	0.000163786	0.143020859	9.97176E-06	7.53422E-06	1.10797E-05	1.38178E-06	1.96917E-06	5621	1328.6	4.25	106288
Riverside (SC)	2020	OFF - ConstMin - Surfacing Equipment	Aggregated	25	Gasoline	0.002476312	0.002277712	0.002725031	0.092370947	0.001955072	0.167752422	0.001174503	0.000887402	0.001305003	4.84326E-06	4.2823E-06	12223.85	33923.1	79.28	263971.65
Riverside (SC)	2020	OFF - ConstMin - Tampers/Rammers	Aggregated	25	Gasoline	0.000257612	0.000236952	0.000283486	0.011995181	0.000218989	0.022735753	0.000171535	0.000129604	0.000190594	9.05323E-07	5.63898E-07	1609.65	7497.1	41.12	31904.65
Riverside (SC)	2020	OFF - ConstMin - Tractors/Loaders/Backhoes	Aggregated	25	Diesel	0.000287054	0.000341618	0.000413358	0.001410846	0.002612092	0.34264274	9.83107E-05	9.04459E-05	9.83107E-05	4.34749E-06	2.86578E-06	11391.65	15778.95	16.74	362915.85
Riverside (SC)	2020	OFF - ConstMin - Tractors/Loaders/Backhoes	Aggregated	100	Gasoline	4.79291E-05	4.40852E-05	5.2743E-05	0.003091022	0.000125177	0.056421318	3.93383E-06	2.97223E-06	4.37092E-06	5.45109E-07	8.15799E-07	2328.7	803	0.91	50589
Riverside (SC)	2020	OFF - ConstMin - Trenchers	Aggregated	25	Gasoline	0.002243466	0.00206354	0.002468798	0.092077842	0.001712944	0.156856225	0.001183435	0.000894151	0.001314927	4.16462E-06	4.12119E-06	11763.95	12380.8	28.5	183230
Riverside (SC)	2020	OFF - ConstMin - Trenchers	Aggregated	25	Diesel	0.000135264	0.000160975	0.00019478	0.00073285	0.001228742	0.162577007	4.631E-05	4.26052E-05	4.631E-05	2.15444E-06	1.36265E-06	5416.6	5650.2	9.14	126202.4
Riverside (SC)	2020	OFF - ConstMin - Trenchers	Aggregated	50	Gasoline	0.000207989	0.000191308	0.000228879	0.012641937	0.00032692	0.089262475	6.15367E-06	4.64944E-06	6.83742E-06	1.08527E-06	1.46025E-06	4168.3	1901.65	4.72	57049.5
Riverside (SC)	2020	OFF - ConstMin - Trenchers	Aggregated	100	Gasoline	8.03601E-05	7.39152E-05	8.84314E-05	0.002815021	0.000233047	0.064439246	4.49286E-06	3.3946E-06	4.99207E-06	6.22573E-07	9.117E-07	2602.45	631.45	1.55	41675.7
Riverside (SC)	2020	OFF - Industrial - Aerial Lifts	Aggregated	25	Gasoline	0.000930087	0.000855494	0.001023504	0.038226228	0.000676367	0.063796912	0.000481329	0.000363671	0.00053481	1.6201E-06	1.6917E-06	4828.95	5664.8	15.1	106864.7
Riverside (SC)	2020	OFF - Industrial - Aerial Lifts	Aggregated	25	Diesel	0.000105589	0.00012566	0.000152048	0.000598834	0.000949405	0.124647644	3.8274E-05	3.52121E-05	3.8274E-05	1.69826E-06	1.04586E-06	4157.35	9026.45	22.6	157778.55
Riverside (SC)	2020	OFF - Industrial - Aerial Lifts	Aggregated	25	Nat Gas	0	0	8.86384E-05	0.023863114	0.00065654	0.140646154	0	0	7.20205E-05	0	0	9398.75	7953.35	21.18	150018.65
Riverside (SC)	2020	OFF - Industrial - Aerial Lifts	Aggregated	50	Gasoline	0.00028786	0.000264774	0.000316773	0.023538233	0.000446652	0.234015673	1.61328E-05	1.21892E-05	1.79254E-05	2.8452E-06	3.60716E-06	10296.65	6515.25	18.06	215003.25
Riverside (SC)	2020	OFF - Industrial - Aerial Lifts	Aggregated	100	Gasoline	0.000227076	0.000208864	0.000249883	0.012510544	0.000589104	0.469784947	3.27545E-05	2.47479E-05	3.63939E-05	4.53878E-06	6.49954E-06	18552.95	6515.25	18.06	436521.75
Riverside (SC)	2020	OFF - Industrial - Forklifts	Aggregated	25	Gasoline	2.74657E-05	2.52629E-05	3.02243E-05	0.001685818	2.35982E-05	0.002789634	1.40313E-06	1.06014E-06	1.55904E-06	7.07022E-08	7.28848E-08	208.05	313.9	0.35	7219.7
Riverside (SC)	2020	OFF - Industrial - Forklifts	Aggregated	25	Nat Gas	0	0	4.31251E-06	0.000685149	1.91281E-05	0.003576053	0	0	2.34855E-06	0	0	251.85	251.85	0.2	5792.55
Riverside (SC)	2020	OFF - Industrial - Forklifts	Aggregated	50	Gasoline	0.007316277	0.006729511	0.008051116	0.858674909	0.017401431	3.153314718	0.000217387	0.000164248	0.000241541	3.83386E-05	6.00648E-05	171455.1	108368.5	60.16	4443108.5
Riverside (SC)	2020	OFF - Industrial - Forklifts	Aggregated	50	Nat Gas	0	0	0.000587931	0.098854532	0.025881691	6.218012948	0	0	0.000552991	0	0	331131.65	248112.4	137.73	10172608.4
Riverside (SC)	2020	OFF - Industrial - Forklifts	Aggregated	100	Gasoline	0.01544352	0.014204949	0.016994651	1.460310844	0.078553351	18.6808287	0.001302472	0.00098409	0.001447191	0.000180483	0.000278783	795787.6	380308.1	211.11	26621567
Riverside (SC)	2020	OFF - Industrial - Forklifts	Aggregated	100	Nat Gas	0	0	0.003490354	1.666426664	0.166536898	37.25926646	0	0	0.003313604	0	0	2071550.2	870802.4	483.37	60956168
Riverside (SC)	2020	OFF - Industrial - Forklifts	Aggregated	175	Gasoline	0.000806331	0.000741663	0.000887318	0.055962037	0.004856704	1.384934117	9.9285E-05	7.50153E-05	0.000110317	1.37579E-05	1.95613E-05	55837.7	13899.2	7.71	2029283.2
Riverside (SC)	2020	OFF - Industrial - Forklifts	Aggregated	175	Nat Gas	0	0	0.000160558	0.097773526	0.008347199	2.843876088	0	0	0.000252916	0	0	155519.2	31864.5	17.7	4652217
Riverside (SC)	2020	OFF - Industrial - Other General Industrial Equipment	Aggregated	25	Gasoline	0.000769344	0.000707643	0.000846616	0.046814647	0.000635757	0.080932196	3.90068E-05	2.94718E-05	4.33409E-05	2.24337E-06	2.08936E-06	5964.1	10935.4	28.2	115515.2
Riverside (SC)	2020	OFF - Industrial - Other General Industrial Equipment	Aggregated	25	Diesel	0.000127567	0.000151815	0.000183696	0.000722852	0.001188321	0.157513716	4.48677E-05	4.12783E-05	4.48677E-05	2.10587E-06	1.31582E-06	5230.45	9986.4	7	179937.7
Riverside (SC)	2020	OFF - Industrial - Other General Industrial Equipment	Aggregated	50	Gasoline	0.000226339	0.000208186	0.000249072	0.021629412	0.000516169	0.157551749	1.08615E-05	8.20645E-06	1.20683E-05	1.91554E-06	2.5548E-06	7292.7	4109.9	5.78	123297
Riverside (SC)	2020	OFF - Industrial - Other General Industrial Equipment	Aggregated	100	Gasoline	7.00174E-05	6.4402E-05	7.70499E-05	0.005075647	0.000425605	0.134809004	9.39921E-06	7.10162E-06	1.04436E-05	1.30244E-06	1.89245E-06	5402	1361.45	1.88	107554.55
Riverside (SC)	2020	OFF - Industrial - Other General Industrial Equipment	Aggregated	175	Gasoline	9.82648E-06	9.0384E-06	1.08134E-05	0.000942436	8.56891E-05	0.027945915	2.00342E-06	1.5137E-06	2.22603E-06	2.77613E-07	3.88719E-07	1109.6	131.4	0.18	22863.6
Riverside (SC)	2020	OFF - Industrial - Other Material Handling Equipment	Aggregated	50	Gasoline	3.2966E-06	3.03222E-06	3.62771E-06	0.000234381	6.7033E-06	0.001617109	1.11482E-07	8.42309E-08	1.23869E-07	1.96611E-08	2.17376E-08	62.05	21.9	0.04	897.9
Riverside (SC)	2020	OFF - Industrial - Other Material Handling Equipment	Aggregated	100	Gasoline	9.30045E-05	8.55455E-05	0.000102346	0.003978248	0.000405501	0.093187083	6.49723E-06	4.90902E-06	7.21914E-06	9.00317E-07	1.32216E-06	3774.1	1379.7	3.61	74503.8
Riverside (SC)	2020	OFF - Industrial - Sweepers/Scrubbers	Aggregated	25	Gasoline	0.000585924	0.000538933	0.000644773	0.037549098	0.000488501	0.063836367	2.9814E-05	2.25262E-05	3.31267E-05	1.6812E-06	1.66101E-06	4741.35	5350.9	19.83	69233.2
Riverside (SC)	2020	OFF - Industrial - Sweepers/Scrubbers	Aggregated	25	Diesel	2.54049E-05	3.02339E-05	3.65831E-05	0.00015596	0.000240098	0.032025342	9.1224E-06	8.39261E-06	9.1224E-06	4.41152E-07	2.68122E-07	1065.8	1474.6	2.27	27280.1
Riverside (SC)	2020	OFF - Industrial - Sweepers/Scrubbers	Aggregated	50	Gasoline	0.000626745	0.00057648	0.000689694	0.053929158	0.00139872	0.509255259	3.51076E-05	2.65257E-05	3.90084E-05	6.19162E-06	7.90481E-06	22564.3	8657.8	16.79	303023
Riverside (SC)	2020	OFF - Industrial - Sweepers/Scrubbers	Aggregated	100	Gasoline	0.000365788	0.000336452	0.000402528	0.023052132	0.002378617	0.816828479	5.69512E-05	4.30298E-05	6.32792E-05	7.8917E-06	1.1324E-05	32324.4	7230.65	14.02	491684.2
Riverside (SC)	2020	OFF - Industrial - Sweepers/Scrubbers	Aggregated	175	Gasoline	2.8322E-06	2.60506E-06	3.11666E-06	0.00030663	2.82021E-05	0.009509097	6.81701E-07	5.15063E-07	7.57445E-07	9.44629E-08	1.32983E-07	379.6	43.8	0.06	6132
Riverside (SC)	2020	OFF - Light Commercial - Air Compressors	Aggregated	25	Gasoline	0.013098045	0.012047582	0.014413599	0.30005595	0.008011404	0.690020069	0.002628	0.0019856	0.002919999	2.15529E-05	1.61165E-05	46004.6	154143.15	318.88	949996.45
Riverside (SC)	2020	OFF - Light Commercial - Air Compressors	Aggregated	25	Diesel	6.15295E-05	7.32251E-05	8.86024E-05	0.000315633	0.000534485	0.067232051	2.51221E-05	2.31124E-05	2.51221E-05	8.91975E-07	5.60117E-07	2226.5	4084.35	4.98	81643.2
Riverside (SC)	2020	OFF - Light Commercial - Air Compressors	Aggregated	50	Gasoline	0.000723079	0.000665088	0.000795704	0.047226499	0.00106808	0.296134239	2.04152E-05	1.54248E-05	2.26836E-05	3.60045E-06	4.94466E-06	14114.55	6376.55	13.21	223179.25
Riverside (SC)	2020	OFF - Light Commercial - Air Compressors	Aggregated	50	Diesel	0.000892376	0.001062001	0.001285021	0.006786184	0.005805499	0.752060833	0.000327939	0.000301704	0.000327939	9.72227E-06	6.35045E-06	25243.4	24670.35	30.31	912802.95
Riverside (SC)	2020	OFF - Light Commercial - Air Compressors	Aggregated	100	Gasoline	0.002443776	0.002247785	0.002689227	0.092525002	0.006643957	1.898941372	0.000132399	0.000100035	0.00014711	1.83464E-05	2.72231E-05	77708.5	20710.1	42.85	1449707
Riverside (SC)	2020	OFF - Light Commercial - Air Compressors	Aggregated	175	Gasoline	0.000204091	0.000187723	0.000224589	0.008322064	0.000948562	0.237829764	1.70499E-05	1.28821E-05	1.89443E-05	2.36259E-06	3.33352E-06	9515.55	1383.35	2.89	185368.9
Riverside (SC)	2020	OFF - Light Commercial - Gas Compressors	Aggregated	50	Nat Gas	0	0	4.40219E-05	0.007799204	0.001598579	0.53122607	0	0	4.06914E-05	0	0	28225.45	8256.3	0.98	264201.6
Riverside (SC)	2020	OFF - Light Commercial - Gas Compressors	Aggregated	100	Nat Gas	0	0	0.000240059	0.12472152	0.009458858	2.9852158	0	0	0.000231263	0	0	165180.75	17060.1	2.01	1501288.8
Riverside (SC)	2020	OFF - Light Commercial - Gas Compressors	Aggregated	175	Nat Gas	0	0	6.695E-05	0.025372851	0.002531147	0.77691244	0	0	6.18848E-05	0	0	42420.3	2752.1	0.33	401806.6
Riverside (SC)	2020	OFF - Light Commercial - Gas Compressors	Aggregated	300	Nat Gas	0	0	5.15087E-05	0.029196167	0.002449436	0.80070816	0	0	7.12099E-05	0	0	43935.05	2200.95	0.26	462199.5
Riverside (SC)	2020	OFF - Light Commercial - Gas Compressors	Aggregated	600	Nat Gas	0	0	7.25415E-05	0.041117926	0.003449622	1.1276637	0	0	0.000100287	0	0	61874.8	1927.2	0.22	651393.6
Riverside (SC)	2020	OFF - Light Commercial - Generator Sets	Aggregated	25	Gasoline	0.099957157	0.091940593	0.109996754	5.177015414	0.071232996	9.103384935	0.006013833	0.004543785	0.006682037	0.00024936	0.000233947	667804	962366.3	8375.63	10322751.15
Riverside (SC)	2020	OFF - Light Commercial - Generator Sets	Aggregated	25	Diesel	0.001466482	0.001745235	0.002111734	0.009059118	0.013930964	1.758117327	0.000641732	0.000590393	0.000641732	2.45387E-05	1.47274E-05	58542.35	96276.05	285.16	1384412.15
Riverside (SC)	2020	OFF - Light Commercial - Generator Sets	Aggregated	50	Gasoline	0.003640387	0.003348428	0.004006024	0.215932735	0.007819671	2.570575777	0.000177213	0.000133894	0.000196904	3.12535E-05	3.87555E-05	110627.85	49935.65	434.78	1597940.8
Riverside (SC)	2020	OFF - Light Commercial - Generator Sets	Aggregated	50	Diesel	0.001688719	0.002009715	0.002431755	0.014499168	0.01488044	2.081525129	0.000701026	0.000644944	0.000701026	2.69089E-05	1.74839E-05	69499.65	49661.9	147.13	1638842.7
Riverside (SC)	2020	OFF - Light Commercial - Generator Sets	Aggregated	100	Gasoline	0.000863745	0.000794473	0.000950499	0.030920097	0.004816976	1.27323242	8.87728E-05	6.70728E-05	9.86365E-05	1.23012E-05	1.75588E-05	50121.8	9650.6	83.97	800999.8
Riverside (SC)	2020	OFF - Light Commercial - Generator Sets	Aggregated	100	Nat Gas	0	0	4.20275E-06	0.002591039	0.000305645	0.082551693	0	0	7.34163E-06	0	0	4478.55	719.05	6.28	59681.15
Riverside (SC)	2020	OFF - Light Commercial - Generator Sets	Aggregated	175	Gasoline	8.60973E-05	7.91923E-05	9.47448E-05	0.006358424	0.000848452	0.205808713	1.47543E-05	1.11477E-05	1.63937E-05	2.04449E-06	2.85913E-06	8161.4	908.85	7.94	132692.1
Riverside (SC)	2020	OFF - Light Commercial - Generator Sets	Aggregated	175	Nat Gas	0	0	4.77095E-06	0.003105878	0.000425476	0.120382521	0	0	1.07061E-05	0	0	6497	580.35	5.19	84731.1
Riverside (SC)	2020	OFF - Light Commercial - Pressure Washers	Aggregated	25	Gasoline	0.010565537	0.009718181	0.011626729	0.377598978	0.005554227	0.766777212	0.001059936	0.00080084	0.001177707	2.29675E-05	1.86125E-05	53129.4	100448	874.38	695434.5
Riverside (SC)	2020	OFF - Light Commercial - Pressure Washers	Aggregated	25	Diesel	8.00309E-06	9.52434E-06	1.15245E-05	5.69336E-05	7.84653E-05	0.009931721	3.66371E-06	3.37061E-06	3.66371E-06	1.47297E-07	7.71309E-08	306.6	1357.8	9.44	19206.3
Riverside (SC)	2020	OFF - Light Commercial - Pressure Washers	Aggregated	50	Gasoline	3.32064E-05	3.05433E-05	3.65416E-05	0.002022651	5.86476E-05	0.026026937	1.79427E-06	1.35567E-06	1.99364E-06	3.1644E-07	3.91276E-07	1116.9	445.3	3.89	12913.7
Riverside (SC)	2020	OFF - Light Commercial - Pressure Washers	Aggregated	50	Diesel	5.87384E-06	6.99036E-06	8.45833E-06	5.92957E-05	6.87465E-05	0.010001748	2.79381E-06	2.5703E-06	2.79381E-06	1.29298E-07	8.35585E-08	332.15	507.35	3.51	19279.3
Riverside (SC)	2020	OFF - Light Commercial - Pumps	Aggregated	25	Gasoline	0.03271245	0.030088912	0.035998056	1.096008268	0.022782821	2.117995075	0.013177575	0.00995639	0.01464175	6.45808E-05	5.27034E-05	150442.05	426553.6	1932.7	2366908.2
Riverside (SC)	2020	OFF - Light Commercial - Pumps	Aggregated	25	Diesel	0.000812649	0.000967119	0.001170214	0.004854907	0.007162658	0.902562159	0.000345209	0.000317592	0.000345209	1.29051E-05	7.56526E-06	30072.35	64678	160.65	710925.1
Riverside (SC)	2020	OFF - Light Commercial - Pumps	Aggregated	50	Gasoline	0.000570489	0.000524736	0.000627788	0.037923001	0.000935526	0.388087624	2.67544E-05	2.02144E-05	2.97271E-05	4.71844E-06	5.96505E-06	17027.25	7668.65	34.76	237728.15
Riverside (SC)	2020	OFF - Light Commercial - Pumps	Aggregated	50	Diesel	0.001080054	0.001285354	0.001555278	0.008911051	0.008822176	1.21828762	0.000433821	0.000399115	0.000433821	1.57494E-05	1.02428E-05	40715.75	25925.95	64.41	959260.15
Riverside (SC)	2020	OFF - Light Commercial - Pumps	Aggregated	100	Gasoline	0.000996152	0.000916261	0.001096205	0.040117821	0.002989396	1.459095076	0.000101732	7.68639E-05	0.000113035	1.40969E-05	2.02287E-05	57743	9712.65	44.06	903276.45
Riverside (SC)	2020	OFF - Light Commercial - Pumps	Aggregated	175	Gasoline	3.21881E-05	2.96066E-05	3.54211E-05	0.002106729	0.000151434	0.066240831	4.74876E-06	3.58795E-06	5.2764E-06	6.58033E-07	9.23208E-07	2635.3	288.35	1.35	41522.4
Riverside (SC)	2020	OFF - Light Commercial - Welders	Aggregated	25	Gasoline	0.031777791	0.029229212	0.03496952	1.31199103	0.023473837	2.207998006	0.016658701	0.012586574	0.018509668	5.7023E-05	5.83347E-05	166516.65	212627.1	1023.51	3338217
Riverside (SC)	2020	OFF - Light Commercial - Welders	Aggregated	25	Diesel	0.000720131	0.000857015	0.001036988	0.004001676	0.006301897	0.793415358	0.000300035	0.000276032	0.000300035	1.09435E-05	6.65162E-06	26440.6	67539.6	105.11	1027548

Riverside (SC)	2020 OFF - Light Commercial - Welders	Aggregated	50	Gasoline	0.001367146	0.001257501	0.001504461	0.079481869	0.002339367	0.778682182	5.36817E-05	4.05595E-05	5.96463E-05	9.46736E-06	1.20465E-05	34386.65	14344.5	69.06	645502.5
Riverside (SC)	2020 OFF - Light Commercial - Welders	Aggregated	50	Diesel	0.003825084	0.004552167	0.005508122	0.029197326	0.026104684	3.456352947	0.001432175	0.001317601	0.001432175	4.4682E-05	2.91491E-05	115869.25	97283.45	151.51	4475038.7
Riverside (SC)	2020 OFF - Light Commercial - Welders	Aggregated	100	Gasoline	0.001100944	0.001012649	0.001211522	0.037227211	0.003613614	1.222392733	8.52282E-05	6.43946E-05	9.46979E-05	1.181E-05	1.70308E-05	48614.35	14643.8	70.46	1025066
Riverside (SC)	2020 OFF - Light Commercial - Welders	Aggregated	175	Gasoline	8.95056E-05	8.23272E-05	9.84954E-05	0.004856053	0.00050973	0.152197016	1.09109E-05	8.24379E-06	1.21232E-05	1.51192E-06	2.12133E-06	6055.35	1003.75	4.86	130487.5
Riverside (SC)	2020 OFF - Military - A/C unit	Aggregated	100	Diesel	3.49283E-05	4.15676E-05	5.02968E-05	0.000480623	0.000455775	0.081461198	2.53677E-05	2.33382E-05	2.53677E-05	9.55582E-07	6.81323E-07	2708.3	784.75	2.61	79259.75
Riverside (SC)	2020 OFF - Military - A/C unit	Aggregated	300	Diesel	1.67625E-05	1.99488E-05	2.4138E-05	0.000126939	0.000251899	0.070036431	7.37855E-06	6.78827E-06	7.37855E-06	7.8803E-07	5.80318E-07	2306.8	321.2	1.09	66809.6
Riverside (SC)	2020 OFF - Military - A/C unit	Aggregated	600	Diesel	9.53587E-06	1.13485E-05	1.37316E-05	7.45608E-05	0.000136301	0.04193259	4.26463E-06	3.92346E-06	4.26463E-06	4.11582E-07	3.46171E-07	1376.05	120.45	0.42	37941.75
Riverside (SC)	2020 OFF - Military - Aircraft Support	Aggregated	100	Diesel	6.39272E-06	7.60787E-06	9.20552E-06	8.79656E-05	8.34177E-05	0.014909365	4.64289E-06	4.27146E-06	4.64289E-06	1.74895E-07	1.2396E-07	492.75	208.05	0.7	14147.4
Riverside (SC)	2020 OFF - Military - Aircraft Support	Aggregated	175	Diesel	1.38319E-05	1.64611E-05	1.9918E-05	0.000224368	0.000183901	0.043851069	8.06677E-06	7.42143E-06	8.06677E-06	4.934E-07	3.65454E-07	1452.7	299.3	1	41902
Riverside (SC)	2020 OFF - Military - Cart	Aggregated	100	Diesel	3.26351E-06	3.88385E-06	4.69946E-06	4.49068E-05	4.25851E-05	0.007611294	2.37022E-06	2.1806E-06	2.37022E-06	8.92844E-08	6.33575E-08	251.85	73	0.3	5913
Riverside (SC)	2020 OFF - Military - Cart	Aggregated	175	Diesel	1.13372E-06	1.34923E-06	1.63256E-06	1.83901E-05	1.50733E-05	0.003594222	6.61187E-07	6.08292E-07	6.61187E-07	4.04412E-08	2.93832E-08	116.8	0	0	0
Riverside (SC)	2020 OFF - Military - Cart	Aggregated	300	Diesel	3.6921E-06	4.39391E-06	5.31663E-06	2.79595E-05	5.54831E-05	0.015426181	1.6252E-06	1.49518E-06	1.6252E-06	1.73571E-07	1.27633E-07	507.35	62.05	0.21	12223.85
Riverside (SC)	2020 OFF - Military - Communications	Aggregated	50	Diesel	1.00032E-06	1.19046E-06	1.44046E-06	8.57672E-06	9.01458E-06	0.001252888	4.22916E-07	3.89083E-07	4.22916E-07	1.61967E-08	1.37734E-08	54.75	10.95	0.13	438
Riverside (SC)	2020 OFF - Military - Communications	Aggregated	100	Diesel	1.61161E-06	1.91795E-06	2.32072E-06	2.21762E-05	2.10297E-05	0.003758664	1.17048E-06	1.07684E-06	1.17048E-06	4.4091E-08	3.03014E-08	120.45	58.4	0.16	4672
Riverside (SC)	2020 OFF - Military - Compressor (Military)	Aggregated	50	Diesel	1.22539E-06	1.45831E-06	1.76456E-06	1.05065E-05	1.10429E-05	0.001534788	5.18072E-07	4.76626E-07	5.18072E-07	1.9841E-08	1.46916E-08	58.4	10.95	0.13	536.55
Riverside (SC)	2020 OFF - Military - Compressor (Military)	Aggregated	100	Diesel	3.5996E-05	4.28382E-05	5.18342E-05	0.000495315	0.000469707	0.083951312	2.61431E-05	2.40517E-05	2.61431E-05	9.84792E-07	7.03361E-07	2795.9	1153.4	3.8	81891.4
Riverside (SC)	2020 OFF - Military - Compressor (Military)	Aggregated	175	Diesel	1.64995E-06	1.96358E-06	2.37593E-06	2.67639E-05	2.19368E-05	0.005230806	9.6225E-07	8.8527E-07	9.6225E-07	5.88555E-08	4.40748E-08	175.2	10.95	0.13	1828.65
Riverside (SC)	2020 OFF - Military - Compressor (Military)	Aggregated	300	Diesel	3.34351E-06	3.97905E-06	4.81465E-06	2.53197E-05	5.02446E-05	0.013969698	1.47175E-06	1.35401E-06	1.47175E-06	1.57183E-07	1.15696E-07	459.9	58.4	0.16	13023.2
Riverside (SC)	2020 OFF - Military - Compressor (Military)	Aggregated	600	Diesel	1.85981E-05	2.21332E-05	2.67812E-05	0.000145418	0.000265832	0.081782251	8.31742E-06	7.65202E-06	8.31742E-06	8.0272E-07	6.78569E-07	2697.35	208.05	0.7	77602.65
Riverside (SC)	2020 OFF - Military - Crane	Aggregated	100	Diesel	2.34E-06	2.78479E-06	3.36959E-06	7.38548E-05	4.39307E-05	0.013155322	9.27252E-07	8.53072E-07	9.27252E-07	1.54319E-07	1.08351E-07	430.7	124.1	0.39	13030.5
Riverside (SC)	2020 OFF - Military - Crane	Aggregated	175	Diesel	4.87379E-07	5.80021E-07	7.01826E-07	1.64446E-05	6.24355E-06	0.003312322	1.54715E-07	1.42338E-07	1.54715E-07	3.72693E-08	2.66285E-08	105.85	29.2	0.09	4117.2
Riverside (SC)	2020 OFF - Military - Crane	Aggregated	300	Diesel	4.28554E-07	5.10015E-07	6.17118E-07	5.66928E-06	4.19193E-06	0.003351475	1.05392E-07	9.69609E-08	1.05392E-07	3.77098E-08	2.66285E-08	105.85	0	0.05	0
Riverside (SC)	2020 OFF - Military - Deicer	Aggregated	100	Diesel	1.47731E-06	1.75812E-06	2.12733E-06	2.03282E-05	1.92772E-05	0.003445442	1.07294E-06	9.87103E-07	1.07294E-06	4.04168E-08	2.93832E-08	116.8	10.95	0.13	1204.5
Riverside (SC)	2020 OFF - Military - Generator (Military)	Aggregated	50	Diesel	6.41454E-06	7.63383E-06	9.23694E-06	5.49982E-05	5.7806E-05	0.008034143	2.71195E-06	2.49499E-06	2.71195E-06	1.03861E-07	6.61122E-08	262.8	193.45	0.68	7351.1
Riverside (SC)	2020 OFF - Military - Generator (Military)	Aggregated	100	Diesel	0.000187269	0.000222866	0.000269668	0.002576875	0.002443649	0.436756662	0.000136009	0.000125129	0.000136009	5.12338E-06	3.65454E-06	14527	5102.7	17.02	423524.1
Riverside (SC)	2020 OFF - Military - Generator (Military)	Aggregated	175	Diesel	0.000196431	0.000233769	0.00028286	0.003186302	0.002611622	0.622740075	0.000114558	0.000105394	0.000114558	7.00689E-06	5.20083E-06	20673.6	4109.9	13.67	604155.3
Riverside (SC)	2020 OFF - Military - Generator (Military)	Aggregated	300	Diesel	5.97652E-05	7.11255E-05	8.60619E-05	0.000452589	0.000898122	0.249708357	2.63076E-05	2.42029E-05	2.63076E-05	2.80965E-06	2.07427E-06	8245.35	1087.7	3.61	242557.1
Riverside (SC)	2020 OFF - Military - Generator (Military)	Aggregated	600	Diesel	3.59425E-05	4.27745E-05	5.17572E-05	0.000281034	0.000513744	0.158051789	1.60742E-05	1.47882E-05	1.60742E-05	1.55133E-06	1.31214E-06	5215.85	441.65	1.46	153694.2
Riverside (SC)	2020 OFF - Military - Generator (Military)	Aggregated	750	Diesel	1.92916E-06	2.29586E-06	2.77799E-06	1.48685E-05	2.77744E-05	0.008361946	8.59088E-07	7.90361E-07	8.59088E-07	8.40771E-08	6.88669E-08	273.75	0	0	0
Riverside (SC)	2020 OFF - Military - Hydraulic unit	Aggregated	100	Diesel	2.13706E-05	2.54328E-05	3.07737E-05	0.000294066	0.000278862	0.049841443	1.5521E-05	1.42793E-05	1.5521E-05	5.84666E-07	4.15038E-07	1649.8	507.35	1.68	48198.25
Riverside (SC)	2020 OFF - Military - Lift (Military)	Aggregated	100	Diesel	6.37929E-07	7.59189E-07	9.18618E-07	8.77808E-06	8.32425E-06	0.001487804	4.63314E-07	4.26249E-07	4.63314E-07	1.74527E-08	1.46916E-08	58.4	0	0	0
Riverside (SC)	2020 OFF - Military - Light	Aggregated	50	Diesel	1.563E-06	1.8601E-06	2.25072E-06	1.34011E-05	1.40853E-05	0.001957637	6.60806E-07	6.07942E-07	6.60806E-07	2.53074E-08	1.46916E-08	58.4	51.1	0.16	2555
Riverside (SC)	2020 OFF - Military - Other tactical support equipment	Aggregated	50	Diesel	3.12599E-07	3.72019E-07	4.50143E-07	2.68023E-06	2.81706E-06	0.000391527	1.32161E-07	1.21588E-07	1.32161E-07	5.06147E-09	0	0	0	0	0
Riverside (SC)	2020 OFF - Military - Other tactical support equipment	Aggregated	100	Diesel	4.24391E-06	5.0506E-06	6.11123E-06	5.83973E-05	5.53782E-05	0.009897813	3.08226E-06	2.83568E-06	3.08226E-06	1.16106E-07	8.08038E-08	321.2	120.45	0.37	9515.55
Riverside (SC)	2020 OFF - Military - Other tactical support equipment	Aggregated	175	Diesel	5.84893E-06	6.96071E-06	8.42246E-06	9.48755E-05	7.77638E-05	0.018542739	3.41109E-06	3.1382E-06	3.41109E-06	2.08638E-07	1.53344E-07	609.55	120.45	0.37	17826.6
Riverside (SC)	2020 OFF - Military - Other tactical support equipment	Aggregated	300	Diesel	2.45141E-06	2.91738E-06	3.53002E-06	1.8564E-05	3.68385E-05	0.010242358	1.07906E-06	9.92739E-07	1.07906E-06	1.15244E-07	8.44767E-08	335.8	58.4	0.16	12731.2
Riverside (SC)	2020 OFF - Military - Other tactical support equipment	Aggregated	600	Diesel	9.616E-07	1.14438E-06	1.3847E-06	7.51873E-06	1.37446E-05	0.004228496	4.30046E-07	3.95643E-07	4.30046E-07	4.15041E-08	3.21379E-08	127.75	0	0	0
Riverside (SC)	2020 OFF - Military - Other tactical support equipment	Aggregated	750	Diesel	1.13091E-06	1.34588E-06	1.62851E-06	8.71616E-06	1.62819E-05	0.004901924	5.03613E-07	4.63324E-07	5.03613E-07	4.92875E-08	4.04019E-08	160.6	0	0	0
Riverside (SC)	2020 OFF - Military - Pressure Washers	Aggregated	175	Diesel	1.12631E-06	1.34041E-06	1.62189E-06	1.82699E-05	1.49748E-05	0.00357073	6.56865E-07	6.04316E-07	6.56865E-07	4.01768E-08	2.93832E-08	116.8	0	0	0
Riverside (SC)	2020 OFF - Military - Pump (Military)	Aggregated	50	Diesel	1.4142E-05	1.68301E-05	2.03645E-05	0.000121253	0.000127444	0.017712702	5.97897E-06	5.50066E-06	5.97897E-06	2.28981E-07	1.49671E-07	594.95	441.65	1.46	17224.35
Riverside (SC)	2020 OFF - Military - Pump (Military)	Aggregated	100	Diesel	1.51089E-05	1.79808E-05	2.17567E-05	0.000207902	0.000197153	0.035237469	1.09732E-05	1.00954E-05	1.09732E-05	4.13354E-07	2.9475E-07	1171.65	343.1	1.14	34310
Riverside (SC)	2020 OFF - Military - Start Cart	Aggregated	100	Diesel	3.35752E-07	3.99573E-07	4.83483E-07	4.62004E-06	4.38118E-06	0.000783055	2.43849E-07	2.24342E-07	2.43849E-07	9.18564E-09	0	0	0	0	0
Riverside (SC)	2020 OFF - Military - Start Cart	Aggregated	600	Diesel	5.0395E-07	5.99742E-07	7.25687E-07	3.94037E-06	7.20321E-06	0.002216045	2.25376E-07	2.07346E-07	2.25376E-07	2.17512E-08	1.46916E-08	58.4	0	0	0
Riverside (SC)	2020 OFF - Military - Test Stand	Aggregated	100	Diesel	1.01934E-05	1.2131E-05	1.46786E-05	0.000140265	0.000133013	0.023773546	7.40327E-06	6.81101E-06	7.40327E-06	2.78876E-07	1.99255E-07	792.05	251.85	0.82	23170.2
Riverside (SC)	2020 OFF - Military - Test Stand	Aggregated	175	Diesel	7.01477E-07	8.34815E-07	1.01013E-06	1.13786E-05	9.3264E-06	0.002223876	4.091E-07	3.76372E-07	4.091E-07	2.50224E-08	1.46916E-08	58.4	0	0	0
Riverside (SC)	2020 OFF - Military - Test Stand	Aggregated	300	Diesel	1.14455E-05	1.36211E-05	1.64815E-05	8.66745E-05	0.000171998	0.047821162	5.03811E-06	4.63506E-06	5.03811E-06	5.3807E-07	3.96673E-07	1576.8	237.25	0.79	46738.25
Riverside (SC)	2020 OFF - Military - Test Stand	Aggregated	600	Diesel	7.32953E-06	8.72274E-06	1.05545E-05	5.73095E-05	0.000104765	0.032230539	3.27791E-06	3.01568E-06	3.27791E-06	3.16353E-07	2.6904E-07	1069.45	73	0.3	25039
Riverside (SC)	2020 OFF - Military - Welder	Aggregated	50	Diesel	4.59521E-06	5.46868E-06	6.6171E-06	3.93993E-05	4.14107E-05	0.005755453	1.94277E-06	1.78735E-06	1.94277E-06	7.44036E-08	4.77477E-08	189.8	160.6	0.52	5621
Riverside (SC)	2020 OFF - Military - Welder	Aggregated	100	Diesel	1.20737E-05	1.43686E-05	1.73861E-05	0.000166137	0.000157547	0.028158653	8.76883E-06	8.06732E-06	8.76883E-06	3.30315E-07	2.35984E-07	938.05	441.65	1.46	27382.3
Riverside (SC)	2020 OFF - Oil Drilling - Compressors (Workover)	Aggregated	25	Diesel	1.48968E-07	1.77284E-07	2.14513E-07	7.30323E-07	1.33829E-06	0.000167729	6.0993E-08	5.61136E-08	6.0993E-08	2.12816E-09	0	0	0	0	0
Riverside (SC)	2020 OFF - Oil Drilling - Generator (Drilling)	Aggregated	50	Diesel	1.43696E-07	1.71011E-07	2.06923E-07	1.08173E-06	8.75511E-07	0.000108749	5.06668E-08	4.66134E-08	5.06668E-08	1.40586E-09	0	0	0	0	0
Riverside (SC)	2020 Oil Drilling - Drill Rig (Mobile)	Aggregated	25	Diesel	2.87898E-08	3.48357E-08	4.14573E-08	6.11044E-07	4.8726E-07	9.69122E-05	2.00666E-09	1.84613E-09	2.00666E-09	8.95138E-10	7.90985E-10	3.144210819	4.350435886	0.002729257	108.7608971
Riverside (SC)	2020 Oil Drilling - Drill Rig (Mobile)	Aggregated	50	Diesel	4.37539E-06	5.29422E-06	6.30056E-06	1.5803E-05	1.11653E-05	0.000940965	1.46846E-06	1.35098E-06	1.46846E-06	8.56843E-09	7.68003E-09	30.52858899	25.03547577	0.021834057	1056.080593
Riverside (SC)	2020 Oil Drilling - Drill Rig (Mobile)	Aggregated	75	Diesel	2.96921E-07	3.59274E-07	4.27566E-07	4.00741E-06	3.73636E-06	0.000560925	2.24824E-07	2.06838E-07	2.24824E-07	5.17712E-09	4.57819E-09	18.19858317	9.999998171	0.010917029	700.0817497
Riverside (SC)	2020 Oil Drilling - Drill Rig (Mobile)	Aggregated	100	Diesel	3.02737E-06	3.66311E-06	4.35941E-06	2.42735E-05	3.32959E-05	0.003094357	2.54529E-06	2.34166E-06	2.54529E-06	2.8518E-08	2.52557E-08	100.3929908	43.01036331	0.032751086	3826.924791
Riverside (SC)	2020 Oil Drilling - Drill Rig (Mobile)	Aggregated	175	Diesel	1.45118E-05	1.75593E-05	2.0897E-05	0.000149346	0.000145862	0.022800639	9.06485E-06	8.33967E-06	9.06485E-06	2.10368E-07	1.86096E-07	739.741636	196.1353353	0.163755429	28343.08479
Riverside (SC)	2020 Oil Drilling - Drill Rig (Mobile)	Aggregated	300	Diesel	1.21908E-05	1.47509E-05	1.75548E-05	6.18906E-05	0.000172375	0.02650945	5.11088E-06	4.70201E-06	5.11088E-06	2.44727E-07	2.16367E-07	860.0698962	147.4508464	0.117358057	32992.27699
Riverside (SC)	2020 Oil Drilling - Drill Rig (Mobile)	Aggregated	600	Diesel	1.91711E-05	2.3197E-05	2.76064E-05	0.000103132	0.000276075	0.047863912	8.68416E-06	7.98942E-06	8.68416E-06	4.4195E-07	3.90659E-07	1552.891924	144.9262835	0.103711771	59607.1161
Riverside (SC)	2020 Oil Drilling - Drill Rig (Mobile)	Aggregated	750	Diesel	5.21794E-06	6.3137E-06	7.51383E-06	2.48146E-05	6.47696E-05	0.011720155	2.37525E-06	2.18523E-06	2.37525E-06	1.08202E-07	9.56583E-08	380.2475377	22.9830744	0.016375543	14584.6207
Riverside (SC)	2020 Oil Drilling - Drill Rig (Mobile)	Aggregated	9999	Diesel	3.45687E-06	4.18281E-06	4.97789E-06	1.70504E-05	7.28572E-05	0.00838735	1.83695E-06	1.68999E-06	1.83695E-06	7.74415E-08	6.84564E-08	272.1183223	13.60807611	0.008187771	10465.64492
Riverside (SC)	2020 Oil Drilling - Workover Rig (Mobile)	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2020 Oil Drilling - Workover Rig (Mobile)	Aggregated	75	Diesel	2.8956E-08	3.50368E-08	4.16967E-08	2.64088E-07	3.76658E-07	3.36855E-05	2.77842E-08	2.55615E-08	2.77842E-08	3.10571E-10	2.74937E-10	1.092889718	0.568082192	0.002840411	42.03808219
Riverside (SC)	2020 Oil Drilling - Workover Rig (Mobile)	Aggregated	175	Diesel	4.31167E-07	5.21712E-07	6.2088E-07	5.22791E-06	4.30893E-06	0.000776107	3.11033E-07	2.86151E-07	3.11033E-07	7.16256E-09	6.33448E-09	25.17993256	5.706385616	0.005680822	968.594339
Riverside (SC)	2020 Oil Drilling - Workover Rig (Mobile)	Aggregated	300	Diesel	5.17397E-06	6.2605E-06	7.45052E-06	2.96831E-05	5.14285E-05	0.011037847	1.9431E-06	1.78765E-06	1.9431E-06	1.01895E-07	9.00894E-08	358.1107938	62.79012466	0.113616438	13609.49751
Riverside (SC)	2020 Oil Drilling - Workover Rig (Mobile)	Aggregated	600	Diesel	0.000235984	0.00028554	0.000339816	0.001386332	0.002658284	0.672194423	8.74971E-05	8.04974E-05	8.74971E-05	6.20769E-06	5.48636E-06	21808.60776	2138.971473	1.530981507	839611.5592
Riverside (SC)	2020 Oil Drilling - Workover Rig (Mobile)	Aggregated	750	Diesel	1.73939E-06	2.10466E-06	2.50472E-06	1.06706E-05	1.51284E-05	0.005384796	7.72389E-07	7.10598E-07	7.72389E-07	4.97329E-08	4.395E-08	174.7037663	9.856226027	0.005680822	6721.008815
Riverside (SC)	2020 Portable Equipment - Non-Rental Compressor	Aggregated	50	Diesel	1.05233E-05	1.27332E-05	1.51535E-05	0.000225518	0.000243179	0.036050605	8.35503E-06	7.68663E-06	8.35503E-06	3.3299E-07	2.9424E-07	1169.622175	1615.721069	4.10358947	69460.9714
Riverside (SC)	2020 Portable Equipment - Non-Rental Compressor	Aggregated	75	Diesel	0.00014842	0.000179589	0.000213725	0.002560537	0.002414677	0.388868232	9.78276E-05	9.00014E-05	9.78276E-05	3.59083E-06	3.17389E-06	12616.40154	12387.19486	31.4608526	832961.3696
Riverside (SC)	2020 Portable Equipment - Non-Rental Compressor	Aggregated	100	Diesel	0.000274808	0.000332518	0.000395724	0.00834184	0.004358769	1.2489257	0.000310399	0.000285567	0.000310399	1.15387E-05	1.01936E-05	40520.0189	31129.55926	79.06249046	2675216.887
Riverside (SC)	2020 Portable Equipment - Non-Rental Compressor	Aggregated	175	Diesel	0.000443001	0.000536031	0.000637921	0.014494573	0.007638888	2.619948464	0.000273029	0.000251187	0.000273029	2.42094E-05	2.13837E-05	85001.34256	40285.31198	102.3161641	5611967.448
Riverside (SC)	2020 Portable Equipment - Non-Rental Compressor	Aggregated	300	Diesel	0.000289542	0.000350346	0.00041694	0.002989463	0.004153383	1.571340755	0.000146278	0.000134576	0.000146278	1.45191E-05	1.28251E-05	50980.42028	11740.90643	29.81941682	3365834.591
Riverside (SC)	2020 Portable Equipment - Non-Rental Compressor	Aggregated	600	Diesel	0.000413489	0.000500322	0.000595424	0.004044008	0.005533774	2.150409908	0.000210034	0.000193232	0.000210034	1.98692E-05	1.75514E-05	69767.68123	9371.182198	23.80081893	4606209.08
Riverside (SC)	2020 Portable Equipment - Non-Rental Compressor	Aggregated	750	Diesel	0.000166417	0.000201365	0.000239641	0.001340179	0.000301689	0.704094843	0.000101418	9.33041E-05	0.000101418	6.50471E-06	5.74673E-06	22843.58175	2154.294758	5.471452627	1508181.321
Riverside (SC)	2020 Portable Equipment - Non-Rental Compressor	Aggregated	9999	Diesel	7.08179E-06	8.56897E-06	1.01978E-05	8.83423E-05	0.000142788	0.045793055	3.55492E-06	3.27052E-06	3.55492E-06	4.23167E-07	3.73757E-07	1485.705233	107.7147379	0.273572631	98089.3849
Riverside (SC)	2020 Portable Equipment - Non-Rental Generator	Aggregated	50	Diesel	6.55761E-05	7.9347E-05	9.44295E-05	0.00083267	0.000631432	0.084725141	2.79147E-05	2.56815E-05	2.79147E-05	7.81359E-07	6.91515E-07	2748.813886	3234.27826	2.462153682	163245.2657
Riverside (SC)	2020 Portable Equipment - Non-Rental Generator	Aggregated	75	Diesel	0.001656188	0.002003987	0.00238491	0.02392801	0.018731948	3.241902725	0.000727007	0.000668846	0.000727007	2.99233E-05	2.646E-05	105179.9636	102778.1758	78.24177256	6944202.456
Riverside (SC)	2020 Portable Equipment - Non-Rental Generator	Aggregated	100	Diesel	0.001963154	0.002375416	0.002826941	0.038061081	0.023807119	5.167787291	0.001881927	0.001731373	0.001881927	4.77199E-05	4.21788E-05	167663.1673	112121.6463	85.35466098	11069475.01
Riverside (SC)	2020 Portable Equipment - Non-Rental Generator	Aggregated	175	Diesel	0.003975662	0.004810551	0.005724953	0.070852658	0.042795196	11.20391918	0.002148847	0.001976939	0.002148847	0.000103467	9.14449E-05	363498.8188	167463.741	127.4848462	23998956.68
Riverside (SC)	2020 Portable Equipment - Non-Rental Generator	Aggregated	300	Diesel	0.004624637	0.005595811	0.006659477	0.028168689	0.040264476	12.25399792	0.001747761	0.00160794	0.001747761	0.000113156	0.000100015	397567.4672	103496.9043	78.78891783	26248240.52
Riverside (SC)	2020 Portable Equipment - Non-Rental Generator	Aggregated	600	Diesel	0.008045426	0.009734966	0.011585414	0.051542329	0.072492903	25.20260046	0.003074042	0.002828118	0.003074042	0.000232769	0.0002057	817670.6162	131527.3159	100.1275831	53984334.16
Riverside (SC)	2020 Portable Equipment - Non-Rental Generator	Aggregated	750	Diesel	0.002510112	0.003037236	0.003614562	0.013425065	0.022701595	6.299584225	0.001085207	0.00099839	0.001085207	5.81675E-05	5.14164E-05	204383.0724	19046.30531	14.49934946	13493800.39
Riverside (SC)	2020 Portable Equipment - Non-Rental Generator	Aggregated	9999	Diesel	0.016454587	0.01991005	0.023694605	0.089219586	0.264158898	41.18845495	0.008294251	0.007630711	0.008294251	0.000380314	0.000336175	1336314.06	68279.20771	51.97879995	88226265.35
Riverside (SC)	2020 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	50	Diesel	1.49491E-05	1.80884E-05	2.15267E-05	0.000191468	0.000202989	0.030802648	7.98716E-06	7.34819E-06	7.98716E-06	2.84337E-07	2.51407E-07	999.3579918	1258.585473	4.10358947	59349.40221
Riverside (SC)	2020 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	75	Diesel	0.000203674	0.000246446	0.000293291	0.005141391	0.004345803	0.830720781	0.000122745	0.000112925	0.000122745	7.67432E-06	6.78023E-06	26951.82085	24332.65248	79.33606309	1779415.91
Riverside (SC)	2020 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	100	Diesel	0.000432132	0.000522879	0.00062227	0.011864212	0.008592071	1.869619492	0.000536918	0.000493964	0.000536918	1.72726E-05	1.52596E-05	60657.7454	43630.96307	142.2577683	4004751.953
Riverside (SC)	2020 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	175	Diesel	0.001186274	0.001435391	0.001708234	0.033322794	0.022204629	6.047197662	0.000861249	0.000792349	0.000861249	5.58738E-05	4.93564E-05	196194.6683	91037.68256	296.826305	12953184.73
Riverside (SC)	2020 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	300	Diesel	0.000399858	0.000483828	0.000575795	0.003901862	0.005881466	2.02943411	0.000204271	0.000187929	0.000204271	1.87511E-05	1.6564E-05	65842.75468	17871.91372	58.27097048	4347077.173
Riverside (SC)	2020 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	600	Diesel	0.000587337	0.000710677	0.000845765	0.005037956	0.010112316	2.66894145	0.000316415	0.000291102	0.000316415	2.46581E-05	2.17835E-05	86590.86602	12585.85473	41.0358947	5716911.13
Riverside (SC)	2020 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	750	Diesel	0.000242936	0.000293953	0.000349828	0.002193407	0.004135725	1.169139537	0.000154981	0.000142582	0.000154981	1.0802E-05	9.54236E-06	37931.4447	3524.039325	11.49005052	2504313.773
Riverside (SC)	2020 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	9999	Diesel	0.00556679	0.006735816	0.008016178	0.04573142	0.096399334	10.31536372	0.003070729	0.002825071	0.003070729	9.52036E-05	8.41926E-05	334670.6155	8894.00401	28.99869892	22095658.06
Riverside (SC)	2020 Portable Equipment - Non-Rental Pump	Aggregated	50	Diesel	2.29917E-06	2.78199E-06	3.3108E-06	3.92537E-05	3.64445E-05	0.006238394	1.31764E-06	1.21223E-06	1.31764E-06	5.76081E-08	5.09169E-08	202.397823	252.2552139	0.820717894	12019.90668
Riverside (SC)	2020 Portable Equipment - Non-Rental Pump	Aggregated	75	Diesel	0.000128907	0.000155978	0.000185627	0.00294669	0.002577532	0.469869312	9.0289E-05	8.30658E-05	9.0289E-05	4.34031E-06	3.83501E-06	15244.39237	13874.03676	45.13948417	1006466.853
Riverside (SC)	2020 Portable Equipment - Non-Rental Pump	Aggregated	100	Diesel	0.000223786	0.000270782	0.000322252	0.005711481	0.004292656	0.900915382	0.000252315	0.000232129	0.000252315	8.3227E-06	7.35315E-06	29229.20738	20432.67232	66.47814942	1929773.759
Riverside (SC)	2020 Portable Equipment - Non-Rental Pump	Aggregated	175	Diesel	0.000316122	0.000382507	0.000455215	0.008676898	0.005962244	1.572964837	0.000235526	0.000216683	0.000235526	1.45334E-05	1.28383E-05	51033.11183	23627.90503	76.87390941	3369313.398
Riverside (SC)	2020 Portable Equipment - Non-Rental Pump	Aggregated	300	Diesel	0.000209165	0.000253089	0.000301197	0.002199808	0.003249346	1.160166523	0.00011055	0.000101706	0.00011055	1.072E-05	9.46912E-06	37640.32515	10090.20856	32.82871576	2485093.448
Riverside (SC)	2020 Portable Equipment - Non-Rental Pump	Aggregated	600	Diesel	0.000397015	0.000480388	0.000571702	0.004032761	0.006990185	2.194469257	0.000261092	0.000240204	0.000261092	2.0277E-05	1.7911E-05	71197.13826	11267.39955	36.6587326	4700584.841
Riverside (SC)	2020 Portable Equipment - Non-Rental Pump	Aggregated	750	Diesel	0.000208248	0.00025198	0.000299877	0.002041222	0.004322188	1.112822119	0.000173703	0.000159807	0.000173703	1.02823E-05	9.0827E-06	36104.28809	3363.402852	10.94290525	2383681.05
Riverside (SC)	2020 Portable Equipment - Non-Rental Pump	Aggregated	9999	Diesel	0.000222392	0.000269095	0.000320245	0.00120261	0.005052893	0.634847311	0.000133458	0.000122781	0.000133458	5.86281E-06	5.18154E-06	20596.92186	1009.020856	3.282871576	1359852.11
Riverside (SC)	2020 Portable Equipment - Rental Compressor	Aggregated	50	Diesel	8.78035E-06	1.06242E-05	1.26437E-05	0.000202444	0.00015933	0.034208286	2.39449E-06	2.20293E-06	2.39449E-06	3.16009E-07	2.79203E-07	1109.850176	1270.325756	2.462153682	65911.26007
Riverside (SC)	2020 Portable Equipment - Rental Compressor	Aggregated	75	Diesel	3.77817E-05	4.57158E-05	5.44056E-05	0.000659059	0.000571561	0.099149998	2.0864E-05	1.91949E-05	2.0864E-05	9.15557E-07	8.09249E-07	3216.81248	3246.388043	6.292170521	212380.7269
Riverside (SC)	2020 Portable Equipment - Rental Compressor	Aggregated	100	Diesel	3.12208E-05	3.77772E-05	4.4958E-05	0.000629421	0.000396838	0.092172517	2.75405E-05	2.53372E-05	2.75405E-05	8.51244E-07	7.523E-07	2990.43581	2258.3569	4.377162101	197434.8629
Riverside (SC)	2020 Portable Equipment - Rental Compressor	Aggregated	175	Diesel	0.000371261	0.000449226	0.000534616	0.011865539	0.00661722	2.156041469	0.000207947	0.000191311	0.000207947	1.99225E-05	1.75973E-05	69950.39101	32322.73313	62.64813258	4618271.964
Riverside (SC)	2020 Portable Equipment - Rental Compressor	Aggregated	300	Diesel	0.000220677	0.000267019	0.000317775	0.002633603	0.002298814	1.377494197	8.65329E-05	7.96103E-05	8.65329E-05	1.2729E-05	1.12429E-05	44691.28218	10021.45874	19.42365683	2950612.463
Riverside (SC)	2020 Portable Equipment - Rental Compressor	Aggregated	600	Diesel	0.003479786	0.004210541	0.005010892	0.036939872	0.04302208	19.38979029	0.00173546	0.001596623	0.00173546	0.000179164	0.000158257	629080.3918	73114.30463	141.710623	41533210.82
Riverside (SC)	2020 Portable Equipment - Rental Compressor	Aggregated	750	Diesel	0.000347037	0.000419915	0.000499734	0.003882014	0.003160118	1.988581937	0.000166989	0.00015363	0.000166989	1.8375E-05	1.62305E-05	64517.35093	6492.776087	12.58434104	4259571.229
Riverside (SC)	2020 Portable Equipment - Rental Compressor	Aggregated	9999	Diesel	0.00028355	0.000343096	0.000408313	0.002762575	0.006726465	1.461154188	0.000154879	0.000142488	0.000154879	1.35006E-05	1.19257E-05	47405.53845	2822.946125	5.471452627	3129813.372
Riverside (SC)	2020 Portable Equipment - Rental Generator	Aggregated	50	Diesel	7.52393E-06	9.10395E-06	1.08345E-05	0.000108679	8.68882E-05	0.010576234	4.52595E-06	4.16387E-06	4.52595E-06	9.75568E-08	8.63218E-08	343.1342533	384.8937842	0.273572631	20377.89559
Riverside (SC)	2020 Portable Equipment - Rental Generator	Aggregated	75	Diesel	0.001768185	0.002139504	0.002546186	0.026118431	0.021640172	3.604256522	0.000873037	0.000803194	0.000873037	3.32701E-05	2.94175E-05	116936.1335	112388.985	79.88320835	7720369.523
Riverside (SC)	2020 Portable Equipment - Rental Generator	Aggregated	100	Diesel	0.003389802	0.004101661	0.004881315	0.061736906	0.042828856	8.440311425	0.003109157	0.002860425	0.003109157	7.79332E-05	6.88887E-05	273836.6088	182824.5475	129.9469999	18079268.97
Riverside (SC)	2020 Portable Equipment - Rental Generator	Aggregated	175	Diesel	0.005039078	0.006097285	0.007256273	0.101844721	0.055584692	16.31971126	0.002311105	0.002126216	0.002311105	0.000150733	0.000133199	529475.0589	229781.5892	163.3228609	34957057.21
Riverside (SC)	2020 Portable Equipment - Rental Generator	Aggregated	300	Diesel	0.011539732	0.013963076	0.016617214	0.073027343	0.105361069	33.34132308	0.004236486	0.003897567	0.004236486	0.000307911	0.000272127	1081722.509	272889.693	193.9629956	71417595.56
Riverside (SC)	2020 Portable Equipment - Rental Generator	Aggregated	600	Diesel	0.015755918	0.019064661	0.022688522	0.105277165	0.139242517	51.41759329	0.006077412	0.005591219	0.006077412	0.000474908	0.000419663	1668187.188	254029.8976	180.5579367	110137227.4
Riverside (SC)	2020 Portable Equipment - Rental Generator	Aggregated	750	Diesel	0.003415211	0.004132405	0.004917904	0.015830385	0.041778411	7.449773524	0.001575857	0.001449789	0.001575857	6.87744E-05	6.08041E-05	241699.6975	22708.73327	16.14078525	15957522.48
Riverside (SC)	2020 Portable Equipment - Rental Generator	Aggregated	9999	Diesel	0.031348835	0.03793209	0.045142322	0.192427734	0.532052679	94.51474433	0.015704019	0.014447697	0.015704019	0.000872895	0.000771417	3066426.79	153957.5137	109.4290525	202451947.3
Riverside (SC)	2020 Portable Equipment - Rental Other Portable Equipment	Aggregated	50	Diesel	2.1583E-05	2.61155E-05	3.10796E-05	0.000355509	0.000255456	0.042991208	8.25426E-06	7.59392E-06	8.25426E-06	3.96828E-07	3.50888E-07	1394.802409	1997.298175	1.641435788	82833.86919
Riverside (SC)	2020 Portable Equipment - Rental Other Portable Equipment	Aggregated	75	Diesel	0.000670016	0.000810719	0.000964822	0.013262315	0.010179472	1.992955929	0.000201437	0.000185322	0.000201437	1.84058E-05	1.62662E-05	64659.26026	56257.23192	46.2337747	4268940.382
Riverside (SC)	2020 Portable Equipment - Rental Other Portable Equipment	Aggregated	100	Diesel	0.000298916	0.000361688	0.000430439	0.0079184	0.003420877	1.057611077	0.000281963	0.000259406	0.000281963	9.76917E-06	8.63208E-06	34313.02664	24300.46112	19.97080209	2265418.201
Riverside (SC)	2020 Portable Equipment - Rental Other Portable Equipment	Aggregated	175	Diesel	0.001338581	0.001619683	0.001927556	0.034494153	0.014968511	5.797031744	0.000538804	0.0004957	0.000538804	5.35563E-05	4.73146E-05	188078.3107	88546.88574	72.77031994	12417325.72
Riverside (SC)	2020 Portable Equipment - Rental Other Portable Equipment	Aggregated	300	Diesel	0.001462241	0.001769312	0.002105628	0.008884437	0.013302385	3.852949394	0.000535226	0.000492408	0.000535226	3.55786E-05	3.14473E-05	125004.6998	32622.53685	26.81011787	8253073.247
Riverside (SC)	2020 Portable Equipment - Rental Other Portable Equipment	Aggregated	600	Diesel	0.000936453	0.001133108	0.001348492	0.006203368	0.008157569	3.021111213	0.000338354	0.000311286	0.000338354	2.79036E-05	2.46579E-05	98016.62613	15312.61934	12.58434104	6471263.848
Riverside (SC)	2020 Portable Equipment - Rental Other Portable Equipment	Aggregated	750	Diesel	0.000560567	0.000678286	0.000807216	0.004345462	0.005718832	2.169032458	0.00030042	0.000276386	0.00030042	2.0037E-05	1.77034E-05	70371.86933	6657.660582	5.471452627	4646098.85
Riverside (SC)	2020 Portable Equipment - Rental Other Portable Equipment	Aggregated	9999	Diesel	0.000693721	0.000839403	0.000998959	0.004157888	0.011136674	2.022411722	0.000325187	0.000299172	0.000325187	1.86774E-05	1.65067E-05	65614.92103	3328.830291	2.735726313	4332035.116
Riverside (SC)	2020 Portable Equipment - Rental Pump	Aggregated	50	Diesel	7.82472E-06	9.46791E-06	1.12676E-05	7.70704E-05	6.49091E-05	0.007135849	4.63964E-06	4.26847E-06	4.63964E-06	6.57397E-08	5.82418E-08	231.5147603	259.6901688	0.273572631	13749.08965
Riverside (SC)	2020 Portable Equipment - Rental Pump	Aggregated	75	Diesel	0.000282225	0.000341492	0.000406403	0.006003786	0.005004127	0.923018563	0.000197422	0.000181629	0.000197422	8.5253E-06	7.53355E-06	29946.32075	25969.01688	27.35726313	1977119.092
Riverside (SC)	2020 Portable Equipment - Rental Pump	Aggregated	100	Diesel	0.000545738	0.000660343	0.000785863	0.010306047	0.007282561	1.416621675	0.000516781	0.000475439	0.000516781	1.3081E-05	1.15623E-05	45960.73012	34279.10229	36.11158734	3034424.087
Riverside (SC)	2020 Portable Equipment - Rental Pump	Aggregated	175	Diesel	0.000740999	0.000896609	0.001067039	0.014995791	0.008314473	2.397537508	0.000370715	0.000341058	0.000370715	2.21442E-05	1.95684E-05	77785.46404	33759.72195	35.56444207	5135559.968
Riverside (SC)	2020 Portable Equipment - Rental Pump	Aggregated	300	Diesel	0.000944926	0.001143361	0.001360694	0.007544325	0.008999416	3.619028694	0.000347484	0.000319685	0.000347484	3.34314E-05	2.9538E-05	117415.4003	27527.1579	28.99869892	7752011.729
Riverside (SC)	2020 Portable Equipment - Rental Pump	Aggregated	600	Diesel	0.001061191	0.001284041	0.001528115	0.009949893	0.009918148	5.133472364	0.000432244	0.000397664	0.000432244	4.74297E-05	4.18987E-05	166549.8574	27527.1579	28.99869892	10995971.94
Riverside (SC)	2020 Portable Equipment - Rental Pump	Aggregated	750	Diesel	0.000229552	0.000277758	0.000330555	0.001079854	0.002898152	0.521460557	0.000122941	0.000113105	0.000122941	4.81427E-06	4.25609E-06	16918.21348	1558.141013	1.641435788	1116976.044
Riverside (SC)	2020 TRU - Instate Genset TRU	Aggregated	50	Diesel	0.000875346	0.001059169	0.001260499	0.017832151	0.013856401	0.387512869	5.88202E-05	5.41146E-05	5.88202E-05	3.58052E-06	3.18404E-06	245.9791318	148185.0913	189.8055186	4667830.376
Riverside (SC)	2020 TRU - Instate Trailer TRU	Aggregated	50	Diesel	0.017502439	0.021177951	0.025203512	0.271293074	0.194117569	4.618985716	0.0037247	0.003426724	0.0037247	4.24662E-05	3.79524E-05	2931.964812	1173958.505	886.0846793	39914589.16
Riverside (SC)	2020 TRU - Instate Truck TRU	Aggregated	25	Diesel	0.002684681	0.003248464	0.003865941	0.026169033	0.031525647	0.627514958	0.001308856	0.001204147	0.001308856	5.76006E-06	5.15605E-06	398.3237636	315907.414	232.1141911	4454294.538
Riverside (SC)	2020 TRU - Instate Van TRU	Aggregated	25	Diesel	6.21522E-05	7.52042E-05	8.94992E-05	0.000605831	0.000729841	0.014527411	3.03009E-05	2.78769E-05	3.03009E-05	1.33349E-07	1.19366E-07	9.221473967	11457.78186	8.418649417	103120.0367
Riverside (SC)	2020 TRU - Out-of-State Genset TRU	Aggregated	50	Diesel	0.00054904	0.000664339	0.000790618	0.01120865	0.008726487	0.244182408	3.72654E-05	3.42841E-05	3.72654E-05	2.25626E-06	2.00635E-06	154.9981472	93375.46006	755.1965053	2941326.992
Riverside (SC)	2020 TRU - Out-of-State Trailer TRU	Aggregated	50	Diesel	0.009165216	0.011089911	0.013197911	0.156910114	0.112294853	2.847872576	0.001148002	0.001056162	0.001148002	2.62316E-05	2.33999E-05	1807.726348	723813.503	3449.626341	24609659.1
Riverside (SC)	2020 TRU - Railcar TRU	Aggregated	50	Diesel	0.000948718	0.001147949	0.001366154	0.016242218	0.011623964	0.294791499	0.000118833	0.000109326	0.000118833	2.71531E-06	2.42219E-06	187.1229646	74924.0219	232.3729861	2547416.745

OFFROAD 2021

	Equipment Type	Horsepower	Gas				Diesel				Natural Gas			
		HP	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr
Air Compressors25	Air Compressors	25	49012.2	339.7	164202.55	0.298486229	2387.1	5.34	4347.15	0.549118388	0	0	0	0
Air Compressors50	Air Compressors	50	14957.7	14.09	6803.6	2.198497854	26853.05	32.28	26287.3	1.0215218	0	0	0	0
Air Compressors75	Air Compressors	75	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors100	Air Compressors	100	82497.3	45.64	22060.6	3.739576439	0	0	0	0	0	0	0	0
Air Compressors175	Air Compressors	175	10139.7	3.06	1481.9	6.842364532	0	0	0	0	0	0	0	0
Air Compressors300	Air Compressors	300	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors600	Air Compressors	600	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors750	Air Compressors	750	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors9999	Air Compressors	9999	0	0	0	0	0	0	0	0	0	0	0	0
Aerial Lifts25	Aerial Lifts	25	5142.85	16.09	6037.1	0.851874244	4416.5	24.09	9621.4	0.459028832	9698.05	21.88	8216.15	1.180364283
Aerial Lifts50	Aerial Lifts	50	10935.4	19.21	6945.95	1.57435628	25912.15419	105.9631956	31693.32032	0.817590392	0	0	0	0
Aerial Lifts75	Aerial Lifts	75	0	0	0	0	30603.31372	89.11109703	26568.88648	1.151847811	0	0	0	0
Aerial Lifts100	Aerial Lifts	100	19735.55	19.21	6945.95	2.841303205	14610.33046	39.25488842	11739.99393	1.244492164	0	0	0	0
Aerial Lifts175	Aerial Lifts	175	0	0	0	0	2763.276135	4.450554229	1329.096395	2.079063749	0	0	0	0
Aerial Lifts300	Aerial Lifts	300	0	0	0	0	165.127259	0.150018682	45.05220132	3.665242855	0	0	0	0
Aerial Lifts600	Aerial Lifts	600	0	0	0	0	117.2642854	0.050006227	15.01740044	7.808560865	0	0	0	0
Bore/Drill rigs25	Bore/Drill rigs	25	452.6	2.92	357.7	1.265306122	1303.05	2.39	1960.05	0.664804469	0	0	0	0
Bore/Drill rigs50	Bore/Drill rigs	50	62.05	0.25	0	0	5186.791616	12.75914471	4488.26719	1.155633432	0	0	0	0
Bore/Drill rigs75	Bore/Drill rigs	75	0	0	0	0	5893.930093	7.78979361	3138.906051	1.877701976	0	0	0	0
Bore/Drill rigs100	Bore/Drill rigs	100	715.4	1.01	109.5	6.533333333	26454.52956	31.15917444	12245.08464	2.160420311	0	0	0	0
Bore/Drill rigs175	Bore/Drill rigs	175	251.85	0.27	25.55	9.857142857	37441.05145	30.75625408	9622.480942	3.890997725	0	0	0	0
Bore/Drill rigs300	Bore/Drill rigs	300	0	0	0	0	53333.32852	31.02486765	9958.342828	5.355642946	0	0	0	0
Bore/Drill rigs600	Bore/Drill rigs	600	0	0	0	0	97291.10703	26.32413013	9098.293791	10.6933354	0	0	0	0
Bore/Drill rigs750	Bore/Drill rigs	750	0	0	0	0	42438.91488	5.103657882	2518.736699	16.84928595	0	0	0	0
Bore/Drill rigs9999	Bore/Drill rigs	9999	0	0	0	0	28037.39018	0.805840718	580.8970137	48.26568137	0	0	0	0
Cement and Mortar Mixers25	Cement and Mortar Mixers	25	15424.9	440.19	40522.3	0.380652135	3328.8	33.51	10063.05	0.330794342	0	0	0	0
Cement and Mortar Mixers50	Cement and Mortar Mixers	50	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers75	Cement and Mortar Mixers	75	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers100	Cement and Mortar Mixers	100	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers175	Cement and Mortar Mixers	175	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers300	Cement and Mortar Mixers	300	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers600	Cement and Mortar Mixers	600	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers750	Cement and Mortar Mixers	750	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers9999	Cement and Mortar Mixers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws25	Concrete/Industrial Saws	25	13782.4	61.96	17611.25	0.782590674	105.85	0.23	142.35	0.743589744	0	0	0	0
Concrete/Industrial Saws50	Concrete/Industrial Saws	50	1438.1	0.86	521.95	2.755244755	1682.65	2.11	1222.75	1.376119403	0	0	0	0
Concrete/Industrial Saws75	Concrete/Industrial Saws	75	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws100	Concrete/Industrial Saws	100	1408.9	0.49	299.3	4.707317073	0	0	0	0	0	0	0	0
Concrete/Industrial Saws175	Concrete/Industrial Saws	175	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws300	Concrete/Industrial Saws	300	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws600	Concrete/Industrial Saws	600	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws750	Concrete/Industrial Saws	750	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws9999	Concrete/Industrial Saws	9999	0	0	0	0	0	0	0	0	0	0	0	0
Cranes25	Cranes	25	0	0	0	0	99.17534014	0.506034688	239.5679457	0.413975834	0	0	0	0
Cranes50	Cranes	50	208.05	0.27	105.85	1.965517241	1606.892899	5.397703338	2330.169621	0.689603403	0	0	0	0
Cranes75	Cranes	75	0	0	0	0	652.6199694	1.686782293	625.5808438	1.043222432	0	0	0	0
Cranes100	Cranes	100	704.45	0.57	215.35	3.271186441	36674.54364	64.09772714	28042.97057	1.3077981	0	0	0	0
Cranes175	Cranes	175	36.5	0	0	0	110799.1786	112.1710225	50720.79985	2.184491942	0	0	0	0
Cranes300	Cranes	300	0	0	0	0	193220.233	125.8339591	58748.42083	3.288943435	0	0	0	0
Cranes600	Cranes	600	0	0	0	0	334399.2179	124.6532115	60965.66215	5.485042006	0	0	0	0
Cranes750	Cranes	750	0	0	0	0	5227.733027	1.349425835	546.1692116	9.571636256	0	0	0	0
Cranes9999	Cranes	9999	0	0	0	0	18466.37822	2.698851669	1320.861106	13.98056021	0	0	0	0
Crawler Tractors25	Crawler Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0
Crawler Tractors50	Crawler Tractors	50	0	0	0	0	5203.681899	14.97065012	5049.374804	1.030559644	0	0	0	0
Crawler Tractors75	Crawler Tractors	75	0	0	0	0	639.1568869	2.245597517	409.8655698	1.55943054	0	0	0	0
Crawler Tractors100	Crawler Tractors	100	0	0	0	0	229329.5323	254.800465	117950.8602	1.944280287	0	0	0	0
Crawler Tractors175	Crawler Tractors	175	0	0	0	0	250756.5965	169.1683463	75762.76325	3.309760438	0	0	0	0
Crawler Tractors300	Crawler Tractors	300	0	0	0	0	264114.6296	131.5920145	57869.46911	4.563971877	0	0	0	0
Crawler Tractors600	Crawler Tractors	600	0	0	0	0	912264.7085	227.5538818	106954.6317	8.529454908	0	0	0	0
Crawler Tractors750	Crawler Tractors	750	0	0	0	0	16706.33398	2.694717021	1205.427317	13.8592628	0	0	0	0
Crawler Tractors9999	Crawler Tractors	9999	0	0	0	0	53135.12674	4.491195035	2457.334235	21.62307674	0	0	0	0
Crushing/Proc. Equipment25	Crushing/Proc. Equipment	25	200.75	0.73	211.7	0.948275862	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment50	Crushing/Proc. Equipment	50	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment75	Crushing/Proc. Equipment	75	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment100	Crushing/Proc. Equipment	100	540.2	0.3	62.05	8.705882353	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment175	Crushing/Proc. Equipment	175	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment300	Crushing/Proc. Equipment	300	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment600	Crushing/Proc. Equipment	600	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment750	Crushing/Proc. Equipment	750	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment9999	Crushing/Proc. Equipment	9999	0	0	0	0	0	0	0	0	0	0	0	0
Dumpers/Tenders25	Dumpers/Tenders	25	1467.3	29.32	4361.75	0.336401674	332.15	1.44	959.95	0.346007605	0	0	0	0
Dumpers/Tenders100	Dumpers/Tenders	100	62.05	0.17	0	0	0	0	0	0	0	0	0	0
Excavators25	Excavators	25	0	0	0	0	2391.65203	2.680017575	3228.103132	0.740884641	0	0	0	0
Excavators50	Excavators	50	0	0	0	0	208058.3896	366.0142942	264695.469	0.786029283	0	0	0	0
Excavators75	Excavators	75	0	0	0	0	15087.7049	13.20051553	10278.13676	1.467941638	0	0	0	0
Excavators100	Excavators	100	0	0	0	0	255131.8068	250.6597892	158579.5074	1.608857355	0	0	0	0
Excavators175	Excavators	175	0	0	0	0	570227.3388	337.9631987	197574.9513	2.886131744	0	0	0	0
Excavators300	Excavators	300	0	0	0	0	730097.9303	293.261453	168867.2974	4.323501007	0	0	0	0
Excavators600	Excavators	600	0	0	0	0	1283614.286	303.1618396	192663.665	6.662461681	0	0	0	0
Excavators750	Excavators	750	0	0	0	0	18076.70945	2.550099591	1429.184315	12.64827025	0	0	0	0
Excavators9999	Excavators	9999	0	0	0	0	35934.31763	2.250087874	1509.458443	23.80609933	0	0	0	0
Forklifts25	Forklifts	25	219	0.37	332.15	0.659340659	31.65510214	0.173770837	54.73563115	0.578327161	259.15	0.2	262.8	0.986111111
Forklifts50	Forklifts	50	180828.3	64.18	115482.35	1.565852271	24991.7228	72.57965706	43038.27842	0.580685932	341848.05	142.18	256153.35	1.334544522
Forklifts75	Forklifts	75	0	0	0	0	1934.577757	4.66379891	2279.664384	0.848623934	0	0	0	0
Forklifts100	Forklifts	100	847307.35	226.34	405734	2.088332134	671798.4317	1151.232078	475080.1722	1.414073815	2138454.7	499.02	899016.9	2.378659066
Forklifts175	Forklifts	175	59611.8	8.22	14804.4	4.026627219	171976.9966	212.4120336	85955.73472	2.000762336	160545.25	18.26	32901.1	4.879631684
Forklifts300	Forklifts	300	0	0	0	0	21998.49539	15.88213642	8340.967662	2.637403271	0	0	0	0
Forklifts600	Forklifts	600	0	0	0	0	6433.619663	2.770458968	1337.175864	4.811348932	0	0	0	0
Forklifts750	Forklifts	750	0	0	0	0	481.4162094	0.173770837	37.07897594	12.98353574	0	0	0	0
Forklifts9999	Forklifts	9999	0	0	0	0	289.1953344	0.040596832	31.62498037	9.144522179	0	0	0	0
Generator Sets25	Generator Sets	25	710457.9	8922.09	1025157.25	0.693023339	62367.55	303.78	102521.2	0.60833808	0	0	0	0
Generator Sets50	Generator Sets	50	117489.85	463.14	53202.4	2.208356202	73956.3	156.7	52903.1	1.397957776	0	0	0	0
Generator Sets75	Generator Sets	75	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets100	Generator Sets	100	53308.25	89.47	10271.1	5.190120824	0	0	0	0	4777.85	6.67	762.85	6.263157895
Generator Sets175	Generator Sets	175	8708.9	8.42	967.25	9.003773585	0	0	0	0	6924.05	5.5	631.45	10.96531792
Generator Sets300	Generator Sets	300	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets600	Generator Sets	600	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets750	Generator Sets	750	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets9999	Generator Sets	9999	0	0	0	0	0	0	0	0	0	0	0	0
Graders25	Graders	25	0	0	0	0	40.00529202	0.301482627	68.07400789	0.587673523	0	0	0	0
Graders50	Graders	50	0	0	0	0	1336.167528	4.371498091	1522.815557	0.877432281	0	0	0	0
Graders75	Graders	75	0	0	0	0	2001.289316	3.316308896	1299.192441	1.540410222	0	0	0	0
Graders100	Graders	100	0	0	0	0	28439.19829	41.75534383	15162.46415	1.875631693	0	0	0	0
Graders175	Graders	175	0	0	0	0	348838.2124	237.4175687	110805.0838	3.14821487	0	0	0	0
Graders300	Graders	300	0	0	0	0	734562.6449	213.7511825	160407.0394	4.579366638	0	0	0	0
Graders600	Graders	600	0	0	0	0	31613.06304	5.577428598	4230.969776	7.47182436	0	0	0	0
Graders750	Graders	750	0	0	0	0	0	0	0	0	0	0	0	0
Graders9999	Graders	9999	0	0	0	0	24921.05612	0.904447881	651.4682555	38.25367684	0	0	0	0
Pavers25	Pavers	25	1259.25	2.86	1131.5	1.112903226	627.8	0.91	740.95	0.84729064	0	0	0	0
Pavers50	Pavers	50	664.3	0.75	288.35	2.303797468	5703.727984	17.5665793	6160.618163	0.925836959	0	0	0	0
Pavers75	Pavers	75	0	0	0	0	10050.02258	18.73768459	6449.014951	1.558381033	0	0	0	0
Pavers100	Pavers	100	594.95	0.43	160.6	3.704545455	44859.55958	66.02106055	25867.29133	1.734219444	0	0	0	0
Pavers175	Pavers	175	0	0	0	0	75433.15952	58.26248803	22213.65935	3.39580068	0	0	0	0
Pavers300	Pavers	300	0	0	0	0	58987.45503	27.96013873	12417.91949	4.750188232	0	0	0	0
Pavers600	Pavers	600	0	0	0	0	10557.67144	3.074151378	1336.376179	7.900224202	0	0	0	0
Pavers750	Pavers	750	0	0	0	0	2207.599235	0.292776322	137.0091334	16.11278884	0	0	0	0
Pavers9999	Pavers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Paving Equipment25	Paving Equipment	25	26688.8	312.96	59206.65	0.450773688	740.95	1.57	1299.4	0.570224719	0	0	0	0
Paving Equipment50	Paving Equipment	50	788.4	2.03	350.4	2.25	7102.986745	21.63060639	10072.37491	0.705194833	0	0	0	0
Paving Equipment75	Paving Equipment	75	0	0	0	0	1145.150327	2.338443934	929.9658437	1.231389663	0	0	0	0
Paving Equipment100	Paving Equipment	100	324.85	0.52	87.6	3.708333333	29955.23896	40.19200512	18220.79636	1.644013707	0	0	0	0
Paving Equipment175	Paving Equipment	175	0	0	0	0	31564.39046	25.72288328	11802.61299	2.674356134	0	0	0	0
Paving Equipment300	Paving Equipment	300	0	0	0	0	22802.19415	11.39991418	5302.587359	4.300201507	0	0	0	0
Paving Equipment600	Paving Equipment	600	0	0	0	0	21714.01069	6.430720819	2926.356323	7.420152671	0	0	0	0
Paving Equipment750	Paving Equipment	750	0	0	0	0	4593.189427	0.730763729	390.5658538	11.76034562	0	0	0	0
Paving Equipment9999	Paving Equipment	9999	0	0	0	0	2085.585646	0.292305492	134.6437417	15.489659	0	0	0	0
Rollers25	Rollers	25	6208.65	33.84	8435.15	0.736045002	13764.22667	51.82057834	35957.3002	0.382793663	0	0	0	0
Rollers50	Rollers	50	865.05	0.57	317.55	2.724137931	117117.811	444.0555192	151950.6541	0.770762138	0	0	0	0
Rollers75	Rollers	75	0	0	0	0	978.0136419	3.162145101	719.7843301	1.358759285	0	0	0	0
Rollers100	Rollers	100	2748.45	0.98	605.9	4.536144578	182085.288	328.1101989	107522.0768	1.693468852	0	0	0	0
Rollers175	Rollers	175	0	0	0	0	189297.4081	191.5356461	67901.12848	2.787838911	0	0	0	0
Rollers300	Rollers	300	0	0	0	0	31346.42067	24.54426912	7469.674936	4.196490602	0	0	0	0
Rollers600	Rollers	600	0	0	0	0	18387.83311	8.884121952	2696.386221	6.819435942	0	0	0	0
Rollers750	Rollers	750	0	0	0	0	0	0	0	0	0	0	0	0
Rollers9999	Rollers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Rough Terrain Forklifts25	Rough Terrain Forklifts	25	0	0	0	0	31.65510214	0.173770837	54.73563115	0.578327161	0	0	0	0
Rough Terrain Forklifts50	Rough Terrain Forklifts	50	142.35	0.09	36.5	3.9	5934.404844	19.98364624	5395.089092	1.099964198	0	0	0	0
Rough Terrain Forklifts75	Rough Terrain Forklifts	75	0	0	0	0	162.6645715	0.521312511	117.9072198	1.379598059	0	0	0	0
Rough Terrain Forklifts100	Rough Terrain Forklifts	100	3106.15	1.46	605.9	5.126506024	463150.5864	827.3229545	231316.1124	2.002240923	0	0	0	0
Rough Terrain Forklifts175	Rough Terrain Forklifts	175	178.85	0	0	0	105583.9073	151.354399	40727.42946	2.592452034	0	0	0	0
Rough Terrain Forklifts300	Rough Terrain Forklifts	300	0	0	0	0	7525.344113	6.950833476	1720.346773	4.374318151	0	0	0	0
Rough Terrain Forklifts600	Rough Terrain Forklifts	600	0	0	0	0	2792.404914	1.390166695	351.7598088	7.938385354	0	0	0	0
Rough Terrain Forklifts750	Rough Terrain Forklifts	750	0	0	0	0	481.4162094	0.173770837	37.07897594	12.98353574	0	0	0	0
Rough Terrain Forklifts9999	Rough Terrain Forklifts	9999	0	0	0	0	0	0	0	0	0	0	0	0
Rubber Tired Dozers25	Rubber Tired Dozers	25	0	0	0	0	0	0	0	0	0	0	0	0
Rubber Tired Dozers50	Rubber Tired Dozers	50	0	0	0	0	5034.649306	5.58718139	5367.824148	0.937931118	0	0	0	0
Rubber Tired Dozers75	Rubber Tired Dozers	75	0	0	0	0	4065.720448	4.4410929	2860.046837	1.421557296	0	0	0	0
Rubber Tired Dozers100	Rubber Tired Dozers	100	0	0	0	0	19591.19369	12.75023445	11315.48588	1.731361243	0	0	0	0
Rubber Tired Dozers175	Rubber Tired Dozers	175	0	0	0	0	21679.57602	9.598491106	7221.363522	3.002144395	0	0	0	0
Rubber Tired Dozers300	Rubber Tired Dozers	300	0	0	0	0	23808.7793	7.879358371	5331.756148	4.465466656	0	0	0	0
Rubber Tired Dozers600	Rubber Tired Dozers	600	0	0	0	0	263989.4906	48.27897765	34797.04782	7.586548492	0	0	0	0
Rubber Tired Dozers750	Rubber Tired Dozers	750	0	0	0	0	7510.950468	0.573044245	564.7957673	13.29852471	0	0	0	0
Rubber Tired Dozers9999	Rubber Tired Dozers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Scrapers25	Scrapers	25	0	0	0	0	0	0	0	0	0	0	0	0
Scrapers50	Scrapers	50	0	0	0	0	250.3839587	0.885843484	285.1968921	0.877933686	0	0	0	0
Scrapers75	Scrapers	75	0	0	0	0	3002.988	4.281576841	1801.190892	1.667223621	0	0	0	0
Scrapers100	Scrapers	100	0	0	0	0	13227.27763	9.596637746	5840.785678	2.264640129	0	0	0	0
Scrapers175	Scrapers	175	0	0	0	0	177466.3541	95.81873688	42368.65693	4.188623547	0	0	0	0
Scrapers300	Scrapers	300	0	0	0	0	209673.0516	94.19469049	37741.99993	5.555430342	0	0	0	0
Scrapers600	Scrapers	600	0	0	0	0	2592483.575	518.3660789	245843.0546	10.54527889	0	0	0	0
Scrapers750	Scrapers	750	0	0	0	0	41382.43831	6.939107293	2652.281091	15.60258392	0	0	0	0
Scrapers9999	Scrapers	9999	0	0	0	0	59990.40043	3.838655098	1505.492887	39.84768109	0	0	0	0
Skid Steer Loaders25	Skid Steer Loaders	25	20334.15	59.12	18870.5	1.077562863	60553.5	115.55	96451.25	0.62781457	0	0	0	0
Skid Steer Loaders50	Skid Steer Loaders	50	4193.85	7.09	2200.95	1.905472637	88614.77619	307.4595815	95669.11312	0.926263172	0	0	0	0
Skid Steer Loaders75	Skid Steer Loaders	75	0	0	0	0	462430.851	974.9685093	344195.408	1.343512552	0	0	0	0
Skid Steer Loaders100	Skid Steer Loaders	100	5628.3	4.26	1324.95	4.247933884	7875.096411	17.2250534	5519.639984	1.426740953	0	0	0	0
Skid Steer Loaders175	Skid Steer Loaders	175	0	0	0	0	3178.541724	4.115720724	1098.317662	2.894009478	0	0	0	0
Skid Steer Loaders300	Skid Steer Loaders	300	0	0	0	0	2953.03517	2.591379715	755.6742172	3.907815171	0	0	0	0
Skid Steer Loaders600	Skid Steer Loaders	600	0	0	0	0	854.0209288	0.304868202	94.65288532	9.022661336	0	0	0	0
Skid Steer Loaders750	Skid Steer Loaders	750	0	0	0	0	0	0	0	0	0	0	0	0
Skid Steer Loaders9999	Skid Steer Loaders	9999	0	0	0	0	1156.035098	0.304868202	60.57784661	19.08346307	0	0	0	0
Surfacing Equipment25	Surfacing Equipment	25	13019.55	84.47	36138.65	0.36026664	0	0	0	0	0	0	0	0
Surfacing Equipment50	Surfacing Equipment	50	0	0	0	0	820.9722418	5.393280363	1300.223888	0.631408367	0	0	0	0
Surfacing Equipment75	Surfacing Equipment	75	0	0	0	0	550.9636586	2.074338601	521.9318514	1.055623751	0	0	0	0
Surfacing Equipment100	Surfacing Equipment	100	0	0	0	0	4779.693861	12.86089933	3436.038345	1.391047882	0	0	0	0
Surfacing Equipment175	Surfacing Equipment	175	0	0	0	0	4420.04454	8.159065164	2093.81635	2.110999152	0	0	0	0
Surfacing Equipment300	Surfacing Equipment	300	0	0	0	0	8715.673916	10.09511453	2449.160919	3.558636694	0	0	0	0
Surfacing Equipment600	Surfacing Equipment	600	0	0	0	0	27575.66568	15.48839489	4354.688364	6.332408516	0	0	0	0
Surfacing Equipment750	Surfacing Equipment	750	0	0	0	0	13728.14952	4.701834163	1384.844607	9.913133539	0	0	0	0
Surfacing Equipment9999	Surfacing Equipment	9999	0	0	0	0	4521.346388	1.244603161	331.1449168	13.65367898	0	0	0	0
Tractors/Loaders/Backhoes25	Tractors/Loaders/Backhoes	25	0	0	0	0	11544.95	16.97	16008.9	0.721158231	0	0	0	0
Tractors/Loaders/Backhoes50	Tractors/Loaders/Backhoes	50	0	0	0	0	175173.5535	430.2991584	219856.8375	0.796761909	0	0	0	0
Tractors/Loaders/Backhoes75	Tractors/Loaders/Backhoes	75	0	0	0	0	24823.48544	81.11214102	18175.09821	1.365796495	0	0	0	0
Tractors/Loaders/Backhoes100	Tractors/Loaders/Backhoes	100	2336	0.91	803	2.909090909	2791934.247	2840.574166	1757175.212	1.588876413	0	0	0	0
Tractors/Loaders/Backhoes175	Tractors/Loaders/Backhoes	175	0	0	0	0	487272.1219	326.8474444	179320.9552	2.717318349	0	0	0	0
Tractors/Loaders/Backhoes300	Tractors/Loaders/Backhoes	300	0	0	0	0	293649.1729	136.1364585	74863.6517	3.922453236	0	0	0	0
Tractors/Loaders/Backhoes600	Tractors/Loaders/Backhoes	600	0	0	0	0	414968.7198	119.6441562	65008.29805	6.383319243	0	0	0	0
Tractors/Loaders/Backhoes750	Tractors/Loaders/Backhoes	750	0	0	0	0	7841.985459	1.199440163	644.7459264	12.16290811	0	0	0	0
Tractors/Loaders/Backhoes9999	Tractors/Loaders/Backhoes	9999	0	0	0	0	137009.9548	6.297060855	3884.048314	35.27503876	0	0	0	0
Trenchers25	Trenchers	25	12526.8	30.36	13187.45	0.949903128	5482.3	9.24	5730.5	0.956687898	0	0	0	0
Trenchers50	Trenchers	50	4168.3	4.73	1890.7	2.204633205	62028.33964	141.0991602	53727.25936	1.154504071	0	0	0	0
Trenchers75	Trenchers	75	0	0	0	0	3576.857403	7.215297966	1941.458412	1.842355922	0	0	0	0
Trenchers100	Trenchers	100	2617.05	1.57	624.15	4.192982456	41393.07131	58.2034036	18991.71728	2.17953283	0	0	0	0
Trenchers175	Trenchers	175	0	0	0	0	9179.466835	8.65835756	2476.920788	3.705999352	0	0	0	0
Trenchers300	Trenchers	300	0	0	0	0	21816.58171	11.86515666	3673.1126	5.939535234	0	0	0	0
Trenchers600	Trenchers	600	0	0	0	0	30316.07929	8.33767765	3009.486816	10.0735046	0	0	0	0
Trenchers750	Trenchers	750	0	0	0	0	9845.293898	1.282719638	586.5105132	16.78621896	0	0	0	0
Trenchers9999	Trenchers	9999	0	0	0	0	809.4549498	0.160339955	36.20435267	22.35794566	0	0	0	0
Welders25	Welders	25	177291.45	1090.3	226500.75	0.782741117	28148.8	112.01	71930.55	0.391333029	0	0	0	0
Welders50	Welders	50	36503.65	73.56	15286.2	2.388013372	123242.25	161.38	103641.75	1.189117802	0	0	0	0
Welders75	Welders	75	0	0	0	0	0	0	0	0	0	0	0	0
Welders100	Welders	100	51662.1	75.06	15600.1	3.311651848	0	0	0	0	0	0	0	0
Welders175	Welders	175	6453.2	5.17	1069.45	6.034129693	0	0	0	0	0	0	0	0
Welders300	Welders	300	0	0	0	0	0	0	0	0	0	0	0	0
Welders600	Welders	600	0	0	0	0	0	0	0	0	0	0	0	0
Welders750	Welders	750	0	0	0	0	0	0	0	0	0	0	0	0
Welders9999	Welders	9999	0	0	0	0	0	0	0	0	0	0	0	0

OFFROAD2017 (v1.0.1) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2021
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2017 Equipment Types
Units: Emissions: tons/day, Fuel Consumption: gallons/year, Activity: hours/year, HP-Hours: HP-hours/year

Region	CalYr	VehClass	MdlYr	HP_Bin	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2_5_tpd	PM_tpd	SOx_tpd	NH3_tpd	Fuel_gpy	Total_Activity_hpy	Total_Population	Horsepower_Hours_hhpy
Riverside (SC)		2021 Agricultural - Agricultural Tractors	Aggregated	50	Diesel	0.020546402	0.024861147	0.029586819	0.064698404	0.058951838	0.818048895	0.005535024	0.005092222	0.005535024	6.99761E-06	6.72159E-06	189532.7489	169842.4736	527.0840775	6931654
Riverside (SC)		2021 Agricultural - Agricultural Tractors	Aggregated	75	Diesel	0.019828782	0.023992827	0.028553447	0.078689935	0.147897588	1.511950281	0.011475146	0.010557134	0.011475146	1.34776E-05	1.24231E-05	350301.913	198239.5879	566.2882914	12503476
Riverside (SC)		2021 Agricultural - Agricultural Tractors	Aggregated	100	Diesel	0.023522125	0.028461772	0.033871861	0.154777328	0.195765797	3.431943806	0.015728659	0.014470366	0.015728659	3.12372E-05	2.81989E-05	795142.8667	332268.6931	595.9010959	28470594
Riverside (SC)		2021 Agricultural - Agricultural Tractors	Aggregated	175	Diesel	0.01487592	0.017999864	0.021421325	0.093848661	0.138854734	2.025505037	0.0080251	0.007383102	0.0080251	1.84061E-05	1.66428E-05	469286.7869	150127.2251	228.7271303	18204632
Riverside (SC)		2021 Agricultural - Agricultural Tractors	Aggregated	300	Diesel	0.011847773	0.014335805	0.017060793	0.043970052	0.125925568	2.072901527	0.00536926	0.00493972	0.00536926	1.89381E-05	1.70322E-05	480268.0218	87003.14578	104.3322191	18854465
Riverside (SC)		2021 Agricultural - Agricultural Tractors	Aggregated	600	Diesel	0.006326129	0.007654616	0.009109626	0.027707969	0.059455693	1.700938373	0.002664418	0.002453105	0.002666418	1.56417E-05	1.39759E-05	394088.3331	42709.3348	38.42256655	15695462
Riverside (SC)		2021 Agricultural - Bale Wagons (Self Propelled)	Aggregated	50	Diesel	1.1973E-05	1.44874E-05	1.72412E-05	7.62303E-05	8.0292E-05	0.001333479	4.45707E-06	4.1005E-06	4.45707E-06	1.20522E-08	1.09567E-08	308.9520438	302.8941679	0.472959036	10601.3
Riverside (SC)		2021 Agricultural - Bale Wagons (Self Propelled)	Aggregated	100	Diesel	6.43173E-05	7.78239E-05	9.26169E-05	0.000606142	0.000589192	0.01404935	4.88557E-05	4.49472E-05	4.88557E-05	1.28835E-07	1.15438E-07	3255.076828	1332.853775	2.147789024	111670.5
Riverside (SC)		2021 Agricultural - Bale Wagons (Self Propelled)	Aggregated	175	Diesel	0.000165293	0.000200004	0.000238022	0.001686403	0.001625343	0.040534088	9.89526E-05	9.10364E-05	9.89526E-05	3.72313E-07	3.33053E-07	9391.293226	2805.057511	4.494559956	362350.9
Riverside (SC)		2021 Agricultural - Bale Wagons (Self Propelled)	Aggregated	300	Diesel	4.19441E-05	5.07523E-05	6.03995E-05	0.000182216	0.000478793	0.012258576	1.90552E-05	1.75308E-05	1.90552E-05	1.12838E-07	1.00724E-07	2840.174463	560.031345	0.902187477	108344.5
Riverside (SC)		2021 Agricultural - Balers (Self Propelled)	Aggregated	50	Diesel	0.000134629	0.000162901	0.000193865	0.000605486	0.000678582	0.011012462	4.43027E-05	4.07585E-05	4.43027E-05	9.84597E-08	9.04851E-08	2551.463764	1893.938193	5.825741144	87137
Riverside (SC)		2021 Agricultural - Balers (Self Propelled)	Aggregated	75	Diesel	6.64158E-05	8.03631E-05	9.56388E-05	0.000459327	0.000641407	0.010750516	4.10061E-05	3.77256E-05	4.10061E-05	9.80681E-08	8.83328E-08	2490.773898	1319.496833	4.026454828	85667.35
Riverside (SC)		2021 Agricultural - Balers (Self Propelled)	Aggregated	100	Diesel	1.41617E-05	1.71356E-05	2.03928E-05	9.92235E-05	0.000129506	0.00232232	9.54393E-06	8.78041E-06	9.54393E-06	2.11902E-08	1.90816E-08	538.0554886	233.4158912	0.717153551	18489.58
Riverside (SC)		2021 Agricultural - Balers (Self Propelled)	Aggregated	175	Diesel	7.67093E-06	9.28182E-06	1.10461E-05	6.36036E-05	8.56653E-05	0.001561901	4.4344E-06	4.07965E-06	4.4344E-06	1.43073E-08	1.28335E-08	361.8748304	131.5120738	0.404377599	13895.91
Riverside (SC)		2021 Agricultural - Combine Harvesters	Aggregated	75	Diesel	1.5393E-05	1.86255E-05	2.21659E-05	9.13397E-05	0.000132607	0.00206476	9.85628E-06	9.06778E-06	9.85628E-06	1.8756E-08	1.69653E-08	478.3816785	325.2943939	0.894446716	18496.66
Riverside (SC)		2021 Agricultural - Combine Harvesters	Aggregated	100	Diesel	0.000104806	0.000126815	0.000150921	0.000622989	0.000809926	0.014064443	7.14404E-05	6.57252E-05	7.14404E-05	1.27761E-07	1.15562E-07	3258.573672	1451.882782	4.016301367	122934.9
Riverside (SC)		2021 Agricultural - Combine Harvesters	Aggregated	175	Diesel	0.000153809	0.000186108	0.000221484	0.001089031	0.001623019	0.026305614	8.70937E-05	8.01262E-05	8.70937E-05	2.40225E-07	2.16143E-07	6094.715543	1917.647539	5.375160894	267205.6

Riverside (SC)	2021	Agricultural - Combine Harvesters	Aggregated	300	Diesel	0.000771347	0.00093333	0.00111074	0.003294467	0.010206865	0.194043763	0.000376001	0.000345921	0.000376001	1.78292E-06	1.59438E-06	44957.76239	8275.745735	21.97867361	1913664
Riverside (SC)	2021	Agricultural - Combine Harvesters	Aggregated	600	Diesel	0.000157233	0.000190251	0.000226415	0.001096538	0.002088288	0.06965776	8.65058E-05	7.95853E-05	8.65058E-05	6.43623E-07	5.72351E-07	16138.92119	2023.375977	4.470527621	670009.8
Riverside (SC)	2021	Agricultural - Construction Equipment	Aggregated	50	Diesel	0.001467447	0.001775611	0.002113124	0.005099796	0.004763845	0.069098852	0.000412281	0.000379299	0.000412281	5.99115E-07	5.67758E-07	16009.42855	15472.46013	40.04174857	685206
Riverside (SC)	2021	Agricultural - Construction Equipment	Aggregated	75	Diesel	0.001000202	0.001210244	0.001440291	0.005119015	0.008233408	0.109087378	0.00059711	0.000549341	0.00059711	9.85326E-07	8.96329E-07	25274.3212	17107.71306	47.23693347	1077297
Riverside (SC)	2021	Agricultural - Construction Equipment	Aggregated	100	Diesel	0.001955999	0.002366758	0.002816638	0.011821369	0.015992631	0.258367422	0.001301998	0.001197838	0.001301998	2.34608E-06	2.1229E-06	59860.83226	30387.01309	62.44406298	2562832
Riverside (SC)	2021	Agricultural - Construction Equipment	Aggregated	175	Diesel	0.003931096	0.004756627	0.005660779	0.026853683	0.036480536	0.59492629	0.002151555	0.001979431	0.002151555	5.41935E-06	4.88828E-06	137837.7452	53673.34187	85.81125195	6579418
Riverside (SC)	2021	Agricultural - Construction Equipment	Aggregated	300	Diesel	0.002111218	0.002554574	0.003040155	0.008133205	0.023523908	0.390214775	0.00099477	0.000915189	0.00099477	3.56859E-06	3.20624E-06	90408.38444	21831.00473	39.01002643	4296886
Riverside (SC)	2021	Agricultural - Construction Equipment	Aggregated	600	Diesel	0.000296155	0.000358347	0.000426463	0.001377686	0.00295937	0.047072751	0.00012731	0.000117125	0.00012731	4.29245E-07	3.86778E-07	10906.22824	1491.750975	1.689331893	526311.8
Riverside (SC)	2021	Agricultural - Cotton Pickers	Aggregated	100	Diesel	2.51707E-05	3.04565E-05	3.62458E-05	0.000297792	0.000276011	0.00732861	2.05789E-05	1.89326E-05	2.05789E-05	6.7456E-08	6.02163E-08	1697.95679	729.4624996	1.610875409	65651.62
Riverside (SC)	2021	Agricultural - Cotton Pickers	Aggregated	175	Diesel	5.8905E-05	7.1275E-05	8.48232E-05	0.000752042	0.000687567	0.01912206	3.84654E-05	3.53881E-05	3.84654E-05	1.76212E-07	1.57119E-07	4430.366737	1538.038563	3.361243654	187241.6
Riverside (SC)	2021	Agricultural - Cotton Pickers	Aggregated	300	Diesel	6.10283E-05	7.38442E-05	8.78807E-05	0.000322981	0.00082908	0.023594695	3.12464E-05	2.87467E-05	3.12464E-05	2.17777E-07	1.93868E-07	5466.625978	951.1814158	2.058830168	234927
Riverside (SC)	2021	Agricultural - Cotton Pickers	Aggregated	600	Diesel	0.00017104	0.000206958	0.000246298	0.000916578	0.002266102	0.068395567	8.901E-05	8.18892E-05	8.901E-05	6.31461E-07	5.6198E-07	15846.48537	2090.69166	4.562170216	678740.9
Riverside (SC)	2021	Agricultural - Forage & Silage Harvesters	Aggregated	100	Diesel	4.64179E-06	5.61657E-06	6.68418E-06	2.76185E-05	3.9516E-05	0.000624324	3.16759E-06	2.91419E-06	3.16759E-06	5.67165E-09	5.12983E-09	144.6488545	69.91073275	0.191157571	5592.859
Riverside (SC)	2021	Agricultural - Forage & Silage Harvesters	Aggregated	300	Diesel	4.51947E-06	5.46855E-06	6.50803E-06	1.79676E-05	5.97626E-05	0.00100782	2.15965E-06	1.98688E-06	2.15965E-06	9.24471E-09	8.28086E-09	233.5004831	45.62238871	0.128259752	10036.93
Riverside (SC)	2021	Agricultural - Forage & Silage Harvesters	Aggregated	600	Diesel	5.39324E-05	6.52582E-05	7.76627E-05	0.000295107	0.000709466	0.016942361	2.74255E-05	2.52314E-05	2.74255E-05	1.56073E-07	1.39209E-07	3925.354841	421.3387292	1.034602181	175734.1
Riverside (SC)	2021	Agricultural - Forage & Silage Harvesters	Aggregated	750	Diesel	0.000115565	0.000139834	0.000166414	0.00078859	0.001537387	0.049796168	6.30739E-05	5.8028E-05	6.30739E-05	4.60011E-07	4.09156E-07	11537.21341	815.2846538	1.785641981	493073.2
Riverside (SC)	2021	Agricultural - Forage & Silage Harvesters	Aggregated	9999	Diesel	7.18558E-05	8.69455E-05	0.000103472	0.000478477	0.001595414	0.029859077	3.92536E-05	3.61133E-05	3.92536E-05	2.75758E-07	2.4534E-07	6918.013071	345.7767941	0.751390196	297368
Riverside (SC)	2021	Agricultural - Forklifts	Aggregated	50	Diesel	0.000122555	0.000148291	0.000176479	0.000484047	0.000458057	0.006980905	3.55002E-05	3.26602E-05	3.55002E-05	6.12982E-08	5.73594E-08	1617.397327	2094.419735	3.473844645	69373.66
Riverside (SC)	2021	Agricultural - Forklifts	Aggregated	75	Diesel	9.9075E-06	1.19881E-05	1.42668E-05	5.43472E-05	8.07671E-05	0.001125889	5.83489E-06	5.3681E-06	5.83489E-06	1.0182E-08	9.25099E-09	260.8558666	172.1333992	0.204593739	11188.67
Riverside (SC)	2021	Agricultural - Forklifts	Aggregated	100	Diesel	3.88949E-06	4.70628E-06	5.60087E-06	2.15995E-05	3.00447E-05	0.000447469	2.46504E-06	2.26783E-06	2.46504E-06	4.04813E-09	3.67668E-09	103.6734866	57.3778007	0.068197917	4446.78
Riverside (SC)	2021	Agricultural - Hay Squeeze/Stack retriever	Aggregated	75	Diesel	7.28771E-06	8.81813E-06	1.04943E-05	3.1191E-05	5.25921E-05	0.000599444	4.41132E-06	4.05841E-06	4.41132E-06	5.3607E-09	4.9254E-09	138.8845412	89.93201302	0.151957608	5673.388
Riverside (SC)	2021	Agricultural - Hay Squeeze/Stack retriever	Aggregated	100	Diesel	1.09553E-05	1.3256E-05	1.57757E-05	4.70205E-05	7.80323E-05	0.000903662	6.88428E-06	6.33354E-06	6.88428E-06	8.08219E-09	7.42504E-09	209.368415	110.3565348	0.186370257	8552.631
Riverside (SC)	2021	Agricultural - Hay Squeeze/Stack retriever	Aggregated	175	Diesel	0.000181792	0.000219968	0.00026178	0.000931688	0.001638027	0.019212092	9.58947E-05	8.82232E-05	9.58947E-05	1.73363E-07	1.57858E-07	4451.226027	1546.556058	2.606790366	188500.9
Riverside (SC)	2021	Agricultural - Hay Squeeze/Stack retriever	Aggregated	300	Diesel	0.000441038	0.000533656	0.000635094	0.001520907	0.004644592	0.056304904	0.000201473	0.000185355	0.000201473	5.10827E-07	4.62635E-07	13045.21451	2493.74017	4.190151333	591976.7
Riverside (SC)	2021	Agricultural - Hay Squeeze/Stack retriever	Aggregated	600	Diesel	0.000110696	0.000133942	0.000159403	0.000593605	0.001164385	0.015409868	4.96535E-05	4.56812E-05	4.96535E-05	1.40107E-07	1.26617E-07	3570.29344	500.0248183	0.84662559	159229.7
Riverside (SC)	2021	Agricultural - Nut Harvester	Aggregated	50	Diesel	0.000293994	0.000355733	0.000423352	0.003152548	0.004047717	0.076455845	0.000146769	0.000135028	0.000146769	7.02794E-07	6.28208E-07	17713.96122	17139.04025	43.59064046	686437.9
Riverside (SC)	2021	Agricultural - Nut Harvester	Aggregated	75	Diesel	0.000170957	0.000206858	0.000246178	0.002685133	0.002674019	0.068930092	0.000116123	0.000106833	0.000116123	6.36439E-07	5.66372E-07	15970.32882	9527.92909	24.13563609	621547.7
Riverside (SC)	2021	Agricultural - Nut Harvester	Aggregated	100	Diesel	0.000399327	0.000483186	0.000575031	0.009399803	0.005877862	0.243040965	0.000395556	0.000363912	0.000395556	2.25013E-06	1.99697E-06	56309.86421	26634.34649	47.32644236	2190884
Riverside (SC)	2021	Agricultural - Nut Harvester	Aggregated	175	Diesel	0.000429077	0.000519183	0.000617871	0.007361484	0.005386526	0.190787657	0.000300497	0.000276457	0.000300497	1.76289E-06	1.56763E-06	44203.359	15043.92414	30.43787503	1851684
Riverside (SC)	2021	Agricultural - Nut Harvester	Aggregated	300	Diesel	3.18016E-05	3.848E-05	4.57944E-05	0.000207784	0.000425018	0.015410575	1.75305E-05	1.61281E-05	1.75305E-05	1.4248E-07	1.26623E-07	3570.457281	780.1600004	1.61766412	154153.5
Riverside (SC)	2021	Agricultural - Nut Harvester	Aggregated	600	Diesel	0.000229407	0.000277582	0.000330346	0.001725244	0.003304697	0.135426134	0.000137328	0.000126341	0.000137328	1.2536E-06	1.11274E-06	31376.71557	4149.894355	9.751161401	1348716
Riverside (SC)	2021	Agricultural - Other Harvesters	Aggregated	50	Diesel	0.000149887	0.000181363	0.000215837	0.000893384	0.000854492	0.013732741	5.02711E-05	4.62494E-05	5.02711E-05	1.23321E-07	1.12837E-07	3181.722052	3255.615173	2.552340208	123021.5
Riverside (SC)	2021	Agricultural - Other Harvesters	Aggregated	75	Diesel	0.000197983	0.00023956	0.000285096	0.001751035	0.001822969	0.038916812	0.000117125	0.000107755	0.000117125	3.56279E-07	3.19764E-07	9016.588688	5222.87021	3.719386607	351978.9
Riverside (SC)	2021	Agricultural - Other Harvesters	Aggregated	100	Diesel	0.000662565	0.000801704	0.000954094	0.005642558	0.005347072	0.124358167	0.000466358	0.00042905	0.000466358	1.13759E-06	1.0218E-06	28812.39183	12995.80685	10.26640741	1113446
Riverside (SC)	2021	Agricultural - Other Harvesters	Aggregated	175	Diesel	0.000481537	0.00058266	0.000693414	0.003617506	0.004591631	0.083266796	0.000271494	0.000249774	0.000271494	7.6056E-07	6.84171E-07	19291.98224	6355.250584	9.318725179	844946.7
Riverside (SC)	2021	Agricultural - Other Harvesters	Aggregated	300	Diesel	0.000408876	0.00049474	0.000588782	0.001584729	0.004583199	0.083643579	0.000188207	0.000173151	0.000188207	7.66247E-07	6.87267E-07	19379.27854	3856.116338	5.801815691	822962.1
Riverside (SC)	2021	Agricultural - Other Harvesters	Aggregated	600	Diesel	0.000127485	0.000154257	0.000183578	0.00067881	0.001409946	0.02498719	5.88354E-05	5.41286E-05	5.88354E-05	2.28744E-07	2.0531E-07	5789.251504	649.5840407	1.072917577	250392
Riverside (SC)	2021	Agricultural - Others	Aggregated	50	Diesel	0.000105697	0.000127893	0.000152203	0.000428072	0.000418982	0.006469216	3.14714E-05	2.89537E-05	3.14714E-05	5.70414E-08	5.3155E-08	1498.844853	1428.637549	2.721890146	64288.69
Riverside (SC)	2021	Agricultural - Others	Aggregated	75	Diesel	1.96514E-05	2.37782E-05	2.8298E-05	0.000120826	0.000171905	0.002667401	1.20823E-05	1.11157E-05	1.20823E-05	2.42373E-08	2.1917E-08	618.0068107	407.8099306	0.825995025	26507.65
Riverside (SC)	2021	Agricultural - Others	Aggregated	100	Diesel	8.02896E-05	9.71504E-05	0.000115617	0.000497706	0.000667512	0.010970461	5.33352E-05	4.90684E-05	5.33352E-05	9.9699E-08	9.014E-08	2541.732672	1252.118745	2.512083943	109020.4
Riverside (SC)	2021	Agricultural - Others	Aggregated	175	Diesel	0.00022438	0.000271499	0.000323107	0.001627191	0.002262019	0.0376762	0.000126731	0.000116593	0.000126731	3.4394E-07	3.09571E-07	8729.15285	3264.672362	6.610566292	416240.2
Riverside (SC)	2021	Agricultural - Others	Aggregated	300	Diesel	0.000250818	0.00030349	0.000361178	0.001017547	0.002894684	0.04934555	0.000122641	0.000112829	0.000122641	4.5176E-07	4.05453E-07	11432.81014	2504.237347	5.024167832	545161.2
Riverside (SC)	2021	Agricultural - Others	Aggregated	600	Diesel	0.001159477	0.001402967	0.001669647	0.006999325	0.013569552	0.249664868	0.00056509	0.000519883	0.00056509	2.28897E-06	2.0514E-06	57844.5483	7382.533735	14.95288751	2758255
Riverside (SC)	2021	Agricultural - Sprayers/Spray rigs	Aggregated	50	Diesel	0.000267182	0.00032329	0.000384742	0.001046312	0.001021294	0.015733256	7.82479E-05	7.1988E-05	7.82479E-05	1.38422E-07	1.29274E-07	3645.218774	3947.636917	7.051747331	148268
Riverside (SC)	2021	Agricultural - Sprayers/Spray rigs	Aggregated	75	Diesel	5.99695E-05	7.25631E-05	8.63561E-05	0.000352771	0.000517441	0.007698808	3.65035E-05	3.35832E-05	3.65035E-05	6.98576E-08	6.32581E-08	1783.727346	1193.987394	2.1415948	72847.25
Riverside (SC)	2021	Agricultural - Sprayers/Spray rigs	Aggregated	100	Diesel	0.000180712	0.000218661	0.000260225	0.001072908	0.001482772	0.02338905	0.000118166	0.000108713	0.000118166	2.12272E-07	1.92179E-07	5418.980386	2524.309858	4.490599053	222833.7
Riverside (SC)	2021	Agricultural - Sprayers/Spray rigs	Aggregated	175	Diesel	0.000225622	0.000273003	0.000324896	0.001592403	0.002277061	0.036449194	0.000126618	0.000116489	0.000126618	3.32483E-07	2.99489E-07	8444.869299	3146.854583	5.628210707	374661.2
Riverside (SC)	2021	Agricultural - Sprayers/Spray rigs	Aggregated	300	Diesel	9.23298E-05	0.000111719	0.000132955	0.000378517	0.001060543	0.017405643	4.5508E-05	4.18673E-05	4.5508E-05	1.59233E-07	1.43015E-07	4032.692198	828.3202244	1.492499976	181289.7
Riverside (SC)	2021	Agricultural - Sprayers/Spray rigs	Aggregated	600	Diesel	6.49175E-06	7.85502E-06	9.34813E-06	4.15188E-05	7.57633E-05	0.001335974	3.17873E-06	2.92443E-06	3.17873E-06	1.22398E-08	1.09772E-08	309.5300894	42.59627278	0.077786752	14056.77
Riverside (SC)	2021	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregated	50	Diesel	5.04258E-05	6.10153E-05	7.26132E-05	0.000347924	0.000401779	0.007018563	1.98178E-05	1.82324E-05	1.98178E-05	6.38126E-08	5.76688E-08	1626.122266	1337.035958	3.05583438	59102.57
Riverside (SC)	2021	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregated	75	Diesel	0.000105073	0.000127139	0.000151306	0.001192249	0.001273566	0.029228895	6.83819E-05	6.29113E-05	6.83819E-05	2.68896E-07	2.40162E-07	6772.00696	3767.840081	8.168197942	242350.2
Riverside (SC)	2021	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregated	100	Diesel	0.000237589	0.000287483	0.000342129	0.002854379	0.002556091	0.070078773	0.000189514	0.000174353	0.000189514	6.45131E-07	5.7581E-07	16236.46536	6876.592605	14.82637976	589082
Riverside (SC)	2021	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregated	175	Diesel	0.000128888	0.000155954	0.000185598	0.001796561	0.001503807	0.045748144	8.45704E-05	7.78048E-05	8.45704E-05	4.21935E-07	3.75895E-07	10599.33166	3447.249089	7.154199245	407367.7
Riverside (SC)	2021	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregated	300	Diesel	6.3251E-05	7.65337E-05	9.10815E-05	0.000355774	0.000819928	0.025497422	3.26111E-05	3.00022E-05	3.26111E-05	2.3542E-07	2.09502E-07	5907.466445	1137.279869	2.349212702	233666.1
Riverside (SC)	2021	AirGrSupp - A/C Tug Narrow Body	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Narrow Body	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Narrow Body	Aggregated	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Narrow Body	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Narrow Body	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Narrow Body	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Narrow Body	Aggregated	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Wide Body	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Wide Body	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Wide Body	Aggregated	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Wide Body	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Wide Body	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Wide Body	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Wide Body	Aggregated	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - A/C Tug Wide Body	Aggregated	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Baggage Tug	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Baggage Tug	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Baggage Tug	Aggregated	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Baggage Tug	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Baggage Tug	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Baggage Tug	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Belt Loader	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Belt Loader	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Belt Loader	Aggregated	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Belt Loader	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Belt Loader	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Belt Loader	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Belt Loader	Aggregated	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Belt Loader	Aggregated	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Bobtail	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Bobtail	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Bobtail	Aggregated	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Bobtail	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Bobtail	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Bobtail	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Loader	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Loader	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Loader	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Loader	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Loader	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Loader	Aggregated	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Loader	Aggregated	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Tractor	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Tractor	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Tractor	Aggregated	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Tractor	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Tractor	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Tractor	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Cargo Tractor	Aggregated	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Forklift	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Forklift	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Forklift	Aggregated	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Forklift	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Forklift	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Forklift	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Forklift	Aggregated	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Lift	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Lift	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Lift	Aggregated	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Lift	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Lift	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Lift	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Other GSE	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Other GSE	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Other GSE	Aggregated	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Other GSE	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Other GSE	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Other GSE	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Other GSE	Aggregated	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Passenger Stand	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Passenger Stand	Aggregated	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Passenger Stand	Aggregated	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Passenger Stand	Aggregated	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Passenger Stand	Aggregated	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Passenger Stand	Aggregated	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	AirGrSupp - Passenger Stand	Aggregated	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	ConstMin - Bore/Drill Rigs	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	ConstMin - Bore/Drill Rigs	Aggregated	50	Diesel	0.000156771	0.000189693	0.000225751	0.001214224	0.001237174	0.159869554	7.76719E-05	7.14581E-05	7.76719E-05	1.47337E-06	1.30483E-06	5186.791616	4488.26719	12.75914471	176233.8
Riverside (SC)	2021	ConstMin - Bore/Drill Rigs	Aggregated	75	Diesel	8.93348E-05	0.000108095	0.000128642	0.001210549	0.001502517	0.181665285	8.40214E-05	7.72997E-05	8.40214E-05	1.67691E-06	1.48273E-06	5893.930093	3138.906051	7.78979361	228602.6
Riverside (SC)	2021	ConstMin - Bore/Drill Rigs	Aggregated	100	Diesel	0.000250729	0.000303382	0.000361049	0.00512337	0.003711519	0.815393051	0.000164178	0.000151044	0.000164178	7.53119E-06	6.65513E-06	26454.52956	12245.08464	31.15917444	1027207
Riverside (SC)	2021	ConstMin - Bore/Drill Rigs	Aggregated	175	Diesel	0.000279427	0.000338107	0.000402375	0.006410014	0.003495096	1.154024422	0.000153962	0.000141645	0.000153962	1.06611E-05	9.41899E-06	37441.05145	9622.480942	30.75625408	1435887
Riverside (SC)	2021	ConstMin - Bore/Drill Rigs	Aggregated	300	Diesel	0.000351971	0.000425885	0.000506838	0.003364148	0.005024631	1.64386312	0.00015299	0.000140751	0.00015299	1.51878E-05	1.3417E-05	53333.32852	9958.342828	31.02486765	2070260
Riverside (SC)	2021	ConstMin - Bore/Drill Rigs	Aggregated	600	Diesel	0.000517536	0.000626219	0.000745252	0.005659936	0.006447677	2.998748946	0.0002141	0.000196972	0.0002141	2.77094E-05	2.44754E-05	97291.10703	9098.293791	26.32413013	3785672
Riverside (SC)	2021	ConstMin - Bore/Drill Rigs	Aggregated	750	Diesel	0.000187519	0.000226898	0.000270027	0.002389244	0.002103384	1.308070749	7.85537E-05	7.22694E-05	7.85537E-05	1.20881E-05	1.06763E-05	42438.91488	2518.736699	5.103657882	1622087
Riverside (SC)	2021	ConstMin - Bore/Drill Rigs	Aggregated	9999	Diesel	0.000247694	0.000299709	0.000356679	0.00163645	0.006593506	0.864180672	0.000160462	0.000147625	0.000160462	7.98235E-06	7.05333E-06	28037.39018	580.8970137	0.805840718	1080678
Riverside (SC)	2021	ConstMin - Cranes	Aggregated	25	Diesel	4.89022E-06	5.91716E-06	7.04191E-06	2.76425E-05	2.47927E-05	0.003056826	1.88261E-06	1.732E-06	1.88261E-06	2.81152E-08	2.49494E-08	99.17534014	239.5679457	0.506034688	5989.199
Riverside (SC)	2021	ConstMin - Cranes	Aggregated	50	Diesel	0.00015374	0.000186025	0.000221386	0.000652141	0.000521094	0.049528354	5.54039E-05	5.09716E-05	5.54039E-05	4.53302E-07	4.04244E-07	1606.892899	2330.169621	5.397703338	96071.96
Riverside (SC)	2021	ConstMin - Cranes	Aggregated	75	Diesel	4.10064E-05	4.96177E-05	5.90492E-05	0.000171725	0.000374498	0.020115337	3.47853E-05	3.20025E-05	3.47853E-05	1.84746E-07	1.64179E-07	652.6199694	625.5808438	1.686782293	43521.57
Riverside (SC)	2021	ConstMin - Cranes	Aggregated	100	Diesel	0.001160667	0.001404408	0.001671361	0.008782256	0.012413914	1.130398784	0.00085887	0.000790161	0.00085887	1.04163E-05	9.22616E-06	36674.54364	28042.97057	64.09772714	2470996
Riverside (SC)	2021	ConstMin - Cranes	Aggregated	175	Diesel	0.002652966	0.003210089	0.003820271	0.022684616	0.032781919	3.41510062	0.001758815	0.00161811	0.001758815	3.14947E-05	2.78736E-05	110799.1786	50720.79985	112.1710225	7427714
Riverside (SC)	2021	ConstMin - Cranes	Aggregated	300	Diesel	0.003324791	0.004022997	0.004787699	0.019987373	0.047691234	5.955518317	0.001930353	0.001775925	0.001930353	5.4962E-05	4.86081E-05	193220.233	58748.42083	125.8339591	12974625
Riverside (SC)	2021	ConstMin - Cranes	Aggregated	600	Diesel	0.004332749	0.005242626	0.006239159	0.042051509	0.061155663	10.30699858	0.002428122	0.002233872	0.002428122	9.51633E-05	8.41243E-05	334399.2179	60965.66215	124.6532115	22480066
Riverside (SC)	2021	ConstMin - Cranes	Aggregated	750	Diesel	0.000163851	0.00019826	0.000235945	0.001602917	0.002096155	0.161131468	0.000108352	9.96836E-05	0.000108352	1.48482E-06	1.31513E-06	5227.733027	546.1692116	1.349425835	349726.8
Riverside (SC)	2021	ConstMin - Cranes	Aggregated	9999	Diesel	0.000687167	0.000831472	0.00098952	0.007069446	0.009471229	0.569178766	0.000452544	0.00041634	0.000452544	5.24172E-06	4.64556E-06	18466.37822	1320.861106	2.698851669	1239236
Riverside (SC)	2021	ConstMin - Crawler Tractors	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	ConstMin - Crawler Tractors	Aggregated	50	Diesel	0.000473926	0.000573451	0.000682454	0.002041674	0.001560038	0.160390154	0.000164074	0.000150948	0.000164074	1.46867E-06	1.30908E-06	5203.681899	5049.374804	14.97065012	212461.3
Riverside (SC)	2021	ConstMin - Crawler Tractors	Aggregated	75	Diesel	6.01516E-05	7.27834E-05	8.66182E-05	0.000235946	0.000576403	0.019700372	4.22608E-05	3.888E-05	4.22608E-05	1.80335E-07	1.60792E-07	639.1568869	409.8655698	2.245597517	28642.49
Riverside (SC)	2021	ConstMin - Crawler Tractors	Aggregated	100	Diesel	0.007319732	0.008856876	0.010540414	0.053003774	0.074522674	7.068494894	0.00614221	0.005650833	0.00614221	6.51321E-05	5.76921E-05	229329.5323	117950.8602	254.800465	10310899
Riverside (SC)	2021	ConstMin - Crawler Tractors	Aggregated	175	Diesel	0.005295092	0.006407061	0.007624932	0.048557897	0.064580171	7.728929214	0.003597689	0.003309874	0.003597689	7.12989E-05	6.30825E-05	250756.5965	75762.76325	169.1683463	11299145
Riverside (SC)	2021	ConstMin - Crawler Tractors	Aggregated	300	Diesel	0.004981291	0.006027362	0.007173059	0.031729376	0.07392751	8.140656338	0.002949927	0.002713933	0.002949927	7.5115E-05	6.64429E-05	264114.6296	57869.46911	131.5920145	11911481
Riverside (SC)	2021	ConstMin - Crawler Tractors	Aggregated	600	Diesel	0.011128249	0.013465181	0.016024678	0.087850132	0.156366102	28.11822084	0.005950172	0.005474158	0.005950172	0.000259633	0.000229497	912264.7085	106954.6317	227.5538818	41147947
Riverside (SC)	2021	ConstMin - Crawler Tractors	Aggregated	750	Diesel	0.000296496	0.000358761	0.000426955	0.001769174	0.005655908	0.514929914	0.000163356	0.000150288	0.000163356	4.75189E-06	4.20279E-06	16706.33398	1205.427317	2.694717021	753998.6
Riverside (SC)	2021	ConstMin - Crawler Tractors	Aggregated	9999	Diesel	0.000979719	0.001185459	0.001410795	0.005259247	0.019573271	1.637754058	0.000542276	0.000498894	0.000542276	1.51125E-05	1.33671E-05	53135.12674	2457.334235	4.491195035	2392658
Riverside (SC)	2021	ConstMin - Excavators	Aggregated	25	Diesel	1.08524E-05	1.31314E-05	1.56275E-05	3.68755E-05	2.50475E-05	0.001940335	3.49087E-06	3.2116E-06	3.49087E-06	1.76138E-08	1.58368E-08	62.95202983	114.653132	0.450017575	2866.328
Riverside (SC)	2021	ConstMin - Excavators	Aggregated	50	Diesel	0.005062785	0.00612597	0.007290411	0.048657443	0.042749879	6.412866455	0.002197642	0.002021831	0.002197642	5.91382E-05	5.2341E-05	208058.3896	264695.469	366.0142942	9472561
Riverside (SC)	2021	ConstMin - Excavators	Aggregated	75	Diesel	0.000138896	0.000168065	0.000200011	0.002979181	0.00255536	0.465039823	0.000112393	0.000103402	0.000112393	4.29536E-06	3.79559E-06	15087.7049	10278.13676	13.20051553	764991.2
Riverside (SC)	2021	ConstMin - Excavators	Aggregated	100	Diesel	0.003433906	0.004155026	0.004944825	0.05251198	0.042380466	7.863783856	0.002412864	0.002219835	0.002412864	7.26016E-05	6.41831E-05	255131.8068	158579.5074	250.6597892	12974778
Riverside (SC)	2021	ConstMin - Excavators	Aggregated	175	Diesel	0.005996979	0.007256345	0.00863565	0.102885152	0.068084992	17.57579581	0.003314646	0.003049474	0.003314646	0.000162317	0.000143451	570227.3388	197574.9513	337.9631987	28853455
Riverside (SC)	2021	ConstMin - Excavators	Aggregated	300	Diesel	0.005867968	0.007100241	0.008449874	0.047894362	0.075315052	22.50339693	0.002323035	0.002137192	0.002323035	0.000207879	0.00018367	730097.9303	168867.2974	293.261453	36936483
Riverside (SC)	2021	ConstMin - Excavators	Aggregated	600	Diesel	0.008800021	0.010648026	0.012672031	0.081079917	0.097771544	39.56411952	0.003287411	0.003024418	0.003287411	0.000365526	0.000322917	1283614.286	192663.665	303.1618396	65164212
Riverside (SC)	2021	ConstMin - Excavators	Aggregated	750	Diesel	0.000204639	0.000247613	0.00029468	0.001546344	0.003056945	0.557168225	9.41887E-05	8.66536E-05	9.41887E-05	5.14516E-06	4.54753E-06	18076.70945	1429.184315	2.550099591	906438.7
Riverside (SC)	2021	ConstMin - Excavators	Aggregated	9999	Diesel	0.000283262	0.000342747	0.000407898	0.00247343	0.006912925	1.107583215	0.000130292	0.000119869	0.000130292	1.02317E-05	9.03995E-06	35934.31763	1509.458443	2.250087874	1817215
Riverside (SC)	2021	ConstMin - Graders	Aggregated	25	Diesel	3.43614E-06	4.15773E-06	4.94805E-06	1.61462E-05	1.27539E-05	0.001233061	1.5329E-06	1.41027E-06	1.5329E-06	1.12972E-08	1.00641E-08	40.00529202	68.07400789	0.301482627	1701.85
Riverside (SC)	2021	ConstMin - Graders	Aggregated	50	Diesel	0.00013868	0.000167802	0.000199699	0.000570529	0.000409176	0.041183938	4.70308E-05	4.32683E-05	4.70308E-05	3.76606E-07	3.36138E-07	1336.167528	1522.815557	4.371498091	56850.22
Riverside (SC)	2021	ConstMin - Graders	Aggregated	75	Diesel	5.50945E-05	6.66643E-05	7.9336E-05	0.00045945	0.000551019	0.061684612	3.81949E-05	3.51393E-05	3.81949E-05	5.68652E-07	5.03462E-07	2001.289316	1299.192441	3.316308896	95046.46
Riverside (SC)	2021	ConstMin - Graders	Aggregated	100	Diesel	0.001469536	0.001778139	0.002116132	0.007837844	0.013792443	0.876565377	0.001139776	0.001048594	0.001139776	8.0602E-06	7.15441E-06	28439.19829	15162.46415	41.75534383	1362058
Riverside (SC)	2021	ConstMin - Graders	Aggregated	175	Diesel	0.008324567	0.010072726	0.011987377	0.071523843	0.096526354	10.75204357	0.005381494	0.004950974	0.005381494	9.91582E-05	8.77567E-05	348838.2124	110805.0838	237.4175687	16455766
Riverside (SC)	2021	ConstMin - Graders	Aggregated	300	Diesel	0.011707651	0.014166258	0.016859018	0.057654148	0.173325388	22.64101031	0.005714033	0.00525691	0.005714033	0.000208976	0.000184793	734562.6449	160407.0394	213.7511825	34742282
Riverside (SC)	2021	ConstMin - Graders	Aggregated	600	Diesel	0.000517624	0.000626325	0.000745379	0.002090317	0.008213723	0.974391621	0.000252382	0.000232191	0.000252382	8.99321E-06	7.95285E-06	31613.06304	4230.969776	5.577428598	1489789
Riverside (SC)	2021	ConstMin - Graders	Aggregated	9999	Diesel	0.000606098	0.000733379	0.000872781	0.003074967	0.010056713	0.768127664	0.000316301	0.000290997	0.000316301	7.08354E-06	6.26935E-06	24921.05612	651.4682555	0.904447881	1178716
Riverside (SC)	2021	ConstMin - Off-Highway Tractors	Aggregated	25	Diesel	3.68388E-06	4.4575E-06	5.30479E-06	1.22489E-05	8.43433E-06	0.000644517	1.15955E-06	1.06679E-06	1.15955E-06	5.84837E-09	5.26046E-09	20.91065656	33.42011851	0.148009283	835.503
Riverside (SC)	2021	ConstMin - Off-Highway Tractors	Aggregated	50	Diesel	0.003385457	0.004096402	0.004875057	0.02430582	0.02038353	2.662261144	0.001394879	0.001283288	0.001394879	2.45124E-05	2.1729E-05	86374.13086	91461.67383	140.3128006	3455619
Riverside (SC)	2021	ConstMin - Off-Highway Tractors	Aggregated	75	Diesel	0.000885568	0.001071537	0.001275218	0.012391937	0.010759162	1.807248338	0.000595548	0.000547904	0.000595548	1.66823E-05	1.47505E-05	58634.182	36635.80231	58.46366691	2598767
Riverside (SC)	2021	ConstMin - Off-Highway Tractors	Aggregated	100	Diesel	0.001177107	0.001424299	0.001695034	0.011387945	0.013122968	1.568951595	0.001055873	0.000971403	0.001055873	1.44704E-05	1.28056E-05	50902.9066	28341.096	43.5147293	2255873
Riverside (SC)	2021	ConstMin - Off-Highway Tractors	Aggregated	175	Diesel	0.001184153	0.001432825	0.00170518	0.017649048	0.014682744	2.894736307	0.000713775	0.000656673	0.000713775	2.67277E-05	2.36264E-05	93916.5315	26362.29078	38.92644151	4169063
Riverside (SC)	2021	ConstMin - Off-Highway Tractors	Aggregated	300	Diesel	0.000808406	0.000978171	0.001164104	0.005647489	0.010480429	2.482111247	0.000361398	0.000332486	0.000361398	2.29241E-05	2.02587E-05	80529.36584	16677.97594	26.04963386	3581552
Riverside (SC)	2021	ConstMin - Off-Highway Tractors	Aggregated	600	Diesel	0.001877285	0.002271515	0.00270329	0.016319247	0.019961098	8.10778573	0.000679559	0.000625194	0.000679559	7.49042E-05	6.61747E-05	263048.1789	32694.06643	47.95500779	11703605
Riverside (SC)	2021	ConstMin - Off-Highway Tractors	Aggregated	750	Diesel	0.000126276	0.000152793	0.000181837	0.000721797	0.001175103	0.357803093	5.86203E-05	5.39307E-05	5.86203E-05	3.30428E-06	2.92034E-06	11608.52732	822.3020159	1.184074267	523895.7
Riverside (SC)	2021	ConstMin - Off-Highway Tractors	Aggregated	9999	Diesel	0.000173842	0.000210349	0.000250332	0.001086115	0.00306159	0.449666761	8.12101E-05	7.47133E-05	8.12101E-05	4.15218E-06	3.67012E-06	14588.94283	396.1955049	0.740046417	648003.6
Riverside (SC)	2021	ConstMin - Off-Highway Trucks	Aggregated	25	Diesel	3.49199E-05	4.2253E-05	5.02846E-05	0.000159634	0.000103908	0.011335744	1.06739E-05	9.81995E-06	1.06739E-05	1.03757E-07	9.25208E-08	367.7757293	670.2072844	0.439947506	16755.18
Riverside (SC)	2021	ConstMin - Off-Highway Trucks	Aggregated	50	Diesel	0.000268597	0.000325002	0.00038678	0.00230342	0.001893091	0.24511192	0.00012447	0.000114512	0.00012447	2.25812E-06	2.00057E-06	7952.3863	12621.85087	7.919055115	364617.2
Riverside (SC)	2021	ConstMin - Off-Highway Trucks	Aggregated	75	Diesel	3.85659E-05	4.66648E-05	5.55349E-05	0.000585206	0.000338609	0.077122155	1.36727E-05	1.25789E-05	1.36727E-05	7.11876E-07	6.29461E-07	2502.143392	1782.969922	1.17319335	126823.8
Riverside (SC)	2021	ConstMin - Off-Highway Trucks	Aggregated	100	Diesel	0.000110907	0.000134198	0.000159707	0.00132192	0.001189487	0.177640254	8.62355E-05	7.93367E-05	8.62355E-05	1.63905E-06	1.44988E-06	5763.342419	3329.016272	2.639685038	291522.7
Riverside (SC)	2021	ConstMin - Off-Highway Trucks	Aggregated	175	Diesel	0.002708447	0.003277221	0.003900164	0.038596332	0.026439847	6.088086757	0.001341359	0.00123405	0.001341359	5.62061E-05	4.96901E-05	197521.27	63471.84179	45.75454066	10015357
Riverside (SC)	2021	ConstMin - Off-Highway Trucks	Aggregated	300	Diesel	0.004896904	0.005925254	0.007051542	0.032357439	0.050247904	12.41910007	0.001960912	0.001804039	0.001960912	0.000114674	0.000101363	402924.0244	97050.9155	76.99081362	20498543
Riverside (SC)	2021	ConstMin - Off-Highway Trucks	Aggregated	600	Diesel	0.018802773	0.022751356	0.027075994	0.136134288	0.199154894	53.26394508	0.007317069	0.006731704	0.007317069	0.000491888	0.000434733	1728090.038	232449.3435	172.7527208	87524075
Riverside (SC)	2021	ConstMin - Off-Highway Trucks	Aggregated	750	Diesel	0.008076982	0.009773148	0.011630854	0.063803992	0.087519541	17.8279309	0.003496251	0.003216551	0.003496251	0.000164586	0.000145509	578407.5841	44230.7006	36.80894137	29346147
Riverside (SC)	2021	ConstMin - Off-Highway Trucks	Aggregated	9999	Diesel	0.011995466	0.014514514	0.017273471	0.078630583	0.232801361	31.86060296	0.005338872	0.004911763	0.005338872	0.000294207	0.000260042	1033682.175	41214.10556	29.47648293	52254666
Riverside (SC)	2021	ConstMin - Other Construction Equipment	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	ConstMin - Other Construction Equipment	Aggregated	50	Diesel	0.002026833	0.002452468	0.00291864	0.012893578	0.01190934	1.434171678	0.000926909	0.000852757	0.000926909	1.31988E-05	1.17055E-05	46530.12065	50975.13254	108.4383132	1940765
Riverside (SC)	2021	ConstMin - Other Construction Equipment	Aggregated	75	Diesel	0.000237711	0.000287631	0.000342304	0.001320333	0.002434103	0.149779478	0.000185434	0.0001706	0.000185434	1.37765E-06	1.22248E-06	4859.430221	3137.090935	10.36220759	228708.4
Riverside (SC)	2021	ConstMin - Other Construction Equipment	Aggregated	100	Diesel	0.003150232	0.003811781	0.004536335	0.030237623	0.035501771	4.35401072	0.002568051	0.002362607	0.002568051	4.01605E-05	3.55369E-05	141261.0827	80234.65562	180.8278198	6579417
Riverside (SC)	2021	ConstMin - Other Construction Equipment	Aggregated	175	Diesel	0.001276366	0.001544403	0.001837967	0.014856414	0.016091011	2.450292846	0.000843002	0.000775561	0.000843002	2.26159E-05	1.9999E-05	79497.05289	24393.15175	59.69215359	3713483
Riverside (SC)	2021	ConstMin - Other Construction Equipment	Aggregated	300	Diesel	0.001412777	0.001709461	0.002034399	0.009365271	0.0209419	3.238909315	0.000787506	0.000724506	0.000787506	2.99029E-05	2.64355E-05	105082.8457	22244.52705	55.4597026	4869174
Riverside (SC)	2021	ConstMin - Other Construction Equipment	Aggregated	600	Diesel	0.003937342	0.004764183	0.005669772	0.035303521	0.054568952	12.38232913	0.001960533	0.001803691	0.001960533	0.000114363	0.000101063	401731.0318	49121.44942	111.2112984	18739338
Riverside (SC)	2021	ConstMin - Other Construction Equipment	Aggregated	750	Diesel	0.000758893	0.000918261	0.001092806	0.005102404	0.010969304	2.417480768	0.000367339	0.000337952	0.000367339	2.2328E-05	1.97312E-05	78432.50115	5953.700655	11.96762003	3659968
Riverside (SC)	2021	ConstMin - Other Construction Equipment	Aggregated	9999	Diesel	0.000200225	0.000242272	0.000288324	0.001498659	0.005011209	0.789148479	0.000107285	9.8702E-05	0.000107285	7.29006E-06	6.44092E-06	25603.05331	1305.322464	2.77298513	1192602
Riverside (SC)	2021	ConstMin - Pavers	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	ConstMin - Pavers	Aggregated	50	Diesel	0.000297901	0.000360461	0.000428978	0.001582568	0.001373677	0.175802792	0.000110431	0.000101596	0.000110431	1.61645E-06	1.43488E-06	5703.727984	6160.618163	17.5665793	239101.3
Riverside (SC)	2021	ConstMin - Pavers	Aggregated	75	Diesel	0.000506284	0.000612604	0.00072905	0.002432388	0.004532241	0.309766181	0.00043911	0.000403981	0.00043911	2.84875E-06	2.52827E-06	10050.02258	6449.014951	18.73768459	469874.2
Riverside (SC)	2021	ConstMin - Pavers	Aggregated	100	Diesel	0.000594245	0.000719037	0.000855713	0.009016732	0.008290988	1.382680916	0.000467348	0.00042996	0.000467348	1.27657E-05	1.12853E-05	44859.55958	25867.29133	66.02106055	2097503
Riverside (SC)	2021	ConstMin - Pavers	Aggregated	175	Diesel	0.000948692	0.001147917	0.001366116	0.013304772	0.012025129	2.325033752	0.000588479	0.000541401	0.000588479	2.14676E-05	1.89766E-05	75433.15952	22213.65935	58.26248803	3506403
Riverside (SC)	2021	ConstMin - Pavers	Aggregated	300	Diesel	0.000477186	0.000577395	0.000687147	0.003515644	0.008465604	1.818137073	0.000248481	0.000228603	0.000248481	1.67953E-05	1.48394E-05	58987.45503	12417.91949	27.96013873	2750054
Riverside (SC)	2021	ConstMin - Pavers	Aggregated	600	Diesel	7.82483E-05	9.46804E-05	0.000112678	0.000614239	0.001165953	0.325413155	4.02819E-05	3.70594E-05	4.02819E-05	3.00626E-06	2.65598E-06	10557.67144	1336.376179	3.074151378	490912.5
Riverside (SC)	2021	ConstMin - Pavers	Aggregated	750	Diesel	1.2854E-05	1.55533E-05	1.85097E-05	0.000125559	0.00015307	0.068043587	6.77419E-06	6.23226E-06	6.77419E-06	6.28711E-07	5.55363E-07	2207.599235	137.0091334	0.292776322	102756.9
Riverside (SC)	2021	ConstMin - Paving Equipment	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	ConstMin - Paving Equipment	Aggregated	50	Diesel	0.000182314	0.0002206	0.000262532	0.001583686	0.001460148	0.218931356	7.53561E-05	6.93276E-05	7.53561E-05	2.01866E-06	1.78689E-06	7102.986745	10072.37491	21.63060639	349493.8
Riverside (SC)	2021	ConstMin - Paving Equipment	Aggregated	75	Diesel	3.52604E-05	4.26651E-05	5.0775E-05	0.00027036	0.000373472	0.035296323	2.66215E-05	2.44918E-05	2.66215E-05	3.25274E-07	2.88084E-07	1145.150327	929.9658437	2.338443934	62450.98
Riverside (SC)	2021	ConstMin - Paving Equipment	Aggregated	100	Diesel	0.000484556	0.000586313	0.000697761	0.006130461	0.005744316	0.923293444	0.000363882	0.000334771	0.000363882	8.52177E-06	7.5358E-06	29955.23896	18220.79636	40.19200512	1630116
Riverside (SC)	2021	ConstMin - Paving Equipment	Aggregated	175	Diesel	0.000368513	0.000445901	0.000530659	0.005672538	0.004485153	0.972891413	0.00022439	0.000206439	0.00022439	8.98381E-06	7.94061E-06	31564.39046	11802.61299	25.72288328	1722038
Riverside (SC)	2021	ConstMin - Paving Equipment	Aggregated	300	Diesel	0.000223971	0.000271005	0.000322518	0.001531501	0.003323881	0.702819176	0.000120671	0.000111018	0.000120671	6.49119E-06	5.73632E-06	22802.19415	5302.587359	11.39991418	1239427
Riverside (SC)	2021	ConstMin - Paving Equipment	Aggregated	600	Diesel	0.000227145	0.000274846	0.000327089	0.0014645	0.003512539	0.669278711	0.000110143	0.000101331	0.000110143	6.181E-06	5.46256E-06	21714.01069	2926.356323	6.430720819	1180101
Riverside (SC)	2021	ConstMin - Paving Equipment	Aggregated	750	Diesel	2.58745E-05	3.13082E-05	3.72593E-05	0.00025992	0.000310944	0.141573288	7.75103E-06	7.13094E-06	7.75103E-06	1.30814E-06	1.1555E-06	4593.189427	390.5658538	0.730763729	249855.4
Riverside (SC)	2021	ConstMin - Paving Equipment	Aggregated	9999	Diesel	9.58521E-06	1.15981E-05	1.38027E-05	0.000119101	0.000283463	0.064282831	4.61785E-06	4.24842E-06	4.61785E-06	5.94039E-07	5.24668E-07	2085.585646	134.6437417	0.292305492	113506.7
Riverside (SC)	2021	ConstMin - Rollers	Aggregated	25	Diesel	3.12363E-06	3.77959E-06	4.49803E-06	1.04168E-05	7.33146E-06	0.000564873	9.89941E-07	9.10746E-07	9.89941E-07	5.12882E-09	4.61041E-09	18.32666622	34.00020454	0.150578338	850.0051
Riverside (SC)	2021	ConstMin - Rollers	Aggregated	50	Diesel	0.004296426	0.005198675	0.006186853	0.028208538	0.026702449	3.609856266	0.001802797	0.001658573	0.001802797	3.3246E-05	2.94632E-05	117117.811	151950.6541	444.0555192	5425722
Riverside (SC)	2021	ConstMin - Rollers	Aggregated	75	Diesel	8.73897E-05	0.000105742	0.000125841	0.000348716	0.000854834	0.030144763	6.03982E-05	5.55663E-05	6.03982E-05	2.76082E-07	2.46038E-07	978.0136419	719.7843301	3.162145101	50275.08
Riverside (SC)	2021	ConstMin - Rollers	Aggregated	100	Diesel	0.003021726	0.003656288	0.004351285	0.036983053	0.037346727	5.612312186	0.002274975	0.002092977	0.002274975	5.1798E-05	4.58069E-05	182085.288	107522.0768	328.1101989	9377780
Riverside (SC)	2021	ConstMin - Rollers	Aggregated	175	Diesel	0.0017619	0.002131899	0.002537136	0.032332765	0.023395331	5.834607298	0.001075214	0.000989196	0.001075214	5.3891E-05	4.76213E-05	189297.4081	67901.12848	191.5356461	9765514
Riverside (SC)	2021	ConstMin - Rollers	Aggregated	300	Diesel	0.000348339	0.00042149	0.000501608	0.002827983	0.005203965	0.966173053	0.000184511	0.00016975	0.000184511	8.9223E-06	7.88577E-06	31346.42067	7469.674936	24.54426912	1614531
Riverside (SC)	2021	ConstMin - Rollers	Aggregated	600	Diesel	0.000136319	0.000164946	0.000196299	0.00148232	0.001988186	0.566757814	6.54841E-05	6.02454E-05	6.54841E-05	5.23587E-06	4.6258E-06	18387.83311	2696.386221	8.884121952	942351
Riverside (SC)	2021	ConstMin - Rough Terrain Forklifts	Aggregated	25	Diesel	2.84539E-07	3.44292E-07	4.09736E-07	6.10094E-06	8.10602E-06	0.000975687	2.67707E-07	2.46291E-07	2.67707E-07	9.01218E-09	7.96343E-09	31.65510214	54.73563115	0.173770837	1368.391
Riverside (SC)	2021	ConstMin - Rough Terrain Forklifts	Aggregated	50	Diesel	0.000250159	0.000302692	0.000360229	0.001450981	0.001372272	0.182912815	9.47861E-05	8.72033E-05	9.47861E-05	1.68361E-06	1.49291E-06	5934.404844	5395.089092	19.98364624	256695.2
Riverside (SC)	2021	ConstMin - Rough Terrain Forklifts	Aggregated	75	Diesel	1.37778E-05	1.66711E-05	1.984E-05	5.59939E-05	0.000137758	0.005013718	9.351E-06	8.60292E-06	9.351E-06	4.5941E-08	4.09213E-08	162.6645715	117.9072198	0.521312511	7821.996
Riverside (SC)	2021	ConstMin - Rough Terrain Forklifts	Aggregated	100	Diesel	0.003140127	0.003799554	0.004521783	0.086976724	0.056421532	14.27542943	0.001713421	0.001576348	0.001713421	0.000131889	0.000116514	463150.5864	231316.1124	827.3229545	22257144
Riverside (SC)	2021	ConstMin - Rough Terrain Forklifts	Aggregated	175	Diesel	0.001441136	0.001743775	0.002075236	0.018664262	0.015747793	3.254353255	0.001062886	0.000977855	0.001062886	3.00449E-05	2.65616E-05	105583.9073	40727.42946	151.354399	5076397
Riverside (SC)	2021	ConstMin - Rough Terrain Forklifts	Aggregated	300	Diesel	4.10408E-05	4.96593E-05	5.90987E-05	0.000431322	0.000685883	0.231949439	1.57295E-05	1.44711E-05	1.57295E-05	2.14326E-06	1.89314E-06	7525.344113	1720.346773	6.950833476	361725.4
Riverside (SC)	2021	ConstMin - Rough Terrain Forklifts	Aggregated	600	Diesel	1.28915E-05	1.55988E-05	1.85638E-05	0.000156302	0.000231911	0.086068723	4.97504E-06	4.57704E-06	4.97504E-06	7.95361E-07	7.02481E-07	2792.404914	351.7598088	1.390166695	135237.2
Riverside (SC)	2021	ConstMin - Rough Terrain Forklifts	Aggregated	750	Diesel	2.45511E-06	2.97069E-06	3.53536E-06	2.72886E-05	3.75391E-05	0.01483842	2.64617E-07	2.43447E-07	2.64617E-07	1.37115E-07	1.21109E-07	481.4162094	37.07897594	0.173770837	23174.36
Riverside (SC)	2021	ConstMin - Rubber Tired Dozers	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021	ConstMin - Rubber Tired Dozers	Aggregated	50	Diesel	0.00025285	0.000305948	0.000364104	0.00157613	0.001172617	0.155180157	9.25403E-05	8.51371E-05	9.25403E-05	1.42713E-06	1.26656E-06	5034.649306	5367.824148	5.58718139	221399.5
Riverside (SC)	2021	ConstMin - Rubber Tired Dozers	Aggregated	75	Diesel	0.000281614	0.000340753	0.000405524	0.001284101	0.002468768	0.125315409	0.000198791	0.000182888	0.000198791	1.15015E-06	1.02281E-06	4065.720448	2860.046837	4.4410929	196936.9
Riverside (SC)	2021	ConstMin - Rubber Tired Dozers	Aggregated	100	Diesel	0.000782001	0.000946221	0.001126081	0.004877806	0.007363457	0.603848319	0.000648725	0.000596827	0.000648725	5.55942E-06	4.92853E-06	19591.19369	11315.48588	12.75023445	949522.1
Riverside (SC)	2021	ConstMin - Rubber Tired Dozers	Aggregated	175	Diesel	0.00071649	0.000866953	0.001031746	0.004887197	0.008466749	0.66821735	0.000484394	0.000445642	0.000484394	6.15651E-06	5.4539E-06	21679.57602	7221.363522	9.598491106	1060525
Riverside (SC)	2021	ConstMin - Rubber Tired Dozers	Aggregated	300	Diesel	0.000755349	0.000913972	0.001087702	0.004869904	0.009730614	0.733844583	0.000470349	0.000432721	0.000470349	6.7621E-06	5.98954E-06	23808.7793	5331.756148	7.879358371	1163589

Riverside (SC)	2021 ConstMin - Rubber Tired Dozers	Aggregated	600	Diesel	0.006143825	0.007434028	0.008847108	0.058881751	0.078424089	8.136799252	0.003503065	0.00322282	0.003503065	7.50444E-05	6.64115E-05	263989.4906	34797.04782	48.27897765	12834338
Riverside (SC)	2021 ConstMin - Rubber Tired Dozers	Aggregated	750	Diesel	8.89045E-05	0.000107574	0.000128022	0.000473344	0.001585005	0.231505792	4.44042E-05	4.08518E-05	4.44042E-05	2.13772E-06	1.88952E-06	7510.950468	564.7957673	0.573044245	367372.8
Riverside (SC)	2021 ConstMin - Rubber Tired Loaders	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 ConstMin - Rubber Tired Loaders	Aggregated	50	Diesel	0.000936729	0.001133441	0.001348889	0.005514311	0.004253552	0.501738184	0.000349908	0.000321915	0.000349908	4.61072E-06	4.09512E-06	16278.34282	18769.91903	22.09957203	779573.6
Riverside (SC)	2021 ConstMin - Rubber Tired Loaders	Aggregated	100	Diesel	0.009629622	0.011651842	0.013866655	0.091105491	0.098638649	12.21484345	0.007401621	0.006809491	0.007401621	0.000112643	9.96959E-05	396297.1435	248737.8408	274.6021146	21404572
Riverside (SC)	2021 ConstMin - Rubber Tired Loaders	Aggregated	175	Diesel	0.015735748	0.019040255	0.022659477	0.184452978	0.171568046	28.97852633	0.009383519	0.008632837	0.009383519	0.000267449	0.000236519	940176.3726	335565.4903	360.1632954	50331204
Riverside (SC)	2021 ConstMin - Rubber Tired Loaders	Aggregated	300	Diesel	0.017251346	0.020874129	0.024841939	0.100141254	0.233911282	40.58646663	0.007837065	0.007210099	0.007837065	0.000374724	0.000331261	1316783.212	341715.5299	326.5659731	70575379
Riverside (SC)	2021 ConstMin - Rubber Tired Loaders	Aggregated	600	Diesel	0.023404408	0.028319333	0.033702347	0.155989771	0.2795711	55.81840513	0.01053204	0.009689477	0.01053204	0.000515367	0.000455582	1810966.681	295227.0225	303.1225082	97305189
Riverside (SC)	2021 ConstMin - Rubber Tired Loaders	Aggregated	750	Diesel	0.001821337	0.002203818	0.002622725	0.015402592	0.021552338	4.883175419	0.000763109	0.00070206	0.000763109	4.50927E-05	3.98558E-05	158429.2486	13097.13499	13.88689323	8498056
Riverside (SC)	2021 ConstMin - Rubber Tired Loaders	Aggregated	9999	Diesel	0.001613196	0.001951968	0.002323003	0.008303742	0.033690955	3.747489469	0.000833629	0.000766939	0.000833629	3.4599E-05	3.05865E-05	121583.1687	6787.448176	5.823535872	6498609
Riverside (SC)	2021 ConstMin - Scrapers	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 ConstMin - Scrapers	Aggregated	50	Diesel	3.31357E-05	4.00942E-05	4.77154E-05	0.000117586	8.41159E-05	0.007717444	1.08451E-05	9.97747E-06	1.08451E-05	7.03575E-08	6.29887E-08	250.3839587	285.1968921	0.885843484	9226.144
Riverside (SC)	2021 ConstMin - Scrapers	Aggregated	75	Diesel	0.000176084	0.000213062	0.000253561	0.000821421	0.001523119	0.092559406	0.000135127	0.000124317	0.000135127	8.50475E-07	7.55457E-07	3002.988	1801.190892	4.281576841	119633.9
Riverside (SC)	2021 ConstMin - Scrapers	Aggregated	100	Diesel	0.000349508	0.000422905	0.000503292	0.003049129	0.00443707	0.407696922	0.000329885	0.000303494	0.000329885	3.75887E-06	3.32757E-06	13227.27763	5840.785678	9.596637746	528399.6
Riverside (SC)	2021 ConstMin - Scrapers	Aggregated	175	Diesel	0.003667671	0.004437882	0.005281447	0.035401979	0.044376224	5.469945389	0.002376573	0.002186447	0.002376573	5.04623E-05	4.4645E-05	177466.3541	42368.65693	95.81873688	7079422
Riverside (SC)	2021 ConstMin - Scrapers	Aggregated	300	Diesel	0.003995093	0.004834062	0.005752933	0.023466606	0.054047457	6.46263427	0.002353194	0.002164939	0.002353194	5.96304E-05	5.27472E-05	209673.0516	37741.99993	94.19469049	8432873
Riverside (SC)	2021 ConstMin - Scrapers	Aggregated	600	Diesel	0.034679937	0.041962724	0.04993911	0.302053069	0.479728135	79.90665978	0.01828069	0.016818235	0.01828069	0.000737736	0.000652187	2592483.575	245843.0546	518.3660789	1.04E+08
Riverside (SC)	2021 ConstMin - Scrapers	Aggregated	750	Diesel	0.001372833	0.001661128	0.00197688	0.01563325	0.022765977	1.275507568	0.000928049	0.000853805	0.000928049	1.17515E-05	1.04105E-05	41382.43831	2652.281091	6.939107293	1650347
Riverside (SC)	2021 ConstMin - Scrapers	Aggregated	9999	Diesel	0.001775014	0.002147767	0.002556021	0.021959904	0.028053113	1.849050294	0.001122048	0.001032284	0.001122048	1.70421E-05	1.50917E-05	59990.40043	1505.492887	3.838655098	2404388
Riverside (SC)	2021 ConstMin - Skid Steer Loaders	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 ConstMin - Skid Steer Loaders	Aggregated	50	Diesel	0.001564102	0.001892563	0.002252307	0.017275237	0.016541281	2.731323292	0.000584625	0.000537855	0.000584625	2.52055E-05	2.22927E-05	88614.77619	95669.11312	307.4595815	4167744
Riverside (SC)	2021 ConstMin - Skid Steer Loaders	Aggregated	75	Diesel	0.003960368	0.004792045	0.00570293	0.088400987	0.063525392	14.25324544	0.002549655	0.002345683	0.002549655	0.00013166	0.000116333	462430.851	344195.408	974.9685093	24262557
Riverside (SC)	2021 ConstMin - Skid Steer Loaders	Aggregated	100	Diesel	7.85362E-05	9.50289E-05	0.000113092	0.001574681	0.001436331	0.242729657	9.35509E-05	8.60668E-05	9.35509E-05	2.2418E-06	1.98113E-06	7875.096411	5519.639984	17.2250534	419008.8
Riverside (SC)	2021 ConstMin - Skid Steer Loaders	Aggregated	175	Diesel	2.40719E-05	2.9127E-05	3.46636E-05	0.000530889	0.00031146	0.0979704	1.30096E-05	1.19688E-05	1.30096E-05	9.05063E-07	7.99621E-07	3178.541724	1098.317662	4.115720724	167217.6
Riverside (SC)	2021 ConstMin - Skid Steer Loaders	Aggregated	300	Diesel	1.42699E-05	1.72666E-05	2.05486E-05	0.000168118	0.000212663	0.091019738	6.06235E-06	5.57737E-06	6.06235E-06	8.41095E-07	7.42891E-07	2953.03517	755.6742172	2.591379715	154932.5
Riverside (SC)	2021 ConstMin - Skid Steer Loaders	Aggregated	600	Diesel	6.44882E-06	7.80307E-06	9.2863E-06	4.92737E-05	0.000103296	0.026323006	4.45431E-06	4.09797E-06	4.45431E-06	2.43176E-07	2.14845E-07	854.0209288	94.65288532	0.304868202	44751.88
Riverside (SC)	2021 ConstMin - Skid Steer Loaders	Aggregated	9999	Diesel	1.68894E-05	2.04362E-05	2.43208E-05	0.000114774	0.000305599	0.035631818	1.01026E-05	9.29438E-06	1.01026E-05	3.28927E-07	2.90822E-07	1156.035098	60.57784661	0.304868202	60577.85
Riverside (SC)	2021 ConstMin - Surfacing Equipment	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 ConstMin - Surfacing Equipment	Aggregated	50	Diesel	1.76848E-05	2.13986E-05	2.54662E-05	0.000166032	0.00017686	0.025304365	8.61178E-06	7.92283E-06	8.61178E-06	2.33421E-07	2.06531E-07	820.9722418	1300.223888	5.393280363	46707.17
Riverside (SC)	2021 ConstMin - Surfacing Equipment	Aggregated	75	Diesel	1.40392E-05	1.69874E-05	2.02164E-05	0.000120203	0.000204947	0.016982042	1.23008E-05	1.13167E-05	1.23008E-05	1.56586E-07	1.38605E-07	550.9636586	521.9318514	2.074338601	35180.99
Riverside (SC)	2021 ConstMin - Surfacing Equipment	Aggregated	100	Diesel	6.62121E-05	8.01166E-05	9.53454E-05	0.00095149	0.000885696	0.147321809	4.78494E-05	4.40215E-05	4.78494E-05	1.36008E-06	1.20242E-06	4779.693861	3436.038345	12.86089933	305687.8
Riverside (SC)	2021 ConstMin - Surfacing Equipment	Aggregated	175	Diesel	5.76403E-05	6.97448E-05	8.3002E-05	0.00078219	0.000807464	0.136236541	3.94407E-05	3.62854E-05	3.94407E-05	1.25785E-06	1.11194E-06	4420.04454	2093.81635	8.159065164	283384.5
Riverside (SC)	2021 ConstMin - Surfacing Equipment	Aggregated	300	Diesel	9.39477E-05	0.000113677	0.000135285	0.000728412	0.001650284	0.268638304	5.4372E-05	5.00222E-05	5.4372E-05	2.48088E-06	2.19259E-06	8715.673916	2449.160919	10.09511453	558905.9
Riverside (SC)	2021 ConstMin - Surfacing Equipment	Aggregated	600	Diesel	0.000163139	0.000197398	0.00023492	0.001724256	0.002408509	0.849949198	8.69224E-05	7.99686E-05	8.69224E-05	7.85331E-06	6.93717E-06	27575.66568	4354.688364	15.48839489	1768670
Riverside (SC)	2021 ConstMin - Surfacing Equipment	Aggregated	750	Diesel	8.93439E-05	0.000108106	0.000128655	0.000811861	0.001378727	0.423135014	5.35069E-05	4.92263E-05	5.35069E-05	3.90941E-06	3.45357E-06	13728.14952	1384.844607	4.701834163	881716.4
Riverside (SC)	2021 ConstMin - Surfacing Equipment	Aggregated	9999	Diesel	3.86407E-05	4.67553E-05	5.56427E-05	0.00029967	0.000990831	0.139358911	2.15469E-05	1.98232E-05	2.15469E-05	1.28728E-06	1.13743E-06	4521.346388	331.1449168	1.244603161	290027.7
Riverside (SC)	2021 ConstMin - Sweepers/Scrubbers	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 ConstMin - Sweepers/Scrubbers	Aggregated	50	Diesel	0.00285474	0.003454236	0.004110826	0.016716996	0.013740486	1.664948216	0.001166497	0.001073177	0.001166497	1.53076E-05	1.35891E-05	54017.41127	57866.90903	82.8206772	2063094
Riverside (SC)	2021 ConstMin - Sweepers/Scrubbers	Aggregated	75	Diesel	0.00037233	0.000450519	0.000536155	0.003247463	0.003969981	0.446138721	0.000281522	0.000259	0.000281522	4.1136E-06	3.64132E-06	14474.47947	8441.461791	14.65852694	613653.6
Riverside (SC)	2021 ConstMin - Sweepers/Scrubbers	Aggregated	100	Diesel	0.001392901	0.00168541	0.002005777	0.014984295	0.015253919	2.127093962	0.001132374	0.001041784	0.001132374	1.96243E-05	1.73611E-05	69011.22102	37045.25445	52.77069698	2929891
Riverside (SC)	2021 ConstMin - Sweepers/Scrubbers	Aggregated	175	Diesel	0.000385726	0.000466728	0.000555445	0.003938479	0.004496354	0.641867019	0.000227064	0.000208899	0.000227064	5.92281E-06	5.23883E-06	20824.66853	5527.462826	7.769019277	883467.3
Riverside (SC)	2021 ConstMin - Sweepers/Scrubbers	Aggregated	300	Diesel	0.000112011	0.000135534	0.000161296	0.000812981	0.001546031	0.385470353	4.9288E-05	4.53449E-05	4.9288E-05	3.5605E-06	3.14616E-06	12506.16109	2530.05544	3.518046465	530562.3
Riverside (SC)	2021 ConstMin - Sweepers/Scrubbers	Aggregated	600	Diesel	4.21892E-05	5.10489E-05	6.07524E-05	0.000690422	0.000581918	0.052057324	2.93807E-05	2.70303E-05	2.93807E-05	4.8003E-07	4.24885E-07	1688.942533	217.1266835	0.293170539	71651.81
Riverside (SC)	2021 ConstMin - Sweepers/Scrubbers	Aggregated	9999	Diesel	2.70696E-05	3.27542E-05	3.89802E-05	0.000134687	0.000540049	0.066885773	1.55746E-05	1.43286E-05	1.55746E-05	6.1758E-07	5.45913E-07	2170.035255	108.5633417	0.146585269	92061.71
Riverside (SC)	2021 ConstMin - Tractors/Loaders/Backhoes	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 ConstMin - Tractors/Loaders/Backhoes	Aggregated	50	Diesel	0.005854462	0.007083899	0.008430425	0.045931787	0.039603972	5.399275688	0.002384496	0.002193736	0.002384496	4.97433E-05	4.40682E-05	175173.5535	219856.8375	430.2991584	8337259
Riverside (SC)	2021 ConstMin - Tractors/Loaders/Backhoes	Aggregated	75	Diesel	0.001938902	0.002346071	0.002792018	0.007804205	0.018412205	0.765120298	0.001474464	0.001356507	0.001474464	7.01575E-06	6.24481E-06	24823.48544	18175.09821	81.11214102	1305021
Riverside (SC)	2021 ConstMin - Tractors/Loaders/Backhoes	Aggregated	100	Diesel	0.037984069	0.045960723	0.054697059	0.575220876	0.470608727	86.05421542	0.027357669	0.025169056	0.027357669	0.000794474	0.000702363	2791934.247	1757175.212	2840.574166	1.46E+08
Riverside (SC)	2021 ConstMin - Tractors/Loaders/Backhoes	Aggregated	175	Diesel	0.005245537	0.0063471	0.007553574	0.088761851	0.059224682	15.01891393	0.002989659	0.002750486	0.002989659	0.0001387	0.000122582	487272.1219	179320.9552	326.8474444	25725376
Riverside (SC)	2021 ConstMin - Tractors/Loaders/Backhoes	Aggregated	300	Diesel	0.00311321	0.003766984	0.004483022	0.021662404	0.042987258	9.050982917	0.001474784	0.001356801	0.001474784	8.35874E-05	7.38729E-05	293649.1729	74863.6517	136.1364585	15422226
Riverside (SC)	2021 ConstMin - Tractors/Loaders/Backhoes	Aggregated	600	Diesel	0.003653668	0.004420939	0.005261282	0.031948605	0.044069227	12.79034692	0.001595671	0.001468017	0.001595671	0.000118143	0.000104393	414968.7198	65008.29805	119.6441562	21959816
Riverside (SC)	2021 ConstMin - Tractors/Loaders/Backhoes	Aggregated	750	Diesel	5.71696E-05	6.91752E-05	8.23242E-05	0.00049702	0.000572825	0.241709097	1.37344E-05	1.26356E-05	1.37344E-05	2.23301E-06	1.9728E-06	7841.985459	644.7459264	1.199440163	419822.2
Riverside (SC)	2021 ConstMin - Tractors/Loaders/Backhoes	Aggregated	9999	Diesel	0.001181751	0.001429918	0.001701721	0.008345681	0.027046105	4.2229806	0.0005482	0.000504344	0.0005482	3.90081E-05	3.44674E-05	137009.9548	3884.048314	6.297060855	7188377
Riverside (SC)	2021 ConstMin - Trenchers	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 ConstMin - Trenchers	Aggregated	50	Diesel	0.002168497	0.002623881	0.003122635	0.015131923	0.014461085	1.911864546	0.001016029	0.000934747	0.001016029	1.76111E-05	1.56044E-05	62028.33964	53727.25936	141.0991602	2143163
Riverside (SC)	2021 ConstMin - Trenchers	Aggregated	75	Diesel	0.000146009	0.000176671	0.000210253	0.000909856	0.001485007	0.110247459	0.000100148	9.21363E-05	0.000100148	1.01491E-06	8.99825E-07	3576.857403	1941.458412	7.215297966	137070.2
Riverside (SC)	2021 ConstMin - Trenchers	Aggregated	100	Diesel	0.001052102	0.001273043	0.001515027	0.008969085	0.01182713	1.275835302	0.00086644	0.000797125	0.00086644	1.17642E-05	1.04132E-05	41393.07131	18991.71728	58.2034036	1589610
Riverside (SC)	2021 ConstMin - Trenchers	Aggregated	175	Diesel	0.000181703	0.00021986	0.000261652	0.001786554	0.002310434	0.282933532	0.000118299	0.000108835	0.000118299	2.61041E-06	2.30927E-06	9179.466835	2476.920788	8.65835756	353884.6
Riverside (SC)	2021 ConstMin - Trenchers	Aggregated	300	Diesel	0.000337368	0.000408215	0.000485809	0.002000096	0.004924437	0.672440199	0.000195833	0.000180166	0.000195833	6.20692E-06	5.48837E-06	21816.58171	3673.1126	11.86515666	836768.6
Riverside (SC)	2021 ConstMin - Trenchers	Aggregated	600	Diesel	0.000307662	0.000372271	0.000443034	0.00326804	0.004155927	0.934415422	0.000164148	0.000151016	0.000164148	8.6299E-06	7.62657E-06	30316.07929	3009.486816	8.33767765	1161173
Riverside (SC)	2021 ConstMin - Trenchers	Aggregated	750	Diesel	3.14246E-05	3.80238E-05	4.52515E-05	0.00054307	0.000288157	0.303455944	5.14828E-06	4.73642E-06	5.14828E-06	2.80466E-06	2.47677E-06	9845.293898	586.5105132	1.282719638	379069
Riverside (SC)	2021 ConstMin - Trenchers	Aggregated	9999	Diesel	4.54384E-05	5.49805E-05	6.54314E-05	0.000656453	0.000629706	0.024949374	2.91681E-05	2.68347E-05	2.91681E-05	2.29306E-07	2.03633E-07	809.4549498	36.20435267	0.160339955	31135.74
Riverside (SC)	2021 Industrial - Aerial Lifts	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 Industrial - Aerial Lifts	Aggregated	50	Diesel	0.000185254	0.000224158	0.000266766	0.004234128	0.003973986	0.798675721	3.6066E-05	3.31807E-05	3.6066E-05	7.3786E-06	6.51868E-06	25912.15419	31693.32032	105.9631956	1461972
Riverside (SC)	2021 Industrial - Aerial Lifts	Aggregated	75	Diesel	0.000156993	0.000189961	0.00022607	0.005658918	0.002917079	0.943268687	6.63832E-05	6.10726E-05	6.63832E-05	8.71628E-06	7.69883E-06	30603.31372	26568.88648	89.11109703	1919746
Riverside (SC)	2021 Industrial - Aerial Lifts	Aggregated	100	Diesel	8.03451E-05	9.72175E-05	0.000115697	0.00272298	0.001684376	0.45032598	2.13817E-05	1.96711E-05	2.13817E-05	4.16108E-06	3.6755E-06	14610.33046	11739.99393	39.25488842	916336.4
Riverside (SC)	2021 Industrial - Aerial Lifts	Aggregated	175	Diesel	1.2802E-05	1.54904E-05	1.84348E-05	0.000459526	0.000143262	0.085170903	4.87908E-06	4.48875E-06	4.87908E-06	7.87063E-07	6.95153E-07	2763.276135	1329.096395	4.450554229	173398.4
Riverside (SC)	2021 Industrial - Aerial Lifts	Aggregated	300	Diesel	5.66524E-07	6.85495E-07	8.15795E-07	9.1657E-06	6.53392E-06	0.005089624	8.67638E-08	7.98227E-08	8.67638E-08	4.70391E-08	4.15408E-08	165.127259	45.05220132	0.150018682	10362.01
Riverside (SC)	2021 Industrial - Aerial Lifts	Aggregated	600	Diesel	3.23071E-07	3.90915E-07	4.65222E-07	6.46309E-06	1.78442E-06	0.003614371	6.12273E-08	5.63291E-08	6.12273E-08	3.3407E-08	2.95E-08	117.2642854	15.01740044	0.050006227	7358.526
Riverside (SC)	2021 Industrial - Forklifts	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 Industrial - Forklifts	Aggregated	50	Diesel	0.000757357	0.000916402	0.001090595	0.005061642	0.004133796	0.537540842	0.000290635	0.000267384	0.000290635	4.94711E-06	4.38734E-06	17439.92063	35548.7696	49.12216617	1507064
Riverside (SC)	2021 Industrial - Forklifts	Aggregated	75	Diesel	0.000121983	0.000147599	0.000175655	0.000488496	0.001159647	0.046574468	9.17932E-05	8.44498E-05	9.17932E-05	4.26945E-07	3.80135E-07	1511.057318	1989.623765	3.93789266	145717.6
Riverside (SC)	2021 Industrial - Forklifts	Aggregated	100	Diesel	0.004053524	0.004904764	0.005837074	0.045167919	0.044911052	6.427839446	0.003178271	0.00292401	0.003178271	5.9307E-05	5.24632E-05	208544.1718	243706.682	323.8409252	20089400
Riverside (SC)	2021 Industrial - Forklifts	Aggregated	175	Diesel	0.000991443	0.001199645	0.001427677	0.012530795	0.011354892	2.046396762	0.000614051	0.000564927	0.000614051	1.88902E-05	1.67024E-05	66393.08924	45228.30525	61.05763465	6390211
Riverside (SC)	2021 Industrial - Forklifts	Aggregated	300	Diesel	0.00017871	0.000216239	0.000257342	0.001184604	0.002229539	0.446097783	8.75311E-05	8.05286E-05	8.75311E-05	4.11903E-06	3.64099E-06	14473.15128	6620.62089	8.93130294	1389690
Riverside (SC)	2021 Industrial - Forklifts	Aggregated	600	Diesel	3.90828E-05	4.72902E-05	5.62792E-05	0.00026016	0.000426306	0.11223111	1.5762E-05	1.4501E-05	1.5762E-05	1.03646E-06	9.16015E-07	3641.214749	985.4160549	1.380292273	348113.3
Riverside (SC)	2021 Industrial - Forklifts	Aggregated	9999	Diesel	1.19615E-06	1.44734E-06	1.72245E-06	1.68021E-05	3.97547E-05	0.008913705	3.4717E-07	3.19396E-07	3.4717E-07	8.23757E-08	7.27525E-08	289.1953344	31.62498037	0.040596832	27829.98
Riverside (SC)	2021 Industrial - Other General Industrial Equipment	Aggregated	25	Diesel	7.01683E-07	8.49036E-07	1.01042E-06	2.33309E-06	1.60652E-06	0.000122764	2.20864E-07	2.03195E-07	2.20864E-07	1.11396E-09	1.00198E-09	3.982927486	8.106360888	0.03590103	202.659
Riverside (SC)	2021 Industrial - Other General Industrial Equipment	Aggregated	50	Diesel	0.001348919	0.001632192	0.001942444	0.010434265	0.0086904	1.155901703	0.000567312	0.000521927	0.000567312	1.06464E-05	9.43431E-06	37501.95775	54198.64252	65.48347807	1903537
Riverside (SC)	2021 Industrial - Other General Industrial Equipment	Aggregated	75	Diesel	0.000350881	0.000424566	0.000505269	0.005245152	0.004401461	0.76172519	0.00025551	0.000235069	0.00025551	7.032E-06	6.2171E-06	24713.3349	19530.33103	23.29976824	1396817
Riverside (SC)	2021 Industrial - Other General Industrial Equipment	Aggregated	100	Diesel	0.000229503	0.000277698	0.000330484	0.001355972	0.002086425	0.169000233	0.00019045	0.000175214	0.00019045	1.55561E-06	1.37936E-06	5483.026451	3936.448847	5.241550328	309693.3
Riverside (SC)	2021 Industrial - Other General Industrial Equipment	Aggregated	175	Diesel	0.000184393	0.000223115	0.000265525	0.002691688	0.002040637	0.43522381	0.000107831	9.92044E-05	0.000107831	4.01833E-06	3.55224E-06	14120.3572	5375.327905	6.533987395	798101.7
Riverside (SC)	2021 Industrial - Other General Industrial Equipment	Aggregated	300	Diesel	0.000170467	0.000206265	0.000245472	0.001123958	0.002441819	0.458570435	7.86019E-05	7.23137E-05	7.86019E-05	4.2346E-06	3.74279E-06	14877.81275	3862.113518	4.810737972	839745.6
Riverside (SC)	2021 Industrial - Other General Industrial Equipment	Aggregated	600	Diesel	0.000378254	0.000457687	0.000544686	0.003232212	0.00380599	1.361636736	0.000137795	0.000126771	0.000137795	1.25777E-05	1.11135E-05	44176.80432	6553.749587	7.790523433	2496613
Riverside (SC)	2021 Industrial - Other General Industrial Equipment	Aggregated	750	Diesel	6.13047E-05	7.41787E-05	8.82788E-05	0.000782941	0.000585378	0.227929538	2.7879E-05	2.56487E-05	2.7879E-05	2.10548E-06	1.86033E-06	7394.922831	660.1009671	0.789822652	417255.6
Riverside (SC)	2021 Industrial - Other General Industrial Equipment	Aggregated	9999	Diesel	2.29675E-05	2.77907E-05	3.30732E-05	0.000154649	0.000562463	0.078775371	1.13988E-05	1.04869E-05	1.13988E-05	7.27628E-07	6.42954E-07	2555.780161	124.1894488	0.143604119	144525.5
Riverside (SC)	2021 Industrial - Other Material Handling Equipment	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 Industrial - Other Material Handling Equipment	Aggregated	50	Diesel	8.26481E-05	0.000100004	0.000119013	0.000543829	0.00045409	0.053737609	3.59273E-05	3.30531E-05	3.59273E-05	4.94351E-07	4.38599E-07	1743.457555	2154.178556	2.867665662	76246.05
Riverside (SC)	2021 Industrial - Other Material Handling Equipment	Aggregated	75	Diesel	1.1483E-05	1.38945E-05	1.65356E-05	0.000103869	0.000111044	0.01321377	8.91421E-06	8.20107E-06	8.91421E-06	1.21823E-07	1.07849E-07	428.7062041	299.3353576	0.491599828	21021.72
Riverside (SC)	2021 Industrial - Other Material Handling Equipment	Aggregated	100	Diesel	0.000211933	0.000256439	0.000305183	0.003813981	0.002826197	0.572196244	0.000127406	0.000117214	0.000127406	5.28388E-06	4.67019E-06	18564.27697	9765.261032	12.69966222	907114.1
Riverside (SC)	2021 Industrial - Other Material Handling Equipment	Aggregated	175	Diesel	0.000218583	0.000264485	0.000314759	0.002713913	0.002246155	0.429185379	0.000146195	0.000134499	0.000146195	3.96147E-06	3.50295E-06	13924.44695	4991.111832	6.88239759	680152.1
Riverside (SC)	2021 Industrial - Other Material Handling Equipment	Aggregated	300	Diesel	0.000295335	0.000357355	0.000425282	0.001587188	0.00374746	0.680335379	0.000141598	0.00013027	0.000141598	6.28118E-06	5.55281E-06	22072.73212	4556.400302	6.104031195	1079381
Riverside (SC)	2021 Industrial - Other Material Handling Equipment	Aggregated	600	Diesel	0.000322486	0.000390208	0.00046438	0.002484912	0.00419695	0.875884627	0.000150193	0.000138178	0.000150193	8.08831E-06	7.14885E-06	28417.1121	3797.979227	5.038898235	1387672
Riverside (SC)	2021 Industrial - Other Material Handling Equipment	Aggregated	750	Diesel	1.76924E-05	2.14078E-05	2.5477E-05	7.98832E-05	0.000190765	0.038638329	9.50396E-06	8.74364E-06	9.50396E-06	3.567E-07	3.15361E-07	1253.578021	98.37551075	0.122899957	61320.74
Riverside (SC)	2021 Industrial - Other Material Handling Equipment	Aggregated	9999	Diesel	7.73039E-06	9.35377E-06	1.11318E-05	0.000116331	0.000276377	0.062461854	2.36686E-06	2.17751E-06	2.36686E-06	5.77259E-07	5.09805E-07	2026.506073	98.37551075	0.122899957	99129.72
Riverside (SC)	2021 Locomotive - Line haul	Aggregated	9999	Diesel	0.063998489	0.077438172	0.092157825	0.791697038	2.196716077	0	0.032614595	0.029813024	0.032614595	0.003088613	0.002477027	0	0	0	0
Riverside (SC)	2021 Locomotive - Passenger	Aggregated	9999	Diesel	0.00458538	3.26958E-06	3.89107E-06	0.050234233	0.104165385	0	0.001908881	0.001756171	0.001908881	0.000146147	0.000161049	0	0	0	0
Riverside (SC)	2021 OFF - Agricultural - 2-Wheel Tractors	Aggregated	25	Gasoline	0.001651252	0.001518822	0.001817102	0.059452347	0.001236052	0.1113605	0.000707713	0.000534717	0.000786348	3.27102E-06	2.80543E-06	8008.1	19786.65	77.91	138539.4
Riverside (SC)	2021 OFF - Agricultural - Agricultural Mowers	Aggregated	25	Gasoline	0.001314467	0.001209046	0.00144649	0.055177462	0.001000385	0.094022769	0.000709374	0.000535972	0.000788194	2.48785E-06	2.46785E-06	7044.5	12085.15	67.03	151102.7
Riverside (SC)	2021 OFF - Agricultural - Agricultural Tractors	Aggregated	25	Diesel	0.008028125	0.009554132	0.0115605	0.045598163	0.072862685	9.68380568	0.002758154	0.002537502	0.002758154	0.00013114	8.10637E-05	322232.95	445964.3	837.03	8060452
Riverside (SC)	2021 OFF - Agricultural - Agricultural Tractors	Aggregated	100	Gasoline	0.001170841	0.00107694	0.001288439	0.044767633	0.003050465	0.847756673	5.91076E-05	4.46591E-05	6.56751E-05	8.19051E-06	1.22293E-05	34908.6	7117.5	12.94	583635
Riverside (SC)	2021 OFF - Agricultural - Agricultural Tractors	Aggregated	175	Gasoline	0.000157959	0.000145291	0.000173825	0.006168298	0.000707583	0.172245596	1.23482E-05	9.32973E-06	1.37202E-05	1.71108E-06	2.41926E-06	6905.8	978.2	1.78	122275
Riverside (SC)	2021 OFF - Agricultural - Balers	Aggregated	50	Gasoline	0.000207275	0.000190652	0.000228094	0.010739743	0.000395555	0.146540237	1.01024E-05	7.63289E-06	1.12248E-05	1.78166E-06	2.17887E-06	6219.6	3222.95	47.25	112803.3
Riverside (SC)	2021 OFF - Agricultural - Balers	Aggregated	100	Gasoline	9.60442E-05	8.83414E-05	0.000105691	0.002890267	0.000361494	0.135504641	9.44771E-06	7.13827E-06	1.04975E-05	1.30916E-06	1.86304E-06	5318.05	1635.2	24.2	104652.8
Riverside (SC)	2021 OFF - Agricultural - Combines	Aggregated	100	Gasoline	2.80215E-05	2.57742E-05	3.0836E-05	0.001287062	7.27366E-05	0.072368722	5.04572E-06	3.81232E-06	5.60636E-06	6.99183E-07	9.87142E-07	2817.8	405.15	3.24	41730.45
Riverside (SC)	2021 OFF - Agricultural - Combines	Aggregated	175	Gasoline	1.7893E-05	1.6458E-05	1.96901E-05	0.00190629	6.9188E-05	0.062259088	4.46331E-06	3.37228E-06	4.95924E-06	6.18479E-07	8.68224E-07	2478.35	222.65	1.81	36514.6
Riverside (SC)	2021 OFF - Agricultural - Combines	Aggregated	300	Gasoline	3.26203E-06	3.00042E-06	3.58967E-06	0.000416308	3.8897E-05	0.013212972	9.74727E-07	7.36461E-07	1.08303E-06	1.35067E-07	1.82851E-07	521.95	32.85	0.33	6372.9
Riverside (SC)	2021 OFF - Agricultural - Hydro Power Units	Aggregated	25	Gasoline	0.001292793	0.001189111	0.001422639	0.049732481	0.000977897	0.087594169	0.000621971	0.000469934	0.000691079	2.41325E-06	2.2671E-06	6471.45	12282.25	31.68	120617.9
Riverside (SC)	2021 OFF - Agricultural - Hydro Power Units	Aggregated	25	Diesel	5.44005E-05	6.47411E-05	7.83367E-05	0.000288052	0.000494384	0.065275392	1.85914E-05	1.71041E-05	1.85914E-05	8.56073E-07	5.46344E-07	2171.75	4723.1	5.78	79161.2
Riverside (SC)	2021 OFF - Agricultural - Hydro Power Units	Aggregated	50	Gasoline	1.17871E-05	1.08418E-05	1.2971E-05	0.000931243	1.85745E-05	0.010059975	6.93526E-07	5.23997E-07	7.70584E-07	1.22311E-07	1.53442E-07	438	200.75	0.45	7628.5
Riverside (SC)	2021 OFF - Agricultural - Hydro Power Units	Aggregated	100	Gasoline	8.91541E-07	8.2004E-07	9.81087E-07	4.3532E-05	2.28236E-06	0.002159537	1.50568E-07	1.13763E-07	1.67298E-07	2.08641E-08	2.94097E-08	83.95	25.55	0.05	1686.3
Riverside (SC)	2021 OFF - Agricultural - Other Agricultural Equipment	Aggregated	25	Gasoline	0.000169591	0.00015599	0.000186624	0.005958243	0.000119188	0.011149164	6.64597E-05	5.0214E-05	7.38441E-05	3.21805E-07	2.78752E-07	795.7	1788.5	12.33	15552.65
Riverside (SC)	2021 OFF - Agricultural - Other Agricultural Equipment	Aggregated	25	Diesel	0.000126101	0.000150071	0.000181585	0.000671253	0.001148715	0.151067644	4.47909E-05	4.12076E-05	4.47909E-05	1.98788E-06	1.2644E-06	5026.05	8906	19.97	172353
Riverside (SC)	2021 OFF - Agricultural - Other Agricultural Equipment	Aggregated	50	Gasoline	9.09388E-06	8.36455E-06	1.00073E-05	0.000551997	1.58622E-05	0.006882576	4.74479E-07	3.58495E-07	5.27199E-07	8.36796E-08	9.97371E-08	284.7	178.85	1.48	5186.65
Riverside (SC)	2021 OFF - Agricultural - Other Agricultural Equipment	Aggregated	100	Gasoline	5.56538E-05	5.11903E-05	6.12436E-05	0.002023755	0.00017712	0.091071746	6.34974E-06	4.79758E-06	7.05527E-06	8.7988E-07	1.24927E-06	3566.05	1054.85	8.53	70674.95
Riverside (SC)	2021 OFF - Agricultural - Other Agricultural Equipment	Aggregated	175	Gasoline	8.48968E-06	7.80881E-06	9.34238E-06	0.000634599	4.46574E-05	0.020497229	1.46943E-06	1.11024E-06	1.6327E-06	2.03618E-07	2.85146E-07	813.95	109.5	0.97	14892
Riverside (SC)	2021 OFF - Agricultural - Other Agricultural Equipment	Aggregated	300	Gasoline	4.57282E-06	4.20608E-06	5.03211E-06	0.000426355	4.78288E-05	0.013382542	9.87237E-07	7.45912E-07	1.09693E-06	1.36801E-07	1.87966E-07	536.55	47.45	0.33	11672.7
Riverside (SC)	2021 OFF - Agricultural - Sprayers	Aggregated	25	Gasoline	0.002836875	0.002609358	0.003121808	0.098761402	0.001791751	0.176831011	0.001074449	0.000811806	0.001193832	4.8703E-06	4.56106E-06	13019.55	29024.8	296.01	272366.7
Riverside (SC)	2021 OFF - Agricultural - Sprayers	Aggregated	25	Diesel	1.29501E-05	1.54117E-05	1.86481E-05	6.01926E-05	0.000110085	0.013859285	5.05224E-06	4.64806E-06	5.05224E-06	1.75848E-07	1.1386E-07	452.6	839.5	7.72	15950.5
Riverside (SC)	2021 OFF - Agricultural - Sprayers	Aggregated	50	Gasoline	4.01716E-05	3.69498E-05	4.42064E-05	0.002106931	7.58069E-05	0.027820938	1.91795E-06	1.44912E-06	2.13106E-06	3.38252E-07	4.15571E-07	1186.25	711.75	8.89	23487.75
Riverside (SC)	2021 OFF - Agricultural - Sprayers	Aggregated	100	Gasoline	6.93037E-05	6.37455E-05	7.62645E-05	0.002112156	0.000257058	0.09553275	6.66077E-06	5.03258E-06	7.40086E-06	9.2298E-07	1.31576E-06	3755.85	1208.15	14.98	82154.2
Riverside (SC)	2021 OFF - Agricultural - Sprayers	Aggregated	175	Gasoline	2.00321E-05	1.84255E-05	2.20441E-05	0.001321301	0.000131028	0.04313717	3.09248E-06	2.33654E-06	3.43608E-06	4.28523E-07	5.98423E-07	1708.2	255.5	3.38	35770
Riverside (SC)	2021 OFF - Agricultural - Swathers	Aggregated	100	Gasoline	0.000368154	0.000338628	0.000405131	0.01138788	0.001341642	0.493329537	3.43961E-05	2.59882E-05	3.82179E-05	4.76625E-06	6.79491E-06	19396.1	4595.35	48.45	404390.8
Riverside (SC)	2021 OFF - Agricultural - Swathers	Aggregated	175	Gasoline	0.000258132	0.00023743	0.000284058	0.016602116	0.001656017	0.539169432	3.86527E-05	2.92043E-05	4.29474E-05	5.35608E-06	7.5033E-06	21418.2	3529.55	37.13	455312
Riverside (SC)	2021 OFF - Agricultural - Tillers	Aggregated	25	Gasoline	0.022492482	0.020688585	0.024751605	1.249350583	0.016609611	2.1818939	0.00099736	0.000753561	0.001108177	6.22117E-05	5.61725E-05	160344.5	338504.65	4760.67	2369533
Riverside (SC)	2021 OFF - ConstMin - Asphalt Pavers	Aggregated	25	Gasoline	0.000237007	0.000217999	0.000260812	0.009897516	0.000176508	0.016684091	0.000125877	9.51068E-05	0.000139863	4.33056E-07	4.41145E-07	1259.25	1131.5	2.86	19483.7
Riverside (SC)	2021 OFF - ConstMin - Asphalt Pavers	Aggregated	50	Gasoline	2.87523E-05	2.64464E-05	3.16402E-05	0.001938479	4.22109E-05	0.014487872	9.98781E-07	7.54634E-07	1.10976E-06	1.76146E-07	2.3272E-07	664.3	288.35	0.75	9227.2
Riverside (SC)	2021 OFF - ConstMin - Asphalt Pavers	Aggregated	100	Gasoline	1.49152E-05	1.3719E-05	1.64133E-05	0.000595041	4.09657E-05	0.014999749	1.04582E-06	7.90174E-07	1.16202E-06	1.44919E-07	2.08425E-07	594.95	160.6	0.43	9796.6
Riverside (SC)	2021 OFF - ConstMin - Bore/Drill Rigs	Aggregated	25	Gasoline	8.34532E-05	7.67603E-05	9.18352E-05	0.003683797	6.14147E-05	0.006185308	4.66663E-05	3.5259E-05	5.18515E-05	1.58735E-07	1.58556E-07	452.6	357.7	2.92	5971.4
Riverside (SC)	2021 OFF - ConstMin - Bore/Drill Rigs	Aggregated	25	Diesel	3.24573E-05	3.86269E-05	4.67385E-05	0.000174277	0.000294892	0.038985404	1.11039E-05	1.02156E-05	1.11039E-05	5.14521E-07	3.27806E-07	1303.05	1960.05	2.39	30386.25
Riverside (SC)	2021 OFF - ConstMin - Bore/Drill Rigs	Aggregated	50	Gasoline	2.21513E-06	2.03748E-06	2.43762E-06	0.000119141	4.08079E-06	0.001466729	1.01115E-07	7.6398E-08	1.1235E-07	1.78327E-08	2.17376E-08	62.05	0	0.25	0
Riverside (SC)	2021 OFF - ConstMin - Bore/Drill Rigs	Aggregated	100	Gasoline	1.39686E-05	1.28483E-05	1.53716E-05	0.000436923	5.02152E-05	0.018309416	1.27658E-06	9.64524E-07	1.41842E-06	1.76894E-07	2.50621E-07	715.4	109.5	1.01	9636
Riverside (SC)	2021 OFF - ConstMin - Bore/Drill Rigs	Aggregated	175	Gasoline	3.09403E-06	2.84589E-06	3.40479E-06	0.000195146	1.95552E-05	0.006311008	4.52432E-07	3.41838E-07	5.02702E-07	6.26933E-08	8.8229E-08	251.85	25.55	0.27	3219.3
Riverside (SC)	2021 OFF - ConstMin - Cement and Mortar Mixers	Aggregated	25	Gasoline	0.00329197	0.003027954	0.003622612	0.113899785	0.00225535	0.215068025	0.001206186	0.000911341	0.001340207	6.47122E-06	5.40371E-06	15424.9	40522.3	440.19	280849.3
Riverside (SC)	2021 OFF - ConstMin - Cement and Mortar Mixers	Aggregated	25	Diesel	8.1962E-05	9.75416E-05	0.000118025	0.000571358	0.000737609	0.099845803	2.90646E-05	2.67394E-05	2.90646E-05	1.49631E-06	8.37421E-07	3328.8	10063.05	33.51	103824.3
Riverside (SC)	2021 OFF - ConstMin - Concrete/Industrial Saws	Aggregated	25	Gasoline	0.002576271	0.002369654	0.002835029	0.10659569	0.002007065	0.186101928	0.001369827	0.00103498	0.00152203	5.12126E-06	4.8283E-06	13782.4	17611.25	61.96	183974.6
Riverside (SC)	2021 OFF - ConstMin - Concrete/Industrial Saws	Aggregated	25	Diesel	2.69481E-06	3.20704E-06	3.88052E-06	1.32447E-05	2.45218E-05	0.003216661	9.16265E-07	8.42964E-07	9.16265E-07	4.08133E-08	2.66285E-08	105.85	142.35	0.23	2562.3
Riverside (SC)	2021 OFF - ConstMin - Concrete/Industrial Saws	Aggregated	50	Gasoline	3.62364E-05	3.33302E-05	3.98759E-05	0.002672804	5.95395E-05	0.033656778	2.32027E-06	1.75309E-06	2.57808E-06	4.09205E-07	5.038E-07	1438.1	521.95	0.86	18268.25
Riverside (SC)	2021 OFF - ConstMin - Concrete/Industrial Saws	Aggregated	50	Diesel	4.49381E-05	5.34801E-05	6.47109E-05	0.000398952	0.000361231	0.050554647	1.64352E-05	1.51204E-05	1.64352E-05	6.53545E-07	4.23302E-07	1682.65	1222.75	2.11	40350.75
Riverside (SC)	2021 OFF - ConstMin - Concrete/Industrial Saws	Aggregated	100	Gasoline	1.48918E-05	1.36974E-05	1.63875E-05	0.000728495	3.81113E-05	0.035968791	2.50783E-06	1.8948E-06	2.78648E-06	3.47509E-07	4.93571E-07	1408.9	299.3	0.49	19753.8
Riverside (SC)	2021 OFF - ConstMin - Cranes	Aggregated	50	Gasoline	1.00935E-05	9.28397E-06	1.11072E-05	0.000641175	1.52988E-05	0.004446865	3.06563E-07	2.31625E-07	3.40625E-07	5.40658E-08	7.28848E-08	208.05	105.85	0.27	3916.45
Riverside (SC)	2021 OFF - ConstMin - Cranes	Aggregated	100	Gasoline	2.09645E-05	1.92831E-05	2.30701E-05	0.000772951	5.86808E-05	0.017587623	1.22625E-06	9.26501E-07	1.3625E-06	1.69921E-07	2.46785E-07	704.45	215.35	0.57	15935.9
Riverside (SC)	2021 OFF - ConstMin - Cranes	Aggregated	175	Gasoline	9.09011E-07	8.36108E-07	1.00031E-06	3.96454E-05	4.39091E-06	0.001155748	8.28548E-08	6.26014E-08	9.20609E-08	1.14811E-08	1.27868E-08	36.5	0	0	0
Riverside (SC)	2021 OFF - ConstMin - Crushing/Proc. Equipment	Aggregated	25	Gasoline	3.77955E-05	3.47643E-05	4.15916E-05	0.001605753	2.919E-05	0.002754086	2.07788E-05	1.56995E-05	2.30875E-05	7.38319E-08	7.03275E-08	200.75	211.7	0.73	2492.95
Riverside (SC)	2021 OFF - ConstMin - Crushing/Proc. Equipment	Aggregated	100	Gasoline	1.31883E-05	1.21306E-05	1.45129E-05	0.000452652	4.16909E-05	0.013898398	9.6903E-07	7.32156E-07	1.0767E-06	1.34278E-07	1.89245E-07	540.2	62.05	0.3	5956.8
Riverside (SC)	2021 OFF - ConstMin - Dumpers/Tenders	Aggregated	25	Gasoline	0.000302993	0.000278693	0.000333425	0.011117201	0.000219095	0.020245334	0.000133618	0.000100956	0.000148464	5.77439E-07	5.1403E-07	1467.3	4361.75	29.32	37850.5
Riverside (SC)	2021 OFF - ConstMin - Dumpers/Tenders	Aggregated	25	Diesel	8.36705E-06	9.95748E-06	1.20486E-05	4.11187E-05	7.61473E-05	0.009986217	2.87794E-06	2.64771E-06	2.87794E-06	1.26706E-07	8.35585E-08	332.15	959.95	1.44	15359.2
Riverside (SC)	2021 OFF - ConstMin - Dumpers/Tenders	Aggregated	100	Gasoline	1.19196E-06	1.09637E-06	1.31168E-06	3.79332E-05	4.19236E-06	0.001507522	1.05108E-07	7.9415E-08	1.16787E-07	1.45648E-08	2.17376E-08	62.05	0	0.17	0
Riverside (SC)	2021 OFF - ConstMin - Excavators	Aggregated	25	Diesel	5.86463E-05	6.97939E-05	8.44506E-05	0.000288241	0.00053366	0.07000323	1.99404E-05	1.83452E-05	1.99404E-05	8.88208E-07	5.85828E-07	2328.7	3113.45	2.23	71609.35
Riverside (SC)	2021 OFF - ConstMin - Other Construction Equipment	Aggregated	25	Diesel	0.000189105	0.000225051	0.000272312	0.001335321	0.001708204	0.232403013	6.61984E-05	6.09026E-05	6.61984E-05	3.49545E-06	1.94939E-06	7748.95	16085.55	23.3	218427
Riverside (SC)	2021 OFF - ConstMin - Other Construction Equipment	Aggregated	175	Gasoline	1.38932E-05	1.2779E-05	1.52886E-05	0.001173938	4.67104E-05	0.037227253	2.6688E-06	2.01642E-06	2.96533E-06	3.69814E-07	5.17866E-07	1478.25	270.1	0.74	34032.6
Riverside (SC)	2021 OFF - ConstMin - Pavers	Aggregated	25	Diesel	1.58821E-05	1.8901E-05	2.28702E-05	7.80016E-05	0.000144646	0.018943734	5.53353E-06	5.09085E-06	5.53353E-06	2.4036E-07	1.57935E-07	627.8	740.95	0.91	17782.8
Riverside (SC)	2021 OFF - ConstMin - Paving Equipment	Aggregated	25	Gasoline	0.005418629	0.004984055	0.005962871	0.1982508	0.004059549	0.371355945	0.002368752	0.001789724	0.002631947	1.09018E-05	9.34972E-06	26688.8	59206.65	312.96	485391.6
Riverside (SC)	2021 OFF - ConstMin - Paving Equipment	Aggregated	25	Diesel	1.87978E-05	2.2371E-05	2.70689E-05	9.23897E-05	0.000171054	0.022438074	6.39071E-06	5.87945E-06	6.39071E-06	2.84697E-07	1.864E-07	740.95	1299.4	1.57	24688.6
Riverside (SC)	2021 OFF - ConstMin - Paving Equipment	Aggregated	50	Gasoline	2.14154E-05	1.96979E-05	2.35663E-05	0.001532299	3.56861E-05	0.018266684	1.25929E-06	9.51463E-07	1.39921E-06	2.2209E-07	2.76195E-07	788.4	350.4	2.03	12964.8
Riverside (SC)	2021 OFF - ConstMin - Paving Equipment	Aggregated	100	Gasoline	3.98685E-06	3.66711E-06	4.38729E-06	0.000183065	1.11358E-05	0.008303545	5.78943E-07	4.37424E-07	6.4327E-07	8.02238E-08	1.13803E-07	324.85	87.6	0.52	5781.6
Riverside (SC)	2021 OFF - ConstMin - Plate Compactors	Aggregated	25	Gasoline	0.002285491	0.002102194	0.002515043	0.07401788	0.001602242	0.146466357	0.000799633	0.000604167	0.000888481	4.45627E-06	3.60588E-06	10293	33404.8	172.42	205261.4
Riverside (SC)	2021 OFF - ConstMin - Plate Compactors	Aggregated	25	Diesel	5.55398E-05	6.60969E-05	7.99773E-05	0.000419513	0.000500848	0.068705864	1.95708E-05	1.80052E-05	1.95708E-05	1.06912E-06	5.75727E-07	2288.55	11636.2	19.38	93089.6
Riverside (SC)	2021 OFF - ConstMin - Rollers	Aggregated	25	Gasoline	0.001171533	0.001077576	0.0012892	0.048318086	0.000883389	0.083452053	0.000607519	0.000459014	0.000675021	2.24811E-06	2.17504E-06	6208.65	8435.15	33.84	103795.1
Riverside (SC)	2021 OFF - ConstMin - Rollers	Aggregated	25	Diesel	0.000339127	0.000403589	0.000488343	0.002134043	0.003071446	0.412486446	0.00011749	0.000108091	0.00011749	5.86303E-06	3.45804E-06	13745.9	35923.3	51.67	429269.2
Riverside (SC)	2021 OFF - ConstMin - Rollers	Aggregated	50	Gasoline	4.88174E-05	4.49023E-05	5.37206E-05	0.003275357	6.81657E-05	0.017555826	1.21028E-06	9.14436E-07	1.34476E-06	2.13447E-07	3.03047E-07	865.05	317.55	0.57	11749.35
Riverside (SC)	2021 OFF - ConstMin - Rollers	Aggregated	100	Gasoline	9.79399E-05	9.00851E-05	0.000107777	0.003801536	0.000247128	0.06615032	4.61216E-06	3.48474E-06	5.12462E-06	6.39104E-07	9.62847E-07	2748.45	605.9	0.98	45442.5
Riverside (SC)	2021 OFF - ConstMin - Rough Terrain Forklifts	Aggregated	50	Gasoline	6.82637E-06	6.27889E-06	7.512E-06	0.000433346	1.03565E-05	0.003014079	2.07788E-07	1.56995E-07	2.30875E-07	3.66457E-08	4.98686E-08	142.35	36.5	0.09	1715.5
Riverside (SC)	2021 OFF - ConstMin - Rough Terrain Forklifts	Aggregated	100	Gasoline	9.10147E-05	8.37153E-05	0.000100156	0.003353529	0.000255059	0.076534529	5.33617E-06	4.03177E-06	5.92908E-06	7.3943E-07	1.08816E-06	3106.15	605.9	1.46	51501.5
Riverside (SC)	2021 OFF - ConstMin - Rough Terrain Forklifts	Aggregated	175	Gasoline	3.43528E-06	3.15977E-06	3.78031E-06	0.000150097	1.66147E-05	0.004378509	3.13892E-07	2.37163E-07	3.48769E-07	4.34959E-08	6.26554E-08	178.85	0	0	0
Riverside (SC)	2021 OFF - ConstMin - Rubber Tired Loaders	Aggregated	25	Diesel	1.56648E-05	1.86424E-05	2.25573E-05	7.6991E-05	0.000142544	0.018698295	5.3262E-06	4.90011E-06	5.3262E-06	2.37246E-07	1.57935E-07	627.8	813.95	0.84	20348.75
Riverside (SC)	2021 OFF - ConstMin - Rubber Tired Loaders	Aggregated	50	Gasoline	1.6204E-05	1.49044E-05	1.78315E-05	0.001084323	2.26993E-05	0.006814437	4.69781E-07	3.54946E-07	5.21979E-07	8.28511E-08	1.11245E-07	317.55	138.7	0.27	5548
Riverside (SC)	2021 OFF - ConstMin - Rubber Tired Loaders	Aggregated	100	Gasoline	9.95731E-05	9.15874E-05	0.000109574	0.003889529	0.000259611	0.080531143	5.61482E-06	4.24231E-06	6.23869E-06	7.78043E-07	1.15337E-06	3292.3	883.3	1.72	63597.6
Riverside (SC)	2021 OFF - ConstMin - Signal Boards	Aggregated	25	Gasoline	5.84899E-05	5.3799E-05	6.43645E-05	0.002406654	4.74175E-05	0.004312551	3.13286E-05	2.36705E-05	3.48095E-05	1.23966E-07	1.09967E-07	313.9	558.45	2.11	4358.1
Riverside (SC)	2021 OFF - ConstMin - Signal Boards	Aggregated	25	Diesel	0.000868047	0.001033048	0.001249988	0.006556693	0.007827897	1.07382381	0.000305878	0.000281408	0.000305878	1.67096E-05	9.00779E-06	35806.5	127166	169.4	762996
Riverside (SC)	2021 OFF - ConstMin - Signal Boards	Aggregated	50	Diesel	1.96546E-05	2.33905E-05	2.83026E-05	0.000172357	0.000157276	0.022346338	7.06096E-06	6.49608E-06	7.06096E-06	2.88882E-07	1.88236E-07	748.25	448.95	0.85	16611.15
Riverside (SC)	2021 OFF - ConstMin - Skid Steer Loaders	Aggregated	25	Gasoline	0.00385181	0.003542894	0.004238682	0.160913395	0.002800251	0.268771757	0.002027805	0.001532119	0.002253116	6.8212E-06	7.12353E-06	20334.15	18870.5	59.12	357170.8
Riverside (SC)	2021 OFF - ConstMin - Skid Steer Loaders	Aggregated	25	Diesel	0.001553428	0.001848708	0.002236936	0.007550117	0.014064221	1.820908946	0.000560432	0.000515598	0.000560432	2.31039E-05	1.52334E-05	60553.5	96451.25	115.55	1929025
Riverside (SC)	2021 OFF - ConstMin - Skid Steer Loaders	Aggregated	50	Gasoline	0.000110913	0.000102018	0.000122053	0.008628007	0.000176562	0.096714204	6.66739E-06	5.03758E-06	7.40821E-06	1.17587E-06	1.4692E-06	4193.85	2200.95	7.09	70430.4
Riverside (SC)	2021 OFF - ConstMin - Skid Steer Loaders	Aggregated	100	Gasoline	6.37523E-05	5.86394E-05	7.01555E-05	0.003319983	0.000163781	0.143020861	9.97176E-06	7.53422E-06	1.10797E-05	1.38178E-06	1.97173E-06	5628.3	1324.95	4.26	105996
Riverside (SC)	2021 OFF - ConstMin - Surfacing Equipment	Aggregated	25	Gasoline	0.002636546	0.002425095	0.002901358	0.098436387	0.002081955	0.178696528	0.001251127	0.000945296	0.001390141	5.15923E-06	4.56106E-06	13019.55	36138.65	84.47	281199.6
Riverside (SC)	2021 OFF - ConstMin - Tampers/Rammers	Aggregated	25	Gasoline	0.000272887	0.000251002	0.000300296	0.012777742	0.000231984	0.024219025	0.000182726	0.000138059	0.000203028	9.64386E-07	6.02259E-07	1719.15	7978.9	43.8	33959.6
Riverside (SC)	2021 OFF - ConstMin - Tractors/Loaders/Backhoes	Aggregated	25	Diesel	0.000291032	0.000346352	0.000419086	0.001430398	0.002648291	0.347391187	9.91648E-05	9.12316E-05	9.91648E-05	4.40774E-06	2.90435E-06	11544.95	16008.9	16.97	368204.7
Riverside (SC)	2021 OFF - ConstMin - Tractors/Loaders/Backhoes	Aggregated	100	Gasoline	4.61706E-05	4.24677E-05	5.08079E-05	0.003096277	0.000121091	0.05642132	3.93383E-06	2.97223E-06	4.37092E-06	5.45109E-07	8.18356E-07	2336	803	0.91	50589
Riverside (SC)	2021 OFF - ConstMin - Trenchers	Aggregated	25	Gasoline	0.00238616	0.00219479	0.002625824	0.098084947	0.001821902	0.167089448	0.001260641	0.000952485	0.001400713	4.43632E-06	4.38843E-06	12526.8	13187.45	30.36	195191
Riverside (SC)	2021 OFF - ConstMin - Trenchers	Aggregated	25	Diesel	0.000137138	0.000163206	0.000197479	0.000743006	0.00124577	0.164830079	4.69518E-05	4.31956E-05	4.69518E-05	2.1843E-06	1.37917E-06	5482.3	5730.5	9.24	128063.9
Riverside (SC)	2021 OFF - ConstMin - Trenchers	Aggregated	50	Gasoline	0.000199725	0.000183707	0.000219785	0.012631422	0.000304596	0.089262471	6.15367E-06	4.64944E-06	6.83742E-06	1.08527E-06	1.46025E-06	4168.3	1890.7	4.73	56721
Riverside (SC)	2021 OFF - ConstMin - Trenchers	Aggregated	100	Gasoline	7.56368E-05	6.95707E-05	8.32337E-05	0.002776989	0.000213372	0.064439246	4.49286E-06	3.3946E-06	4.99207E-06	6.22573E-07	9.16814E-07	2617.05	624.15	1.57	41193.9
Riverside (SC)	2021 OFF - Industrial - Aerial Lifts	Aggregated	25	Gasoline	0.000986601	0.000907476	0.001085695	0.040720088	0.000717473	0.067959003	0.000512731	0.000387397	0.000569701	1.7258E-06	1.80166E-06	5142.85	6037.1	16.09	113894.6
Riverside (SC)	2021 OFF - Industrial - Aerial Lifts	Aggregated	25	Diesel	0.000111497	0.000132691	0.000160556	0.000635706	0.001007441	0.132779606	3.99085E-05	3.67158E-05	3.99085E-05	1.80905E-06	1.11105E-06	4416.5	9621.4	24.09	168177.4
Riverside (SC)	2021 OFF - Industrial - Aerial Lifts	Aggregated	25	Nat Gas	0	0	9.1145E-05	0.02462247	0.000677383	0.145203773	0	0	7.42624E-05	0	0	9698.05	8216.15	21.88	154990
Riverside (SC)	2021 OFF - Industrial - Aerial Lifts	Aggregated	50	Gasoline	0.00030245	0.000278193	0.000332828	0.024511254	0.000469492	0.249282771	1.71853E-05	1.29845E-05	1.90948E-05	3.03082E-06	3.83093E-06	10935.4	6945.95	19.21	229216.3
Riverside (SC)	2021 OFF - Industrial - Aerial Lifts	Aggregated	100	Gasoline	0.000238023	0.000218933	0.000261929	0.012987058	0.000613666	0.500433537	3.48914E-05	2.63624E-05	3.87683E-05	4.83489E-06	6.91383E-06	19735.55	6945.95	19.21	465378.7
Riverside (SC)	2021 OFF - Industrial - Forklifts	Aggregated	25	Gasoline	2.92575E-05	2.69111E-05	3.21961E-05	0.0017958	2.51377E-05	0.002971628	1.49467E-06	1.12931E-06	1.66075E-06	7.53148E-08	7.67209E-08	219	332.15	0.37	7639.45
Riverside (SC)	2021 OFF - Industrial - Forklifts	Aggregated	25	Nat Gas	0	0	4.44052E-06	0.000706904	1.97341E-05	0.003691934	0	0	2.4217E-06	0	0	259.15	262.8	0.2	6044.4
Riverside (SC)	2021 OFF - Industrial - Forklifts	Aggregated	50	Gasoline	0.007582955	0.006974802	0.008344579	0.882304435	0.017995285	3.359035906	0.000231569	0.000174963	0.000257299	4.08398E-05	6.32986E-05	180685.95	115445.85	64.09	4733280
Riverside (SC)	2021 OFF - Industrial - Forklifts	Aggregated	50	Nat Gas	0	0	0.00060499	0.101913437	0.026686927	6.419507297	0	0	0.00057091	0	0	341848.05	256153.35	142.18	10502287
Riverside (SC)	2021 OFF - Industrial - Forklifts	Aggregated	100	Gasoline	0.016017577	0.014732968	0.017626367	1.497872321	0.082208282	19.8995611	0.001387445	0.001048292	0.001541605	0.000192257	0.000295744	844201.2	405128.1	224.88	28358967
Riverside (SC)	2021 OFF - Industrial - Forklifts	Aggregated	100	Nat Gas	0	0	0.003592078	1.717984906	0.171598173	38.4666495	0	0	0.003420981	0	0	2138454.7	899016.9	499.02	62931183
Riverside (SC)	2021 OFF - Industrial - Forklifts	Aggregated	175	Gasoline	0.000834746	0.000767799	0.000918587	0.058978431	0.005130049	1.475286682	0.000105762	7.99093E-05	0.000117514	1.46554E-05	2.08208E-05	59432.95	14804.4	8.22	2161442
Riverside (SC)	2021 OFF - Industrial - Forklifts	Aggregated	175	Nat Gas	0	0	0.000165308	0.100821952	0.008610553	2.936031549	0	0	0.000261112	0	0	160545.25	32901.1	18.26	4803561
Riverside (SC)	2021 OFF - Industrial - Other General Industrial Equipment	Aggregated	25	Gasoline	0.000817268	0.000751723	0.000899354	0.049868821	0.000675261	0.086212184	4.14376E-05	3.13084E-05	4.60418E-05	2.38972E-06	2.22491E-06	6351	11665.4	30.03	123216.7
Riverside (SC)	2021 OFF - Industrial - Other General Industrial Equipment	Aggregated	25	Diesel	0.000135889	0.00016172	0.000195681	0.00077001	0.001265847	0.167789861	4.77949E-05	4.39713E-05	4.77949E-05	2.24326E-06	1.40305E-06	5577.2	10639.75	7.46	191734.5
Riverside (SC)	2021 OFF - Industrial - Other General Industrial Equipment	Aggregated	50	Gasoline	0.000237013	0.000218005	0.000260818	0.022414466	0.000539259	0.167830357	1.15701E-05	8.74183E-06	1.28556E-05	2.04051E-06	2.70441E-06	7719.75	4383.65	6.14	131509.5
Riverside (SC)	2021 OFF - Industrial - Other General Industrial Equipment	Aggregated	100	Gasoline	7.3369E-05	6.74848E-05	8.07381E-05	0.005245679	0.000449221	0.14360389	1.00124E-05	7.56493E-06	1.11249E-05	1.38741E-06	2.01648E-06	5756.05	1445.4	2.01	114186.6
Riverside (SC)	2021 OFF - Industrial - Other General Industrial Equipment	Aggregated	175	Gasoline	1.02778E-05	9.45349E-06	1.13101E-05	0.000998967	9.09359E-05	0.029769097	2.13413E-06	1.61245E-06	2.37125E-06	2.95725E-07	4.1685E-07	1189.9	138.7	0.19	24133.8
Riverside (SC)	2021 OFF - Industrial - Other Material Handling Equipment	Aggregated	50	Gasoline	3.28426E-06	3.02086E-06	3.61413E-06	0.000242244	6.73812E-06	0.001722608	1.18755E-07	8.97261E-08	1.3195E-07	2.09438E-08	2.30163E-08	65.7	25.55	0.04	1047.55
Riverside (SC)	2021 OFF - Industrial - Other Material Handling Equipment	Aggregated	100	Gasoline	8.94683E-05	8.22929E-05	9.84544E-05	0.004052472	0.000406059	0.099266578	6.9211E-06	5.22928E-06	7.69012E-06	9.59054E-07	1.40399E-06	4007.7	1478.25	3.86	79825.5
Riverside (SC)	2021 OFF - Industrial - Sweepers/Scrubbers	Aggregated	25	Gasoline	0.000619645	0.00056995	0.000681882	0.039998788	0.00051593	0.06800103	3.15205E-05	2.38155E-05	3.50228E-05	1.79088E-06	1.76842E-06	5047.95	5704.95	21.13	73817.6
Riverside (SC)	2021 OFF - Industrial - Sweepers/Scrubbers	Aggregated	25	Diesel	2.70623E-05	3.22064E-05	3.89697E-05	0.000166135	0.000255762	0.034114665	9.71755E-06	8.94014E-06	9.71755E-06	4.69933E-07	2.86486E-07	1138.8	1576.8	2.44	29170.8
Riverside (SC)	2021 OFF - Industrial - Sweepers/Scrubbers	Aggregated	50	Gasoline	0.000659221	0.000606351	0.000725432	0.056161226	0.001468194	0.542478892	3.7398E-05	2.82563E-05	4.15533E-05	6.59555E-06	8.39582E-06	23965.9	9234.5	17.89	323207.5
Riverside (SC)	2021 OFF - Industrial - Sweepers/Scrubbers	Aggregated	100	Gasoline	0.000384965	0.000354091	0.00042363	0.023935574	0.00251779	0.870118232	6.06667E-05	4.58371E-05	6.74075E-05	8.40655E-06	1.20503E-05	34397.6	7701.5	14.92	523702
Riverside (SC)	2021 OFF - Industrial - Sweepers/Scrubbers	Aggregated	175	Gasoline	2.9759E-06	2.73723E-06	3.27479E-06	0.000325563	2.99676E-05	0.010129467	7.26175E-07	5.48665E-07	8.06861E-07	1.00626E-07	1.40655E-07	401.5	47.45	0.07	6643
Riverside (SC)	2021 OFF - Light Commercial - Air Compressors	Aggregated	25	Gasoline	0.013945603	0.012827165	0.015346285	0.319631485	0.0085285	0.735036746	0.002799449	0.002115139	0.003110499	2.2959E-05	1.71701E-05	49012.2	164202.55	339.7	1012054
Riverside (SC)	2021 OFF - Light Commercial - Air Compressors	Aggregated	25	Diesel	6.4188E-05	7.6389E-05	9.24307E-05	0.000333367	0.000562894	0.071618245	2.52561E-05	2.32356E-05	2.52561E-05	9.50167E-07	6.00519E-07	2387.1	4347.15	5.34	86811.6
Riverside (SC)	2021 OFF - Light Commercial - Air Compressors	Aggregated	50	Gasoline	0.000716896	0.000659401	0.000788901	0.048980711	0.001033807	0.315453932	2.17471E-05	1.64312E-05	2.41635E-05	3.83534E-06	5.24004E-06	14957.7	6803.6	14.09	238126
Riverside (SC)	2021 OFF - Light Commercial - Air Compressors	Aggregated	50	Diesel	0.000820459	0.000976414	0.001181461	0.006932846	0.005866375	0.80112499	0.000285779	0.000262917	0.000285779	1.03565E-05	6.75538E-06	26853.05	26287.3	32.28	972630.1
Riverside (SC)	2021 OFF - Light Commercial - Air Compressors	Aggregated	100	Gasoline	0.002355245	0.002166354	0.002591804	0.094410176	0.006262531	2.022827754	0.000141036	0.000106561	0.000156707	1.95433E-05	2.89008E-05	82497.3	22060.6	45.64	1544242
Riverside (SC)	2021 OFF - Light Commercial - Air Compressors	Aggregated	175	Gasoline	0.000203368	0.000187058	0.000223794	0.008808733	0.00088584	0.253345685	1.81622E-05	1.37225E-05	2.01802E-05	2.51672E-06	3.55218E-06	10139.7	1481.9	3.06	198574.6
Riverside (SC)	2021 OFF - Light Commercial - Gas Compressors	Aggregated	50	Nat Gas	0	0	4.66798E-05	0.008289656	0.001695873	0.5658831	0	0	4.33461E-05	0	0	30065.05	8796.5	1.04	281488
Riverside (SC)	2021 OFF - Light Commercial - Gas Compressors	Aggregated	100	Nat Gas	0	0	0.000254607	0.13256392	0.010031125	3.1799705	0	0	0.00024635	0	0	175930	18173.35	2.14	1599255
Riverside (SC)	2021 OFF - Light Commercial - Gas Compressors	Aggregated	175	Nat Gas	0	0	7.09921E-05	0.026977486	0.002684282	0.82759778	0	0	6.59222E-05	0	0	45183.35	2930.95	0.35	427918.7
Riverside (SC)	2021 OFF - Light Commercial - Gas Compressors	Aggregated	300	Nat Gas	0	0	5.46487E-05	0.031042589	0.002605765	0.85294597	0	0	7.58556E-05	0	0	46793	2343.3	0.28	492093
Riverside (SC)	2021 OFF - Light Commercial - Gas Compressors	Aggregated	600	Nat Gas	0	0	7.69636E-05	0.0437183	0.003669785	1.2012321	0	0	0.00010683	0	0	65904.4	2051.3	0.24	693339.4
Riverside (SC)	2021 OFF - Light Commercial - Generator Sets	Aggregated	25	Gasoline	0.102633876	0.094402639	0.11294232	5.509193013	0.073922027	9.697286943	0.006306276	0.004764742	0.007006973	0.000265628	0.00024889	710457.9	1025157.25	8922.09	10996067
Riverside (SC)	2021 OFF - Light Commercial - Generator Sets	Aggregated	25	Diesel	0.001539451	0.001832074	0.00221681	0.00958375	0.014646865	1.872816325	0.000647093	0.000595326	0.000647093	2.61396E-05	1.56897E-05	62367.55	102521.2	303.78	1474220
Riverside (SC)	2021 OFF - Light Commercial - Generator Sets	Aggregated	50	Gasoline	0.003666547	0.00337249	0.004034811	0.22446199	0.007861989	2.738278987	0.000188774	0.00014263	0.000209749	3.32925E-05	4.11595E-05	117489.85	53202.4	463.14	1702477
Riverside (SC)	2021 OFF - Light Commercial - Generator Sets	Aggregated	50	Diesel	0.001556352	0.001852188	0.002241147	0.014970593	0.015077231	2.217323057	0.000614728	0.00056555	0.000614728	2.86645E-05	1.86051E-05	73956.3	52903.1	156.7	1745802
Riverside (SC)	2021 OFF - Light Commercial - Generator Sets	Aggregated	100	Gasoline	0.000839994	0.000772627	0.000924362	0.031400984	0.004827205	1.356297718	9.45643E-05	7.14486E-05	0.000105071	1.31037E-05	1.86751E-05	53308.25	10271.1	89.47	852501.3
Riverside (SC)	2021 OFF - Light Commercial - Generator Sets	Aggregated	100	Nat Gas	0	0	4.09274E-06	0.002750181	0.000305018	0.087937333	0	0	7.82059E-06	0	0	4777.85	762.85	6.67	63316.55
Riverside (SC)	2021 OFF - Light Commercial - Generator Sets	Aggregated	175	Gasoline	8.37869E-05	7.70672E-05	9.22024E-05	0.006768256	0.000847597	0.219235578	1.57169E-05	1.1875E-05	1.74632E-05	2.17788E-06	3.05093E-06	8708.9	967.25	8.42	141218.5
Riverside (SC)	2021 OFF - Light Commercial - Generator Sets	Aggregated	175	Nat Gas	0	0	4.62628E-06	0.00329922	0.000423356	0.128236239	0	0	1.14045E-05	0	0	6924.05	631.45	5.5	92191.7
Riverside (SC)	2021 OFF - Light Commercial - Pressure Washers	Aggregated	25	Gasoline	0.010896923	0.01002299	0.011991399	0.403523088	0.005743402	0.816801449	0.001111569	0.000839852	0.001235076	2.44659E-05	1.98234E-05	56585.95	107014.35	931.4	740917.1
Riverside (SC)	2021 OFF - Light Commercial - Pressure Washers	Aggregated	25	Diesel	8.38113E-06	9.97424E-06	1.20688E-05	6.03326E-05	8.23025E-05	0.010579663	3.68597E-06	3.39109E-06	3.68597E-06	1.56907E-07	8.35585E-08	332.15	1449.05	10.05	20458.25
Riverside (SC)	2021 OFF - Light Commercial - Pressure Washers	Aggregated	50	Gasoline	3.35506E-05	3.08598E-05	3.69204E-05	0.002111935	5.87288E-05	0.027724924	1.91133E-06	1.44412E-06	2.1237E-06	3.37085E-07	4.09178E-07	1168	478.15	4.12	13866.35
Riverside (SC)	2021 OFF - Light Commercial - Pressure Washers	Aggregated	50	Diesel	5.38599E-06	6.40978E-06	7.75583E-06	6.16866E-05	6.97332E-05	0.010654259	2.43847E-06	2.2434E-06	2.43847E-06	1.37733E-07	8.81496E-08	350.4	547.5	3.74	20805
Riverside (SC)	2021 OFF - Light Commercial - Pumps	Aggregated	25	Gasoline	0.034482838	0.031717314	0.03794626	1.16822526	0.024062516	2.256172282	0.014027886	0.010598847	0.01558654	6.8794E-05	5.61315E-05	160227.7	454373.9	2058.79	2521274
Riverside (SC)	2021 OFF - Light Commercial - Pumps	Aggregated	25	Diesel	0.000848372	0.001009633	0.001221656	0.005139677	0.007520065	0.961444996	0.000345593	0.000317946	0.000345593	1.37471E-05	8.05835E-06	32032.4	68879.15	171.16	757108.5
Riverside (SC)	2021 OFF - Light Commercial - Pumps	Aggregated	50	Gasoline	0.000573953	0.000527922	0.0006316	0.039510378	0.00093682	0.413406353	2.84999E-05	2.15332E-05	3.16665E-05	5.02627E-06	6.33203E-06	18074.8	8165.05	37.04	253116.6
Riverside (SC)	2021 OFF - Light Commercial - Pumps	Aggregated	50	Diesel	0.000996558	0.001185986	0.001435043	0.009181958	0.008935696	1.297768244	0.00038089	0.000350419	0.00038089	1.67769E-05	1.09021E-05	43336.45	27619.55	68.63	1021923
Riverside (SC)	2021 OFF - Light Commercial - Pumps	Aggregated	100	Gasoline	0.000967811	0.000890193	0.001065017	0.041043591	0.002823092	1.554285589	0.000108369	8.18784E-05	0.000120409	1.50166E-05	2.15061E-05	61389.35	10351.4	46.92	962680.2
Riverside (SC)	2021 OFF - Light Commercial - Pumps	Aggregated	175	Gasoline	3.20999E-05	2.95255E-05	3.5324E-05	0.002238269	0.000142477	0.070562357	5.05857E-06	3.82203E-06	5.62063E-06	7.00963E-07	9.84584E-07	2810.5	313.9	1.41	45201.6
Riverside (SC)	2021 OFF - Light Commercial - Welders	Aggregated	25	Gasoline	0.033427196	0.030746335	0.03678459	1.397114093	0.024729985	2.352047065	0.01774551	0.013407719	0.019717233	6.07431E-05	6.21094E-05	177291.45	226500.75	1090.3	3556023
Riverside (SC)	2021 OFF - Light Commercial - Welders	Aggregated	25	Diesel	0.00075152	0.00089437	0.001082188	0.00423189	0.006626414	0.845177465	0.000300982	0.000276904	0.000300982	1.16575E-05	7.08135E-06	28148.8	71930.55	112.01	1094310

Riverside (SC)	2021 OFF - Light Commercial - Welders	Aggregated	50	Gasoline	0.001363287	0.001253951	0.001500214	0.082590102	0.002286558	0.829483133	5.71838E-05	4.32056E-05	6.35376E-05	1.0085E-05	1.27881E-05	36503.65	15286.2	73.56	687879
Riverside (SC)	2021 OFF - Light Commercial - Welders	Aggregated	50	Diesel	0.003515617	0.004183875	0.005062488	0.029886958	0.026401525	3.681844261	0.001254066	0.001153741	0.001254066	4.75971E-05	3.10039E-05	123242.25	103641.75	161.38	4767521
Riverside (SC)	2021 OFF - Light Commercial - Welders	Aggregated	100	Gasoline	0.001063488	0.000978197	0.001170304	0.03786153	0.003358665	1.302141204	9.07884E-05	6.85957E-05	0.000100876	1.25805E-05	1.80985E-05	51662.1	15600.1	75.06	1092007
Riverside (SC)	2021 OFF - Light Commercial - Welders	Aggregated	175	Gasoline	8.82951E-05	8.12139E-05	9.71634E-05	0.005161048	0.000471669	0.162126291	1.16227E-05	8.78162E-06	1.29141E-05	1.61055E-06	2.26071E-06	6453.2	1069.45	5.17	139028.5
Riverside (SC)	2021 OFF - Military - A/C unit	Aggregated	100	Diesel	3.18005E-05	3.78452E-05	4.57927E-05	0.000478944	0.000420517	0.081461197	2.22436E-05	2.04641E-05	2.22436E-05	9.55582E-07	6.81323E-07	2708.3	784.75	2.61	79259.75
Riverside (SC)	2021 OFF - Military - A/C unit	Aggregated	300	Diesel	1.56963E-05	1.86799E-05	2.26026E-05	0.000125551	0.000221074	0.07003643	6.52566E-06	6.00361E-06	6.52566E-06	7.8803E-07	5.80318E-07	2306.8	321.2	1.09	66809.6
Riverside (SC)	2021 OFF - Military - A/C unit	Aggregated	600	Diesel	8.98438E-06	1.06922E-05	1.29375E-05	7.37655E-05	0.000119861	0.041932589	3.77964E-06	3.47727E-06	3.77964E-06	4.11582E-07	3.46171E-07	1376.05	120.45	0.42	37941.75
Riverside (SC)	2021 OFF - Military - Aircraft Support	Aggregated	100	Diesel	5.82026E-06	6.92658E-06	8.38117E-06	8.76583E-05	7.69647E-05	0.014909365	4.07111E-06	3.74542E-06	4.07111E-06	1.74894E-07	1.2396E-07	492.75	208.05	0.7	14147.4
Riverside (SC)	2021 OFF - Military - Aircraft Support	Aggregated	175	Diesel	1.27939E-05	1.52258E-05	1.84233E-05	0.000224368	0.000163435	0.043851072	7.18595E-06	6.61108E-06	7.18595E-06	4.934E-07	3.65454E-07	1452.7	299.3	1	41902
Riverside (SC)	2021 OFF - Military - Cart	Aggregated	100	Diesel	2.97127E-06	3.53605E-06	4.27862E-06	4.47499E-05	3.92908E-05	0.007611293	2.07832E-06	1.91205E-06	2.07832E-06	8.92844E-08	6.33575E-08	251.85	73	0.3	5913
Riverside (SC)	2021 OFF - Military - Cart	Aggregated	175	Diesel	1.04864E-06	1.24797E-06	1.51005E-06	1.83901E-05	1.33958E-05	0.003594222	5.88991E-07	5.41872E-07	5.88991E-07	4.04412E-08	2.93832E-08	116.8	0	0	0
Riverside (SC)	2021 OFF - Military - Cart	Aggregated	300	Diesel	3.45725E-06	4.11442E-06	4.97845E-06	2.76538E-05	4.86937E-05	0.015426181	1.43734E-06	1.32235E-06	1.43734E-06	1.73571E-07	1.27633E-07	507.35	62.05	0.21	12223.85
Riverside (SC)	2021 OFF - Military - Communications	Aggregated	50	Diesel	8.99957E-07	1.07102E-06	1.29594E-06	8.43841E-06	8.72622E-06	0.001252888	3.69291E-07	3.39747E-07	3.69291E-07	1.61967E-08	1.37734E-08	54.75	10.95	0.13	438
Riverside (SC)	2021 OFF - Military - Communications	Aggregated	100	Diesel	1.46729E-06	1.7462E-06	2.1129E-06	2.20987E-05	1.94029E-05	0.003758664	1.02633E-06	9.44224E-07	1.02633E-06	4.4091E-08	3.03014E-08	120.45	58.4	0.16	4672
Riverside (SC)	2021 OFF - Military - Compressor (Military)	Aggregated	50	Diesel	1.10245E-06	1.312E-06	1.58752E-06	1.03371E-05	1.06896E-05	0.001534788	4.52381E-07	4.16191E-07	4.52381E-07	1.9841E-08	1.46916E-08	58.4	10.95	0.13	536.55
Riverside (SC)	2021 OFF - Military - Compressor (Military)	Aggregated	100	Diesel	3.27726E-05	3.90021E-05	4.71925E-05	0.000493585	0.000433371	0.083951312	2.29235E-05	2.10896E-05	2.29235E-05	9.84792E-07	7.02442E-07	2792.25	1153.4	3.8	81891.4
Riverside (SC)	2021 OFF - Military - Compressor (Military)	Aggregated	175	Diesel	1.52613E-06	1.81622E-06	2.19763E-06	2.67639E-05	1.94955E-05	0.005230806	8.57181E-07	7.88607E-07	8.57181E-07	5.88555E-08	4.40748E-08	175.2	10.95	0.13	1828.65
Riverside (SC)	2021 OFF - Military - Compressor (Military)	Aggregated	300	Diesel	3.13083E-06	3.72595E-06	4.5084E-06	2.50429E-05	4.40962E-05	0.013969699	1.30163E-06	1.1975E-06	1.30163E-06	1.57183E-07	1.15696E-07	459.9	58.4	0.16	13023.2
Riverside (SC)	2021 OFF - Military - Compressor (Military)	Aggregated	600	Diesel	1.75225E-05	2.08532E-05	2.52324E-05	0.000143867	0.000233768	0.081782248	7.37153E-06	6.78181E-06	7.37153E-06	8.0272E-07	6.78569E-07	2697.35	208.05	0.7	77602.65
Riverside (SC)	2021 OFF - Military - Crane	Aggregated	100	Diesel	2.21397E-06	2.63481E-06	3.18811E-06	7.38196E-05	4.0631E-05	0.013155323	6.92924E-07	6.3749E-07	6.92924E-07	1.54319E-07	1.08351E-07	430.7	124.1	0.39	13030.5
Riverside (SC)	2021 OFF - Military - Crane	Aggregated	175	Diesel	4.52905E-07	5.38994E-07	6.52183E-07	1.64446E-05	5.06769E-06	0.003312322	1.27845E-07	1.17617E-07	1.27845E-07	3.72693E-08	2.66285E-08	105.85	29.2	0.09	4117.2
Riverside (SC)	2021 OFF - Military - Crane	Aggregated	300	Diesel	4.05836E-07	4.82978E-07	5.84404E-07	5.66928E-06	3.38392E-06	0.003351475	9.17105E-08	8.43736E-08	9.17105E-08	3.77098E-08	2.66285E-08	105.85	0	0.05	0
Riverside (SC)	2021 OFF - Military - Deicer	Aggregated	100	Diesel	1.34502E-06	1.60068E-06	1.93682E-06	2.02572E-05	1.7786E-05	0.003445441	9.40803E-07	8.65539E-07	9.40803E-07	4.04168E-08	2.93832E-08	116.8	10.95	0.13	1204.5
Riverside (SC)	2021 OFF - Military - Generator (Military)	Aggregated	50	Diesel	5.77097E-06	6.86793E-06	8.3102E-06	5.41113E-05	5.59569E-05	0.008034143	2.36808E-06	2.17863E-06	2.36808E-06	1.03861E-07	6.61122E-08	262.8	193.45	0.68	7351.1
Riverside (SC)	2021 OFF - Military - Generator (Military)	Aggregated	100	Diesel	0.000170499	0.000202908	0.000245519	0.002567874	0.002254614	0.436756685	0.00011926	0.000109719	0.00011926	5.12338E-06	3.65362E-06	14523.35	5102.7	17.02	423524.1
Riverside (SC)	2021 OFF - Military - Generator (Military)	Aggregated	175	Diesel	0.00018169	0.000216226	0.000261633	0.003186301	0.002320981	0.622740045	0.000102049	9.38855E-05	0.000102049	7.00689E-06	5.19899E-06	20666.3	4109.9	13.67	604155.3
Riverside (SC)	2021 OFF - Military - Generator (Military)	Aggregated	300	Diesel	5.59636E-05	6.66014E-05	8.05876E-05	0.000447641	0.000788219	0.249708353	2.32666E-05	2.14053E-05	2.32666E-05	2.80965E-06	2.07427E-06	8245.35	1087.7	3.61	242557.1
Riverside (SC)	2021 OFF - Military - Generator (Military)	Aggregated	600	Diesel	3.38638E-05	4.03008E-05	4.87639E-05	0.000278036	0.000451779	0.158051792	1.42462E-05	1.31065E-05	1.42462E-05	1.55133E-06	1.31214E-06	5215.85	441.65	1.46	153694.2
Riverside (SC)	2021 OFF - Military - Generator (Military)	Aggregated	750	Diesel	1.81372E-06	2.15847E-06	2.61175E-06	1.47099E-05	2.43846E-05	0.008361946	7.61491E-07	7.00572E-07	7.61491E-07	8.40771E-08	6.88669E-08	273.75	0	0	0
Riverside (SC)	2021 OFF - Military - Hydraulic unit	Aggregated	100	Diesel	1.94569E-05	2.31553E-05	2.80179E-05	0.000293039	0.00025729	0.049841445	1.36096E-05	1.25208E-05	1.36096E-05	5.84666E-07	4.1412E-07	1646.15	507.35	1.68	48198.25
Riverside (SC)	2021 OFF - Military - Lift (Military)	Aggregated	100	Diesel	5.80803E-07	6.91203E-07	8.36356E-07	8.74742E-06	7.6803E-06	0.001487804	4.06256E-07	3.73755E-07	4.06256E-07	1.74527E-08	1.46916E-08	58.4	0	0	0
Riverside (SC)	2021 OFF - Military - Light	Aggregated	50	Diesel	1.40618E-06	1.67347E-06	2.0249E-06	1.3185E-05	1.36347E-05	0.001957637	5.77017E-07	5.30855E-07	5.77017E-07	2.53074E-08	1.46916E-08	58.4	51.1	0.16	2555
Riverside (SC)	2021 OFF - Military - Other tactical support equipment	Aggregated	50	Diesel	2.81237E-07	3.34695E-07	4.04981E-07	2.637E-06	2.72694E-06	0.000391527	1.15403E-07	1.06171E-07	1.15403E-07	5.06147E-09	0	0	0	0	0
Riverside (SC)	2021 OFF - Military - Other tactical support equipment	Aggregated	100	Diesel	3.86387E-06	4.59832E-06	5.56397E-06	5.81934E-05	5.10942E-05	0.009897814	2.70267E-06	2.48646E-06	2.70267E-06	1.16106E-07	8.08038E-08	321.2	120.45	0.37	9515.55
Riverside (SC)	2021 OFF - Military - Other tactical support equipment	Aggregated	175	Diesel	5.41E-06	6.43835E-06	7.7904E-06	9.48755E-05	6.91096E-05	0.01854274	3.03863E-06	2.79554E-06	3.03863E-06	2.08638E-07	1.53344E-07	609.55	120.45	0.37	17826.6
Riverside (SC)	2021 OFF - Military - Other tactical support equipment	Aggregated	300	Diesel	2.29548E-06	2.73181E-06	3.30549E-06	1.8361E-05	3.23306E-05	0.010242358	9.54335E-07	8.77988E-07	9.54335E-07	1.15244E-07	8.44767E-08	335.8	58.4	0.16	12731.2
Riverside (SC)	2021 OFF - Military - Other tactical support equipment	Aggregated	600	Diesel	9.05988E-07	1.0782E-06	1.30462E-06	7.43854E-06	1.20868E-05	0.004228496	3.8114E-07	3.50649E-07	3.8114E-07	4.15041E-08	3.21379E-08	127.75	0	0	0
Riverside (SC)	2021 OFF - Military - Other tactical support equipment	Aggregated	750	Diesel	1.06323E-06	1.26533E-06	1.53105E-06	8.62319E-06	1.42947E-05	0.004901923	4.464E-07	4.10688E-07	4.464E-07	4.92875E-08	4.04019E-08	160.6	0	0	0
Riverside (SC)	2021 OFF - Military - Pressure Washers	Aggregated	175	Diesel	1.04179E-06	1.23982E-06	1.50018E-06	1.82699E-05	1.33083E-05	0.00357073	5.85142E-07	5.3833E-07	5.85142E-07	4.01768E-08	2.93832E-08	116.8	0	0	0
Riverside (SC)	2021 OFF - Military - Pump (Military)	Aggregated	50	Diesel	1.27231E-05	1.51416E-05	1.83213E-05	0.000119298	0.000123367	0.017712702	5.22085E-06	4.80318E-06	5.22085E-06	2.28981E-07	1.49671E-07	594.95	441.65	1.46	17224.35
Riverside (SC)	2021 OFF - Military - Pump (Military)	Aggregated	100	Diesel	1.37559E-05	1.63706E-05	1.98084E-05	0.000207176	0.000181902	0.03523747	9.62185E-06	8.8521E-06	9.62185E-06	4.13354E-07	2.9475E-07	1171.65	343.1	1.14	34310
Riverside (SC)	2021 OFF - Military - Start Cart	Aggregated	100	Diesel	3.05686E-07	3.63791E-07	4.40187E-07	4.6039E-06	4.04227E-06	0.000783055	2.13819E-07	1.96713E-07	2.13819E-07	9.18564E-09	0	0	0	0	0
Riverside (SC)	2021 OFF - Military - Start Cart	Aggregated	600	Diesel	4.74805E-07	5.65057E-07	6.83719E-07	3.89835E-06	6.33439E-06	0.002216045	1.99746E-07	1.83766E-07	1.99746E-07	2.17512E-08	1.46916E-08	58.4	0	0	0
Riverside (SC)	2021 OFF - Military - Test Stand	Aggregated	100	Diesel	9.28062E-06	1.10447E-05	1.33641E-05	0.000139775	0.000122723	0.023773547	6.49154E-06	5.97222E-06	6.49154E-06	2.78876E-07	1.99255E-07	792.05	251.85	0.82	23170.2
Riverside (SC)	2021 OFF - Military - Test Stand	Aggregated	175	Diesel	6.48835E-07	7.72167E-07	9.34322E-07	1.13786E-05	8.28849E-06	0.002223876	3.6443E-07	3.35276E-07	3.6443E-07	2.50224E-08	1.46916E-08	58.4	0	0	0
Riverside (SC)	2021 OFF - Military - Test Stand	Aggregated	300	Diesel	1.07175E-05	1.27547E-05	1.54332E-05	8.57269E-05	0.00015095	0.047821164	4.45575E-06	4.09929E-06	4.45575E-06	5.3807E-07	3.96673E-07	1576.8	237.25	0.79	46738.25
Riverside (SC)	2021 OFF - Military - Test Stand	Aggregated	600	Diesel	6.90565E-06	8.21829E-06	9.94413E-06	5.66982E-05	9.21285E-05	0.032230538	2.90513E-06	2.67272E-06	2.90513E-06	3.16353E-07	2.6904E-07	1069.45	73	0.3	25039
Riverside (SC)	2021 OFF - Military - Welder	Aggregated	50	Diesel	4.13418E-06	4.92001E-06	5.95321E-06	3.8764E-05	4.00861E-05	0.005755453	1.69643E-06	1.56071E-06	1.69643E-06	7.44037E-08	4.77477E-08	189.8	160.6	0.52	5621
Riverside (SC)	2021 OFF - Military - Welder	Aggregated	100	Diesel	1.09925E-05	1.30819E-05	1.58291E-05	0.000165556	0.00014536	0.028158654	7.68893E-06	7.07381E-06	7.68893E-06	3.30315E-07	2.35984E-07	938.05	441.65	1.46	27382.3
Riverside (SC)	2021 OFF - Oil Drilling - Compressors (Workover)	Aggregated	25	Diesel	1.46944E-07	1.74876E-07	2.11599E-07	7.22678E-07	1.32714E-06	0.000167729	5.84332E-08	5.37586E-08	5.84332E-08	2.12816E-09	0	0	0	0	0
Riverside (SC)	2021 OFF - Oil Drilling - Generator (Drilling)	Aggregated	50	Diesel	1.30846E-07	1.55718E-07	1.88419E-07	1.06439E-06	8.47268E-07	0.000108749	4.39224E-08	4.04086E-08	4.39224E-08	1.40586E-09	0	0	0	0	0
Riverside (SC)	2021 Oil Drilling - Drill Rig (Mobile)	Aggregated	25	Diesel	3.69512E-08	4.47109E-08	5.32097E-08	6.89256E-07	5.03379E-07	9.69122E-05	2.29639E-09	2.11268E-09	2.29639E-09	8.94893E-10	7.90985E-10	3.144210819	4.350435886	0.002729257	108.7609
Riverside (SC)	2021 Oil Drilling - Drill Rig (Mobile)	Aggregated	50	Diesel	4.37539E-06	5.29422E-06	6.30056E-06	1.5803E-05	1.11653E-05	0.000940965	1.46846E-06	1.35098E-06	1.46846E-06	8.56843E-09	7.68003E-09	30.52858899	25.03547577	0.021834057	1056.081
Riverside (SC)	2021 Oil Drilling - Drill Rig (Mobile)	Aggregated	75	Diesel	3.08386E-07	3.73147E-07	4.44076E-07	4.08282E-06	3.75656E-06	0.000561329	2.25891E-07	2.0782E-07	2.25891E-07	5.18051E-09	4.58149E-09	18.21169927	10.00818594	0.010917029	700.614
Riverside (SC)	2021 Oil Drilling - Drill Rig (Mobile)	Aggregated	100	Diesel	2.87497E-06	3.47871E-06	4.13995E-06	2.43112E-05	3.13936E-05	0.003158034	2.35204E-06	2.16387E-06	2.35204E-06	2.91113E-08	2.57755E-08	102.4589448	43.94376926	0.032751086	3914.847
Riverside (SC)	2021 Oil Drilling - Drill Rig (Mobile)	Aggregated	175	Diesel	1.32025E-05	1.5975E-05	1.90116E-05	0.000149193	0.000127022	0.022664941	7.85559E-06	7.22714E-06	7.85559E-06	2.09153E-07	1.84988E-07	735.3390487	195.1964709	0.163755429	28167.2
Riverside (SC)	2021 Oil Drilling - Drill Rig (Mobile)	Aggregated	300	Diesel	1.10219E-05	1.33365E-05	1.58715E-05	6.13112E-05	0.00014172	0.026509471	4.31261E-06	3.9676E-06	4.31261E-06	2.44763E-07	2.16367E-07	860.0705971	147.4508464	0.117358057	32991.77
Riverside (SC)	2021 Oil Drilling - Drill Rig (Mobile)	Aggregated	600	Diesel	1.92665E-05	2.33125E-05	2.77438E-05	0.000106591	0.000269587	0.049584648	8.51391E-06	7.8328E-06	8.51391E-06	4.57857E-07	4.04703E-07	1608.719285	148.3815231	0.106441029	61757.76
Riverside (SC)	2021 Oil Drilling - Drill Rig (Mobile)	Aggregated	750	Diesel	4.25681E-06	5.15074E-06	6.12981E-06	2.1349E-05	4.17981E-05	0.01001476	1.74268E-06	1.60326E-06	1.74268E-06	9.24637E-08	8.17391E-08	324.9178434	19.53602263	0.013646286	12454.53
Riverside (SC)	2021 Oil Drilling - Drill Rig (Mobile)	Aggregated	9999	Diesel	3.53918E-06	4.2824E-06	5.09641E-06	1.72282E-05	7.31351E-05	0.00838735	1.84527E-06	1.69765E-06	1.84527E-06	7.7439E-08	6.84564E-08	272.1183223	13.60807611	0.008187771	10465.64
Riverside (SC)	2021 Oil Drilling - Workover Rig (Mobile)	Aggregated	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside (SC)	2021 Oil Drilling - Workover Rig (Mobile)	Aggregated	75	Diesel	2.8956E-08	3.50368E-08	4.16967E-08	2.64088E-07	3.76658E-07	3.36855E-05	2.77842E-08	2.55615E-08	2.77842E-08	3.10571E-10	2.74937E-10	1.092889718	0.568082192	0.002840411	42.03808
Riverside (SC)	2021 Oil Drilling - Workover Rig (Mobile)	Aggregated	175	Diesel	4.31167E-07	5.21712E-07	6.2088E-07	5.22791E-06	4.30893E-06	0.000776107	3.11033E-07	2.86151E-07	3.11033E-07	7.16256E-09	6.33448E-09	25.17993256	5.706385616	0.005680822	968.5943
Riverside (SC)	2021 Oil Drilling - Workover Rig (Mobile)	Aggregated	300	Diesel	4.93039E-06	5.96577E-06	7.09976E-06	2.88838E-05	4.74493E-05	0.011075121	1.73318E-06	1.59452E-06	1.73318E-06	1.02247E-07	9.03937E-08	359.3201118	62.78444384	0.113616438	13652.16
Riverside (SC)	2021 Oil Drilling - Workover Rig (Mobile)	Aggregated	600	Diesel	0.000219922	0.000266106	0.000316688	0.001385946	0.002276343	0.673431721	7.41659E-05	6.82326E-05	7.41659E-05	6.21961E-06	5.49646E-06	21848.75054	2138.943068	1.530981507	841044.1
Riverside (SC)	2021 Oil Drilling - Workover Rig (Mobile)	Aggregated	750	Diesel	1.81812E-06	2.19993E-06	2.6181E-06	1.08476E-05	1.51962E-05	0.005391919	7.77134E-07	7.14963E-07	7.77134E-07	4.97964E-08	4.40081E-08	174.9348748	9.867587671	0.005680822	6728.564
Riverside (SC)	2021 Portable Equipment - Non-Rental Compressor	Aggregated	50	Diesel	1.07337E-05	1.29878E-05	1.54566E-05	0.000230028	0.000239191	0.036771617	7.78144E-06	7.15893E-06	7.78144E-06	3.3965E-07	3.00125E-07	1193.014618	1648.03549	4.140521775	70086.12
Riverside (SC)	2021 Portable Equipment - Non-Rental Compressor	Aggregated	75	Diesel	0.000151831	0.000183715	0.000218636	0.002612097	0.002479306	0.396645597	0.000104379	9.60283E-05	0.000104379	3.66263E-06	3.23737E-06	12868.72957	12634.93876	31.74400028	840458
Riverside (SC)	2021 Portable Equipment - Non-Rental Compressor	Aggregated	100	Diesel	0.000312648	0.000378304	0.000450213	0.00851492	0.004937146	1.273904214	0.000345508	0.000317867	0.000345508	1.17685E-05	1.03974E-05	41330.41928	31752.15044	79.77405287	2699294
Riverside (SC)	2021 Portable Equipment - Non-Rental Compressor	Aggregated	175	Diesel	0.000445875	0.000539509	0.00064206	0.014784464	0.00728271	2.672347433	0.000269638	0.000248067	0.000269638	2.46938E-05	2.18113E-05	86701.36941	41091.01822	103.2370096	5662475
Riverside (SC)	2021 Portable Equipment - Non-Rental Compressor	Aggregated	300	Diesel	0.000292359	0.000353754	0.000420996	0.003049252	0.004007628	1.60276757	0.000144504	0.000132944	0.000144504	1.48096E-05	1.30816E-05	52000.02868	11975.72456	30.08779157	3396127
Riverside (SC)	2021 Portable Equipment - Non-Rental Compressor	Aggregated	600	Diesel	0.00044554	0.000539104	0.000641578	0.004196967	0.006037163	2.193418107	0.000229467	0.00021111	0.000229467	2.02659E-05	1.79024E-05	71163.03485	9558.605842	24.0150263	4647665
Riverside (SC)	2021 Portable Equipment - Non-Rental Compressor	Aggregated	750	Diesel	0.000167728	0.000202951	0.000241529	0.001366982	0.002980716	0.718176739	9.70099E-05	8.92491E-05	9.70099E-05	6.63487E-06	5.86166E-06	23300.45338	2197.380653	5.5206957	1521755
Riverside (SC)	2021 Portable Equipment - Non-Rental Compressor	Aggregated	9999	Diesel	7.22343E-06	8.74034E-06	1.04017E-05	9.01091E-05	0.000145643	0.046708916	3.62602E-06	3.33593E-06	3.62602E-06	4.3163E-07	3.81232E-07	1515.419338	109.8690327	0.276034785	98972.19
Riverside (SC)	2021 Portable Equipment - Non-Rental Generator	Aggregated	50	Diesel	6.68876E-05	8.0934E-05	9.63181E-05	0.000849323	0.000644061	0.086419644	2.8473E-05	2.61952E-05	2.8473E-05	7.96986E-07	7.05346E-07	2803.790163	3298.963825	2.484313065	164714.5
Riverside (SC)	2021 Portable Equipment - Non-Rental Generator	Aggregated	75	Diesel	0.001687091	0.002041381	0.002429412	0.024405384	0.01905897	3.306740779	0.000743051	0.000683607	0.000743051	3.05218E-05	2.69892E-05	107283.5629	104833.7393	78.94594852	7006700
Riverside (SC)	2021 Portable Equipment - Non-Rental Generator	Aggregated	100	Diesel	0.00210722	0.002549736	0.003034397	0.038855394	0.025056417	5.271143036	0.001971485	0.001813766	0.001971485	4.86711E-05	4.30224E-05	171016.4307	114364.0793	86.12285293	11169100
Riverside (SC)	2021 Portable Equipment - Non-Rental Generator	Aggregated	175	Diesel	0.004125838	0.004992264	0.005941207	0.072269712	0.043888622	11.42799756	0.002231214	0.002052717	0.002231214	0.000105534	9.32738E-05	370768.7951	170813.0158	128.6322098	24214947
Riverside (SC)	2021 Portable Equipment - Non-Rental Generator	Aggregated	300	Diesel	0.004714105	0.005704067	0.006788311	0.028530862	0.041990674	12.49907788	0.001793781	0.001650279	0.001793781	0.000115419	0.000102016	405518.8165	105566.8424	79.49801809	26484475
Riverside (SC)	2021 Portable Equipment - Non-Rental Generator	Aggregated	600	Diesel	0.008222491	0.009949214	0.011840387	0.052573176	0.074103946	25.70665247	0.003092131	0.002844761	0.003092131	0.000237424	0.000209814	834024.0285	134157.8622	101.0287313	54470193
Riverside (SC)	2021 Portable Equipment - Non-Rental Generator	Aggregated	750	Diesel	0.002561423	0.003099322	0.003688449	0.013693566	0.024440597	6.42557591	0.001122545	0.001032741	0.001122545	5.93308E-05	5.24447E-05	208470.7339	19427.23141	14.62984361	13615245
Riverside (SC)	2021 Portable Equipment - Non-Rental Generator	Aggregated	9999	Diesel	0.016635979	0.020129534	0.02395581	0.091003978	0.264268708	42.01222405	0.008270223	0.007608605	0.008270223	0.000387925	0.000342898	1363040.341	69644.79186	52.44660915	89020302
Riverside (SC)	2021 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	50	Diesel	1.52481E-05	1.84502E-05	2.19573E-05	0.000195298	0.000207048	0.031418701	8.1469E-06	7.49515E-06	8.1469E-06	2.90024E-07	2.56435E-07	1019.345152	1283.757183	4.140521775	59883.55
Riverside (SC)	2021 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	75	Diesel	0.000210323	0.000254491	0.000302866	0.00524595	0.004468516	0.847335196	0.000125701	0.000115645	0.000125701	7.82772E-06	6.91584E-06	27490.85727	24819.30553	80.05008766	1795431
Riverside (SC)	2021 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	100	Diesel	0.000443577	0.000536728	0.000638751	0.012096571	0.008892444	1.907011882	0.000551942	0.000507787	0.000551942	1.7618E-05	1.55648E-05	61870.90031	44503.58233	143.5380882	4040795
Riverside (SC)	2021 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	175	Diesel	0.001225975	0.00148343	0.001765404	0.03398925	0.022427476	6.168141615	0.000872162	0.000802389	0.000872162	5.69907E-05	5.03435E-05	200118.5617	92858.43621	299.4977418	13069763
Riverside (SC)	2021 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	300	Diesel	0.000437615	0.000529514	0.000630165	0.004093161	0.00643422	2.070022792	0.000230924	0.00021245	0.000230924	1.91253E-05	1.68952E-05	67159.60977	18229.35199	58.79540921	4386201
Riverside (SC)	2021 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	600	Diesel	0.000601438	0.00072774	0.00086607	0.005138715	0.010260158	2.722320279	0.000323902	0.00029799	0.000323902	2.51512E-05	2.22192E-05	88322.68334	12837.57183	41.40521775	5768363
Riverside (SC)	2021 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	750	Diesel	0.000250459	0.000303055	0.000360661	0.002237275	0.004420818	1.192522328	0.000157558	0.000144953	0.000157558	1.10179E-05	9.73321E-06	38690.07359	3594.520111	11.59346097	2526853
Riverside (SC)	2021 Portable Equipment - Non-Rental Other Portable Equipment	Aggregated	9999	Diesel	0.005640517	0.006825025	0.008122344	0.046646049	0.097503839	10.52167099	0.003088799	0.002841695	0.003088799	9.71089E-05	8.58765E-05	341364.0278	9071.88409	29.25968721	22294519
Riverside (SC)	2021 Portable Equipment - Non-Rental Pump	Aggregated	50	Diesel	2.34515E-06	2.83763E-06	3.37702E-06	4.00388E-05	3.71734E-05	0.006363162	1.344E-06	1.23648E-06	1.344E-06	5.87602E-08	5.19353E-08	206.4457795	257.3003182	0.828104355	12128.09
Riverside (SC)	2021 Portable Equipment - Non-Rental Pump	Aggregated	75	Diesel	0.000138059	0.000167052	0.000198805	0.003017542	0.002682887	0.479266699	9.68914E-05	8.91401E-05	9.68914E-05	4.42692E-06	3.91171E-06	15549.28022	14151.5175	45.54573953	1015525
Riverside (SC)	2021 Portable Equipment - Non-Rental Pump	Aggregated	100	Diesel	0.000231948	0.000280657	0.000334005	0.005822957	0.004500897	0.91893369	0.000265966	0.000244689	0.000265966	8.48904E-06	7.50021E-06	29813.79153	20841.32577	67.07645276	1947142
Riverside (SC)	2021 Portable Equipment - Non-Rental Pump	Aggregated	175	Diesel	0.000324	0.00039204	0.00046656	0.008850436	0.005976597	1.604424134	0.000237541	0.000218538	0.000237541	1.4824E-05	1.30951E-05	52053.77407	24100.46313	77.56577459	3399637
Riverside (SC)	2021 Portable Equipment - Non-Rental Pump	Aggregated	300	Diesel	0.00020977	0.000253822	0.000302069	0.002243804	0.00318256	1.183369854	0.000107264	9.8683E-05	0.000107264	1.09345E-05	9.65851E-06	38393.13165	10292.01273	33.1241742	2507459
Riverside (SC)	2021 Portable Equipment - Non-Rental Pump	Aggregated	600	Diesel	0.000395368	0.000478395	0.00056933	0.004113416	0.006679919	2.238358642	0.000250594	0.000230547	0.000250594	2.06829E-05	1.82692E-05	72621.08102	11492.74754	36.98866119	4742890
Riverside (SC)	2021 Portable Equipment - Non-Rental Pump	Aggregated	750	Diesel	0.000198067	0.000239662	0.000285217	0.002082046	0.003893052	1.135078561	0.000160991	0.000148112	0.000160991	1.04884E-05	9.26436E-06	36826.37385	3430.670909	11.0413914	2405134
Riverside (SC)	2021 Portable Equipment - Non-Rental Pump	Aggregated	9999	Diesel	0.00022684	0.000274477	0.00032665	0.001226662	0.005153951	0.647544258	0.000135589	0.000124742	0.000135589	5.98006E-06	5.28517E-06	21008.8603	1029.201273	3.31241742	1372091
Riverside (SC)	2021 Portable Equipment - Rental Compressor	Aggregated	50	Diesel	8.95596E-06	1.08367E-05	1.28966E-05	0.000206493	0.000162516	0.034892452	2.44238E-06	2.24699E-06	2.44238E-06	3.22329E-07	2.84788E-07	1132.04718	1295.732271	2.484313065	66504.46
Riverside (SC)	2021 Portable Equipment - Rental Compressor	Aggregated	75	Diesel	3.79366E-05	4.59033E-05	5.46287E-05	0.000671862	0.000566201	0.101132998	1.82183E-05	1.67608E-05	1.82183E-05	9.33887E-07	8.25434E-07	3281.148729	3311.315804	6.348800056	214292.2
Riverside (SC)	2021 Portable Equipment - Rental Compressor	Aggregated	100	Diesel	2.26447E-05	2.74001E-05	3.26084E-05	0.000636066	0.000359942	0.094015968	2.60009E-05	2.39208E-05	2.60009E-05	8.68545E-07	7.67346E-07	3050.244526	2303.524038	4.41655656	199211.8
Riverside (SC)	2021 Portable Equipment - Rental Compressor	Aggregated	175	Diesel	0.000357898	0.000433057	0.000515373	0.01210285	0.005995159	2.199162298	0.000180725	0.000166267	0.000180725	2.03216E-05	1.79493E-05	71349.39883	32969.18779	63.21196577	4659836
Riverside (SC)	2021 Portable Equipment - Rental Compressor	Aggregated	300	Diesel	0.00020882	0.000252673	0.000300701	0.002686275	0.001716823	1.405044081	6.75181E-05	6.21166E-05	6.75181E-05	1.29841E-05	1.14678E-05	45585.10782	10221.88792	19.59846974	2977168
Riverside (SC)	2021 Portable Equipment - Rental Compressor	Aggregated	600	Diesel	0.003328731	0.004027765	0.004793373	0.037678669	0.036701786	19.77758609	0.001489102	0.001369974	0.001489102	0.000182754	0.000161422	641661.9997	74576.59072	142.9860186	41907010
Riverside (SC)	2021 Portable Equipment - Rental Compressor	Aggregated	750	Diesel	0.000350964	0.000424666	0.000505388	0.003959654	0.003075641	2.028353576	0.000161673	0.000148739	0.000161673	1.87426E-05	1.65551E-05	65807.69795	6622.631609	12.69760011	4297907
Riverside (SC)	2021 Portable Equipment - Rental Compressor	Aggregated	9999	Diesel	0.000289221	0.000349958	0.000416479	0.002817826	0.006860994	1.490377272	0.000157976	0.000145338	0.000157976	1.37706E-05	1.21643E-05	48353.64922	2879.405047	5.5206957	3157982
Riverside (SC)	2021 Portable Equipment - Rental Generator	Aggregated	50	Diesel	7.6744E-06	9.28603E-06	1.10511E-05	0.000110853	8.8626E-05	0.010787758	4.61647E-06	4.24715E-06	4.61647E-06	9.95079E-08	8.80482E-08	349.9969384	392.5916599	0.276034785	20561.3
Riverside (SC)	2021 Portable Equipment - Rental Generator	Aggregated	75	Diesel	0.001787818	0.00216326	0.002574458	0.02663024	0.021628567	3.676341653	0.000798496	0.000734617	0.000798496	3.3936E-05	3.00058E-05	119274.8562	114636.7647	80.60215723	7789853
Riverside (SC)	2021 Portable Equipment - Rental Generator	Aggregated	100	Diesel	0.003354182	0.004058561	0.004830023	0.062966356	0.042073782	8.609117653	0.003034945	0.00279215	0.003034945	7.94949E-05	7.02665E-05	279313.341	186481.0384	131.1165229	18241982
Riverside (SC)	2021 Portable Equipment - Rental Generator	Aggregated	175	Diesel	0.004919357	0.005952422	0.007083874	0.103881616	0.051828065	16.64610549	0.002153862	0.001981553	0.002153862	0.000153754	0.000135863	540064.5601	234377.221	164.7927667	35271671
Riverside (SC)	2021 Portable Equipment - Rental Generator	Aggregated	300	Diesel	0.011553848	0.013980156	0.016637541	0.074487889	0.101475369	34.00814954	0.004117435	0.00378804	0.004117435	0.000314076	0.00027757	1103356.959	278347.4869	195.7086626	72060354
Riverside (SC)	2021 Portable Equipment - Rental Generator	Aggregated	600	Diesel	0.0153243	0.018542403	0.022066992	0.107382708	0.124431977	52.44594516	0.005455023	0.005018622	0.005455023	0.000484429	0.000428057	1701550.932	259110.4955	182.1829581	1.11E+08
Riverside (SC)	2021 Portable Equipment - Rental Generator	Aggregated	750	Diesel	0.003483515	0.004215054	0.005016262	0.016146993	0.042613979	7.598768995	0.001607375	0.001478785	0.001607375	7.01499E-05	6.20201E-05	246533.6915	23162.90793	16.28605232	16101140
Riverside (SC)	2021 Portable Equipment - Rental Generator	Aggregated	9999	Diesel	0.031008568	0.037520367	0.044652338	0.196276289	0.524005085	96.40503922	0.015233785	0.014015082	0.015233785	0.000890382	0.000786845	3127755.326	157036.664	110.413914	2.04E+08
Riverside (SC)	2021 Portable Equipment - Rental Other Portable Equipment	Aggregated	50	Diesel	2.20147E-05	2.66378E-05	3.17011E-05	0.000362619	0.000288555	0.043851033	1.0674E-05	9.82009E-06	1.0674E-05	4.04764E-07	3.57906E-07	1422.698457	2037.244138	1.65620871	83579.37
Riverside (SC)	2021 Portable Equipment - Rental Other Portable Equipment	Aggregated	75	Diesel	0.000683416	0.000826933	0.000984119	0.013527562	0.010318123	2.032815047	0.000189166	0.000174033	0.000189166	1.87739E-05	1.65916E-05	65952.44546	57382.37656	46.64987867	4307361
Riverside (SC)	2021 Portable Equipment - Rental Other Portable Equipment	Aggregated	100	Diesel	0.000304894	0.000368922	0.000439047	0.008076768	0.00347852	1.078763299	0.000287117	0.000264148	0.000287117	9.96455E-06	8.80472E-06	34999.28718	24786.47035	20.15053931	2285807
Riverside (SC)	2021 Portable Equipment - Rental Other Portable Equipment	Aggregated	175	Diesel	0.001401698	0.001696055	0.002018446	0.035279474	0.014911851	5.912972379	0.000568235	0.000522776	0.000568235	5.46263E-05	4.82609E-05	191839.8769	90317.82346	73.42525282	12529082
Riverside (SC)	2021 Portable Equipment - Rental Other Portable Equipment	Aggregated	300	Diesel	0.001437061	0.001738844	0.002069368	0.008857114	0.012780488	3.930008382	0.000504757	0.000464377	0.000504757	3.62918E-05	3.20762E-05	127504.7938	33274.98759	27.05140893	8327351
Riverside (SC)	2021 Portable Equipment - Rental Other Portable Equipment	Aggregated	600	Diesel	0.000974866	0.001179588	0.001403807	0.006327435	0.008715133	3.081533437	0.000356484	0.000327965	0.000356484	2.84611E-05	2.51511E-05	99976.95865	15618.87173	12.69760011	6529505
Riverside (SC)	2021 Portable Equipment - Rental Other Portable Equipment	Aggregated	750	Diesel	0.000561537	0.00067946	0.000808614	0.004432372	0.005141108	2.212413107	0.000272351	0.000250563	0.000272351	2.0438E-05	1.80574E-05	71779.30672	6790.813794	5.5206957	4687914
Riverside (SC)	2021 Portable Equipment - Rental Other Portable Equipment	Aggregated	9999	Diesel	0.000707596	0.000856191	0.001018938	0.004241045	0.011359407	2.062859956	0.000331691	0.000305156	0.000331691	1.90509E-05	1.68368E-05	66927.21945	3395.406897	2.76034785	4371023
Riverside (SC)	2021 Portable Equipment - Rental Pump	Aggregated	50	Diesel	7.98121E-06	9.65727E-06	1.14929E-05	7.86119E-05	6.62073E-05	0.007278566	4.73243E-06	4.35384E-06	4.73243E-06	6.70545E-08	5.94067E-08	236.1450555	264.8839722	0.276034785	13872.83
Riverside (SC)	2021 Portable Equipment - Rental Pump	Aggregated	75	Diesel	0.000287869	0.000348322	0.000414532	0.006123862	0.00510421	0.941478934	0.000201371	0.000185261	0.000201371	8.6958E-06	7.68422E-06	30545.24717	26488.39722	27.6034785	1994913
Riverside (SC)	2021 Portable Equipment - Rental Pump	Aggregated	100	Diesel	0.000553362	0.000669567	0.000796841	0.010509835	0.00738396	1.444954109	0.000527077	0.000484911	0.000527077	1.33427E-05	1.17935E-05	46879.94472	34964.68433	36.43659162	3061734
Riverside (SC)	2021 Portable Equipment - Rental Pump	Aggregated	175	Diesel	0.000744456	0.000900791	0.001072016	0.015295707	0.008180822	2.445488258	0.000375345	0.000345318	0.000375345	2.25874E-05	1.99597E-05	79341.17332	34434.91639	35.88452205	5181780
Riverside (SC)	2021 Portable Equipment - Rental Pump	Aggregated	300	Diesel	0.000898609	0.001087316	0.001293996	0.007695211	0.007476928	3.691409268	0.000290504	0.000267264	0.000290504	3.4102E-05	3.01288E-05	119763.7083	28077.70106	29.25968721	7821780
Riverside (SC)	2021 Portable Equipment - Rental Pump	Aggregated	600	Diesel	0.001068301	0.001292644	0.001538353	0.010148891	0.009670517	5.236141812	0.000422799	0.000388976	0.000422799	4.83787E-05	4.27367E-05	169880.8545	28077.70106	29.25968721	11094936
Riverside (SC)	2021 Portable Equipment - Rental Pump	Aggregated	750	Diesel	0.000212339	0.00025693	0.000305768	0.001101451	0.002467891	0.531889768	0.000105179	9.67648E-05	0.000105179	4.91121E-06	4.34121E-06	17256.57775	1589.303833	1.65620871	1127029
Riverside (SC)	2021 TRU - Instate Genset TRU	Aggregated	50	Diesel	0.000980436	0.001186327	0.001411828	0.019167216	0.014485125	0.400970676	6.35141E-05	5.8433E-05	6.35141E-05	3.70263E-06	3.29462E-06	254.5216603	153331.3626	196.3972121	4829938
Riverside (SC)	2021 TRU - Instate Trailer TRU	Aggregated	50	Diesel	0.019273565	0.023321014	0.027753933	0.292208732	0.199178857	4.711625458	0.003482548	0.003203944	0.003482548	4.32753E-05	3.87136E-05	2990.769164	1197503.763	903.8562554	40715128
Riverside (SC)	2021 TRU - Instate Truck TRU	Aggregated	25	Diesel	0.002730504	0.00330391	0.003931926	0.026682774	0.032064393	0.640100583	0.001315109	0.001209901	0.001315109	5.87583E-06	5.25946E-06	406.3126627	322243.3464	236.7695418	4543631
Riverside (SC)	2021 TRU - Instate Van TRU	Aggregated	25	Diesel	6.32131E-05	7.64878E-05	9.10268E-05	0.000617725	0.000742313	0.014818777	3.04457E-05	2.801E-05	3.04457E-05	1.3603E-07	1.2176E-07	9.406422573	11687.58251	8.587496336	105188.2
Riverside (SC)	2021 TRU - Out-of-State Genset TRU	Aggregated	50	Diesel	0.000613263	0.000742048	0.000883098	0.01203431	0.009118512	0.252662539	3.9861E-05	3.66721E-05	3.9861E-05	2.33326E-06	2.07603E-06	160.381027	96618.26573	781.4234766	3043475
Riverside (SC)	2021 TRU - Out-of-State Trailer TRU	Aggregated	50	Diesel	0.010186099	0.012325179	0.014667982	0.16879102	0.115308707	2.924319249	0.001003482	0.000923203	0.001003482	2.69125E-05	2.4028E-05	1856.251927	743243.1413	3542.22615	25270267
Riverside (SC)	2021 TRU - Railcar TRU	Aggregated	50	Diesel	0.001054392	0.001275815	0.001518325	0.017472045	0.011935937	0.302704714	0.000103873	9.55634E-05	0.000103873	2.7858E-06	2.48721E-06	192.1459871	76935.23976	238.6106745	2615798

Proposed Facilities

PROPOSED CONDITIONS

Vehicle type	Fleet percent	VMT	
	High School	High School	Total
LDA	68.35%	4,200,185	4,200,185
LDT1	4.74%	291,143	291,143
LDT2	23.35%	1,434,908	1,434,908
MDV	2.00%	122,925	122,925
LHD1	0.15%	8,910	8,910
LHD2	0.05%	2,820	2,820
MHD	0.16%	9,543	9,543
HHD	0.61%	37,692	37,692
OBUS	0.00%	0	0
UBUS	0.00%	0	0
MCY	0.58%	35,498	35,498
SBUS	0.01%	516	516
MH	0.01%	571	571
	100.00%	6,144,718	6,144,718

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High School	3,156.91	3,156.91	3156.91	6,144,718	6,144,718
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	3,156.91	3,156.91	3,156.91	6,144,718	6,144,718

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
High School	0.683544	0.047381	0.233519	0.020005	0.001450	0.000459	0.001553	0.006134	0.000000	0.000000	0.005777	0.000084	0.00009
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.00103
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.00103
Parking Lot	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.00103

PROPOSED CONDITIONS

Vehicle type	Gas percent	Diesel percent	CNG percent	Electricity percent	
LDA	97.82%	0.95%	0.00%	1.23%	
LDT1	99.56%	0.03%	0.00%	0.42%	
LDT2	98.85%	0.61%	0.00%	0.54%	
MDV	97.44%	2.24%	0.00%	0.32%	
LHD1	48.68%	51.32%	0.00%	0.00%	
LHD2	26.31%	73.69%	0.00%	0.00%	
MHD	6.71%	93.29%	0.00%	0.00%	<< Equal to T6 (https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf)
HHD	0.03%	99.47%	0.50%	0.00%	<< Equal to T7 (https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf)
OBUS	50.31%	49.69%	0.00%	0.00%	<< Motor coach, all other buses, and OBUS (https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf)
UBUS	46.24%	0.12%	53.64%	0.00%	
MCY	100.00%	0.00%	0.00%	0.00%	
SBUS	35.57%	64.43%	0.00%	0.00%	
MH	71.40%	28.60%	0.00%	0.00%	

PROPOSED CONDITIONS

Vehicle type	Gasoline			Diesel			CNG			Electricity		
	VMT	mpg	Gallons	VMT	mpg	Gallons	VMT	mpg	Gallons	VMT	m/kWh	kWh
LDA	4,108,646	31.32	131,167	39,939	50.85	785	0	0.00	0	51,599	3.02	17,104
LDT1	289,849	26.66	10,870	85	25.40	3	0	0.00	0	1,209	3.02	401
LDT2	1,418,392	24.90	56,966	8,714	38.08	229	0	0.00	0	7,802	3.02	2,586
MDV	119,783	19.88	6,024	2,749	27.96	98	0	0.00	0	393	3.02	130
LHD1	4,338	10.70	406	4,572	20.70	221	0	0.00	0	0	3.02	0
LHD2	742	9.36	79	2,078	18.94	110	0	0.00	0	0	3.02	0
MHD	640	5.18	124	8,902	10.78	826	0	0.00	0	0	3.02	0
HHD	10	4.09	2	37,493	7.01	5,346	189	2.33	81	0	3.02	0
OBUS	0	5.09	0	0	9.05	0	0	0.00	0	0	3.02	0
UBUS	0	6.16	0	0	8.92	0	0	4.23	0	0	3.02	0
MCY	35,498	37.97	935	0	0.00	0	0	0.00	0	0	3.02	0
SBUS	184	8.82	21	333	7.49	44	0	0.00	0	0	3.02	0
MH	408	5.11	80	163	10.80	15	0	0.00	0	0	3.02	0
	5,978,491		**206,674**	**105,029**		**7,678**	**189**		**81**	**61,003**		**20,221**

EMFAC Fuel Usage: Year 2020

Vehicle type	Gasoline			Diesel			Natural Gas			Electricity
	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day
All other buses	0	0	0.00	9,716	958	10.14	0	0	0.00	0
LDA	22,811,940	744,924	30.62	211,708	4,253	49.78	0	0	0.00	225,470
LDT1	2,171,444	83,378	26.04	704	28	25.18	0	0	0.00	5,032
LDT2	6,953,901	288,501	24.10	38,381	1,037	37.02	0	0	0.00	27,870
LHD1	522,854	49,160	10.64	546,498	26,632	20.52	0	0	0.00	0
LHD2	74,925	8,051	9.31	210,206	11,198	18.77	0	0	0.00	0
MCY	186,162	4,883	38.12	0	0	0.00	0	0	0.00	0
MDV	5,759,435	297,212	19.38	122,611	4,492	27.30	0	0	0.00	9,883
MH	42,692	8,403	5.08	16,646	1,552	10.73	0	0	0.00	0
Motor coach	0	0	0.00	5,401	826	6.54	0	0	0.00	0
OBUS	16,099	3,193	5.04	0	0	0.00	0	0	0.00	0
PTO	0	0	0.00	38,521	7,801	4.94	0	0	0.00	0
SBUS	14,360	1,634	8.79	25,717	3,471	7.41	0	0	0.00	0
T6	51,276	10,044	5.11	722,760	68,471	10.56	0	0	0.00	0
T7	496	124	3.99	1,811,263	262,583	6.90	7,927	3,460	2.29	0
UBUS	22,881	3,712	6.16	59	7	8.92	26,538	6,280	4.23	1
Total	**38,628,465**	**1,503,220**	**25.70**	**3,760,189**	**393,309**	**9.56**	**34,465**	**9,740**	**3.54**	**268,256**

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2020
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption
Riverside (SC)	2020	All Other Buses	Aggregated	Aggregated	DSL	181.6035296	9715.89	1525.47	0.958448271
Riverside (SC)	2020	LDA	Aggregated	Aggregated	GAS	544330.7452	22811940	2577014	744.9244753
Riverside (SC)	2020	LDA	Aggregated	Aggregated	DSL	4801.796275	211707.5	23004.2	4.252687363
Riverside (SC)	2020	LDA	Aggregated	Aggregated	ELEC	5917.336596	225470.38	29889.45	0
Riverside (SC)	2020	LDT1	Aggregated	Aggregated	GAS	56941.70538	2171443.9	257765.5	83.37784248
Riverside (SC)	2020	LDT1	Aggregated	Aggregated	DSL	32.63987716	703.60725	107.6552	0.027947212
Riverside (SC)	2020	LDT1	Aggregated	Aggregated	ELEC	131.0488487	5032.1362	662.2684	0
Riverside (SC)	2020	LDT2	Aggregated	Aggregated	GAS	172787.9159	6953901	808078.9	288.5007234
Riverside (SC)	2020	LDT2	Aggregated	Aggregated	DSL	801.9527862	38380.621	3973.328	1.036808352
Riverside (SC)	2020	LDT2	Aggregated	Aggregated	ELEC	857.4023436	27869.839	4368.932	0
Riverside (SC)	2020	LHD1	Aggregated	Aggregated	GAS	15903.23291	522854.16	236934.5	49.16043014
Riverside (SC)	2020	LHD1	Aggregated	Aggregated	DSL	15724.26694	546497.79	197791.5	26.63227902
Riverside (SC)	2020	LHD2	Aggregated	Aggregated	GAS	2247.021483	74925.36	33477.27	8.050830837
Riverside (SC)	2020	LHD2	Aggregated	Aggregated	DSL	5986.499893	210205.55	75302.64	11.19837134
Riverside (SC)	2020	MCY	Aggregated	Aggregated	GAS	27562.03276	186161.69	55124.07	4.883458381
Riverside (SC)	2020	MDV	Aggregated	Aggregated	GAS	154154.4763	5759434.7	707161	297.211555
Riverside (SC)	2020	MDV	Aggregated	Aggregated	DSL	2774.383834	122611.31	13585.96	4.491895248
Riverside (SC)	2020	MDV	Aggregated	Aggregated	ELEC	297.2379218	9882.7846	1525.076	0
Riverside (SC)	2020	MH	Aggregated	Aggregated	GAS	5298.489729	42692.113	530.0609	8.40271755
Riverside (SC)	2020	MH	Aggregated	Aggregated	DSL	1995.592802	16646.265	199.5593	1.551805421
Riverside (SC)	2020	Motor Coach	Aggregated	Aggregated	DSL	42.30029755	5401.2695	617.5843	0.825720997
Riverside (SC)	2020	OBUS	Aggregated	Aggregated	GAS	443.2109762	16098.842	8867.765	3.193257484
Riverside (SC)	2020	PTO	Aggregated	Aggregated	DSL	0	38520.745	0	7.801198622
Riverside (SC)	2020	SBUS	Aggregated	Aggregated	GAS	395.8309322	14360.459	1583.324	1.634422225
Riverside (SC)	2020	SBUS	Aggregated	Aggregated	DSL	812.4348173	25716.682	9375.385	3.471308225
Riverside (SC)	2020	T6 Ag	Aggregated	Aggregated	DSL	4.383129537	86.900492	19.28577	0.00907683
Riverside (SC)	2020	T6 CAIRP heavy	Aggregated	Aggregated	DSL	43.44038344	8684.3938	634.2296	0.741465283
Riverside (SC)	2020	T6 CAIRP small	Aggregated	Aggregated	DSL	22.20660971	1173.2987	324.2165	0.106869275
Riverside (SC)	2020	T6 instate constr	Aggregated	Aggregated	DSL	651.6687014	44305.755	2946.169	4.30468991
Riverside (SC)	2020	T6 instate constr	Aggregated	Aggregated	DSL	1354.596268	69151.91	6124.077	6.632685074
Riverside (SC)	2020	T6 instate heavy	Aggregated	Aggregated	DSL	1840.996412	233900.13	21244.84	21.33117101
Riverside (SC)	2020	T6 instate small	Aggregated	Aggregated	DSL	7200.600575	347280.52	83093.93	33.34465165
Riverside (SC)	2020	T6 OOS heavy	Aggregated	Aggregated	DSL	24.49029118	4896.5747	357.5583	0.418200687
Riverside (SC)	2020	T6 OOS small	Aggregated	Aggregated	DSL	12.91506092	676.78467	188.5599	0.061718982
Riverside (SC)	2020	T6 Public	Aggregated	Aggregated	DSL	666.265115	9892.4536	2021.004	1.241735601
Riverside (SC)	2020	T6 utility	Aggregated	Aggregated	DSL	162.4337825	2711.2297	1867.988	0.278258807
Riverside (SC)	2020	T6TS	Aggregated	Aggregated	GAS	1269.719696	51275.623	25404.55	10.04377418
Riverside (SC)	2020	T7 Ag	Aggregated	Aggregated	DSL	9.338038061	123.76157	41.08737	0.021128599
Riverside (SC)	2020	T7 CAIRP	Aggregated	Aggregated	DSL	1539.898711	278768.52	22482.52	39.66330935
Riverside (SC)	2020	T7 CAIRP constru	Aggregated	Aggregated	DSL	173.0313734	31825.209	782.2681	4.293420395
Riverside (SC)	2020	T7 NNOOS	Aggregated	Aggregated	DSL	1683.711642	339842.51	24582.19	46.93881982
Riverside (SC)	2020	T7 NOOS	Aggregated	Aggregated	DSL	605.2818517	109522.92	8837.115	15.9684922
Riverside (SC)	2020	T7 POLA	Aggregated	Aggregated	DSL	2112.421737	258474.6	16054.41	40.94558036
Riverside (SC)	2020	T7 Public	Aggregated	Aggregated	DSL	798.4264191	16189.075	2421.893	2.79493417
Riverside (SC)	2020	T7 Single	Aggregated	Aggregated	DSL	2589.190539	193998.17	29878.9	28.08363094
Riverside (SC)	2020	T7 single constru	Aggregated	Aggregated	DSL	1119.443397	78952.49	5060.96	11.75612883
Riverside (SC)	2020	T7 SWCV	Aggregated	Aggregated	DSL	88.10157927	3599.6878	343.5962	1.779851942
Riverside (SC)	2020	T7 SWCV	Aggregated	Aggregated	NG	195.4860734	7927.1878	762.3957	3.460299106
Riverside (SC)	2020	T7 tractor	Aggregated	Aggregated	DSL	3143.427852	432646.56	39921.53	60.26544413
Riverside (SC)	2020	T7 tractor constr	Aggregated	Aggregated	DSL	926.7659356	65128.853	4189.873	9.726733713
Riverside (SC)	2020	T7 utility	Aggregated	Aggregated	DSL	107.9345364	2190.4787	1241.247	0.345493149
Riverside (SC)	2020	T7IS	Aggregated	Aggregated	GAS	7.834009455	495.69721	156.7429	0.124168185
Riverside (SC)	2020	UBUS	Aggregated	Aggregated	GAS	162.5145119	22881.199	650.058	3.711979171
Riverside (SC)	2020	UBUS	Aggregated	Aggregated	DSL	1.105797941	58.571904	4.423192	0.006566327
Riverside (SC)	2020	UBUS	Aggregated	Aggregated	ELEC	0.058469431	1.2517029	0.233878	0
Riverside (SC)	2020	UBUS	Aggregated	Aggregated	NG	201.6964296	26538.114	806.7857	6.279789141

EMFAC Fuel Usage: Year 2021

Vehicle type	Gasoline			Diesel			Natural Gas			Electricity
	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day
All other buses	0	0	0.00	9,961	961	10.37	0	0	0.00	0
LDA	23,296,505	743,733	31.32	226,459	4,453	50.85	0	0	0.00	292,574
LDT1	2,219,909	83,253	26.66	650	26	25.40	0	0	0.00	9,257
LDT2	7,067,860	283,861	24.90	43,422	1,140	38.08	0	0	0.00	38,876
LHD1	510,348	47,715	10.70	537,961	25,986	20.70	0	0	0.00	0
LHD2	74,170	7,925	9.36	207,780	10,968	18.94	0	0	0.00	0
MCY	183,349	4,829	37.97	0	0	0.00	0	0	0.00	0
MDV	5,679,895	285,658	19.88	130,331	4,662	27.96	0	0	0.00	18,658
MH	40,199	7,866	5.11	16,101	1,491	10.80	0	0	0.00	0
Motor coach	0	0	0.00	5,506	826	6.67	0	0	0.00	0
OBUS	15,661	3,077	5.09	0	0	0.00	0	0	0.00	0
PTO	0	0	0.00	40,020	7,994	5.01	0	0	0.00	0
SBUS	14,545	1,650	8.82	26,347	3,516	7.49	0	0	0.00	0
T6	52,659	10,174	5.18	732,039	67,897	10.78	0	0	0.00	0
T7	479	117	4.09	1,857,920	264,925	7.01	9,360	4,011	2.33	0
UBUS	23,018	3,736	6.16	59	7	8.92	26,697	6,315	4.23	1
Total	**39,178,597**	**1,483,593**	**26.41**	**3,834,555**	**394,851**	**9.71**	**36,057**	**10,326**	**3.49**	**359,366**

EMFAC2017 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Riverside (SC)
Calendar Year: 2021
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption. Note 'day' in the unit is operation day

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	Fuel Consumption
Riverside (SC)	2021	All Other Buses	Aggregated	Aggregated	DSL	182.0424363	9960.69596	1529.156465	0.960645275
Riverside (SC)	2021	LDA	Aggregated	Aggregated	GAS	563361.5495	23296504.67	2667609.425	743.7333054
Riverside (SC)	2021	LDA	Aggregated	Aggregated	DSL	5219.69302	226458.8046	25000.68978	4.453454804
Riverside (SC)	2021	LDA	Aggregated	Aggregated	ELEC	7550.910561	292574.2633	38037.58496	0
Riverside (SC)	2021	LDT1	Aggregated	Aggregated	GAS	58475.42768	2219909.251	265629.8845	83.25302578
Riverside (SC)	2021	LDT1	Aggregated	Aggregated	DSL	30.15411229	650.1856866	99.3322056	0.025601613
Riverside (SC)	2021	LDT1	Aggregated	Aggregated	ELEC	231.4028554	9256.810891	1176.076849	0
Riverside (SC)	2021	LDT2	Aggregated	Aggregated	GAS	177423.7963	7067860.432	830512.9744	283.8610373
Riverside (SC)	2021	LDT2	Aggregated	Aggregated	DSL	927.6206127	43422.04823	4592.575857	1.140187376
Riverside (SC)	2021	LDT2	Aggregated	Aggregated	ELEC	1222.520063	38876.44228	6214.964587	0
Riverside (SC)	2021	LHD1	Aggregated	Aggregated	GAS	15655.58333	510348.3794	233244.8648	47.71514013
Riverside (SC)	2021	LHD1	Aggregated	Aggregated	DSL	15786.61692	537960.5827	198575.7812	25.98590368
Riverside (SC)	2021	LHD2	Aggregated	Aggregated	GAS	2249.730422	74170.48849	33517.63119	7.924831239
Riverside (SC)	2021	LHD2	Aggregated	Aggregated	DSL	6056.795838	207780.2758	76186.8722	10.96838698
Riverside (SC)	2021	MCY	Aggregated	Aggregated	GAS	27861.54696	183348.9736	55723.09393	4.828544708
Riverside (SC)	2021	MDV	Aggregated	Aggregated	GAS	154248.8417	5679894.563	706953.547	285.6582866
Riverside (SC)	2021	MDV	Aggregated	Aggregated	DSL	3020.678509	130330.5709	14741.57267	4.661607229
Riverside (SC)	2021	MDV	Aggregated	Aggregated	ELEC	571.2528957	18657.55493	2928.705005	0
Riverside (SC)	2021	MH	Aggregated	Aggregated	GAS	5071.35352	40199.38943	507.3382062	7.865862736
Riverside (SC)	2021	MH	Aggregated	Aggregated	DSL	1991.436876	16101.15039	199.1436876	1.490736104
Riverside (SC)	2021	Motor Coach	Aggregated	Aggregated	DSL	42.34958587	5505.50416	618.3039537	0.825885679
Riverside (SC)	2021	OBUS	Aggregated	Aggregated	GAS	440.9352614	15660.94555	8822.232709	3.076575652
Riverside (SC)	2021	PTO	Aggregated	Aggregated	DSL	0	40020.26642	0	7.993642594
Riverside (SC)	2021	SBUS	Aggregated	Aggregated	GAS	406.9191801	14544.86274	1627.676721	1.649581397
Riverside (SC)	2021	SBUS	Aggregated	Aggregated	DSL	832.5656654	26346.9299	9607.692348	3.516063942
Riverside (SC)	2021	T6 Ag	Aggregated	Aggregated	DSL	4.345263415	76.84412582	19.11915903	0.008054163
Riverside (SC)	2021	T6 CAIRP heavy	Aggregated	Aggregated	DSL	44.97054209	8919.522938	656.5699145	0.745021395
Riverside (SC)	2021	T6 CAIRP small	Aggregated	Aggregated	DSL	22.86210172	1198.239005	333.7866851	0.106977561
Riverside (SC)	2021	T6 instate constructio	Aggregated	Aggregated	DSL	661.5241834	45015.58469	2990.725113	4.29995012
Riverside (SC)	2021	T6 instate constructio	Aggregated	Aggregated	DSL	1357.870671	70259.80395	6138.880509	6.616862266
Riverside (SC)	2021	T6 instate heavy	Aggregated	Aggregated	DSL	1865.190868	239047.0956	21524.04401	21.24069818
Riverside (SC)	2021	T6 instate small	Aggregated	Aggregated	DSL	7237.472628	349547.2923	83519.43069	32.94704629
Riverside (SC)	2021	T6 OOS heavy	Aggregated	Aggregated	DSL	25.18971398	5010.492507	367.7698241	0.418417856
Riverside (SC)	2021	T6 OOS small	Aggregated	Aggregated	DSL	13.316231	691.6777405	194.4169726	0.061832625
Riverside (SC)	2021	T6 Public	Aggregated	Aggregated	DSL	639.8485802	9538.151168	1940.874025	1.181661974
Riverside (SC)	2021	T6 utility	Aggregated	Aggregated	DSL	162.4937853	2734.719695	1868.678531	0.270565008
Riverside (SC)	2021	T6TS	Aggregated	Aggregated	GAS	1296.813166	52658.61531	25946.63783	10.17367434
Riverside (SC)	2021	T7 Ag	Aggregated	Aggregated	DSL	9.50057431	112.1224494	41.80252696	0.019320917
Riverside (SC)	2021	T7 CAIRP	Aggregated	Aggregated	DSL	1600.258825	284181.439	23363.77885	39.91314635
Riverside (SC)	2021	T7 CAIRP constructior	Aggregated	Aggregated	DSL	178.9463352	32335.08553	809.0094239	4.288258521
Riverside (SC)	2021	T7 NNOOS	Aggregated	Aggregated	DSL	1727.020025	346439.3073	25214.49236	46.81907788
Riverside (SC)	2021	T7 NOOS	Aggregated	Aggregated	DSL	628.3134737	111649.3695	9173.376716	16.07156696
Riverside (SC)	2021	T7 POLA	Aggregated	Aggregated	DSL	2177.610745	274553.6835	16549.84167	42.92814599
Riverside (SC)	2021	T7 Public	Aggregated	Aggregated	DSL	791.8810125	16056.87025	2402.039069	2.740678412
Riverside (SC)	2021	T7 Single	Aggregated	Aggregated	DSL	2722.275606	201550.0611	31414.68306	28.75593627
Riverside (SC)	2021	T7 single constructior	Aggregated	Aggregated	DSL	1140.858447	80217.39979	5157.776684	11.72884546
Riverside (SC)	2021	T7 SWCV	Aggregated	Aggregated	DSL	80.24210488	3278.562394	312.944209	1.620707104
Riverside (SC)	2021	T7 SWCV	Aggregated	Aggregated	NG	230.6715024	9360.06032	899.6188595	4.010788503
Riverside (SC)	2021	T7 tractor	Aggregated	Aggregated	DSL	3238.522555	439164.0676	41129.23645	59.96657867
Riverside (SC)	2021	T7 tractor constructio	Aggregated	Aggregated	DSL	952.684405	66172.29242	4307.049155	9.736881843
Riverside (SC)	2021	T7 utility	Aggregated	Aggregated	DSL	108.8996076	2209.412074	1252.345487	0.336291252
Riverside (SC)	2021	T7IS	Aggregated	Aggregated	GAS	7.215312711	478.7902746	144.3639767	0.116984003
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	GAS	163.4848401	23017.81637	653.9393604	3.736316018
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	DSL	1.105797941	58.57190354	4.423191762	0.006566346
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	ELEC	0.058469431	1.251702935	0.233877724	0
Riverside (SC)	2021	UBUS	Aggregated	Aggregated	NG	202.9076535	26696.92315	811.6306138	6.314839053

Appendix C Noise Modeling Data

Appendices

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Chapter 9.52 - NOISE REGULATION

Sections:

9.52.010 - Intent.

9.52.020 - Exemptions.

9.52.010 - Intent.

At certain levels, sound becomes noise and may jeopardize the health, safety or general welfare of Riverside County residents and degrade their quality of life. Pursuant to its police power, the board of supervisors declares that noise shall be regulated in the manner described in this chapter. This chapter is intended to establish county-wide standards regulating noise. This chapter is not intended to establish thresholds of significance for the purpose of any analysis required by the California Environmental Quality Act and no such thresholds are established.

(Ord. 847 § 1, 2006)

9.52.020 - Exemptions.

Sound emanating from the following sources is exempt from the provisions of this chapter:

A. Facilities owned or operated by or for a governmental agency;

B. Capital improvement projects of a governmental agency;

C. The maintenance or repair of public properties;

D. Public safety personnel in the course of executing their official duties, including, but not limited to, sworn peace officers, emergency personnel and public utility personnel. This exemption includes, without limitation, sound emanating from all equipment used by such personnel, whether stationary or mobile;

E. Public or private schools and school-sponsored activities;

F. Agricultural operations on land designated "Agriculture" in the Riverside County general plan, or land zoned A-l (light agriculture), A-P (light agriculture with poultry), A-2 (heavy agriculture), A-D (agriculture-dairy) or C/V (citrus/vineyard), provided such operations are carried out in a manner consistent with accepted industry standards. This exemption includes, without limitation, sound emanating from all equipment used during such operations, whether stationary or mobile;

G. Wind energy conversion systems (WECS), provided such systems comply with the WECS noise provisions of Riverside County Ordinance No. 348;

H. Private construction projects located one-quarter of a mile or more from an inhabited dwelling;

I. Private construction projects located within one-quarter of a mile from an inhabited dwelling, provided that:

1. Construction does not occur between the hours of six p.m. and six a.m. during the months of June through September, and
2. Construction does not occur between the hours of six p.m. and seven a.m. during the months of October through May;

J. Property maintenance, including, but not limited to, the operation of lawnmowers, leaf blowers, etc., provided such maintenance occurs between the hours of seven a.m. and eight p.m.;

K. Motor vehicles, other than off-highway vehicles. This exemption does not include sound emanating from motor vehicle sound systems;

L. Heating and air conditioning equipment;

M. Safety, warning and alarm devices, including, but not limited to, house and car alarms, and other warning devices that are designed to protect the public health, safety, and welfare;

N. The discharge of firearms consistent with all state laws.

(Ord. 847 § 2, 2006)

9.52.030 - Definitions.

As used in this chapter, the following terms shall have the following meanings:

"Audio equipment" means a television, stereo, radio, tape player, compact disc player, mp3 player, I-POD or other similar device.

"Decibel (dB)" means a unit for measuring the relative amplitude of a sound equal approximately to the smallest difference normally detectable by the human ear, the range of which includes approximately one hundred thirty (130) decibels on a scale beginning with zero decibels for the faintest detectable sound. Decibels are measured with a sound level meter using different methodologies as defined below:

1. "A-weighting (dBA)" means the standard A-weighted frequency response of a sound level meter, which de-emphasizes low and high frequencies of sound in a manner similar to the human ear for moderate sounds.
2. "Maximum sound level (L_{max})" means the maximum sound level measured on a sound level meter.

"Governmental agency" means the United States, the state of California, Riverside County, any city within Riverside County, any special district within Riverside County or any combination of these agencies.

"Land use permit" means a discretionary permit issued by Riverside County pursuant to Riverside County Ordinance No. 348.

"Motor vehicle" means a vehicle that is self-propelled.

"Motor vehicle sound system" means a stereo, radio, tape player, compact disc player, mp3 player, I-POD or other similar device.

"Noise" means any loud, discordant or disagreeable sound.

"Occupied property" means property upon which is located a residence, business or industrial or manufacturing use.

"Off-highway vehicle" means a motor vehicle designed to travel over any terrain.

"Public or private school" means an institution conducting academic instruction at the preschool, elementary school, junior high school, high school, or college level.

"Public property" means property owned by a governmental agency or held open to the public, including, but not limited to, parks, streets, sidewalks, and alleys.

"Sensitive receptor" means a land use that is identified as sensitive to noise in the noise element of the Riverside County general plan, including, but not limited to, residences, schools, hospitals, churches, rest homes, cemeteries or public libraries.

"Sound-amplifying equipment" means a loudspeaker, microphone, megaphone or other similar device.

"Sound level meter" means an instrument meeting the standards of the American National Standards Institute for Type 1 or Type 2 sound level meters or an instrument that provides equivalent data.

(Ord. 847 § 3, 2006)

9.52.040 - General sound level standards.

No person shall create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards set forth in Table 1.

TABLE 1

Sound Level Standards (Db L_{max})

GENERAL PLAN FOUNDATION COMPONENT	GENERAL PLAN LAND USE DESIGNATION	GENERAL PLAN LAND USE DESIGNATION NAME	DENSITY	MAXIMUM DECIBEL LEVEL	
				7 am—10 pm	10 pm—7 am

Community Development	EDR	Estate Density Residential	2 AC	55	45
	VLDR	Very Low Density Residential	1 AC	55	45
	LDR	Low Density Residential	1/2 AC	55	45
	MDR	Medium Density Residential	2—5	55	45
	MHDR	Medium High Density Residential	5—8	55	45
	HDR	High Density Residential	8—14	55	45
	VHDR	Very High Density Residential	14—20	55	45
	H'TDR	Highest Density Residential	20+	55	45
	CR	Retail Commercial		65	55
	CO	Office Commercial		65	55

	CT	Tourist Commercial		65	55
	CC	Community Center		65	55
	LI	Light Industrial		75	55
	HI	Heavy Industrial		75	75
	BP	Business Park		65	45
	PF	Public Facility		65	45
	SP	Specific Plan-Residential		55	45
		Specific Plan-Commercial		65	55
		Specific Plan-Light Industrial		75	55
		Specific Plan-Heavy Industrial		75	75
Rural Community	EDR	Estate Density Residential	2 AC	55	45
	VLDR	Very Low Density Residential	1 AC	55	45

	LDR	Low Density Residential	1/2 AC	55	45
Rural	RR	Rural Residential	5 AC	45	45
	RM	Rural Mountainous	10 AC	45	45
	RD	Rural Desert	10 AC	45	45
Agriculture	AG	Agriculture	10 AC	45	45
Open Space	C	Conservation		45	45
	CH	Conservation Habitat		45	45
	REC	Recreation		45	45
	RUR	Rural	20 AC	45	45
	W	Watershed		45	45
	MR	Mineral Resources		75	45

(Ord. 847 § 4, 2006)

9.52.050 - Sound level measurement methodology.

Sound level measurements may be made anywhere within the boundaries of an occupied property. The actual location of a sound level measurement shall be at the discretion of the enforcement officials identified in Section 9.52.080 of this chapter. Sound level measurements shall be made with a sound level meter. Immediately before a measurement is made, the sound level meter shall be calibrated utilizing an

acoustical calibrator meeting the standards of the American National Standards Institute. Following a sound level measurement, the calibration of the sound level meter shall be re-verified. Sound level meters and calibration equipment shall be certified annually.

(Ord. 847 § 5, 2006)

9.52.060 - Special sound sources standards.

The general sound level standards set forth in Section 9.52.040 of this chapter apply to sound emanating from all sources, including the following special sound sources, and the person creating, or allowing the creation of, the sound is subject to the requirements of that section. The following special sound sources are also subject to the following additional standards, the failure to comply with which constitutes separate violations of this chapter:

A. Motor Vehicles.
    1. Off-Highway Vehicles.
        a. No person shall operate an off-highway vehicle unless it is equipped with a USDA-qualified spark arrester and a constantly operating and properly maintained muffler. A muffler is not considered constantly operating and properly maintained if it is equipped with a cutout, bypass or similar device.
        b. No person shall operate an off-highway vehicle unless the noise emitted by the vehicle is not more than ninety-six (96) dBA if the vehicle was manufactured on or after January 1, 1986 or is not more than one hundred one (101) dBA if the vehicle was manufactured before January 1, 1986. For purposes of this subsection, emitted noise shall be measured a distance of twenty (20) inches from the vehicle tailpipe using test procedures established by the Society of Automotive Engineers under Standard J-1287.
    2. Sound Systems. No person shall operate a motor vehicle sound system, whether affixed to the vehicle or not, between the hours of ten p.m. and eight a.m., such that the sound system is audible to the human ear inside any inhabited dwelling. No person shall operate a motor vehicle sound system, whether affixed to the vehicle or not, at any other time such that the sound system is audible to the human ear at a distance greater than one hundred (100) feet from the vehicle.
B. Power Tools and Equipment. No person shall operate any power tools or equipment between the hours of ten p.m. and eight a.m. such that the power tools or equipment are audible to the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment may be located. No person shall operate any

power tools or equipment at any other time such that the power tools or equipment are audible to the human ear at a distance greater than one hundred (100) feet from the power tools or equipment.

C. Audio Equipment. No person shall operate any audio equipment, whether portable or not, between the hours of ten p.m. and eight a.m. such that the equipment is audible to the human ear inside an inhabited dwelling other than a dwelling in which the equipment may be located. No person shall operate any audio equipment, whether portable or not, at any other time such that the equipment is audible to the human ear at a distance greater than one hundred (100) feet from the equipment.

D. Sound-Amplifying Equipment and Live Music. No person shall install, use or operate sound-amplifying equipment, or perform, or allow to be performed, live music unless such activities comply with the following requirements. To the extent that these requirements conflict with any conditions of approval attached to an underlying land use permit, these requirements shall control:

1. Sound-amplifying equipment or live music is prohibited between the hours of ten p.m. and eight a.m.
2. Sound emanating from sound-amplifying equipment or live music at any other time shall not be audible to the human ear at a distance greater than two hundred (200) feet from the equipment or music.

(Ord. 847 § 6, 2006)

9.52.070 - Exceptions.

Exceptions may be requested from the standards set forth in Section 9.52.040 or 9.52.060 of this chapter and may be characterized as construction-related, single-event or continuous-events exceptions.

A. Application and Processing.

1. Construction-Related Exceptions. An application for a construction-related exception shall be made to and considered by the director of building and safety on forms provided by the building and safety department and shall be accompanied by the appropriate filing fee. No public hearing is required.
2. Single-Event Exceptions. An application for a single-event exception shall be made to and considered by the planning director on forms provided by the planning department and shall be accompanied by the appropriate filing fee. No public hearing is required.
3. Continuous-Events Exceptions. An application for a continuous-events exception shall be made to the planning director on forms provided by the planning department and shall be accompanied by the appropriate filing fee. Upon receipt

of an application for a continuous-events exception, the planning director shall set the matter for public hearing before the planning commission, notice of which shall be given as provided in Section 18.26c of Riverside County Ordinance No. 348. Notwithstanding the above, an application for a continuous-events exception that is associated with an application for a land use permit shall be processed concurrently with the land use permit in the same manner that the land use permit is required to be processed.

B. Requirements for Approval. The appropriate decisionmaking body or officer shall not approve an exception application unless the applicant demonstrates that the activities described in the application would not be detrimental to the health, safety or general welfare of the community. In determining whether activities are detrimental to the health, safety or general welfare of the community, the appropriate decisionmaking body or officer shall consider such factors as the proposed duration of the activities and their location in relation to sensitive receptors. If an exception application is approved, reasonable conditions may be imposed to minimize the public detriment, including, but not limited to, restrictions on sound level, sound duration and operating hours.

C. Appeals. The director of building and safety's decision on an application for a construction-related exception is considered final. The planning director's decision on an application for a single-event exception is considered final. After making a decision on an application for a continuous-events exception, the appropriate decisionmaking body or officer shall mail notice of the decision to the applicant. Within ten (10) calendar days after the mailing of such notice, the applicant or an interested person may appeal the decision to the board of supervisors. Upon receipt of an appeal and payment of the appropriate appeal fee, the clerk of the board shall set the matter for hearing not less than five days nor more than thirty (30) days thereafter and shall give written notice of the hearing in the same manner as notice of the hearing was given by the appropriate hearing officer or body. The board of supervisors shall render its decision within thirty (30) days after the appeal hearing is closed.

D. Effect of a Pending Continuous-Events Exception Application. For a period of one hundred eighty (180) days from the effective date of this chapter, no person creating any sound prohibited by this chapter shall be considered in violation of this chapter if the sound is related to a use that is operating pursuant to an approved land use permit, if an application for a continuous-events exception has been filed to sanction the sound and if a decision on the application is pending.

(Ord. 847 § 7, 2006)

9.52.080 - Enforcement.

The Riverside County sheriff and code enforcement shall have the primary responsibility for enforcing this chapter; provided, however, the sheriff and code enforcement may be assisted by the public health department. Violations shall be prosecuted as described in Section 9.52.100 of this chapter, but nothing in this chapter shall prevent the sheriff, code enforcement or the department of public health from engaging in efforts to obtain voluntary compliance by means of warnings, notices, or educational programs.

(Ord. 847.1 § 1, 2007: Ord. 847 § 8, 2006)

9.52.090 - Duty to cooperate.

No person shall refuse to cooperate with, or obstruct, the enforcement officials identified in Section 9.52.080 of this chapter when they are engaged in the process of enforcing the provisions of this chapter. This duty to cooperate may require a person to extinguish a sound source so that it can be determined whether sound emanating from the source violates the provisions of this chapter.

(Ord. 847 § 9, 2006)

9.52.100 - Violations and penalties.

Any person who violates any provision of this chapter once or twice within a one hundred eighty (180) day period shall be guilty of an infraction. Any person who violates any provision of this chapter more than twice within a one hundred eighty (180) day period shall be guilty of a misdemeanor. Each day a violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such. Penalties shall not exceed the following amounts:

A. For the first violation within a one hundred eighty (180) day period, the minimum mandatory fine shall be five hundred dollars ($500.00).
B. For the second violation within a one hundred eighty (180) day period, the minimum mandatory fine shall be seven hundred fifty dollars ($750.00).
C. For any further violations within a one hundred eighty (180) day period, the minimum mandatory fine shall be one thousand dollars ($1,000.00) or imprisonment in the county jail for a period not exceeding six months, or both.

(Ord. 847 § 10, 2006)



Appendix I-1:
Noise Element Data

APPENDIX I-1: NOISE ELEMENT DATA

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Table 1: Definitions of Acoustical Terms

Term	Definition
Decibel, dB	A unit of level that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de- emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise.
L_{02}, L_{08}, L_{50}, L_{90}	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 2 percent, 8 percent, 50 percent, and 90 percent of a stated time period.
Equivalent Continuous Noise Level, L_{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 decibels to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, L_{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L_{max}, L_{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time, usually a composite of sound from many sources at many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurement and Noise Control 1991.

Table 2: Common Sound Levels and Their Noise Sources

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle at a Few Feet Away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Loud	
Pneumatic Drill; Vacuum Cleaner	80	Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	
Near Freeway Auto Traffic	70	Moderately Loud	Reference Level
Average Office	60	Quiet	½ times as loud
Suburban Street	55	Quiet	
Light Traffic; Soft Radio Music in Apartment	50	Quiet	¼ times as loud
Large Transformer	45	Quiet	
Average Residence without Stereo Playing	40	Faint	⅛ times as loud
Soft Whisper	30	Faint	
Rustling Leaves	20	Very Faint	
Human Breathing	10	Very Faint	Threshold of Hearing
	0	Very Faint	

Source: Compiled by LSA Associates, Inc., 2004.

Table 3: Short-Term Ambient Noise Monitoring Results (15 minutes)

ID	Location	Start Time	Leq (dBA)	Noise Sources	Remarks
1	20 feet (ft) from the street, on the southwest corner of Riverside Drive and Wineville Avenue.	3:21 p.m.	73.2	Traffic on SR-60, I-15, and Riverside Drive and Wineville Avenue.	Intersection is a four-way controlled stop. Land uses are all industrial.
2	30 ft from the street, on the northwest corner of the Etiwanda Avenue and Cantu Galleano Ranch Road.	2:41 p.m.	67.4	Traffic on Etiwanda Avenue and Cantu Galleano Ranch Road.	Four-legged signalized intersection. Land use is light industry, sports ground, and empty space.
3	5 ft from the street, on the southeast corner of Jurupa Road and Troth Street.	3:54 p.m.	69.1	Traffic on Jurupa Road and Troth Street.	Intersection is a four-way controlled stop. Commercial other than residential house on southeast corner.
4	10 ft from the street, on the southwest corner of Magnolia Avenue and McKinley Street.	1:34 p.m.	70.2	Traffic on McKinley Street and Magnolia Avenue.	Intersection is signal-controlled; both streets are major streets with heavy traffic in each direction. Land use is commercial, preschool, and residential area away from intersection.
5	20 ft south of Indiana Avenue at bend in street, near intersection of Indiana Avenue and Barker Lane.	12:53 p.m.	58.0	Traffic on Indiana Avenue; children playing and talking at nearby residence.	Airplanes flying over the sound meter and train passing screened out. Land use is residential and mountain area.
6	20 ft from the street, on the northeast corner of Cajalco Road and Eagle Canyon Road.	10:43 a.m.	72.5	Cars and heavy trucks traffic on Cajalco Road and Eagle Canyon Road.	Three-legged intersection with a stop sign for Eagle Canyon Road and Cajalco Road has right-of-way (ROW) – heavy trucks consistently exiting and entering Eagle Canyon Road. Land use is empty space at intersection of Cajalco Road and Eagle Canyon Road, and a few residential areas on eastside.
7	5 ft east of 34th Street and 75 ft from northeast corner of Armstrong Road and 34th Street.	4:38 p.m.	62.8	Traffic on Armstrong/Valley Road and 34th Street.	Four-legged signalized intersection. Land use is residential or empty space.
8	30 ft from the street, on the northeast corner of McAllister Street and El Sobrante Road.	5:04 p.m.	68.1	Traffic on McAllister Street and El Sobrante Road.	Three-legged intersection with a stop sign for McAllister Street; residential on the northwest corner.
9	140 ft west of Via Lakistas, on sidewalk, 3 ft south from Eureka Street.	1:34 p.m.	44.3	Traffic on Eureka Street and Via Lakistas.	Intersection is a two-way controlled stop; Via Lakistas has ROW. Land use is residential.
10	20 ft from the street, on the southeast corner of Center Street and Mt. Vernon Avenue.	5:27 p.m.	63.7	Traffic on Center Street and Mt. Vernon Avenue (more traffic).	Four-way stop sign intersection. Land use is residential, open space, and agricultural.
11	20 ft from Washington Street, on the northwest corner of Washington Street and Van Buren Boulevard.	4:23 p.m.	65.2	Cars passing on Washington Street and Van Buren Boulevard; cars pulling in/out lot on Washington Street close by the sound meter.	Four-legged signalized intersection; commercial 7-11 market located in the northwest corner of intersection.
12	5 ft from the street, on the southeast corner of Cajalco Road and El Sobrante Road.	3:38 a.m.	74.8	Traffic on Cajalco Road and El Sobrante Road.	Three-legged intersection with a signal.
13	15 ft south of Ellis Avenue; SH-74 to the North.	10:10 a.m.	71.7	Traffic on SH-74 and Ellis Avenue.	Heavy traffic on SH-74; intersection 250 ft south from Ellis Avenue is signal-controlled. Land use is low- density residential or empty space.
14	25 ft from southbound SH– 74, driveway to residential area.	9:40 a.m.	71.0	Traffic on SH-74.	High speed on SH-74; low density residential area.
15	20 ft south of Ramona Expressway, on the northwest corner of Hansen Avenue and Reservoir Avenue.	11:25 a.m.	73.5	Traffic on Ramona Expressway; traffic on Davis/Hansen Avenue.	Heavy traffic and many heavy trucks on Ramona Expressway. Land use is composed of commercial, sports field, and empty space.

Table 3: Short-Term Ambient Noise Monitoring Results (15 minutes)

ID	Location	Start Time	Leq (dBA)	Noise Sources	Remarks
16	10 ft east of Olson Avenue, near intersection of McWade Avenue and Olson Avenue.	4:55 p.m.	56.5	Traffic on Olson; light traffic on McWade Avenue.	Light traffic on Olson Avenue and McWade Avenue. Children talking and playing outside, a few dogs barking. Land use is residential.
17	25 ft west of SR-79, on the northwest corner of SR-79 and Scott Road, 150 ft north from Scott Road.	3:20 p.m.	71.1	Heavy traffic and high speed on SR-79; traffic on Scott Road.	Intersection is signal controlled. Land use is empty space.
18	20 ft from south of De Portola Road (nearby address #34265).	12:55 p.m.	46.3	Very low traffic and slow speed on De Portola Road, community noise, farmer working and talking nearby.	Helicopters flying over the sound meter but screened out during monitoring work. Land use is farmland.
19	10 ft from the street, on northeast corner of Cherry Valley Boulevard and Beaumont Avenue.	12:40 p.m.	66.3	Traffic on Cherry Valley Boulevard and Beaumont Avenue.	Intersection is signal-controlled; moderate traffic levels on Cherry Valley Boulevard and Beaumont Avenue; aircraft flying over the sound meter (screened out); more traffic on Beaumont Avenue. Land use is commercial, community center, and a school.
20	15 ft from the street, on southeast corner of Mayberry Avenue and Cornell Street.	4:20 p.m.	58.1	Traffic on Cornell Street and Mayberry Avenue.	Intersection is a two-way controlled stop; Cornell Street has ROW; low traffic both roadways. Land use is residential.
21	10 ft south of SR 79, Radec junction of SR 79, and Sage Road.	2:00 p.m.	69.4	Traffic on SR 79 and Sage Road.	Heavy traffic on SR 79; low traffic on Sage Road. Land use is commercial and residential, and one commercial building located northwest is closed.
22	15 ft from the street, on the northwest corner of Broadway Road and Bonita Avenue.	9:53 a.m.	62.0	Traffic on Broadway Road and Bonita Avenue.	Intersection is a two-way controlled stop on Bonita Avenue; Broadway Road has ROW; residential developments in the southwest corner of the intersection. Windy conditions.
231	In front of entrance gate to windmill farm (Green Power); on north corner of Ruppert Street and 19th Avenue.	4:30 p.m.	51.7	Windmill noise. Traffic on I-10, 2,000 ft away from the sound meter but faint.	Aircraft flying over the sound meter but screened out; quiet area. Land use is office, light industrial, and windmill farm.
24	10 ft from the street, on the southwest corner of Ramon Road and Desert Moon Drive.	3:45 p.m.	69.8	Traffic on Ramon Road and Desert Moon Drive.	Intersection is a two-way controlled stop; Ramon Road has ROW; more traffic on Ramon Road. Land use is residential, commercial, and empty.
25	30 ft from the street, on the northwest corner of Adams Street and 42nd Avenue.	3:00 p.m.	65.6	Traffic on Adams Street and 42nd Avenue.	Intersection is a four-way controlled stop; residential development on three corners. Bermuda Dunes Country Club is located south of 42nd Avenue.
26	15 ft from south of SH-74 across Pinyon 30 Fire Station.	12:40 p.m. (Nov. 5, 2010)	68.1	Traffic on SH-74, faint radio sound, faint people talking.	Posted speed limits on SH-74 are 35 mph but actual speeds are higher than that; roadway pavement condition was rough.
27	30 ft from the street, on the northwest corner of Highway 86 and 62nd Avenue.	2:00 p.m.	69.3	Heavy and high speed traffic on Highway 86 and lower speed traffic on 62nd Avenue.	Intersection is a two-way controlled stop; Highway 86 has ROW. Roadway construction activities occurred approximately 2,000 ft away from the sound meter but faint noise. Land use is farmland. A little windy weather conditions.
28	15 ft south from Ragsdale Road; 150 ft west from Desert Center Rice Road.	4:35 p.m.	61.8	Traffic on I-10 (approximately 1,000 ft south from the sound meter), low speed trucks on Ragsdale Road, and parking activities.	Trucks are idling in the parking lot and moving slowly. Land use is commercial, parking lot, and empty space.
29	20 ft from the street, on the	2:15 p.m.	63.2	Traffic on 28th Street and	Intersection is a three-legged intersection;

Table 3: Short-Term Ambient Noise Monitoring Results (15 minutes)

ID	Location	Start Time	Leq (dBA)	Noise Sources	Remarks
	southeast corner of Arrow- head Boulevard and 28th Avenue.			Arrowhead Boulevard, two tractors on Arrowhead, and agricultural equipment nearby.	free flowing traffic on 28th Avenue; Arrowhead Boulevard has a stop sign. Land use is farmland.

Source: LSA Associates, Inc., March 2011.
1 This measurement was conducted within the City of Palm Springs because the proposed monitoring location was not available.
dBA = A-weighted decibels
L_{eq} = equivalent continuous sound level
SH = State Highway

Table 4: Meteorological Conditions During Short-Term Monitoring

Site Number	Maximum Wind Speed (mph)	Average Wind Speed (mph)	Temperature (ºF)	Relative Humidity (%)
1	8.1	3.5	95.7	12.7
2	4.8	0.8	96.4	12.7
3	4.6	0.8	94.6	14.2
4	7.1	1.7	96.4	11.5
5	6.8	1.3	98.6	9.3
6	6.9	1.1	94.6	12.5
7	6.8	2.4	93.2	14.5
8	4.9	2.2	87.3	18.9
9	8.7	3.6	88.3	15.2
10	3.6	1.5	86.9	18.4
11	8.8	1.7	88.4	12.5
12	6.0	1.7	91.9	12.1
13	1.5	0.9	81.6	16.5
14	1.3	0.8	77.1	19.5
15	4.4	2.7	84.7	12.0
16	2.3	1.8	85.2	10.9
17	5.4	2.6	95.6	8.2
18	4.7	2.2	91.2	18.8
19	5.1	3.8	80.1	10.0
20	2.5	1.1	91.3	23.4
21	6.7	4.1	91.1	17.2
22	13.3	10.5	85.9	23.0
23	4.4	3.6	90.5	8.5
24	2.4	1.2	92.3	13.5
25	2.7	1.7	93.7	14.2
26	3.6	2.2	79.7	19.2
27	8.5	4.4	96.7	14.3
28	3.6	2.7	89.9	12.1
29	4.6	3.1	90.2	24.1

Source: LSA Associates, Inc., March 2011.
ºF = degrees Fahrenheit
mph = miles per hour

Table 5: Base Year Condition (2007) Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 L_{dn} (ft)	Centerline to 65 L_{dn} (ft)	Centerline to 60 L_{dn} (ft)	L_{dn} (dBA) 50 ft from Centerline of Outermost Lane
38th Avenue between Del Webb Boulevard and western city limits of Indio	10,600	< 50	57	121	65.1
42nd Avenue between Washington Street and Yucca Lane	15,700	< 50	85	180	66.6
54th Avenue between Monroe Street and Jackson Street	10,000	< 50	87	187	67.9
62nd Avenue between eastern city limits of La Quinta and Jackson Street	10,400	< 50	78	167	67.2
Agua Mansa Road between Market Street and Wilson Street	13,300	< 50	95	204	67.9
Airport Boulevard between Van Buren Street and Fredrick Street	6,200	< 50	51	110	64.4
Archibald Avenue between Limonite Avenue and northern county limits of Riverside	18,000	69	149	320	71.4
Archibald Avenue between River Road and Chandler Street	9,300	< 50	94	203	68.4
Armstrong Avenue between Sierra Avenue and SH-60	20,800	58	124	266	70.2
Bellegrave Avenue between Cantu Galleano Ranch Road and Marlatt Street	14,300	56	119	256	69.9
Bellegrave Avenue between Bain Street and Van Buren Boulevard	10,100	< 50	104	223	69.0
Bellegrave Avenue between Ontario Freeway and Wineville Avenue	12,500	< 50	105	224	68.0
Bob Hope Drive between Ramon Road and Dinah Shore Drive	15,100	< 50	103	220	67.9
Briggs Road between Los Alamos Road and SH-79	7,700	< 50	63	134	65.1
Broadway between southern city limits of Blythe and Seeley Avenue	8,500	< 50	< 50	105	63.0
Cactus Avenue between Elsworth Street and I-215	24,100	57	117	251	68.7
Cajalco Road between Temescal Canyon Road and La Sierra Avenue	13,800	< 50	75	162	67.0
Cajalco Road between El Sobrante Road and Gavilan Road	14,900	52	110	236	68.8
Cajalco Road between Patterson Avenue and Day Street	13,300	< 50	96	205	67.9
Camino Real between Jurupa Road and Limonite Avenue	10,300	< 50	58	124	65.2
Cantu Galleano Ranch Road between Etiwanda Avenue and Van Buren Boulevard	20,500	102	217	466	72.8
Center Street between Iowa Avenue and Mount Vernon Avenue	6,700	< 50	58	120	63.9
Citrus Street between Cleveland Avenue and Summer Avenue	8,700	< 50	59	128	65.4
Clay Street between Limonite Avenue and Van Buren Boulevard	14,000	< 50	85	181	66.6
Clinton Keith Road between western city limits of Murrieta and Los Alamos Road	11,800	< 50	86	184	67.2
Country Village Road between Granite Hill Drive and Philadelphia Street	20,300	68	142	304	70.0
Del Webb Boulevard between Washington Street and 38th Avenue	12,800	< 50	80	169	66.1
Desert Moon Drive between Ramon Road and Varner Road	10,300	< 50	69	141	64.4
Dillon Road between Long Canyon Road and Bennett Road	9,100	< 50	88	188	67.9
Domenigoni Parkway between Warren Road and Patterson Avenue	28,400	139	295	634	74.4
Domenigoni Road between SH-79 and Patterson Avenue	27,200	136	289	621	74.2
E Streetetson Avenue between eastern city limits of Hemet and Girard Street	12,500	< 50	95	205	68.5
El Sobrante Road between Cajalco Road and Mockingbird Canyon Road	11,600	< 50	77	165	67.1
Ellis Avenue between Theda Street and Marshall Road	9,000	< 50	82	175	66.9
Etiwanda Avenue between SH-60 and Philadelphia Street	33,400	108	227	487	72.6
Etiwanda Avenue between Limonite Avenue and Holmes Avenue	8,400	< 50	57	118	63.7
Felspar Road between Mission Boulevard and Galena Street	11,500	< 50	92	198	68.3
Gavilan Road between Cajalco Road and Multiview Drive	11,200	< 50	67	145	66.2
Gilman Springs Road between ramps on SH-79 and State Street	17,900	94	202	435	73.4
Gilman Springs Road between Jack Rabbit Trail and Bridge Street	16,300	84	179	386	72.0

Table 5: Base Year Condition (2007) Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 L_{dn} (ft)	Centerline to 65 L_{dn} (ft)	Centerline to 60 L_{dn} (ft)	L_{dn} (dBA) 50 ft from Centerline of Outermost Lane
Graeber Street between Cactus Avenue and Meyer Street	8,600	< 50	< 50	66	60.4
Grand Avenue between Corydon Road and Ortega Highway	13,600	< 50	96	206	68.5
Hamner Avenue between Limonite Avenue and 65th Street	15,000	63	123	258	68.1
Hamner Avenue between northern city limits of Norco and 68th Street	8,800	< 50	85	180	66.5
Harrison Street between 62nd Avenue and 54th Avenue	12,300	87	187	403	72.9
Horsethief Canyon Road between Temecula Valley Freeway and Mountain Road	10,600	< 50	57	123	65.2
I-10 between Apache Trail and Fields Road	132,80 0	823	1,770	3,811	84.7
I-10 between SH-111 and Tipton Road	106,60 0	774	1,665	3,585	84.6
I-10 between Ramon Road and Date Palm Drive	112,80 0	730	1,570	3,379	84.0
I-10 between SH-62 and Tipton Road	106,80 0	774	1,666	3,588	84.6
I-10 between Ramon Road and Monterey Avenue	118,20 0	736	1,582	3,408	84.3
I-10 between SH-86 and Dillon Road	25,800	418	899	1,936	82.1
I-10 between Dillon Road and Box Canyon Road	25,500	429	922	1,986	81.8
I-10 between Red Cloud Mine Road and Eagle Mountain Road	25,500	431	926	1,995	81.8
I-10 between Hayfield Road and Red Cloud Mine Road	15,500	417	898	1,933	81.6
I-10 between Box Canyon Road and Summit Road	25,500	431	926	1,995	81.8
I-10 between Chuckwalla Valley Road and Willey Well Road	24,900	433	932	2,008	81.9
I-10 between Willey Well Road and Mesa Drive	25,900	434	935	2,013	81.9
I-15 between Mission Boulevard and Philadelphia Street	191,00 0	617	1,325	2,853	82.9
I-15 between SH-79 and Rainbow Valley Boulevard West	146,70 0	527	1,130	2,433	81.8
I-215 between Van Buren Boulevard and Oleander Avenue	139,70 0	458	984	2,118	81.5
Indian Avenue between Dillon Road and 18th Avenue	17,600	69	146	314	70.7
Iowa Avenue between Center Street and northern city limits of Riverside	23,300	80	167	357	70.6
Jurupa Road between Valley Way and Camino Real	9,000	< 50	58	117	63.2
Knabe Road between Temecula Valley Freeway and Hunt Road	15,700	< 50	107	226	67.6
Cleveland Avenue between southern city limits of Riverside and Dufferin Avenue	15,700	< 50	99	212	68.1
Limonite Avenue between Archibald Avenue and Harrison Avenue	7,700	< 50	65	140	66.0
Limonite Avenue between Hamner Avenue and I-15	22,900	73	152	323	70.0
Limonite Avenue between Pedley Road and Clay Street	16,600	58	121	258	68.9
Limonite Avenue between Pedley Road and Van Buren Boulevard	17,100	77	162	348	70.9
Limonite Avenue between Etiwanda Avenue and Marlatt Street	19,300	61	130	280	70.5
Limonite Avenue between Van Buren Boulevard and Felspar Road	25,700	97	203	435	71.9
Limonite Avenue between Peralta Place and Camino Real	16,800	57	114	242	68.1
Los Alamos Road between Briggs Road and Whitewood Road	11,200	< 50	70	150	65.9
Los Alamos Road between eastern city limits of Murrieta and Briggs Road	11,300	< 50	70	150	66.5
Market Street between Aguamansa Road and Rubidoux Boulevard	17,300	57	121	259	69.4
Markham Street between Mocking Bird Canyon Boulevard and Washington Street	8,100	< 50	68	142	65.0
Markham Street between Seaton Avenue and Day Street	9,500	< 50	69	149	66.4
Menifee Road between Nuevo Road and Central Avenue	6,600	< 50	81	175	67.5
Mission Boulevard between Wineville Avenue and I-15	10,100	63	132	283	69.5
Mission Boulevard between Pedley Road and Agate Street	19,000	70	148	317	70.3
Mocking Bird Canyon Boulevard between Van Buren Boulevard and Markham Street	19,900	79	164	350	70.5
Mocking Bird Canyon Boulevard between Markham Street and Van Buren Boulevard	15,500	69	141	301	69.5
Monroe Street between 54th Avenue and 52nd Avenue	20,600	< 50	108	228	67.7

Table 5: Base Year Condition (2007) Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 L_{dn} (ft)	Centerline to 65 L_{dn} (ft)	Centerline to 60 L_{dn} (ft)	L_{dn} (dBA) 50 ft from Centerline of Outermost Lane
Mountain View Road between 20th Avenue and Varner Road	11,500	< 50	76	164	67.1
Murrieta Hot Spring Road between Sky Canyon Drive and Winchester Road	11,600	< 50	65	137	64.7
Nuevo Road between Menifee Road and Lakeview Avenue	8,200	< 50	65	141	66.0
Old Elsinore Road between San Jacinto Avenue and Orange Avenue	7,200	< 50	61	131	65.6
Ontario Freeway between Limonite Avenue and 68th Street	184,00 0	631	1,358	2,925	83.9
Palm Drive between northern city limits of Cathedral City and 20th Avenue	29,100	81	171	366	71.2
Pedley Road between Mission Boulevard and SH-60	7,700	< 50	70	151	66.5
Pedley Road between Limonite Avenue and Jurupa Road	7,100	< 50	61	131	65.6
Perris Boulevard between Reche Vista Drive and Sunnymead Ranch Parkway	6,200	< 50	68	145	65.6
Pinacate Road between eastern city limits of Menifee and Juniper Flats Road	27,000	106	226	485	73.0
Ramon Road between Varner Road and I-10	15,200	53	109	233	68.2
Pourroy Road between Thompson Road and Winchester Road	9,400	< 50	58	125	65.3
Ramon Road between Sierra Del Sol and La Canada Way	9,800	< 50	77	160	65.3
Ramon Road between Bob Hope Drive and I-10	36,600	87	174	369	70.1
Ramon Road between I-10 and Varner Road	36,600	85	173	368	70.4
Ramon Road between Sierra Del Sol and Desert Moon Drive	11,000	< 50	106	228	68.6
Ramona Expressway between eastern city limits of Perris and Davis Road	13,500	71	153	329	71.6
Ramona Expressway between Davis Road and Lakeview Avenue	13,500	71	153	329	71.6
Reche Vista Drive between Perris Boulevard and Reche Canyon Boulevard	12,300	< 50	61	132	65.6
Redlands Boulevard between San Timoteo Canyon Road and Locust Avenue	18,900	71	150	323	70.9
Rubiduox Boulevard between Market Street and 24th Street	11,100	54	111	236	68.3
Schleisman Road between Archibald Avenue and River Road	12,500	< 50	82	175	67.5
Sierra Avenue between Armstrong Avenue and Northern County Limits of Riverside	13,000	61	124	263	68.6
Monterey Avenue between Ramon Road and I-10	9,200	< 50	61	131	65.6
SR-111 between Tram Way Road and I-10	21,000	111	234	502	72.8
SR-195 between Lincoln Street and Grapefruit Boulevard	13,100	59	118	250	68.3
SR-371 between SH-74 and Mitchell Road	7,800	< 50	104	225	69.1
SR-60 between Wineville Avenue and Mission Boulevard	163,60 0	589	1,267	2,729	83.2
SR-60 between SH-60 and Jack Rabbit Trail	63,600	428	920	1,981	81.8
SR-62 between I-10 and Dillon Road	18,100	119	253	542	73.3
SR-74 between northern city limits of Lake Elsinore and I-15	28,300	105	225	483	73.0
SR-74 between Theda Street and Ethanac Road	27,100	102	217	465	72.8
SR-74 between SH-371 and Palm Canyon Drive	8,300	53	110	233	68.3
SR-78 between Hobson Way and 18th Avenue	10,600	< 50	96	205	67.9
SR-79 between eastern city limits of Murrieta and Pourroy Road	19,100	110	237	510	73.9
SR-79 between Auld Road and Hunter Road	32,200	128	274	588	74.3
SR-79 between Scott Road and Wickered Road	20,700	100	216	465	73.8
SR-79 between eastern city limits of Temecula and Anza Road	13,800	71	152	327	71.5
SR-79 between SH-371 and Sage Road	8,800	52	111	239	69.5
SR-79 between Domenigoni Road and Patton Avenue	19,100	99	212	456	73.7
SR-79 between Gilman Springs Road and southern city limits of Beaumont	47,100	152	324	697	75.0
SR-86 between Pierce Street and 81St Avenue	8,200	78	167	360	72.2

Table 5: Base Year Condition (2007) Traffic Noise Levels

Roadway Segment	ADT	Centerline to 70 L_{dn} (ft)	Centerline to 65 L_{dn} (ft)	Centerline to 60 L_{dn} (ft)	L_{dn} (dBA) 50 ft from Centerline of Outermost Lane
SR-86 between 74th Avenue and Pierce Street	7,700	77	165	354	71.5
SR-86 between southern city limits of Coachella and 66th Avenue	37,900	247	531	1,144	78.6
SR-86 between 54th Avenue and Airport Boulevard	12,800	88	190	409	73.0
SR-86 between I-10 and Dillon Road	62,200	362	779	1,678	81.1
SR-86 between Grapefruit Boulevard and southern city limits of Coachella	37,900	247	531	1,143	78.2
Seaton Avenue between Harvill Avenue and Markham Street	10,100	< 50	65	131	64.0
I-15 between Temescal Canyon Road and Indian Truck Trail	150,90 0	594	1,277	2,750	83.2
I-15 between Weirick Road and Temescal Canyon Road	154,10 0	596	1,283	2,762	83.2
Temescal Canyon Road between Cajalco Road and I-15	10,600	< 50	79	169	66.6
Temescal Canyon Road between I-15 and Lawson Road	9,300	< 50	54	115	64.1
Temescula Valley Freeway between Temescal Canyon Road and Weirick Road	154,10 0	596	1,283	2,762	83.2
US-95 between I-10 and northern county limits of Riverside	7,200	< 50	105	225	68.5
Van Buren Boulevard between Bellegrave Avenue and Etiwanda Avenue	44,400	192	411	885	76.5
Van Buren Boulevard between Mocking Bird Canyon Boulevard and Firethorn Avenue	48,000	136	290	624	74.2
Van Buren Boulevard between Washington Street and Krameria Avenue	35,800	116	246	529	73.2
Van Buren Boulevard between Limonite Avenue and Jurupa Road	44,600	191	409	880	76.5
Van Buren Boulevard between Limonite Avenue and Clay Street	56,700	210	450	968	77.1
Van Buren Boulevard between I-215 and Harmon Street	27,000	101	213	457	72.2
Warren Road between Domenigoni Parkway and Simpson Road	11,000	62	132	285	70.6
Warren Road between western city limits of Hemet and West Esplanade Avenue	8,600	65	137	294	70.3
Washington Street between Van Buren Boulevard and Golden Street	13,300	< 50	82	176	67.5
Washington Street between Del Webb Boulevard and Wildcat Drive	14,000	< 50	86	182	66.6
West Florida Avenue between Winchester Road and western city limits of Hemet	36,500	141	301	648	74.9
Winchester Road between West Florida Avenue and California Avenue	12,800	80	171	367	71.7

Source: LSA Associates, Inc., March 2011.
Note: ADT values rounded up to the nearest 100. Traffic noise within 50 ft of the roadway centerline should be evaluated with site-specific information.
ADT = average daily traffic
dBA = A-weighted decibels
ft = feet
L_{dn} = Day-Night Average Level

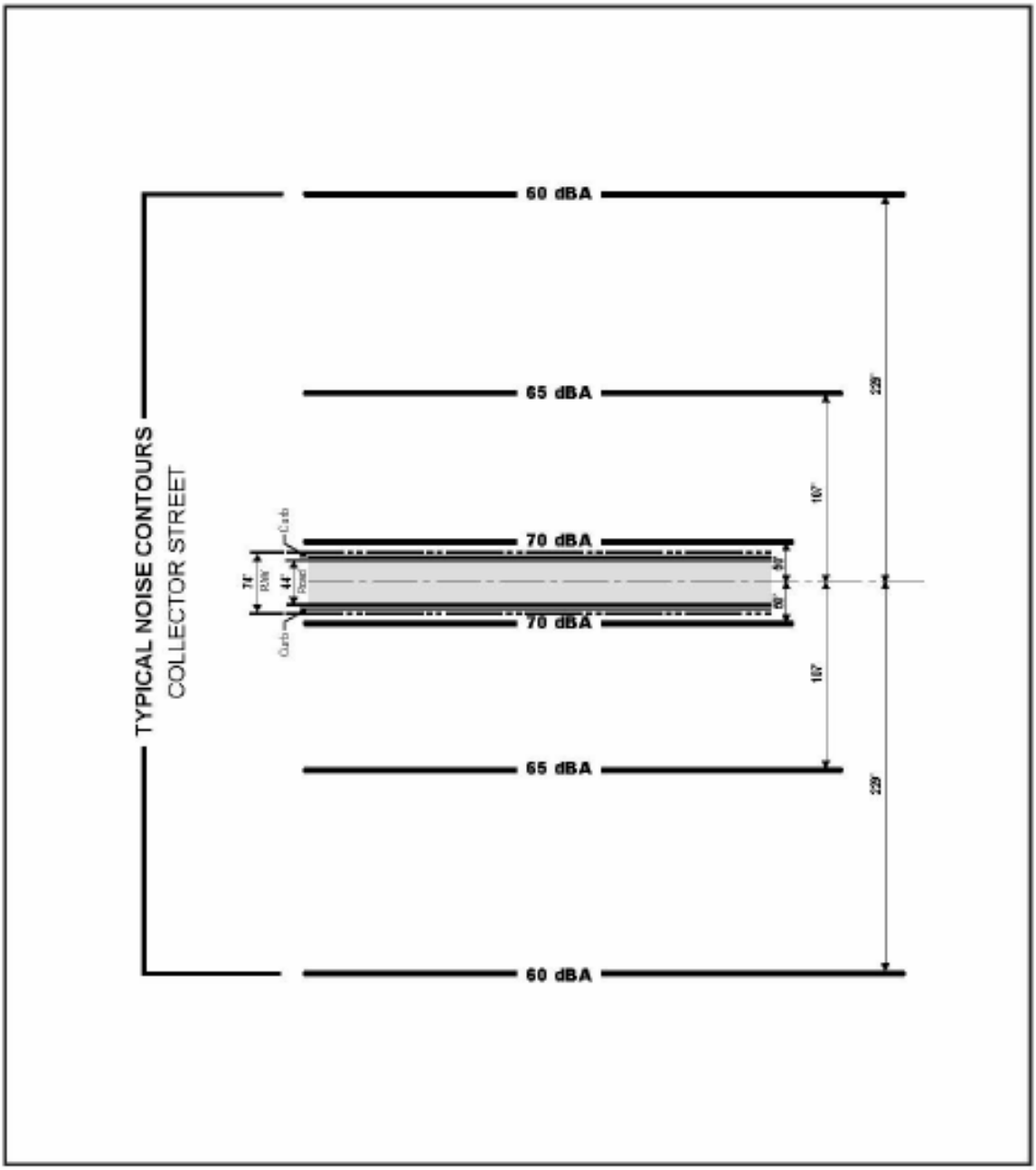


Figure 1

SOURCE: COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Projected Noise Contours Along Freeways and Major Highways: Collector Street (2 Lanes)

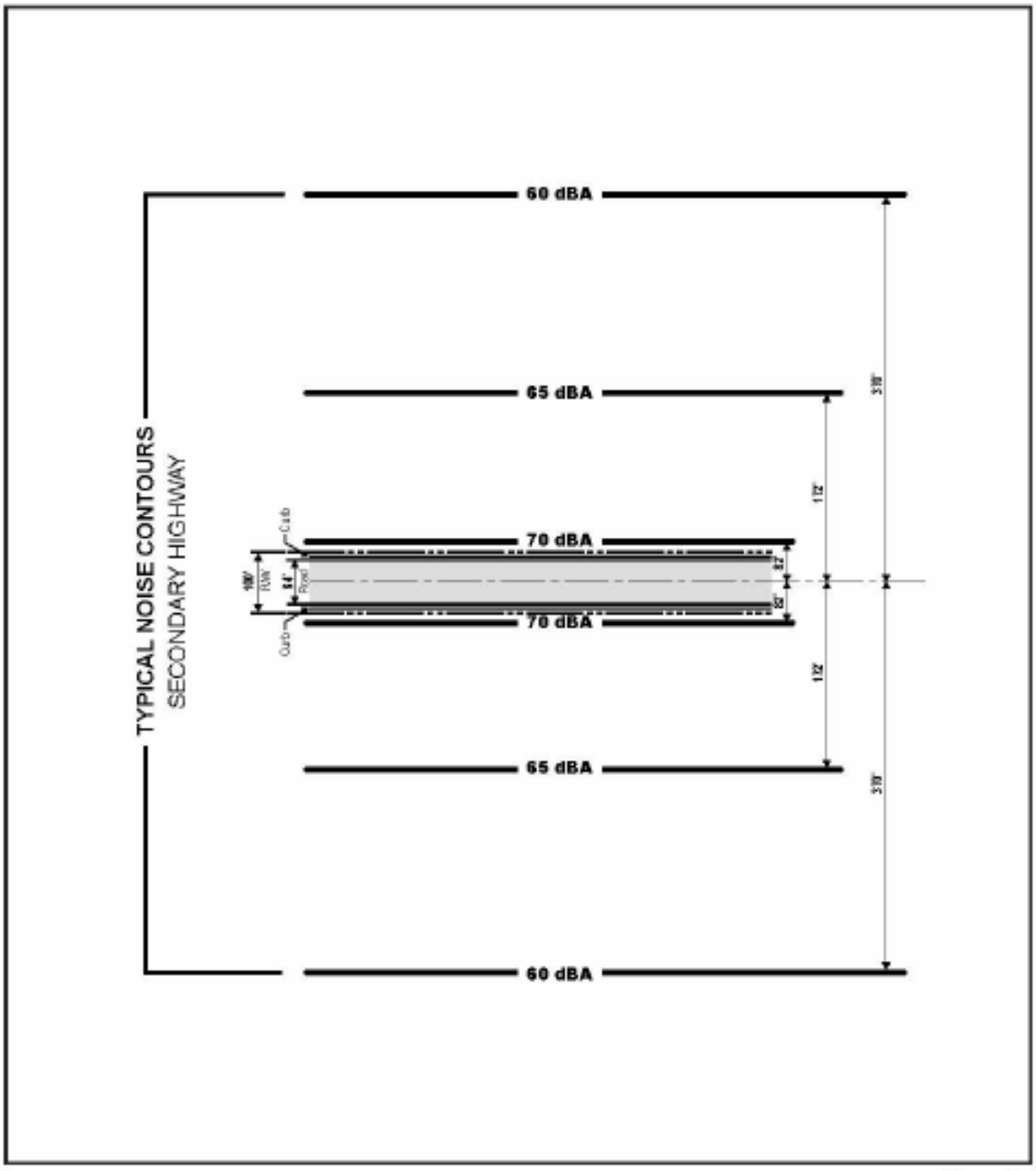


Figure 2

SOURCE: COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Projected Noise Contours Along Freeways and Major Highways: Secondary Highway (4 Lanes)

J:\CGR\1041\Noise Contours\Proj Contour_SecondaryHighway_4-Lanes.ai (9/15/11)

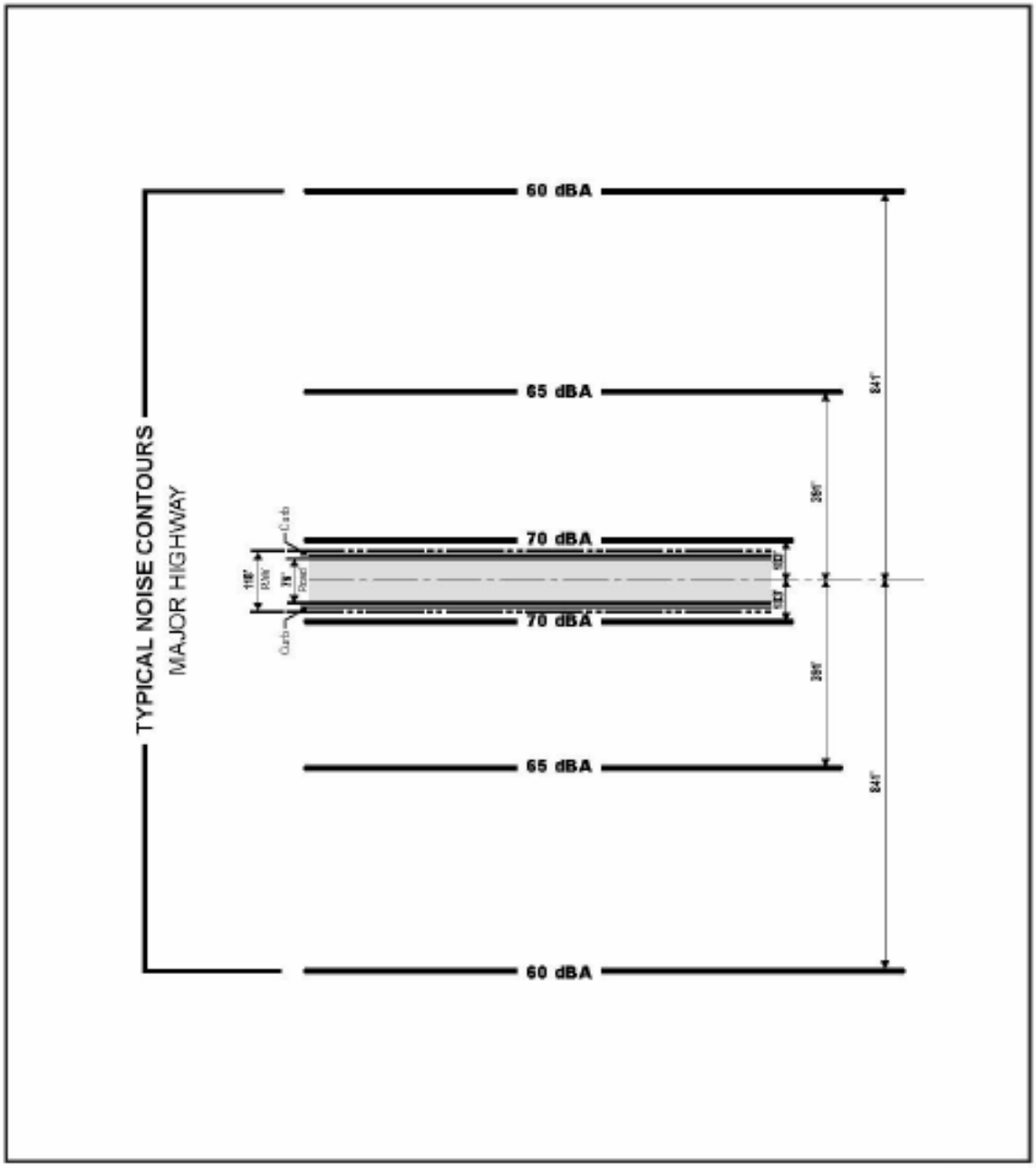


Figure 3

SOURCE: © COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Projected Noise Contours Along Freeways and Major Highways:
Major Highway (4 Lanes)

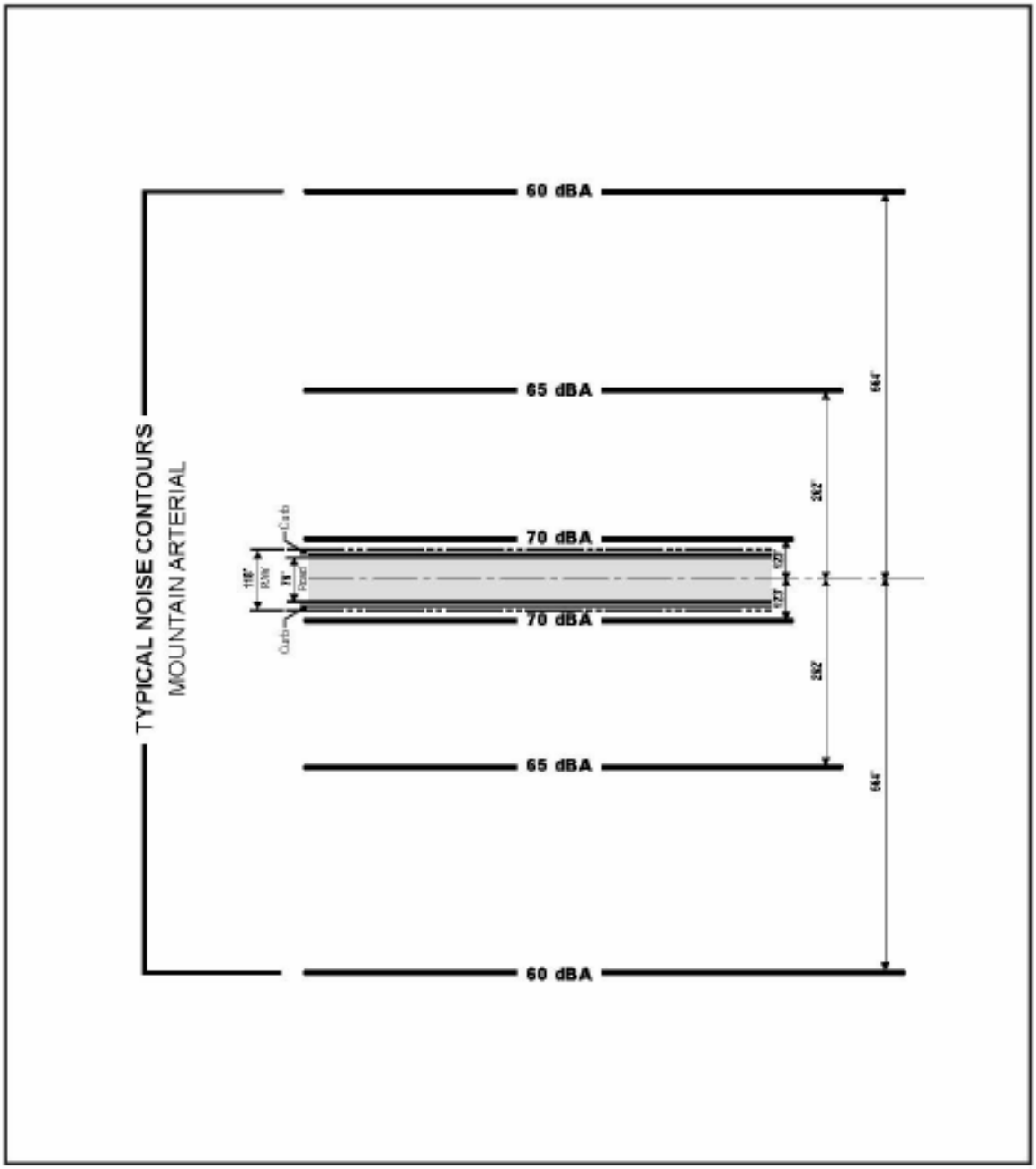


Figure 4

SOURCE: © COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Projected Noise Contours Along Freeways and Major Highways: Mountain Arterial (4 Lanes)

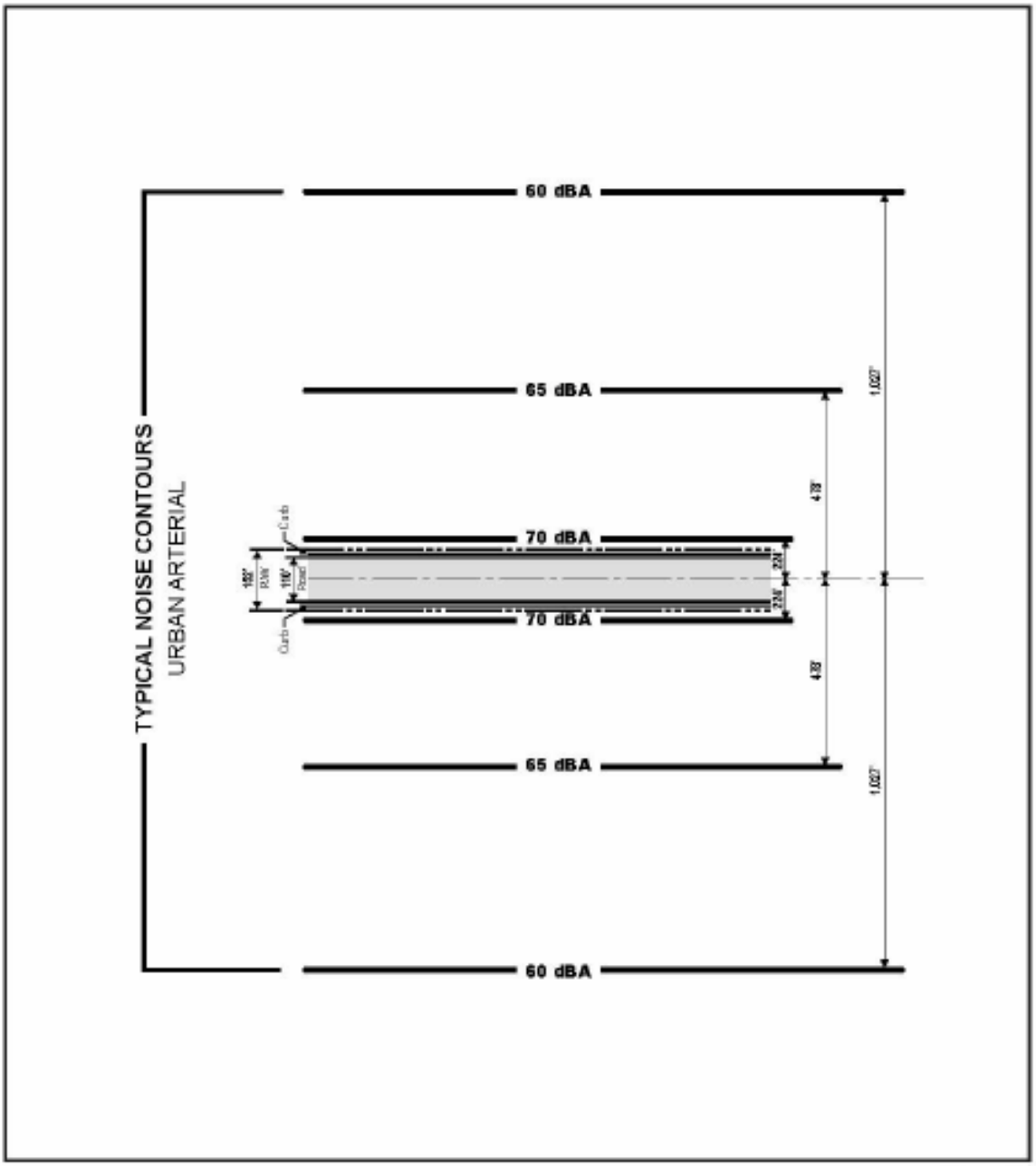


Figure 5

SOURCE: COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Projected Noise Contours Along Freeways and Major Highways:
Urban Arterial (6 Lanes)

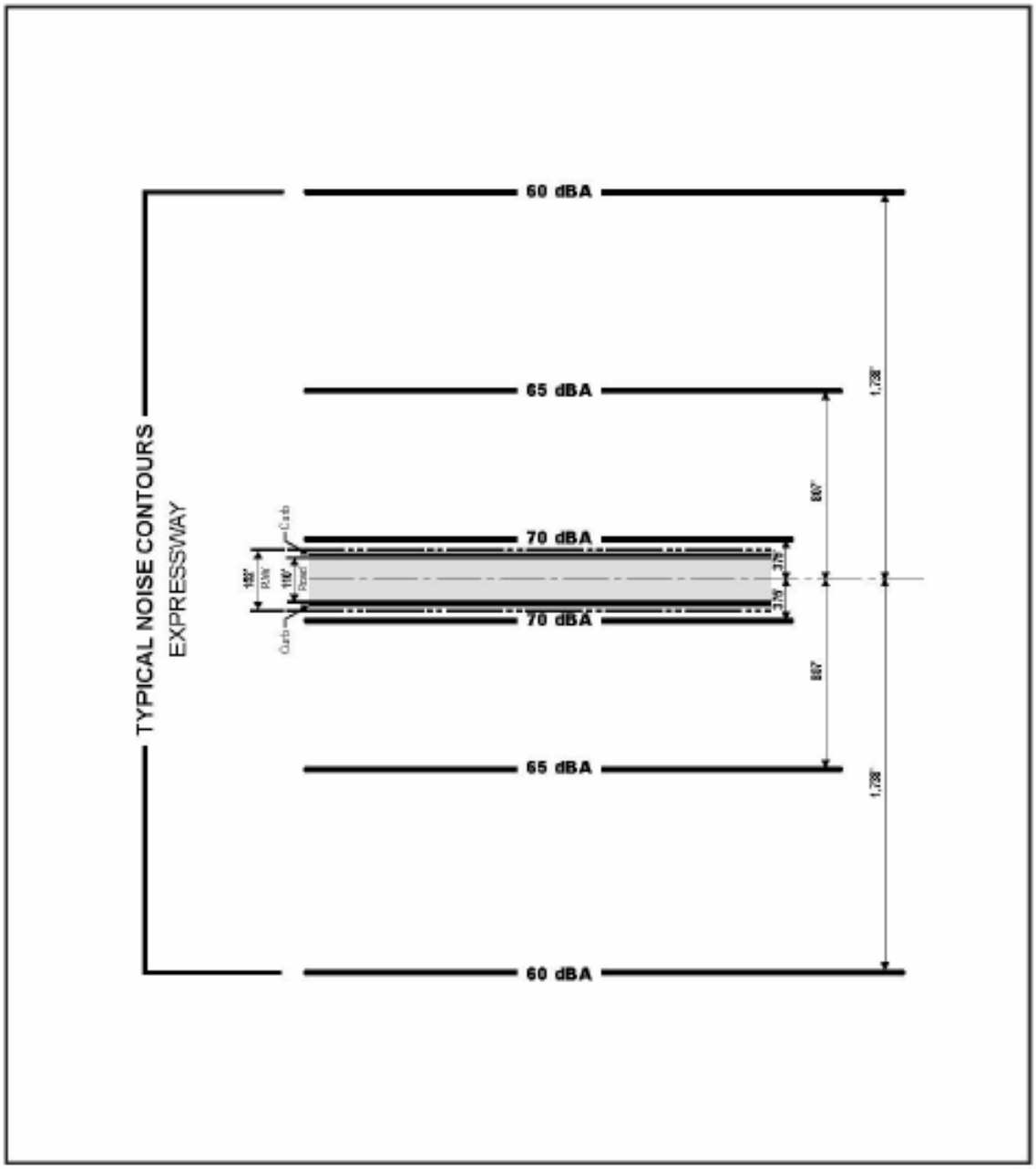


Figure 6

SOURCE: COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Projected Noise Contours Along Freeways and Major Highways:
Expressway (6 Lanes)

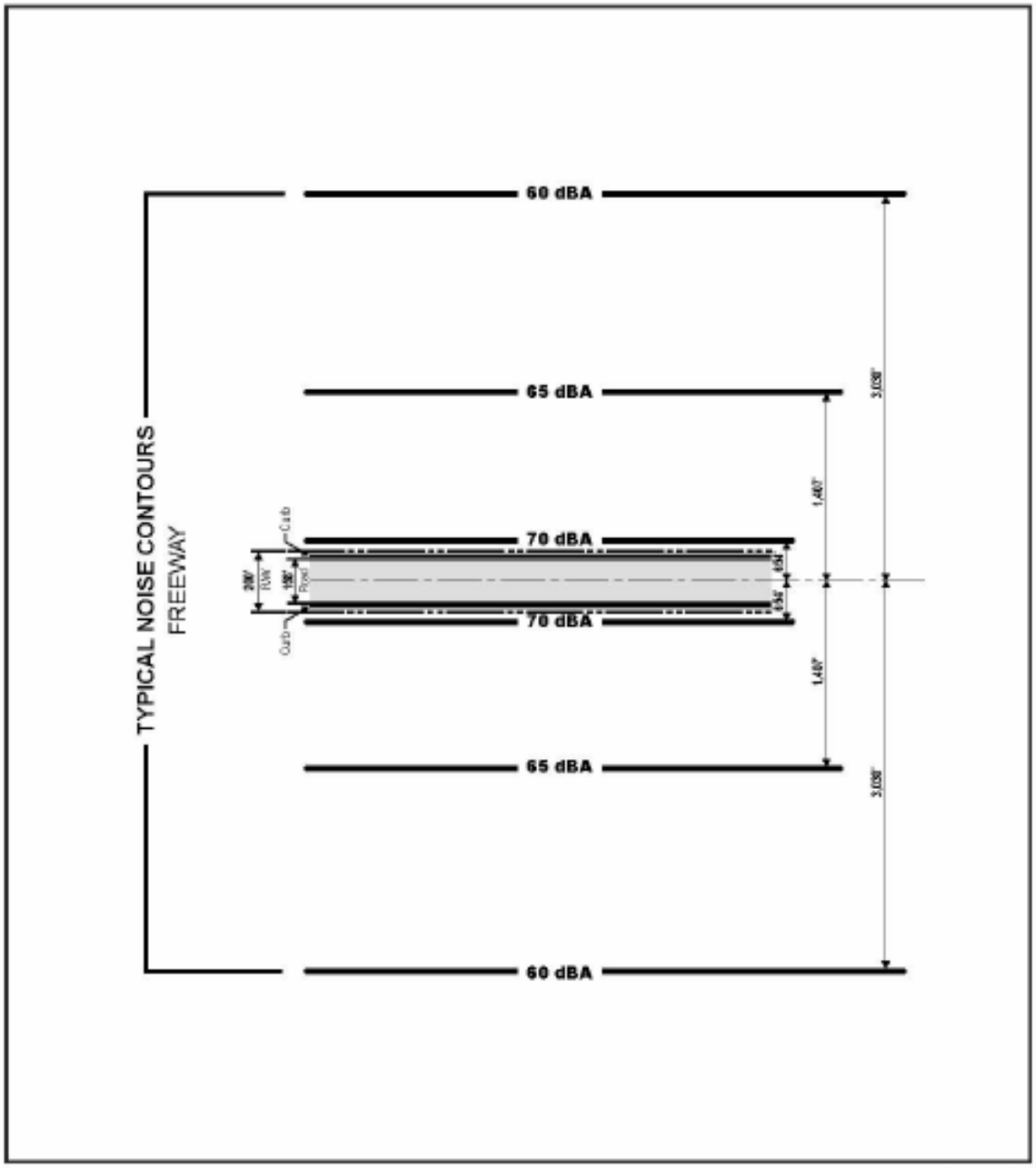


Figure 7

SOURCE: COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Projected Noise Contours Along Freeways and Major Highways: Freeway (6 Lanes)

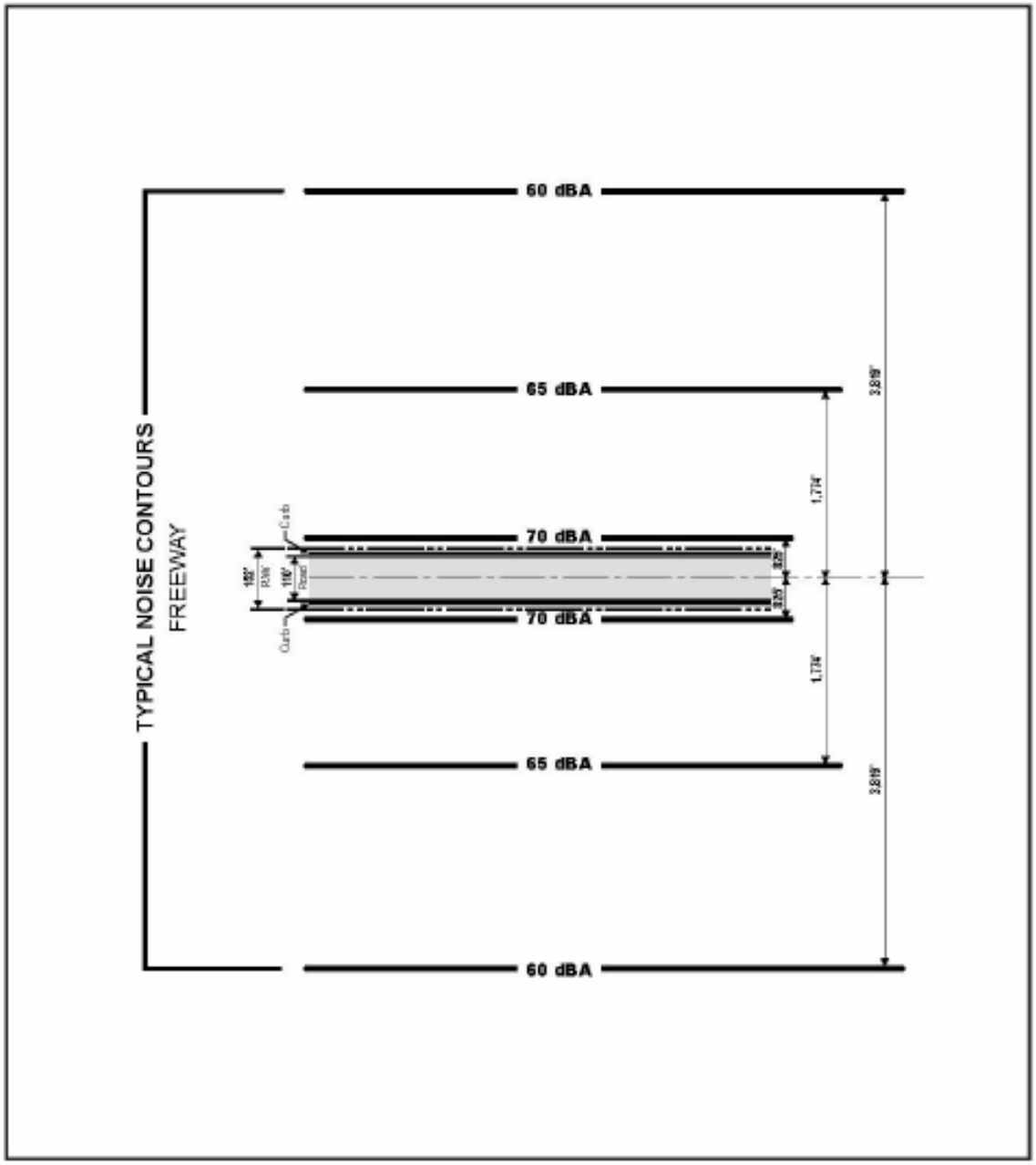


Figure 8

SOURCE: COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Projected Noise Contours Along Freeways and Major Highways: Freeway (10 Lanes)



Figure 9

Projected Noise Contours Along Freeways and Major Highways:
Grand Avenue between Cactus Avenue and Ortega Highway

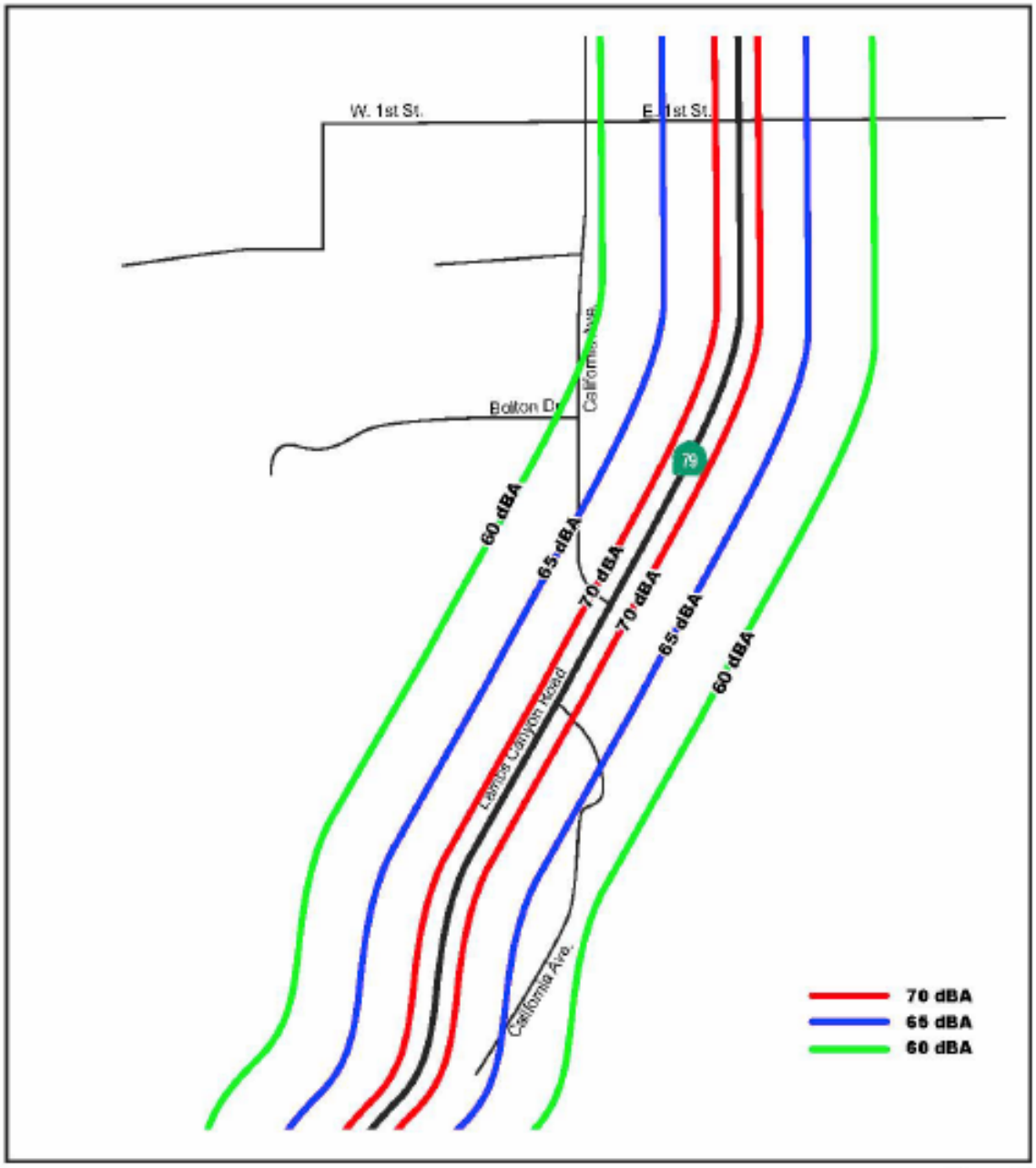


Figure 10

NOT TO SCALE

Projected Noise Contours Along Freeways and Major Highways:
State Route 79 between Gilman Springs Road and Mellow Lane

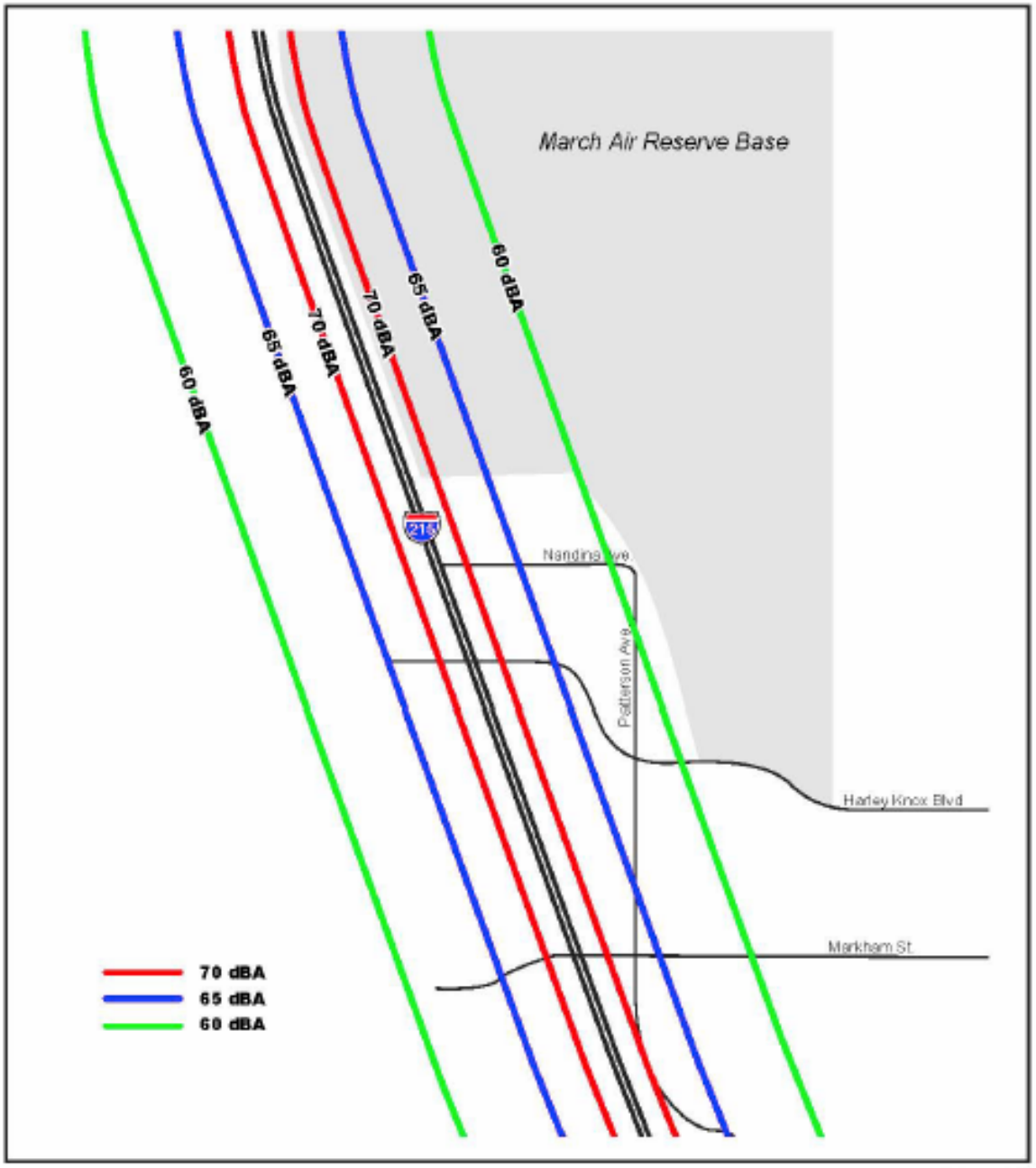


Figure 11

Projected Noise Contours Along Freeways and Major Highways:
I-215 between Van Buren Blvd and Ramona Expressway

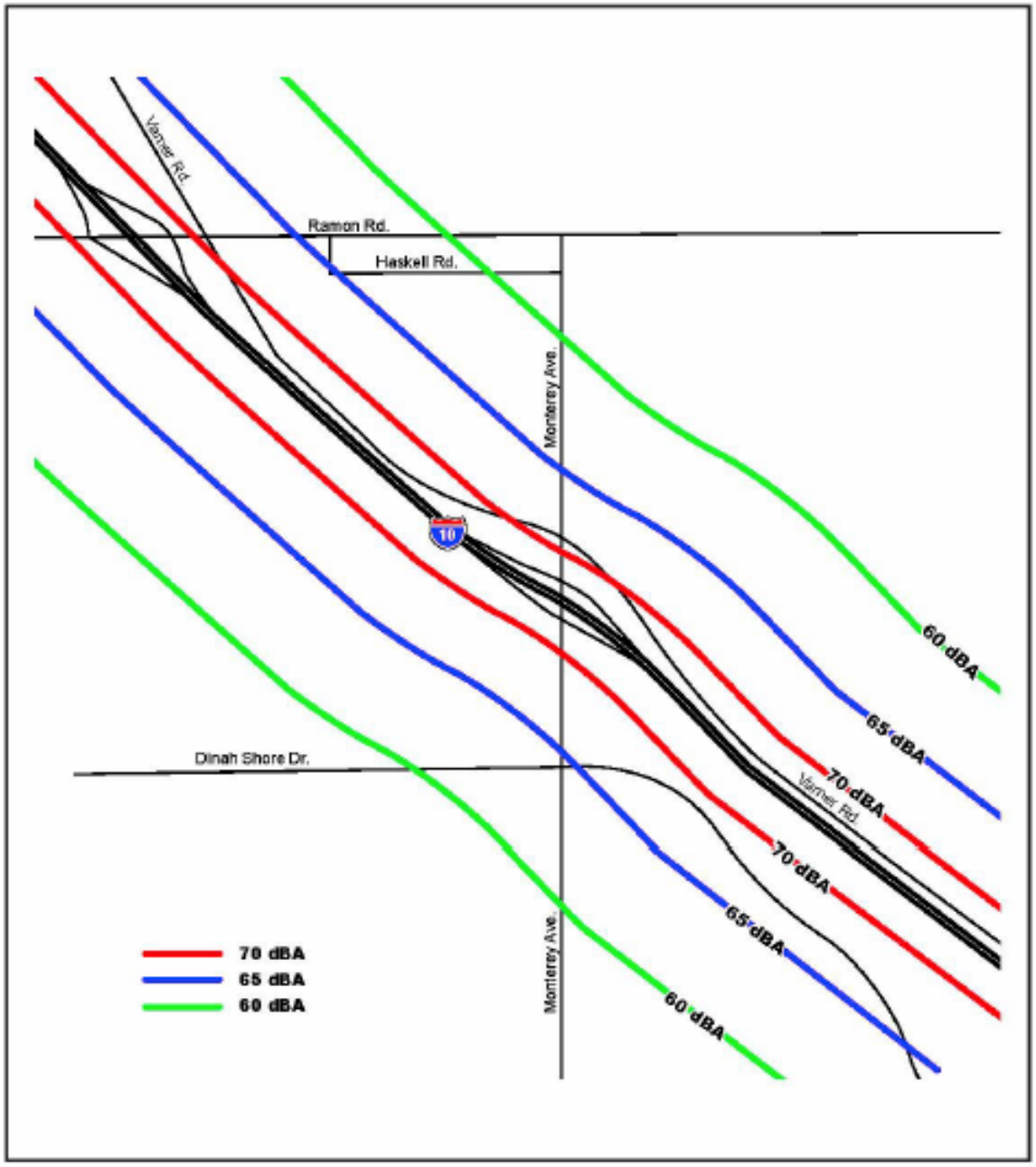


Figure 12

NOT TO SCALE

Projected Noise Contours Along Freeways and Major Highways:
I-10 at Monterey Avenue

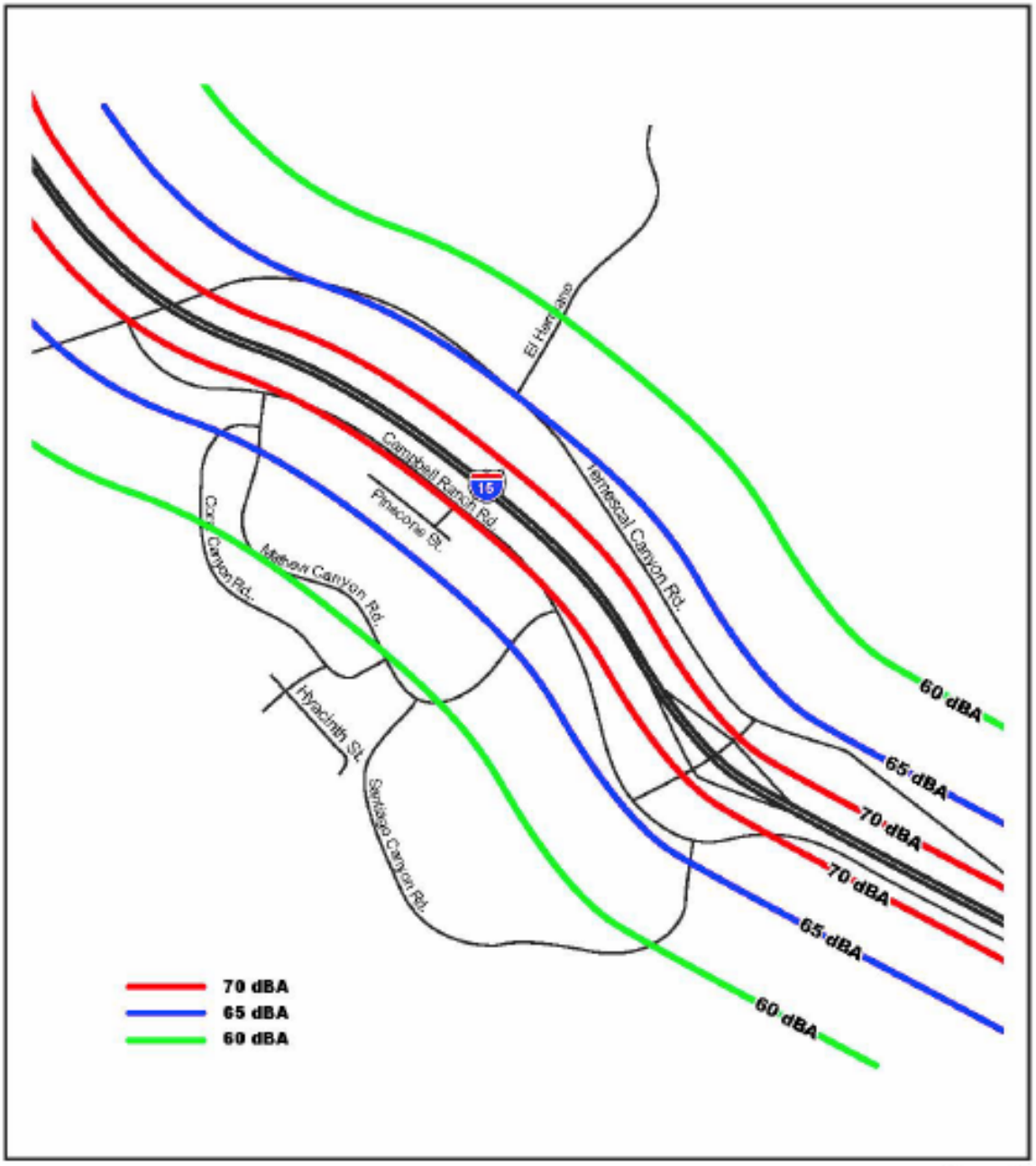


Figure 13

NOT TO SCALE

Projected Noise Contours Along Freeways and Major Highways:
I-15 between Weirick Road and Temescal Canyon Road

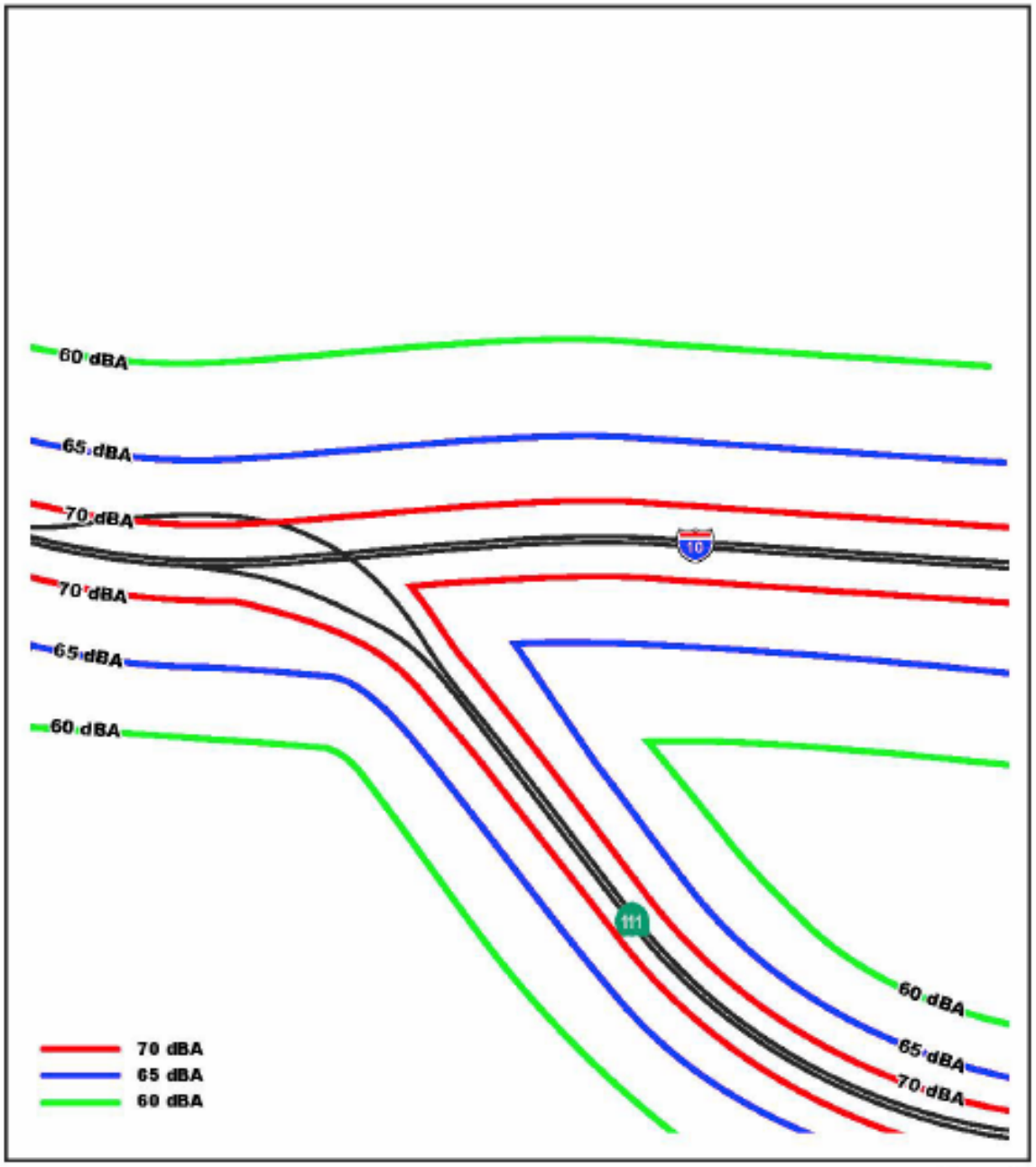


Figure 14

Projected Noise Contours Along Freeways and Major Highways:
I-10 at State Highway 111

NOT TO SCALE

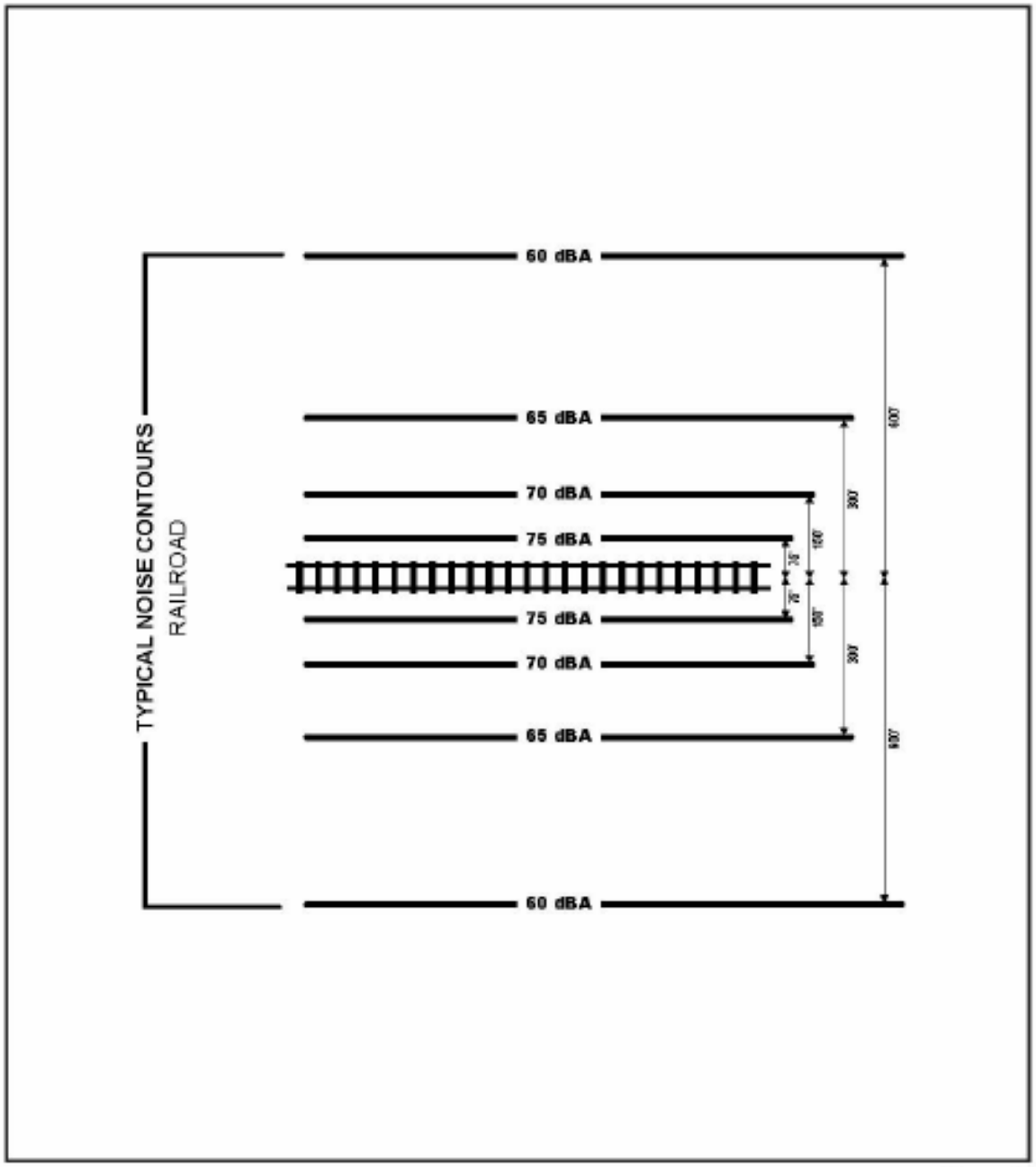


Figure 15

SOURCE: COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Typical Railroad Noise Contours:
1 Locomotive and 5 Cars with Horns (a Commuter Train)

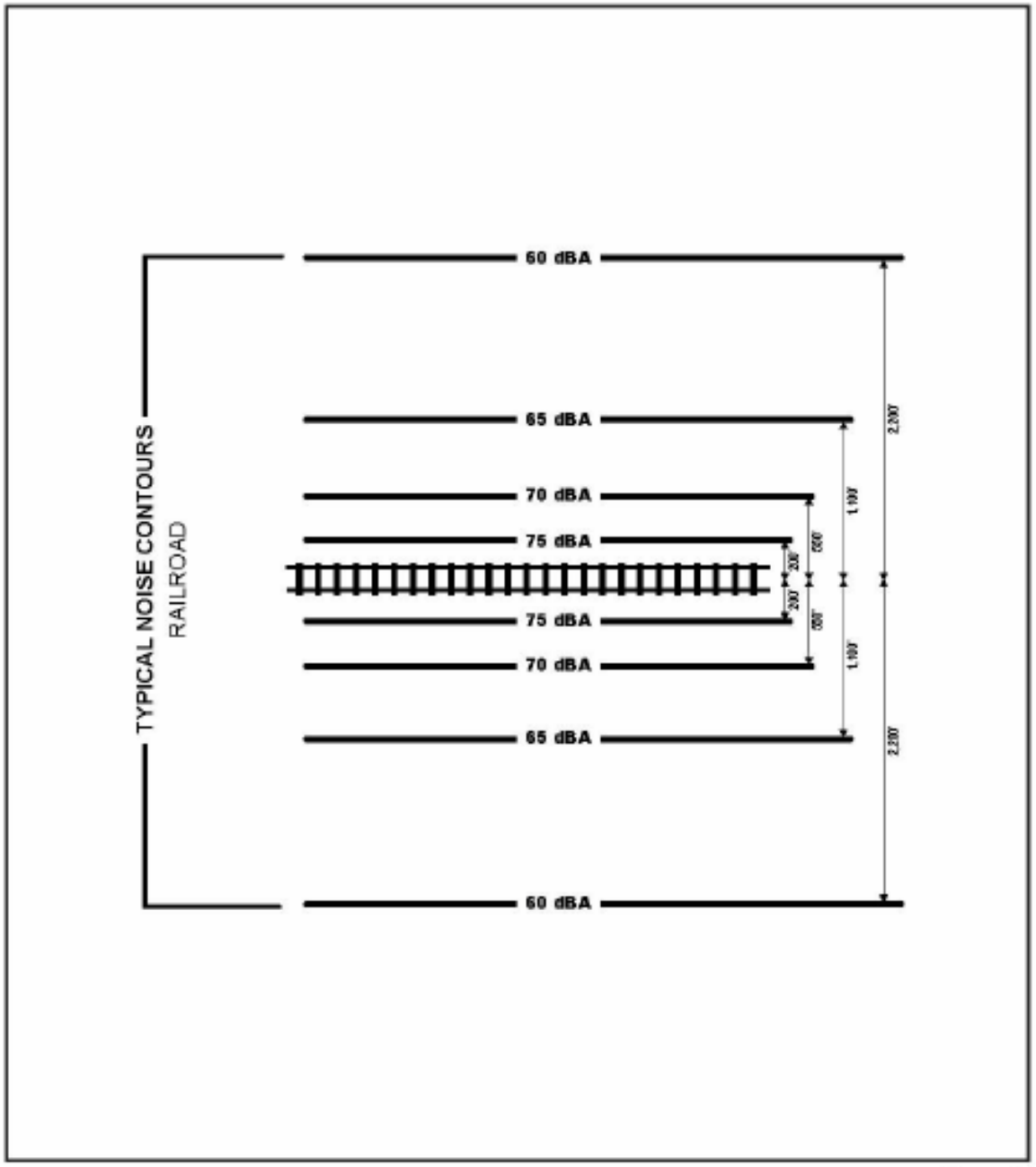


Figure 16

SOURCE: COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Typical Railroad Noise Contours:
2 Locomotives and 50 Cars with Horns (a Freight Train)

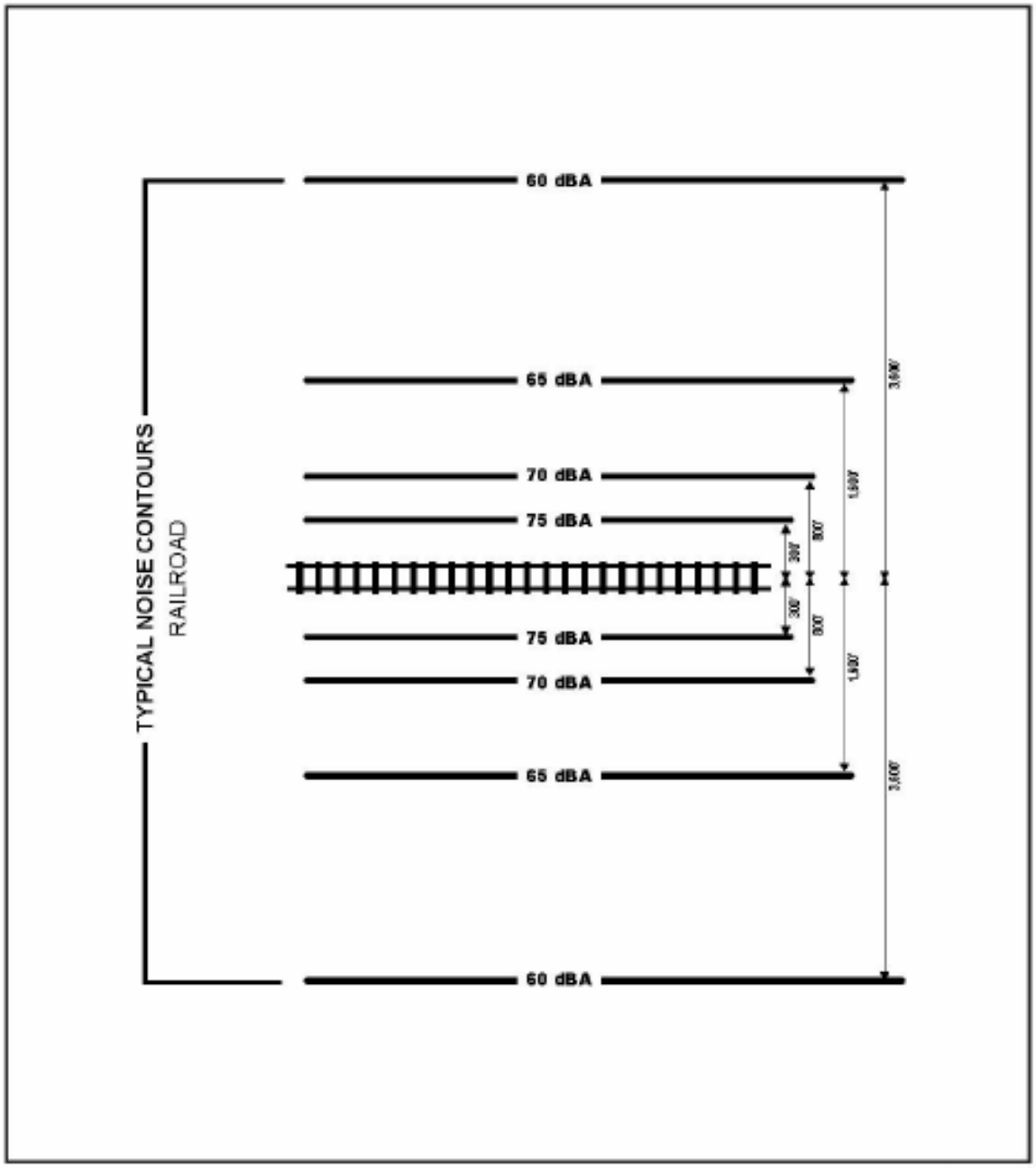


Figure 17

SOURCE: COUNTY OF RIVERSIDE GENERAL PLAN - NOISE ELEMENT DATA

Typical Railroad Noise Contours:
3 Locomotives and 100 Cars with Horns (a Freight Train)

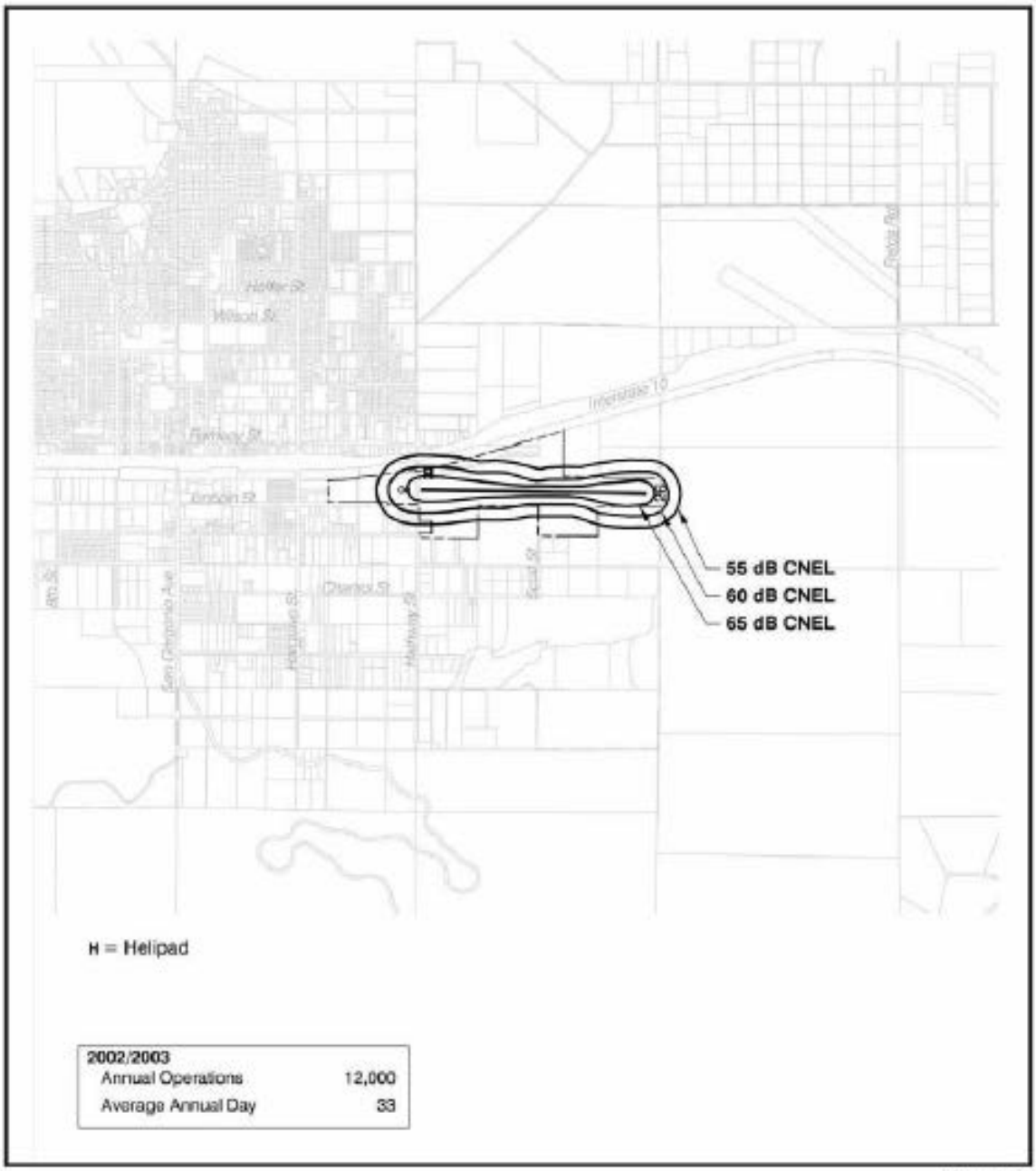


Figure 18

SOURCE: RIVERSIDE COUNTY ALUCP - EAST COUNTY AIRPORTS RADAR/GPS/ND DATA (OCT 2004)

0 1,500 3,000 FEET

Banning Municipal Airport
Existing Noise Contours

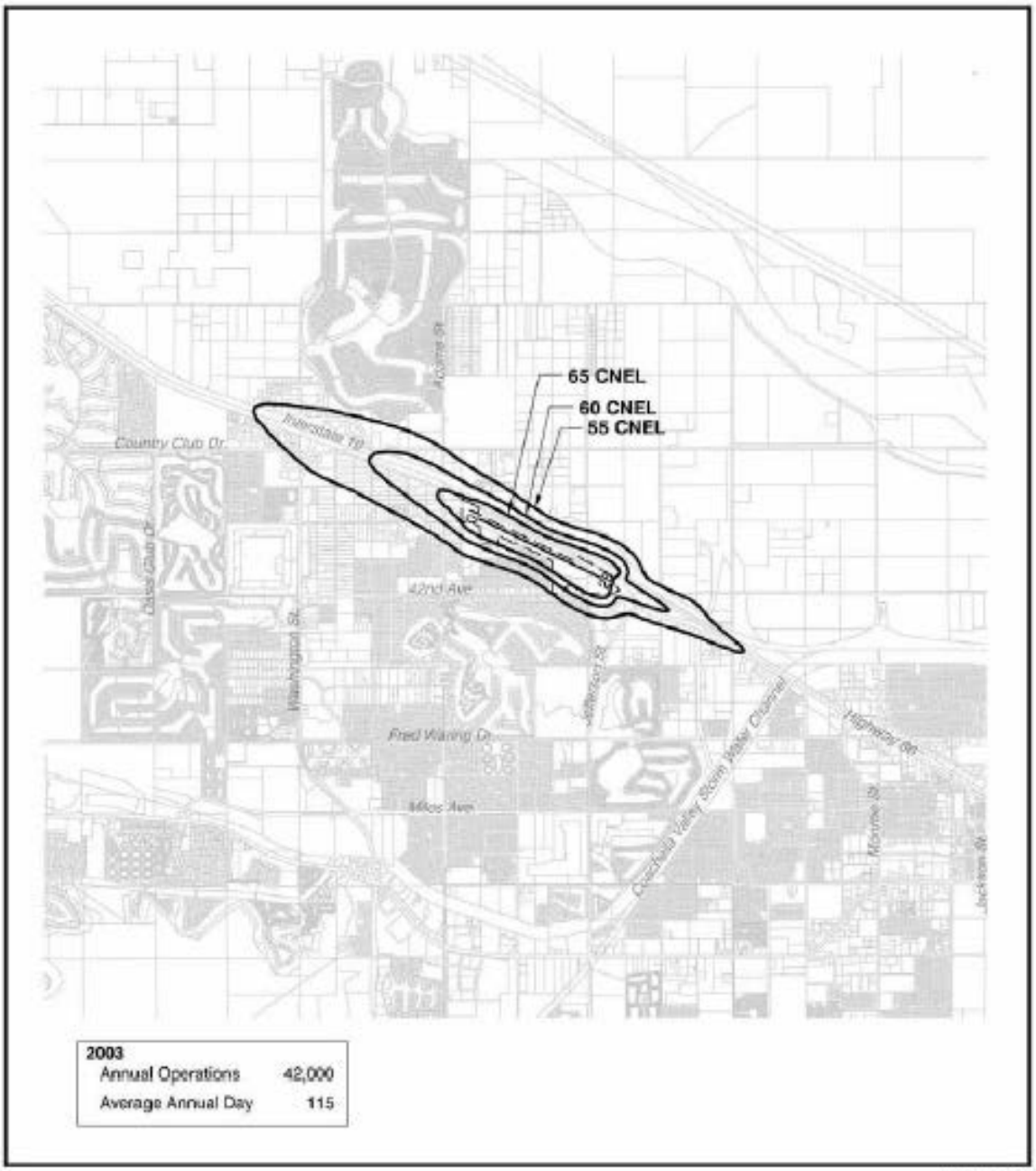


Figure 19

SOURCE: RIVERSIDE COUNTY AUDIO - EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2006)

0 2,500 5,000 FEET

Bermuda Dunes Airport Existing Noise Contours: Average Annual Day

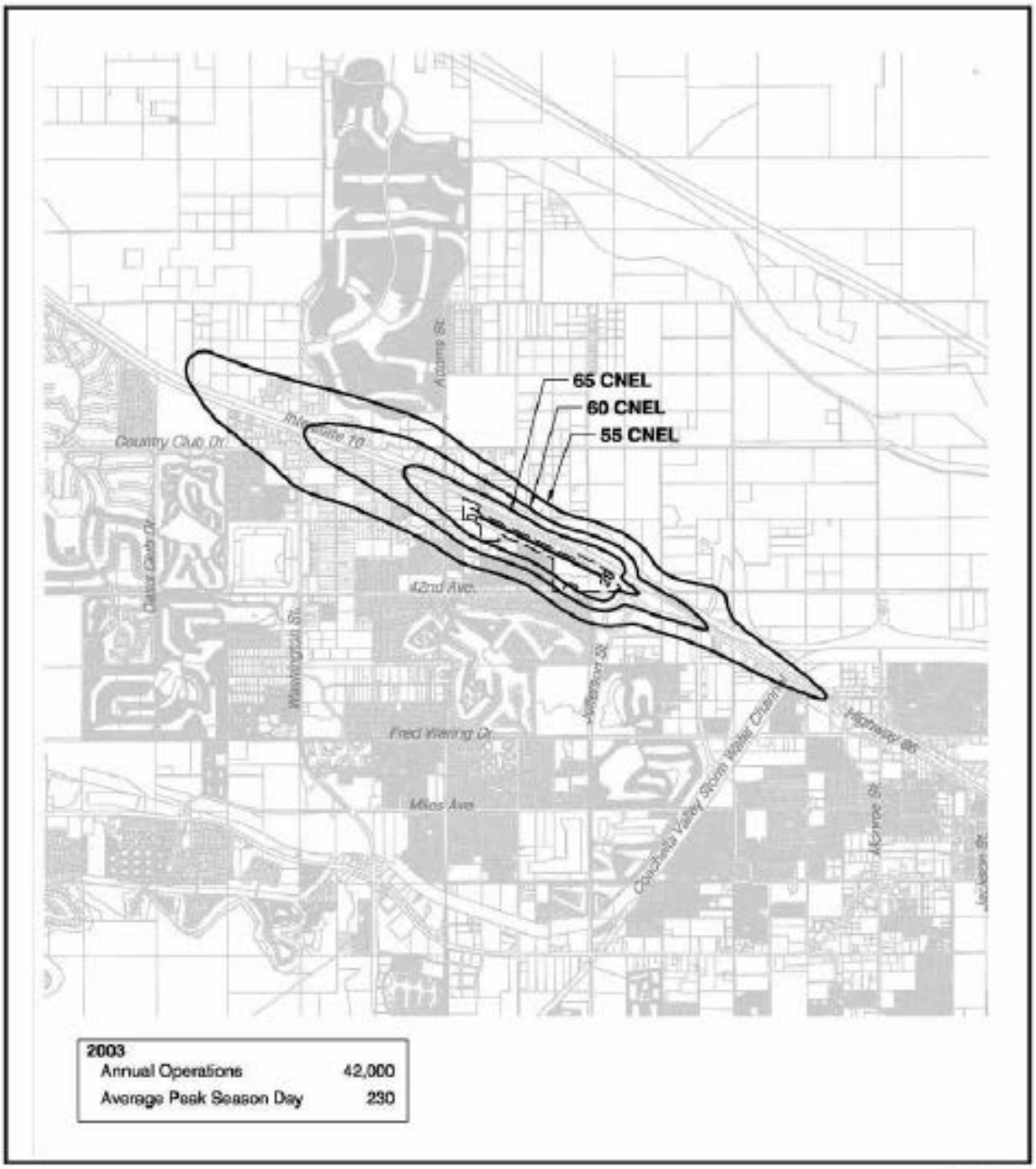


Figure 20

SOURCE: RIVERSIDE COUNTY ALUCP - EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2006)

0 2,500 5,000 FEET

Bermuda Dunes Airport Existing Noise Contours: Average Peak Season Day

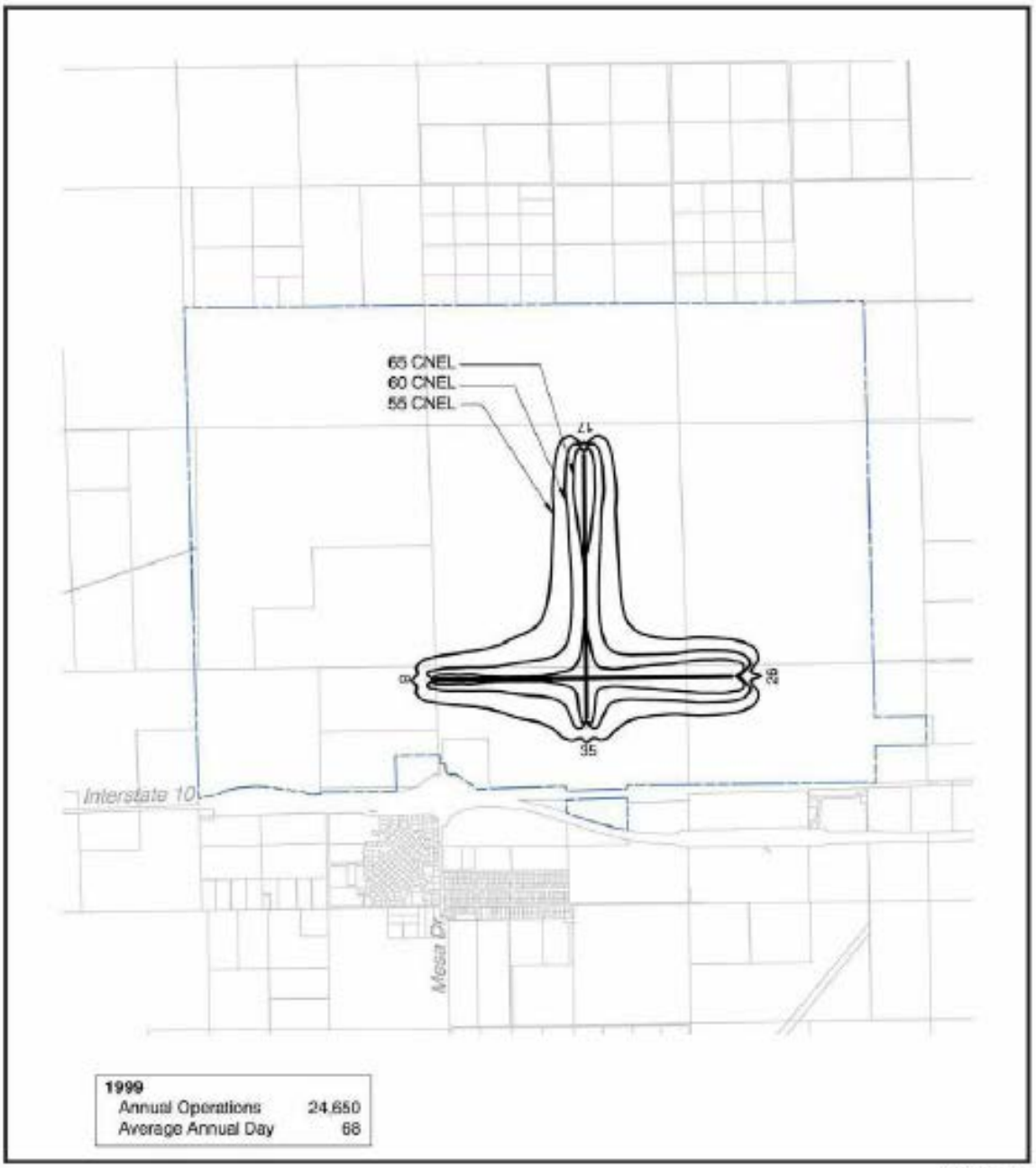


Figure 21

SOURCE: RIVERSIDE COUNTY ALUCP - EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2006)

0 1,500 3,000 FEET

Blythe Municipal Airport
Existing Noise Contours

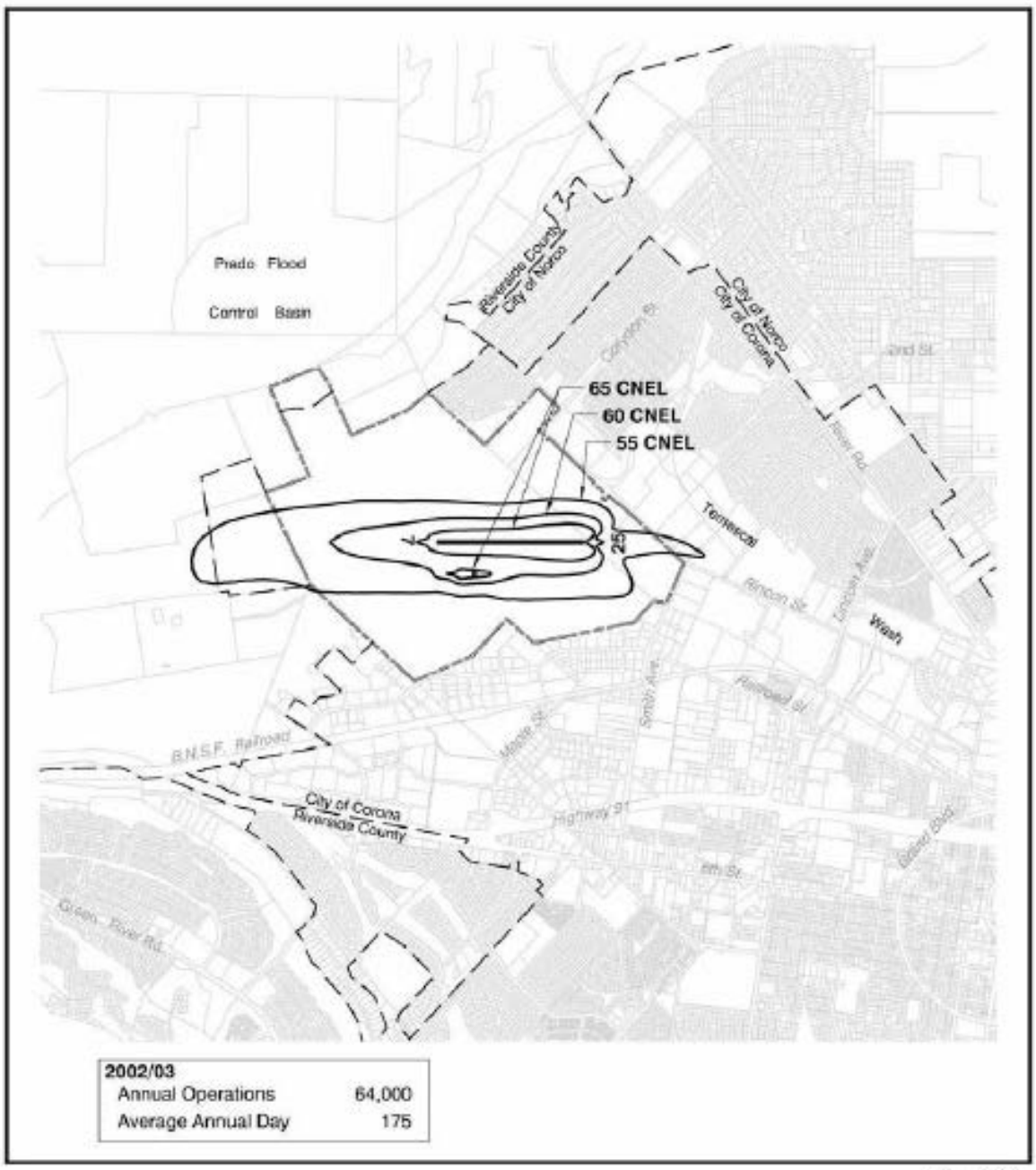


Figure 22

SOURCE: RIVERSIDE COUNTY ALUCP - EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2006)

0 1,500 3,000 FEET

Corona Municipal Airport
Existing Noise Contours

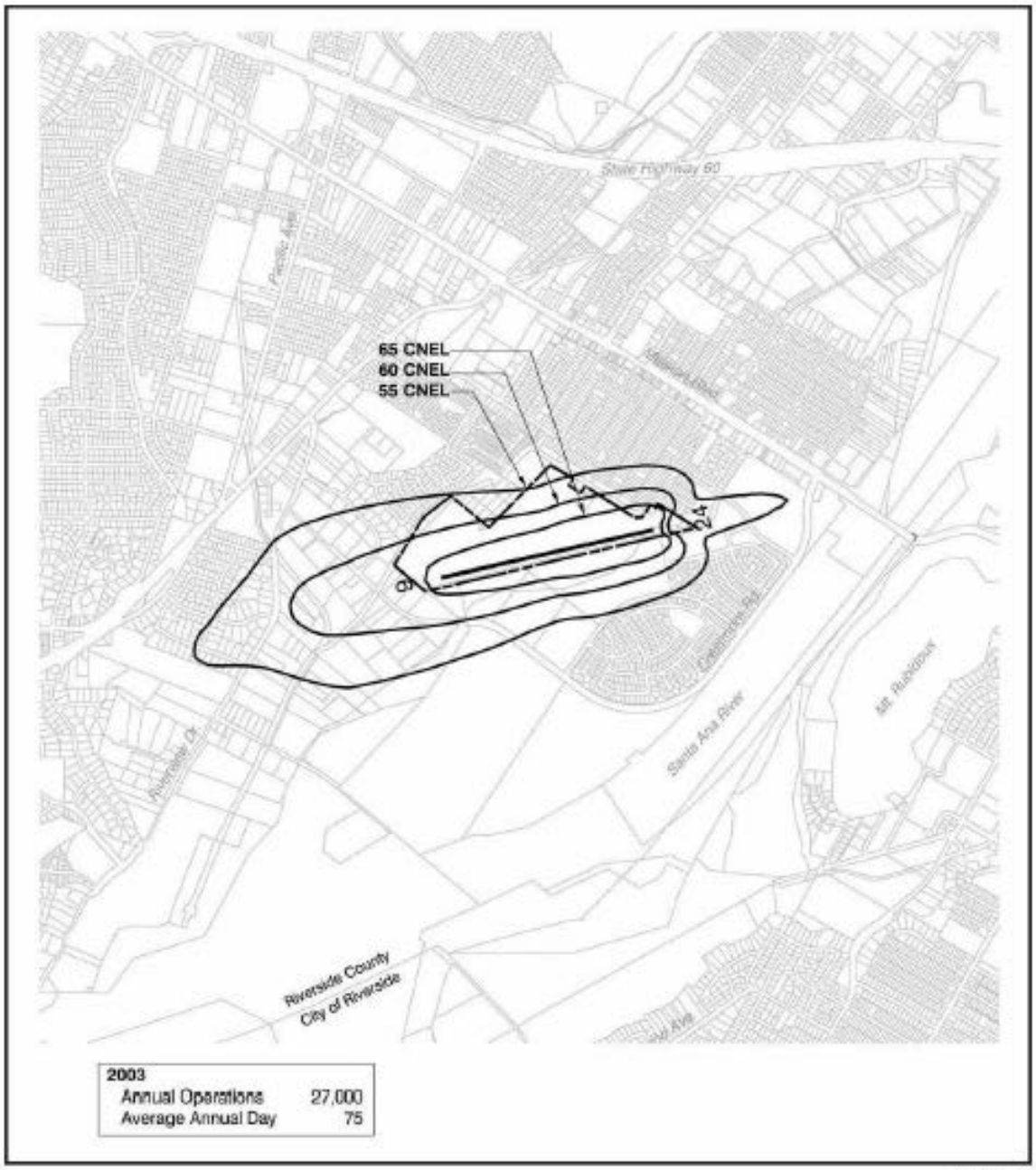


Figure 23

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)

0 1,000 2,000 FEET

Flabob Airport
Existing Noise Contours

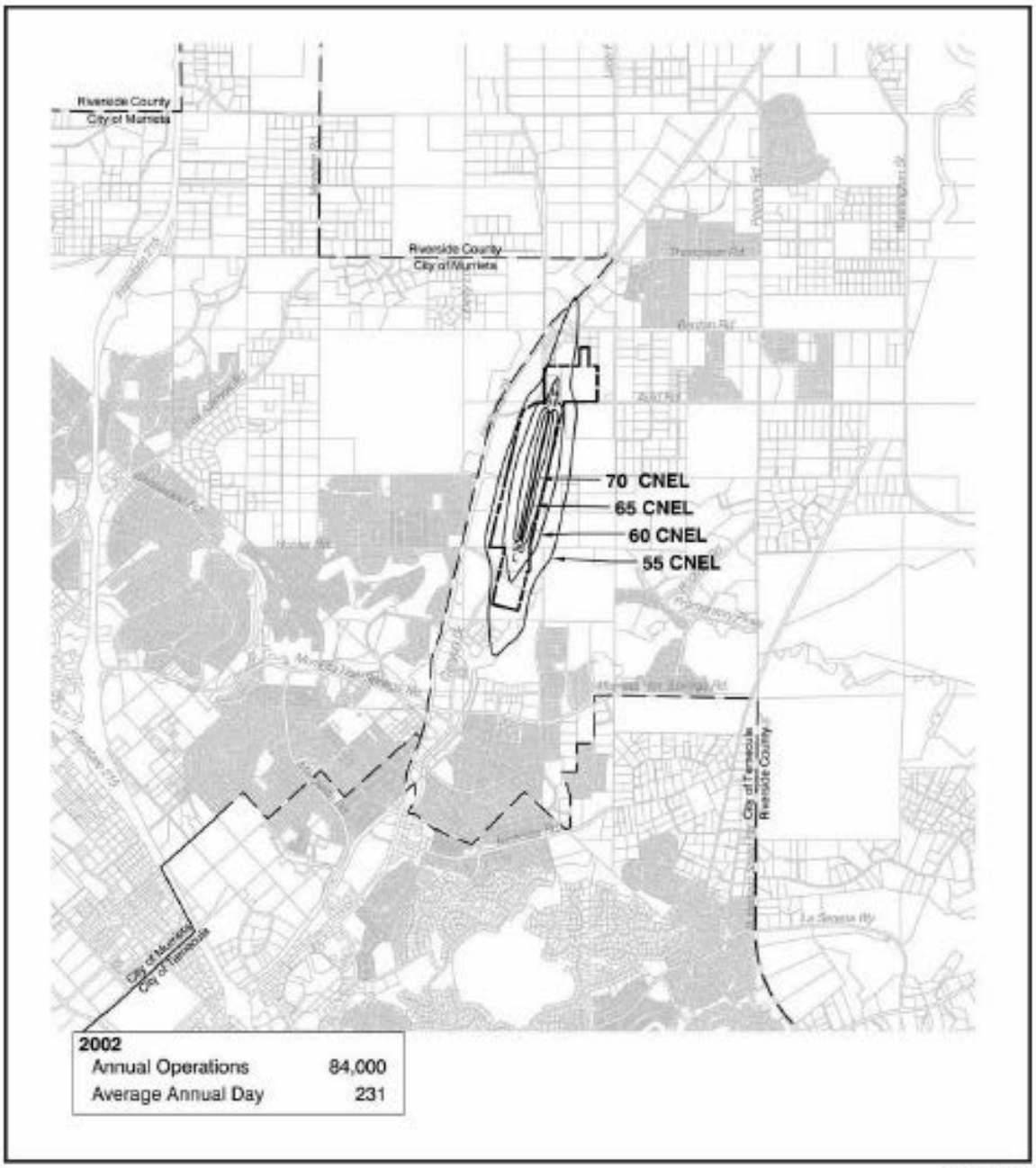


Figure 24

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)

N

0 2,500 5,000 FEET

French Valley Airport
Existing Noise Contours

J:\COUNTY\Noise\French Valley-Existing.cdr (2/15/11)

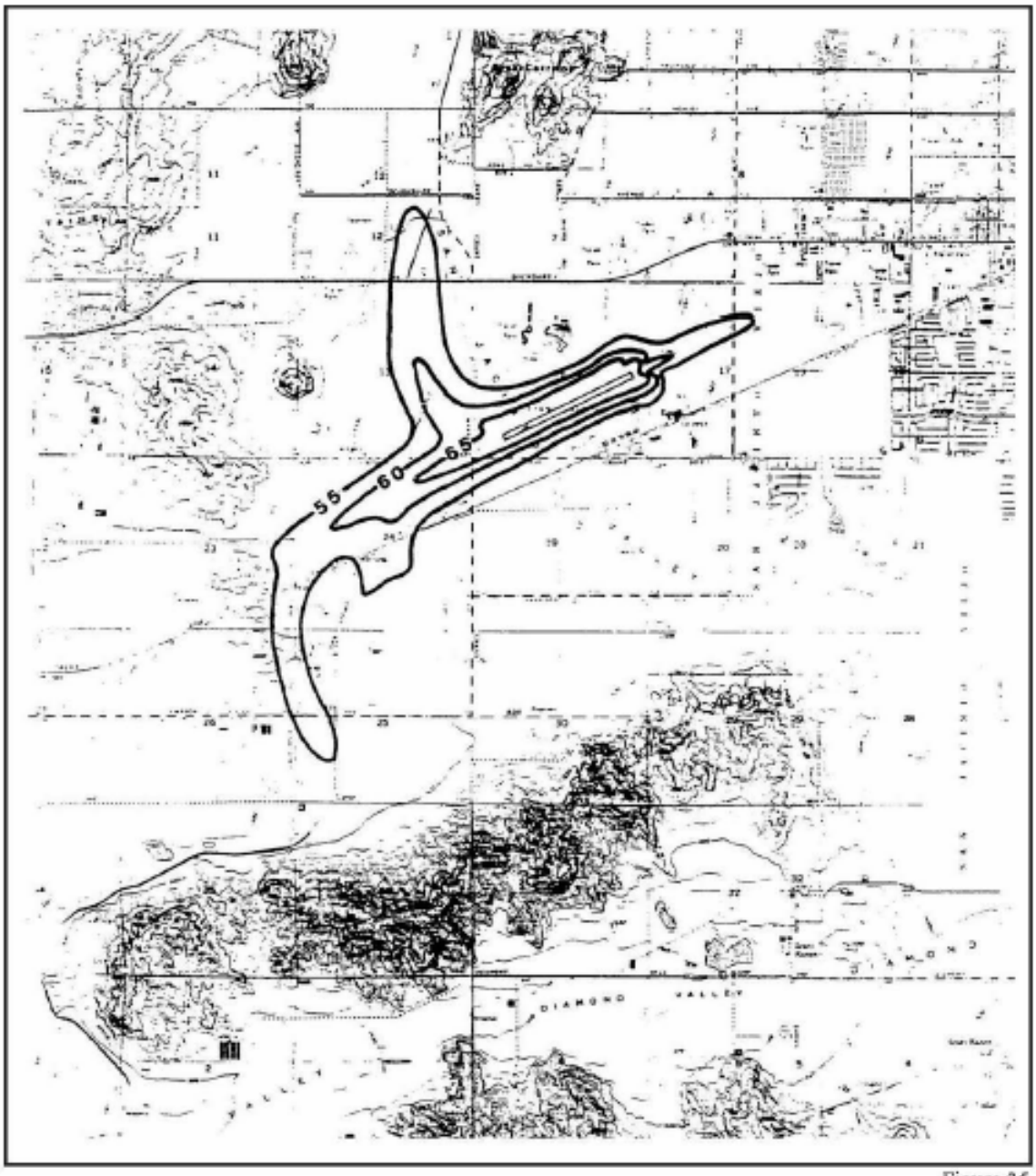


Figure 25

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)

Hemet Ryan Airport
Existing (1990) Noise Contours

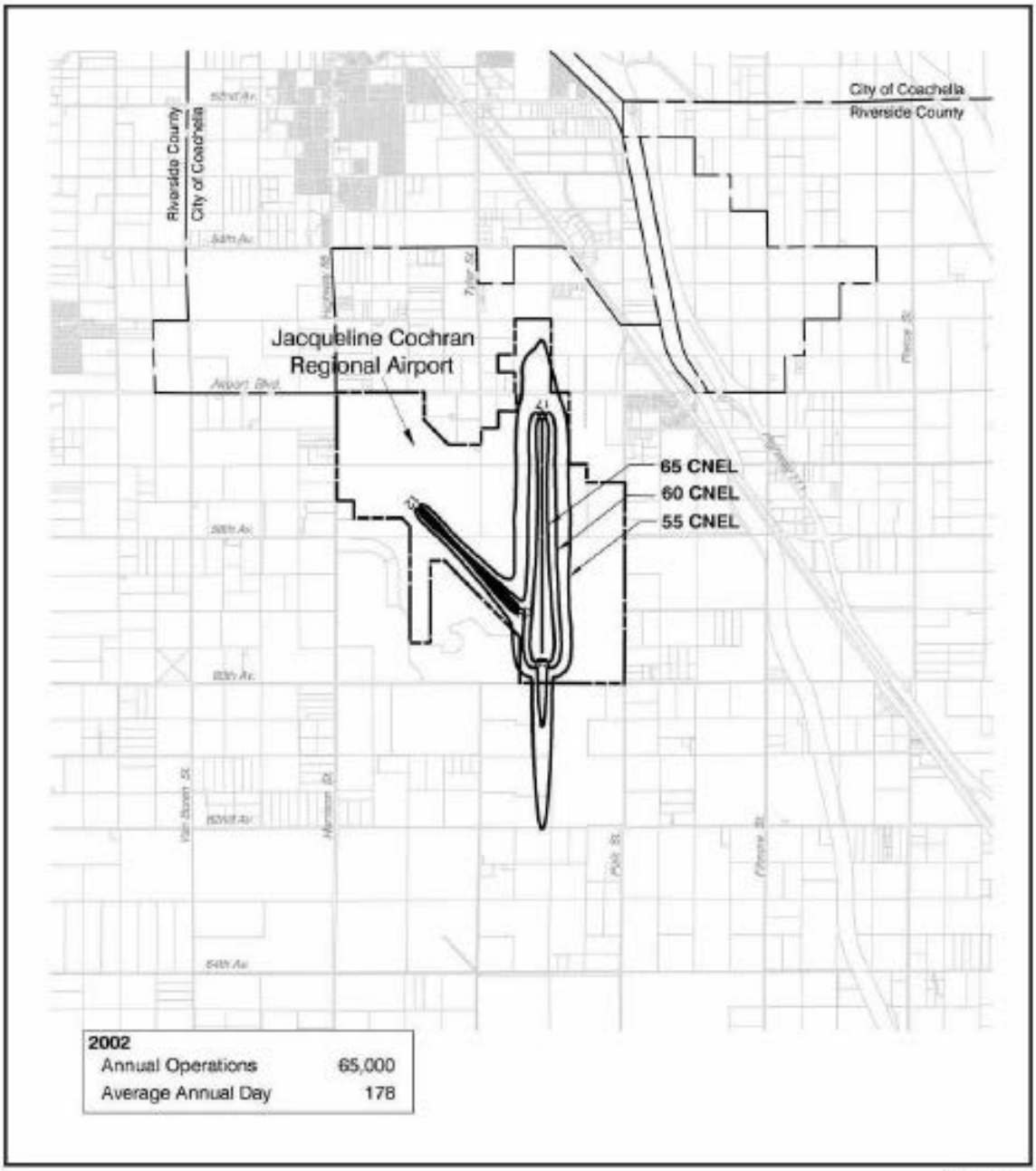

City of Coachella
Riverside County
Riverside County
City of Coachella
Jacqueline Cochran
Regional Airport
Airport Blvd.
65 CNEL
60 CNEL
55 CNEL
2002
Annual Operations 65,000
Average Annual Day 178
SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)
0 2,500 5,000 FEET
Jacqueline Cochran Regional Airport
Existing Noise Contours

Figure 26

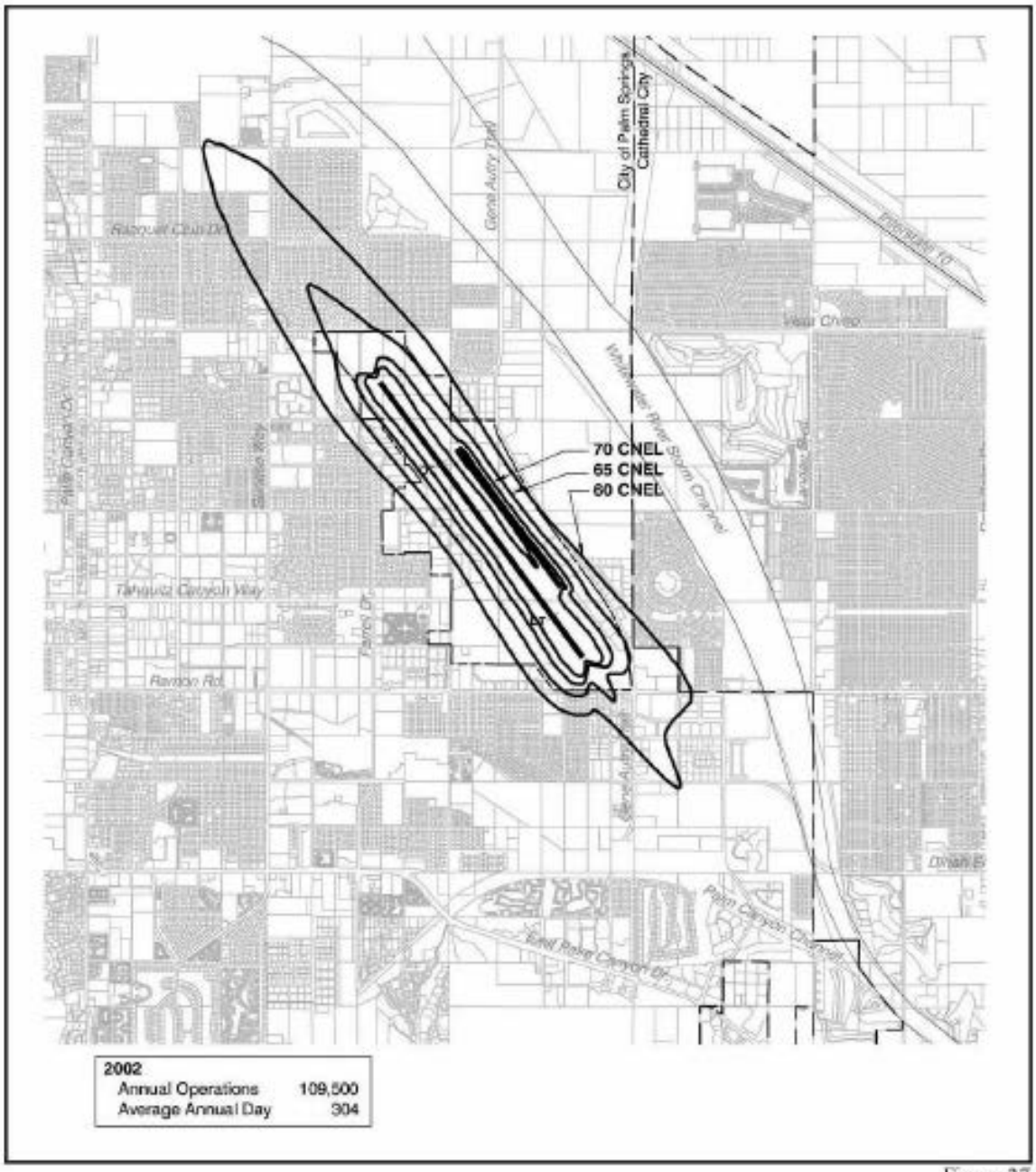


Figure 27

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)

1 2,000 4,000 FEET

Palm Springs International Airport
Existing Noise Contours

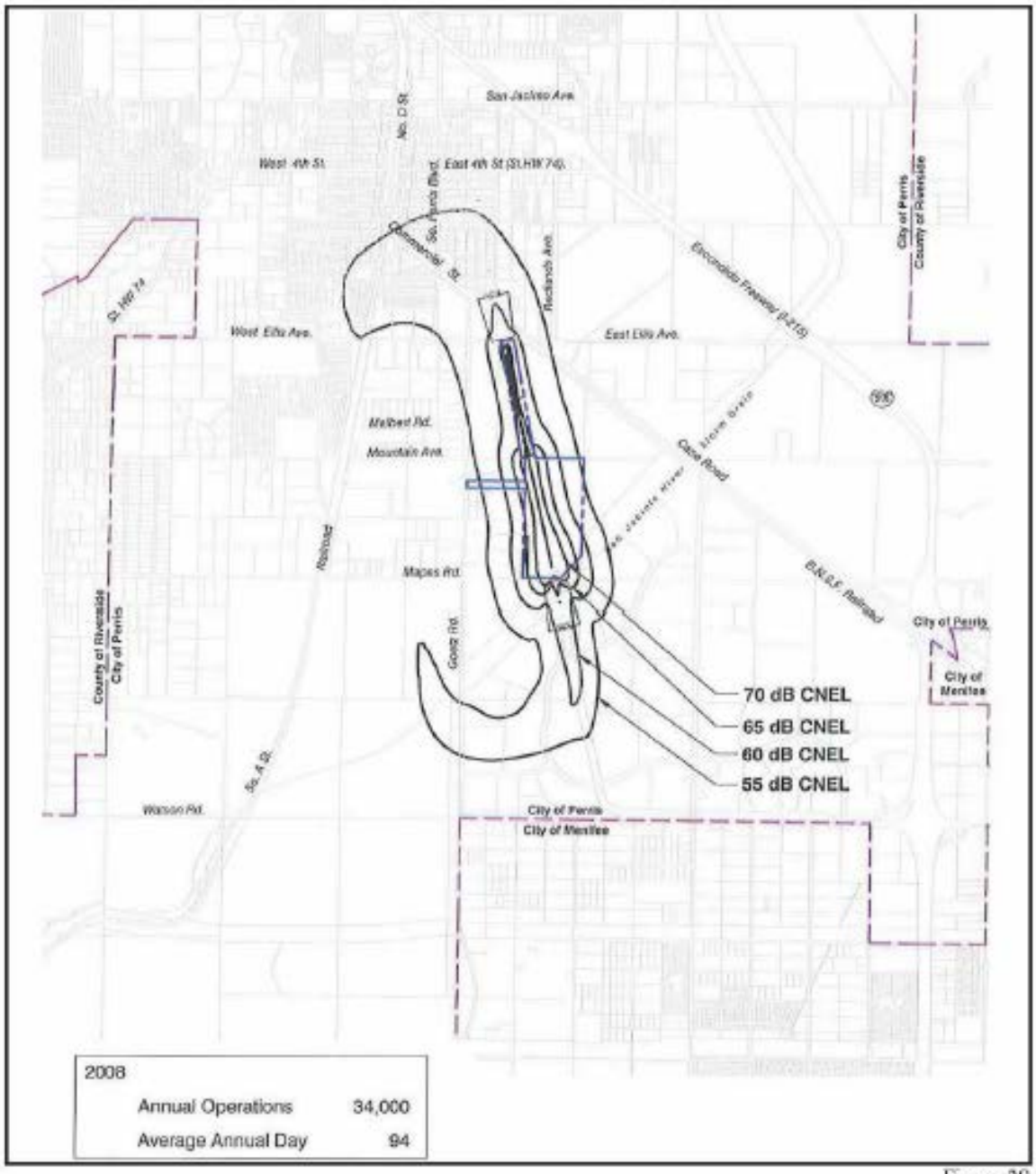

San Jacinto Ave.
West 4th St.
East 4th St (St.Hwy 74)
So. D St.
So. Perris Blvd.
Commercial St.
Redlands Ave.
Escondido Freeway (I-215)
City of Perris
County of Riverside
St. Hwy 74
West Ellis Ave.
East Ellis Ave.
Mallard Rd.
Mountain Ave.
Railroad
Maps Rd.
Goetz Rd.
Ortega Road
Storm Drain
So. Ortega River
A.T.&S.F. Railroad
City of Perris
City of Menifee
County of Riverside
City of Perris
So. A St.
Watson Rd.
City of Perris
City of Menifee
70 dB CNEL
65 dB CNEL
60 dB CNEL
55 dB CNEL
2008
Annual Operations 34,000
Average Annual Day 94
0 1,500 3,000 FEET
Perris Valley Airport
Existing Noise Contours

Figure 28

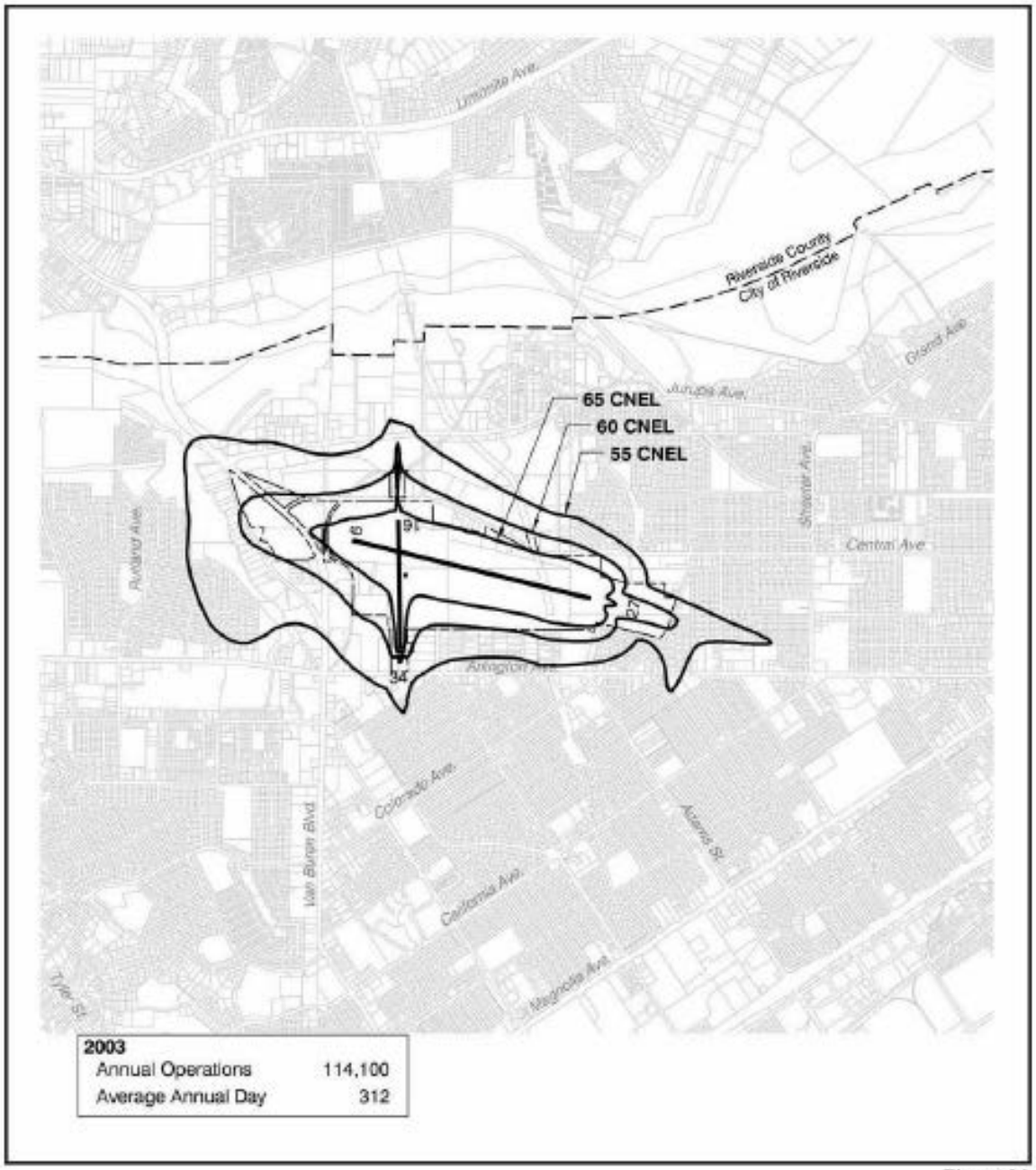


Figure 29

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)

N

0 1,500 3,000 FEET

Riverside Municipal Airport
Existing Noise Contours

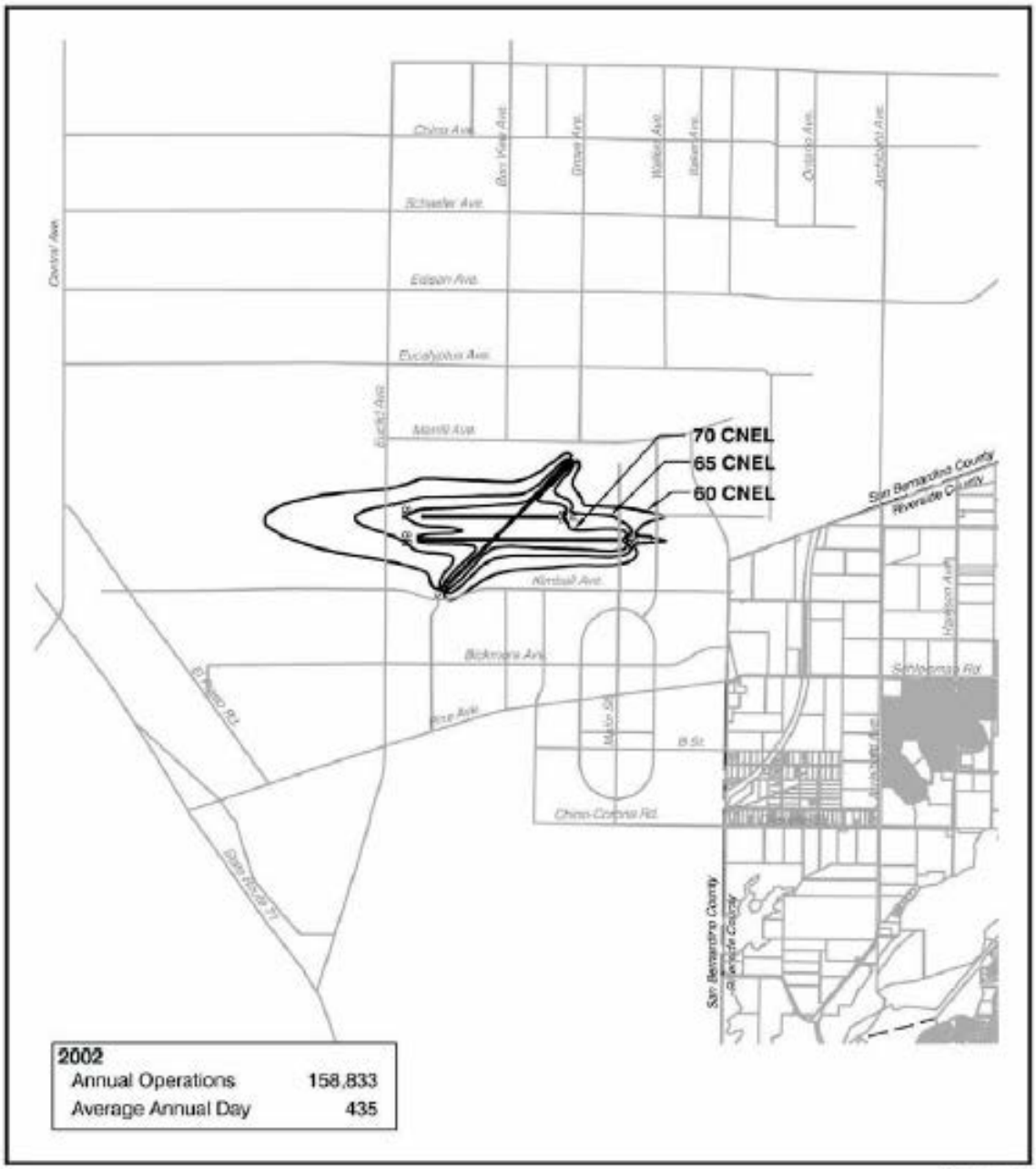

70 CNEL
65 CNEL
60 CNEL
2002
Annual Operations 158,833
Average Annual Day 435
Chino Airport
Existing Noise Contours

Figure 30

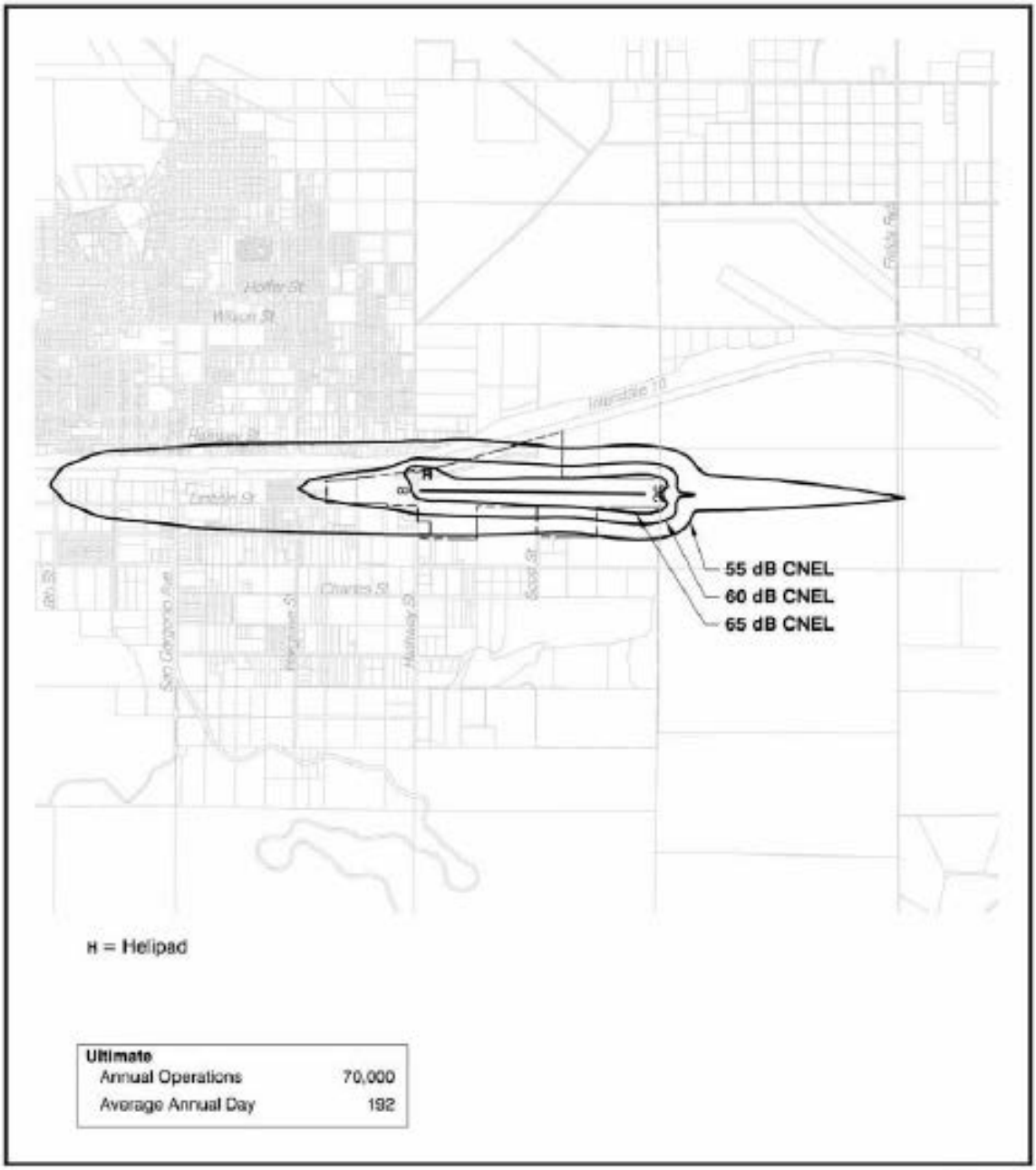


Figure 31

SOURCE: RIVERSIDE COUNTY ALUCP - EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2004)

0 1,500 3,000 FEET

Banning Municipal Airport
Future Noise Contours

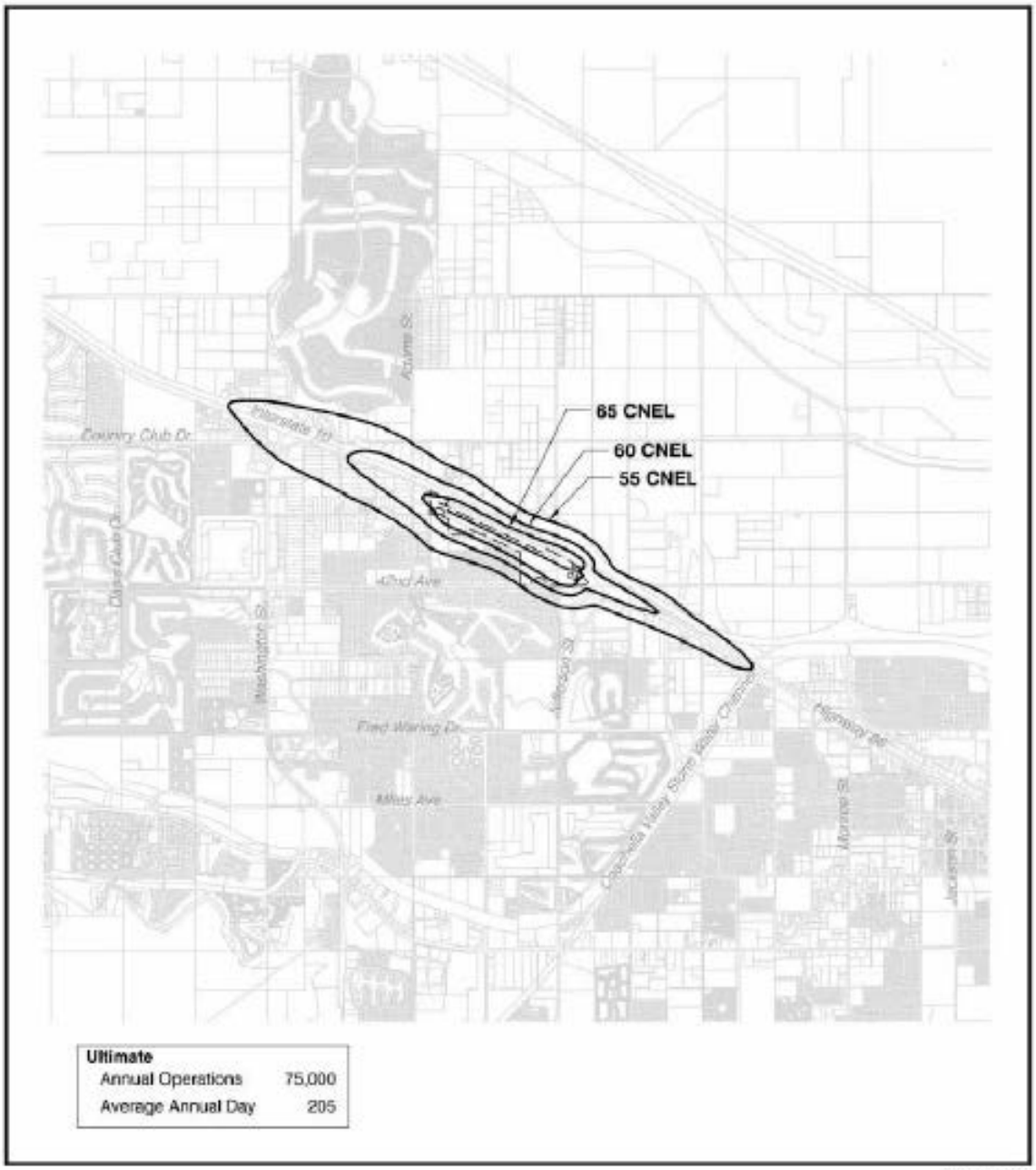


Figure 32

SOURCE: RIVERSIDE COUNTY ALUCP - EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2004)

0 2,500 5,000 FEET

Bermuda Dunes Airport Future Noise Contours: Average Annual Day

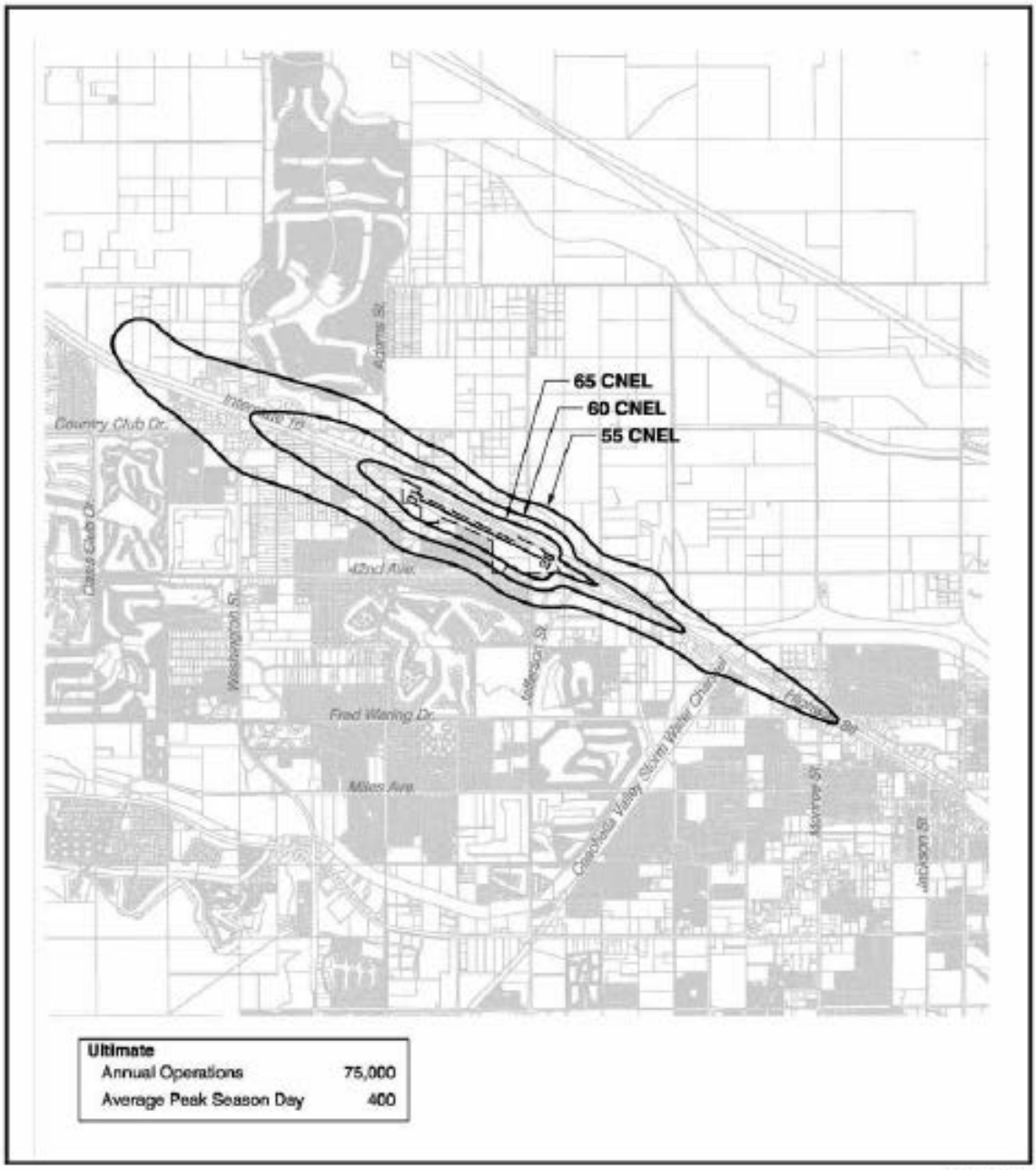


Figure 33

SOURCE: RIVERSIDE COUNTY ALUCP -
EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2004)

0 2,500 5,000 FEET

Bermuda Dunes Airport Future Noise Contours: Average Peak Season Day

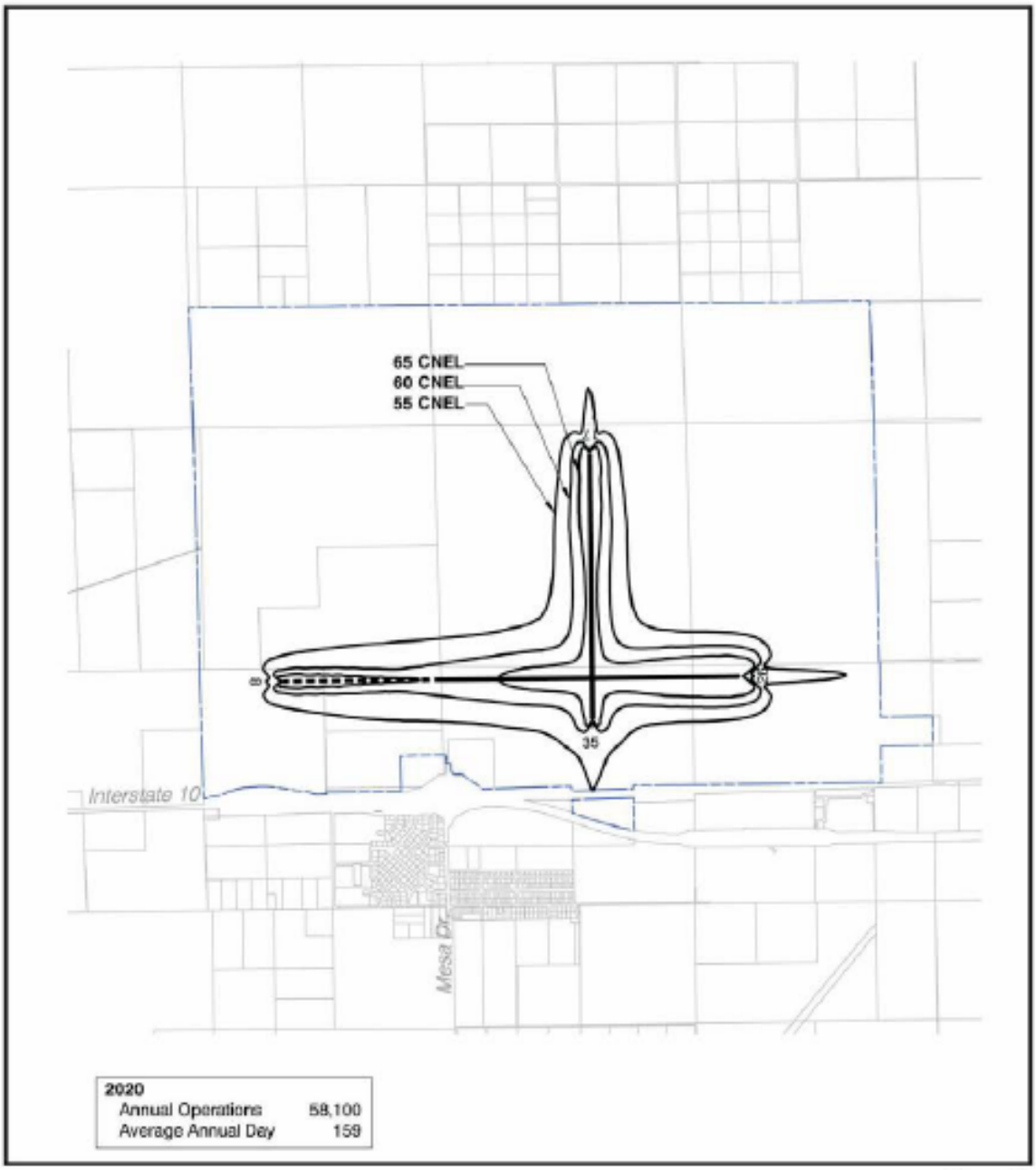


Figure 34

SOURCE: RIVERSIDE COUNTY ALUCP - EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2004)

0 1,500 3,000 FEET

Blythe Municipal Airport
Future Noise Contours

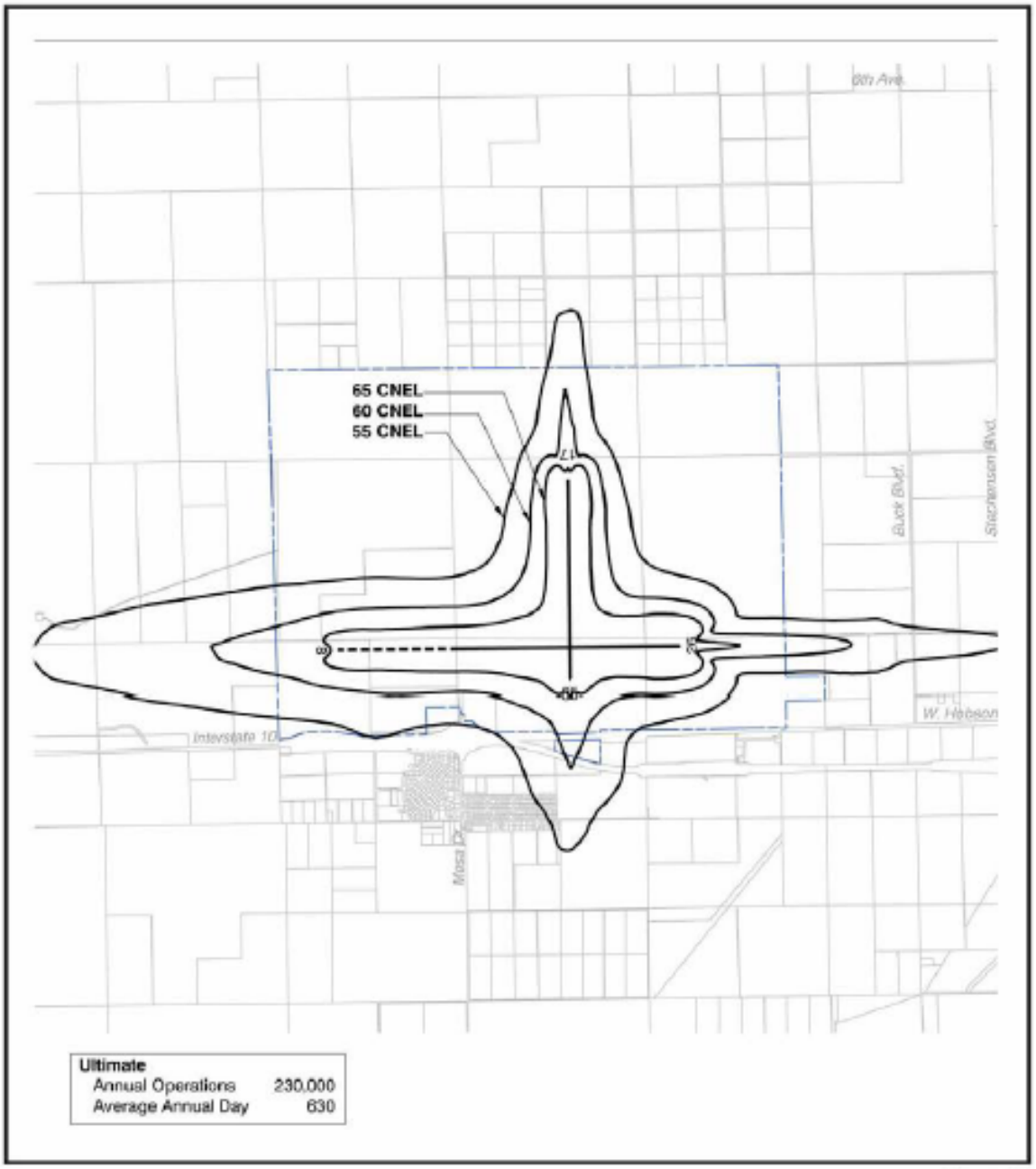


Figure 35

SOURCE: RIVERSIDE COUNTY ALUCP -
EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2004)

0 2,000 4,000 FEET

Blythe Municipal Airport
Ultimate Noise Contours

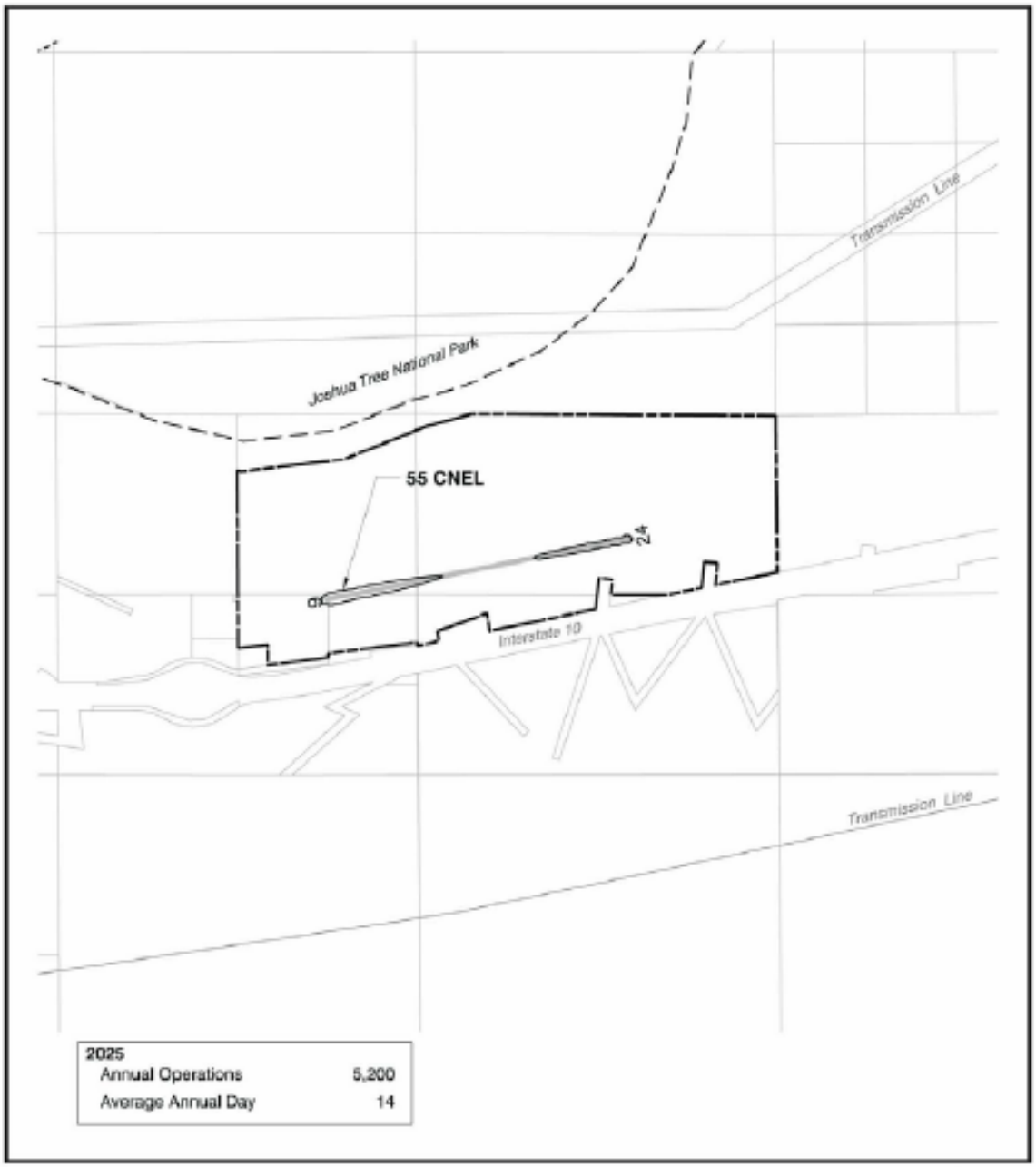


Figure 36

SOURCE: RIVERSIDE COUNTY ALUCP -
EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2004)

0 1,500 2,000 FEET

Chiriaco Summit Airport
Future Noise Contours

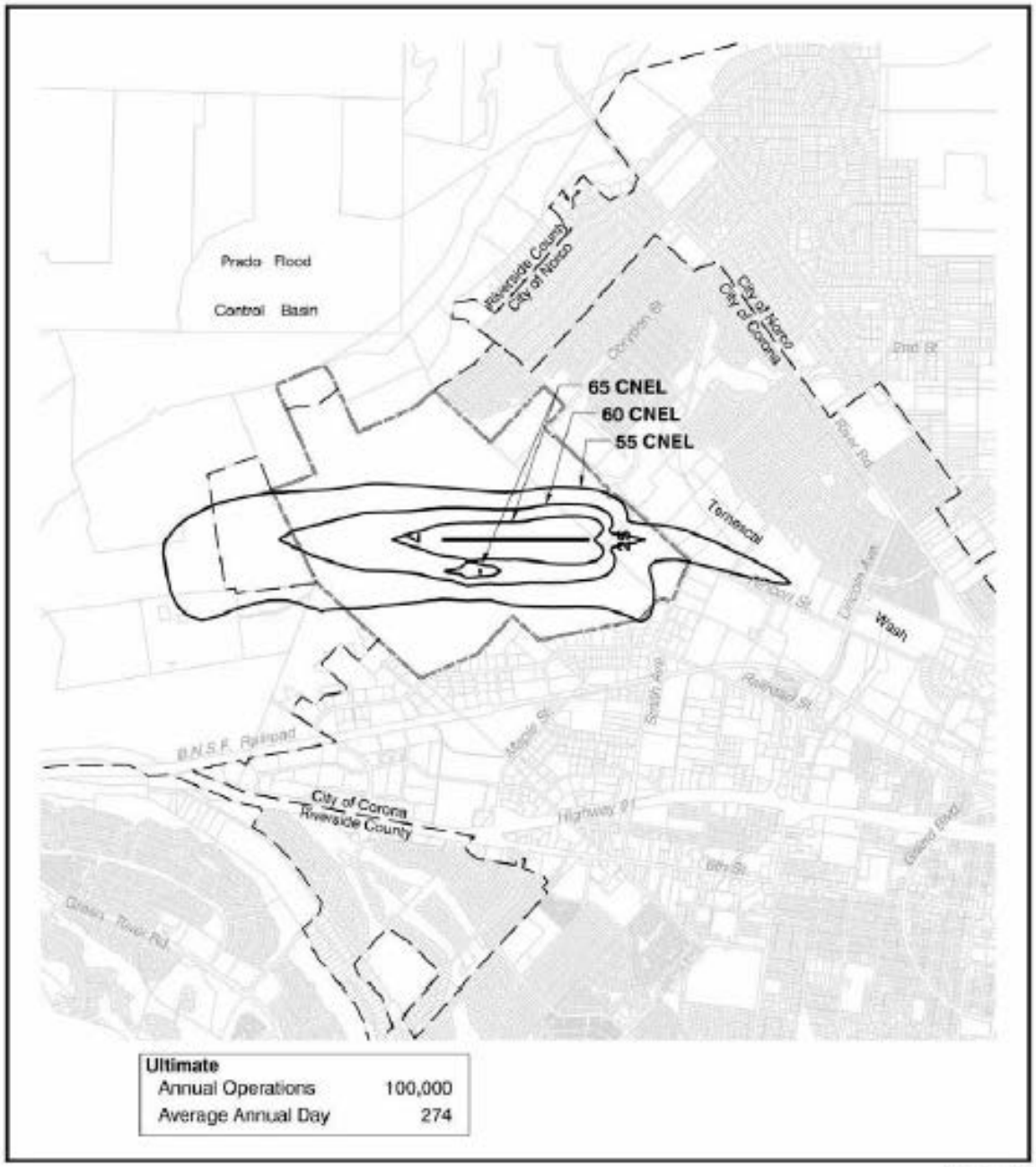


Figure 37

SOURCE: RIVERSIDE COUNTY ALUCP -
EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2004)

0 1,500 3,000 FEET

Corona Municipal Airport
Future Noise Contours

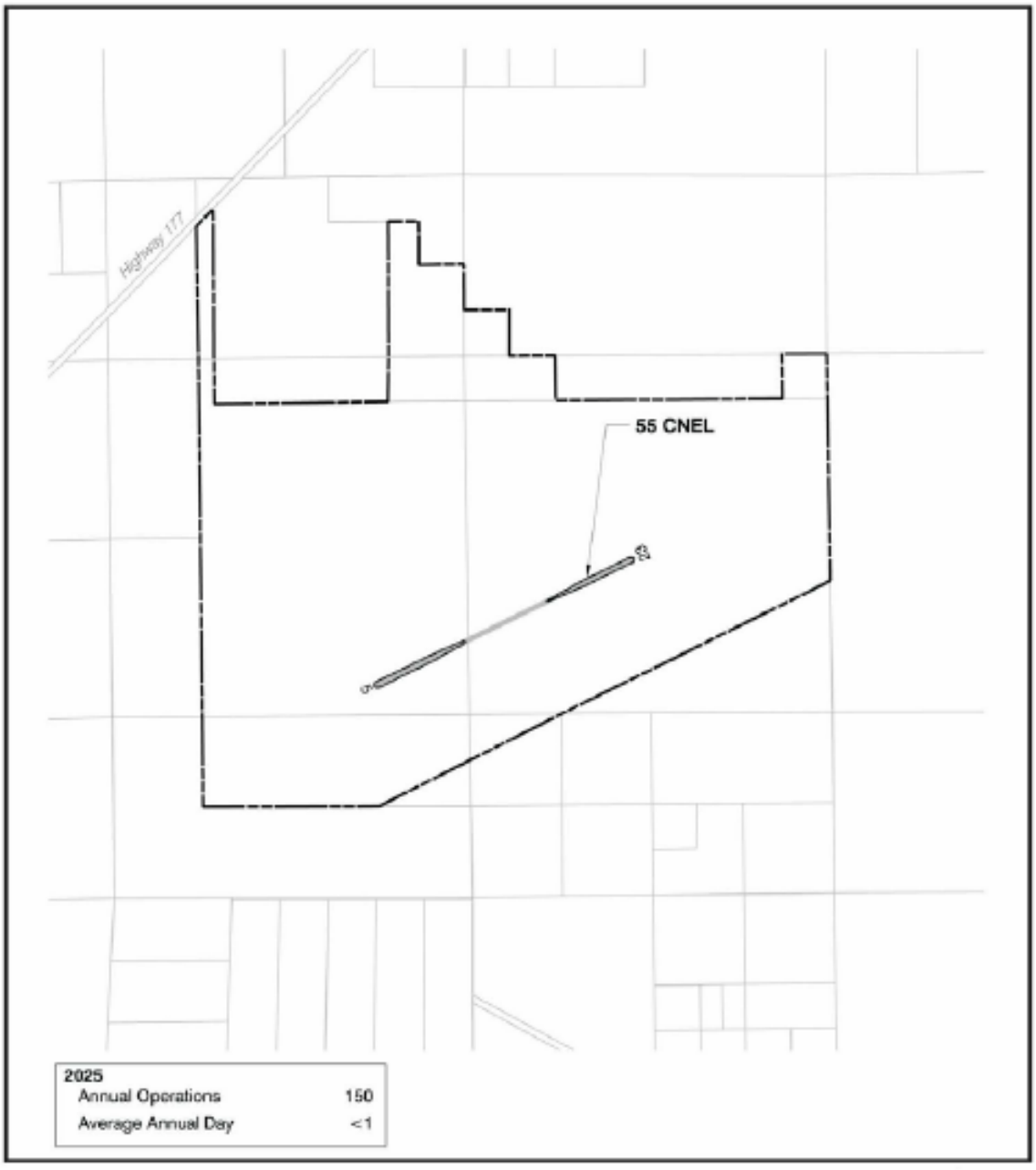


Figure 38

SOURCE: RIVERSIDE COUNTY ALUCP -
EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2004)

0 1,000 2,000 FEET

Desert Center Airport
Future Noise Contours

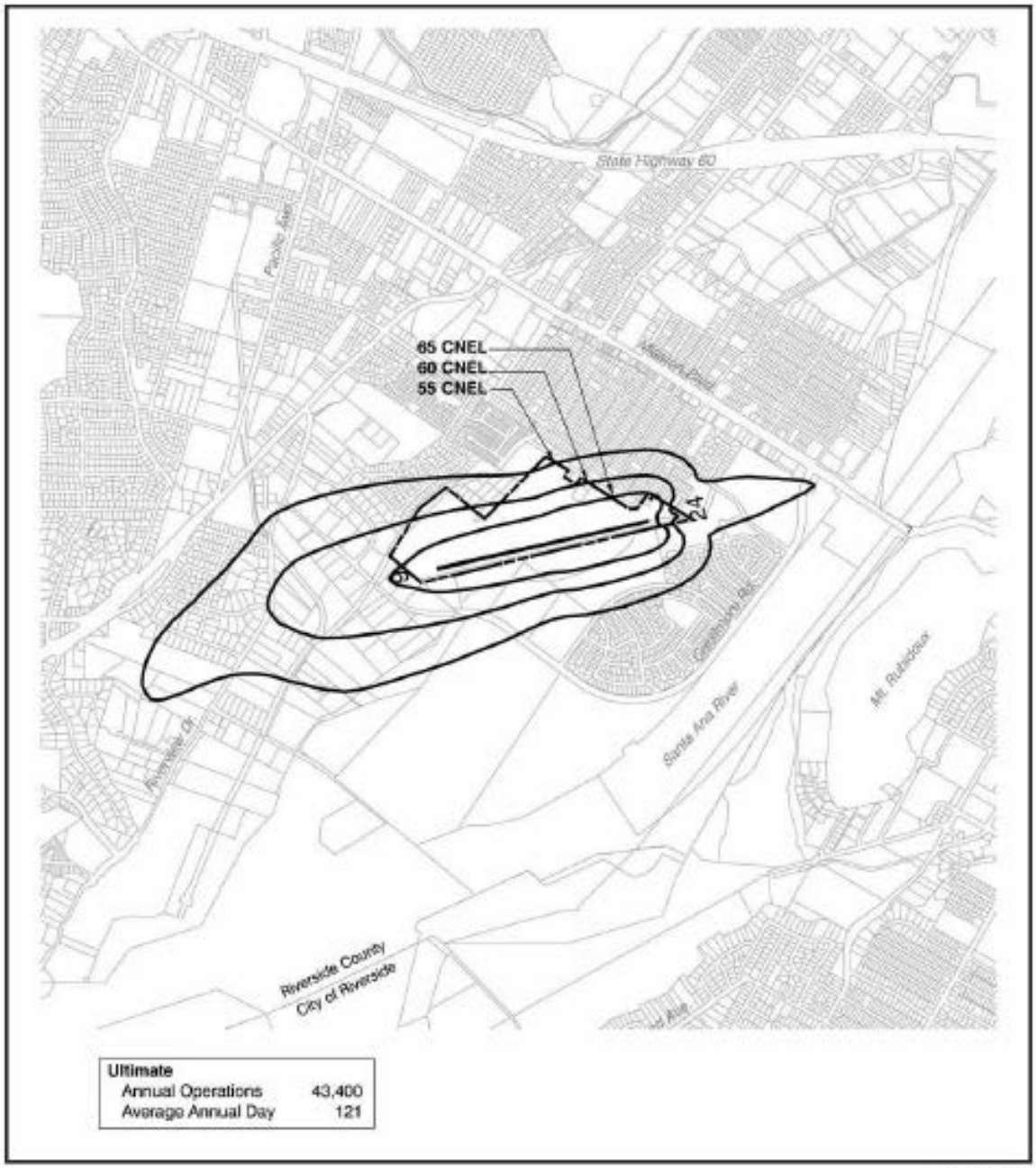


Figure 39

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)

0 1,000 2,000 FEET

Flabob Airport
Future Noise Contours

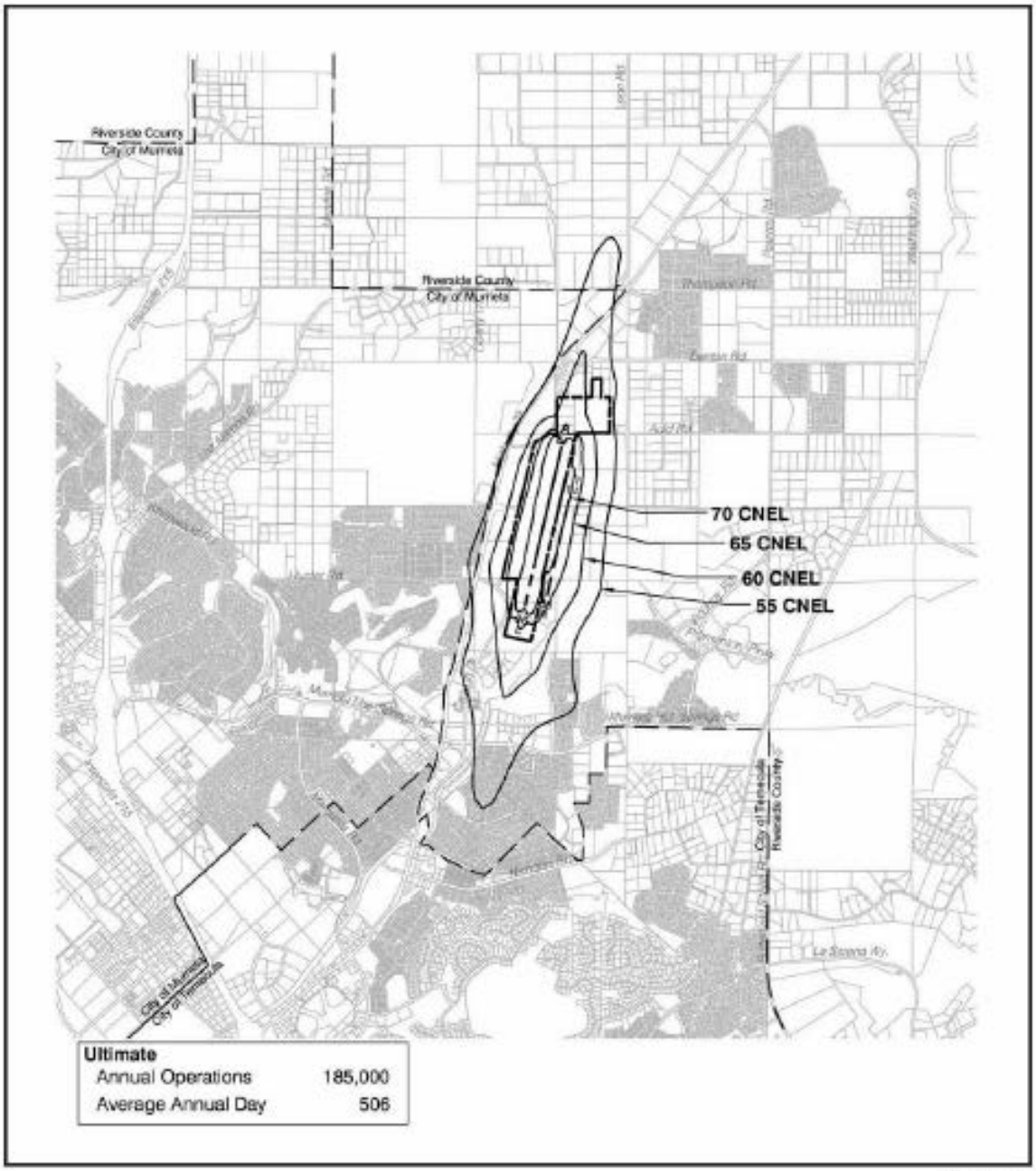


Figure 40

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)

0 2,500 5,000 FEET

French Valley Airport
Future Noise Contours

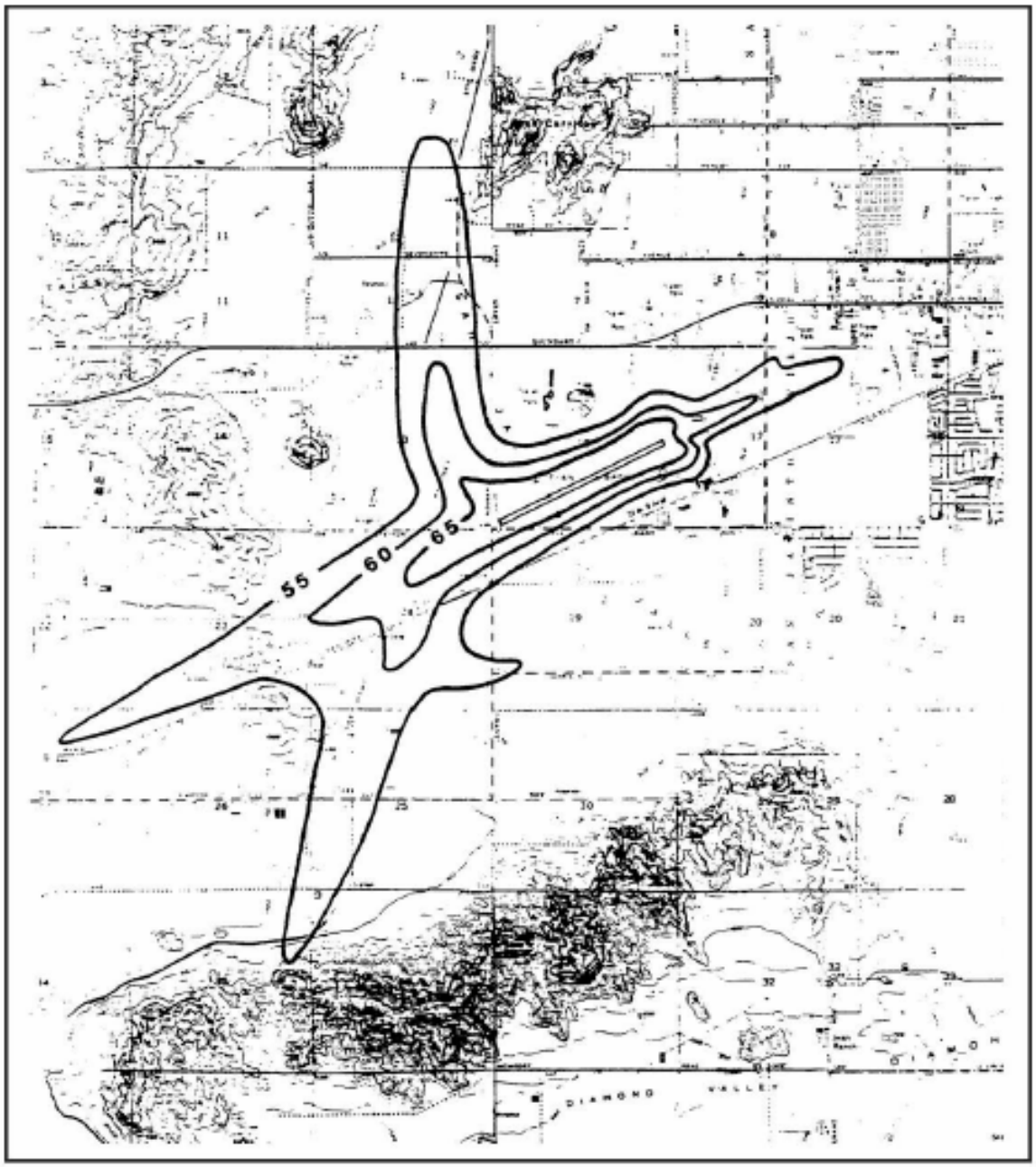


Figure 41

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)

Hemet Ryan Airport
Future (2005) Noise Contours

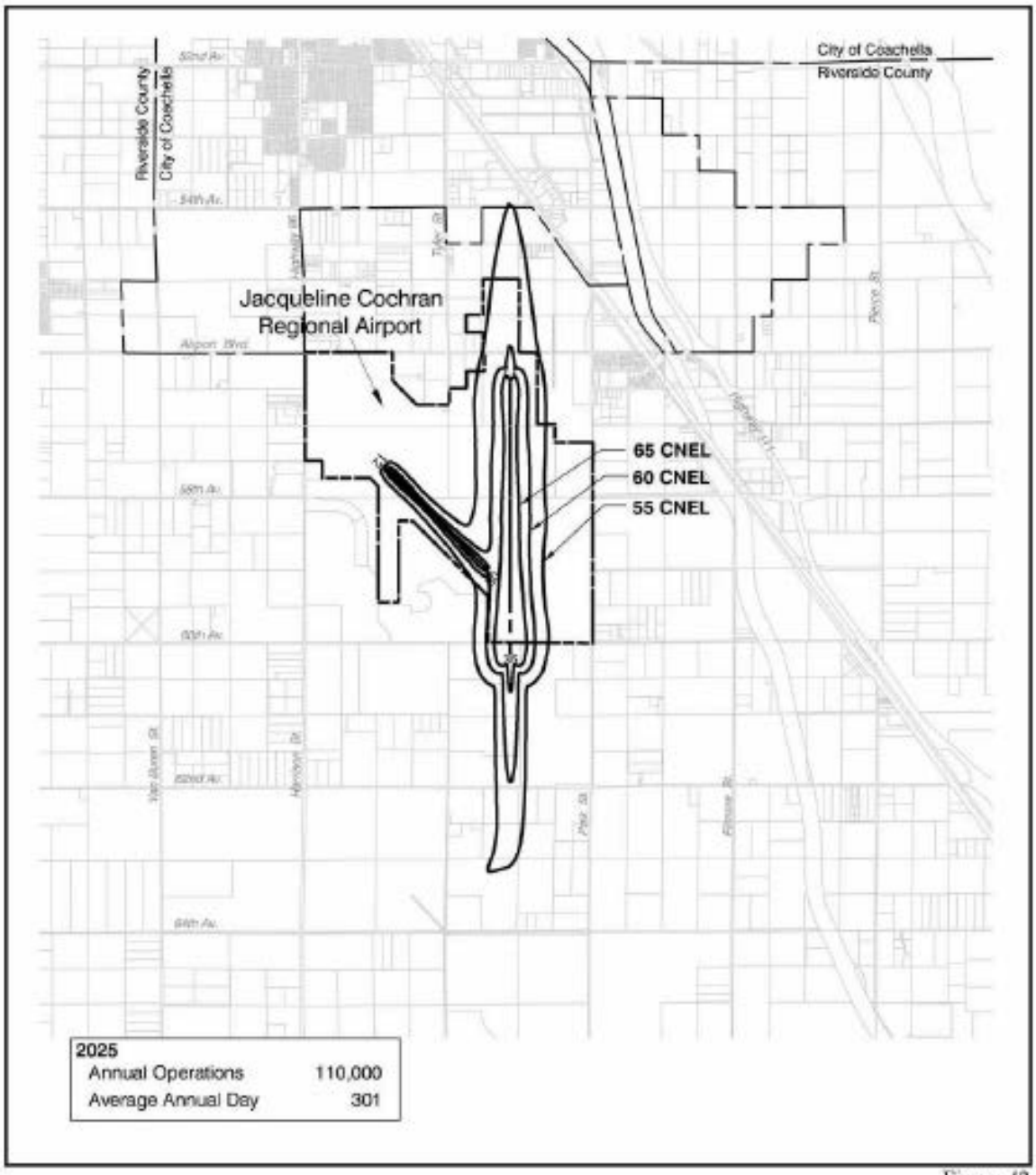


Figure 42

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)

0 2,500 5,000 FEET

Jacqueline Cochran Regional Airport
Future Noise Contours

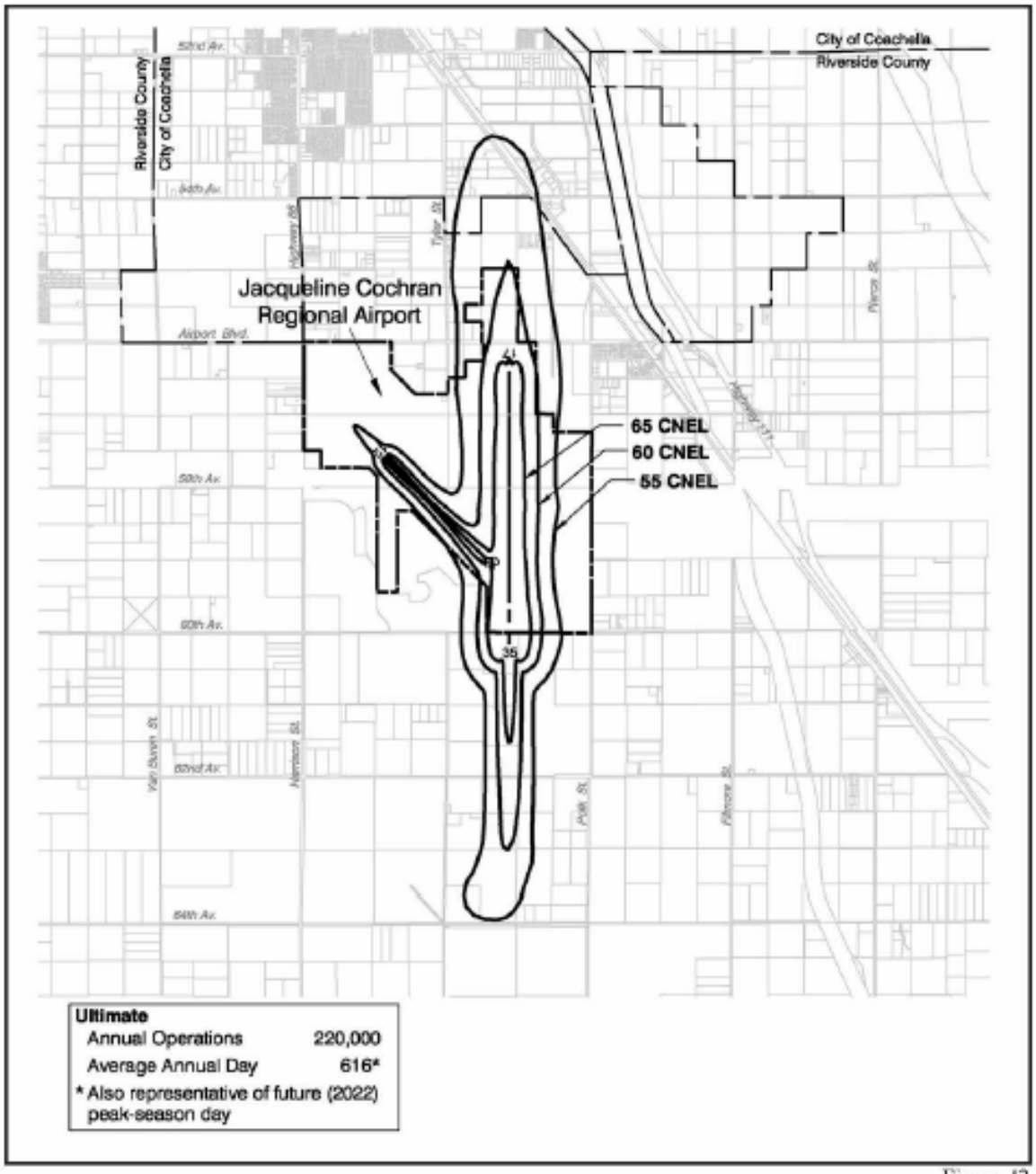


Figure 43

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2006)

0 2,500 5,000 FEET

Jacqueline Cochran Regional Airport
Ultimate Noise Contours

J:\CDR\091\01\Graphics\Jacqueline Cochran Regional-Ultimate.cdr (07/17/15)

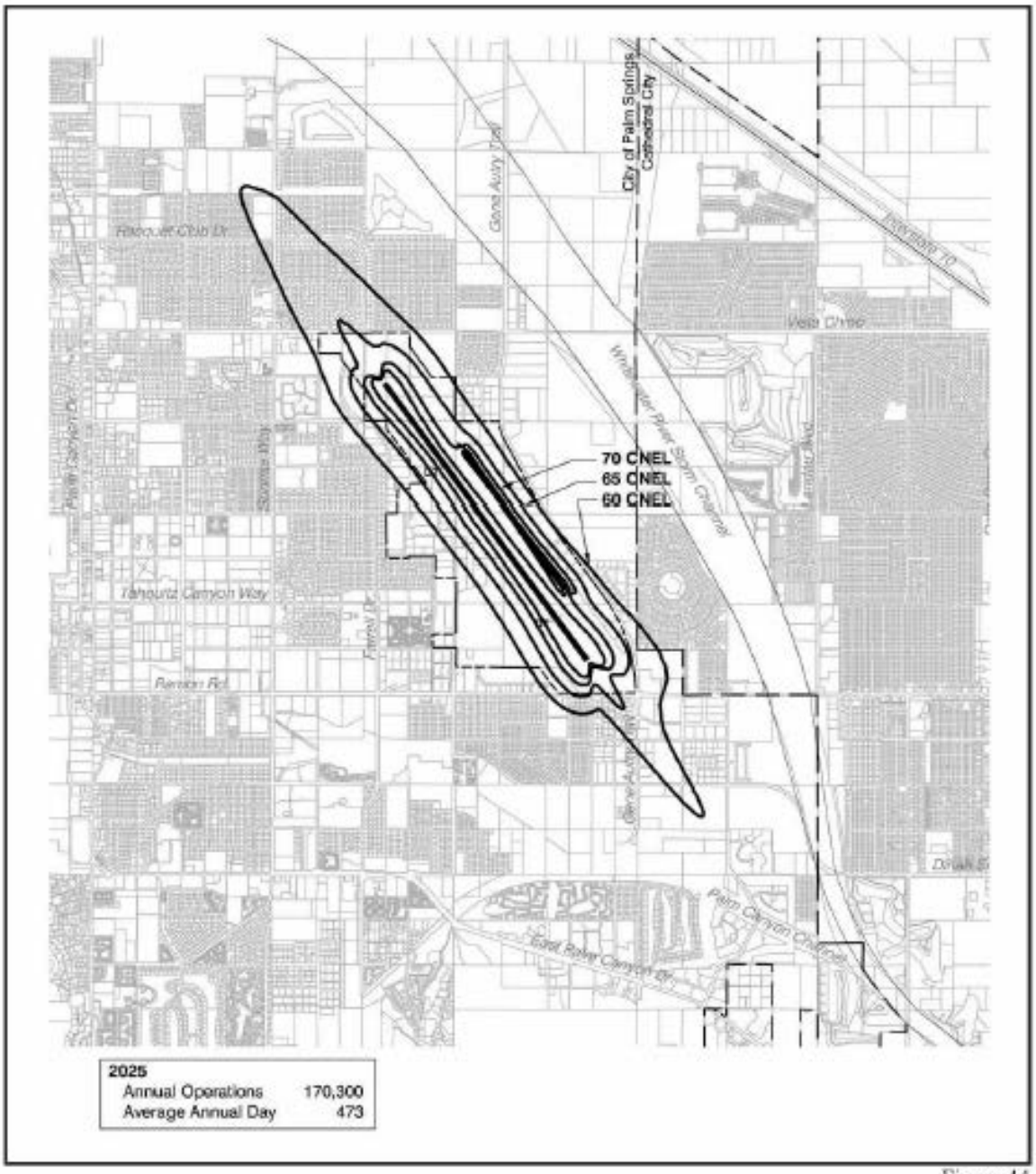

City of Palm Springs
Cathedral City
Gene Autry Trail
Interstate 10
Vista Chino
Whitewater River Storm Channel
Sunrise Way
Farrell Dr
Tahquitz Canyon Way
Ramon Rd
Palm Canyon Dr
East Palm Canyon Dr
70 CNEL
65 CNEL
60 CNEL
2025
Annual Operations 170,300
Average Annual Day 473
SOURCE: RIVERSIDE COUNTY ALUCP
0 2,000 4,000 FEET
Palm Springs International Airport
Future Noise Contours

Figure 44

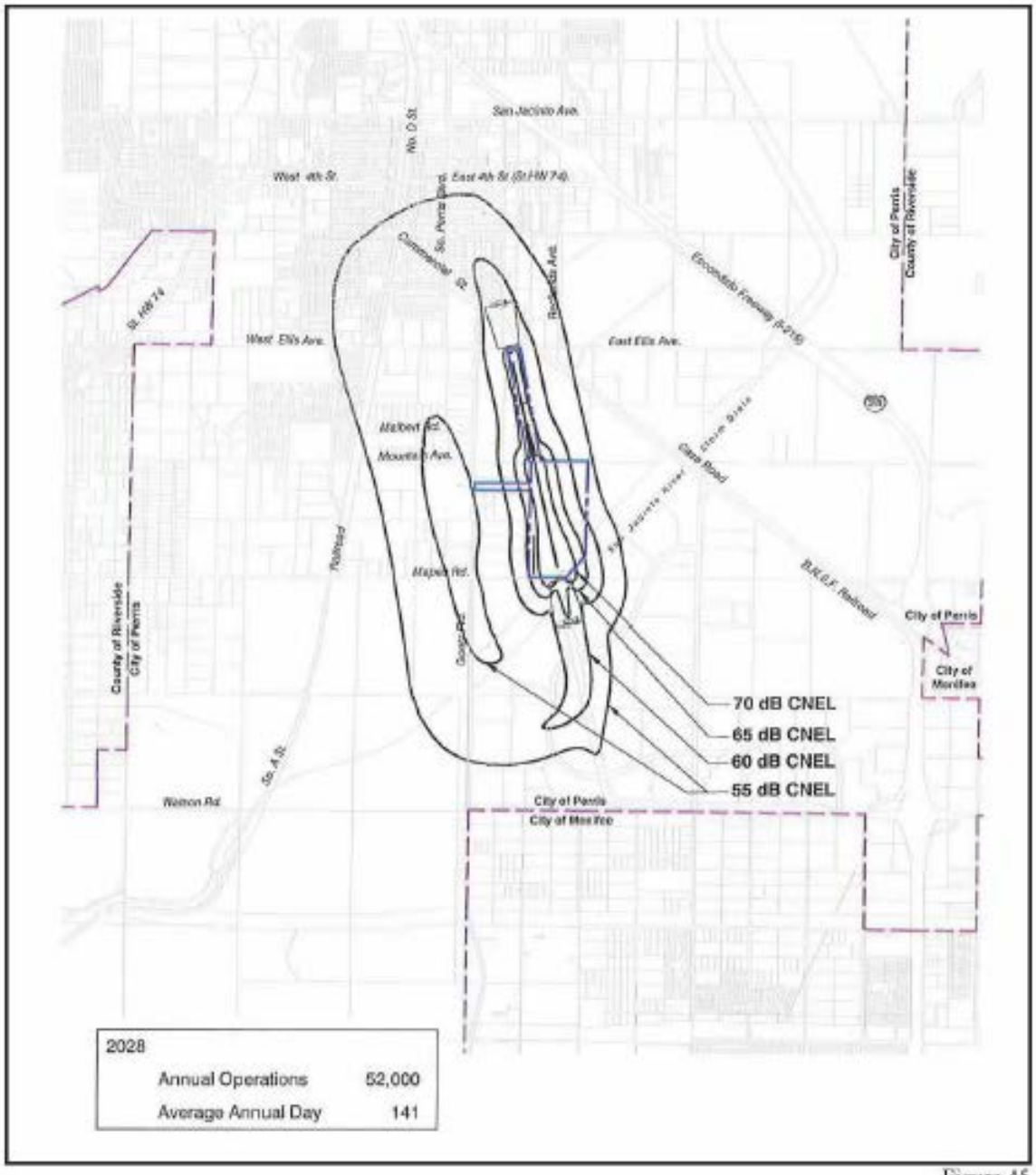


Figure 45

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2006)

0 1,500 3,000 FEET

Perris Valley Airport
Ultimate Noise Contours

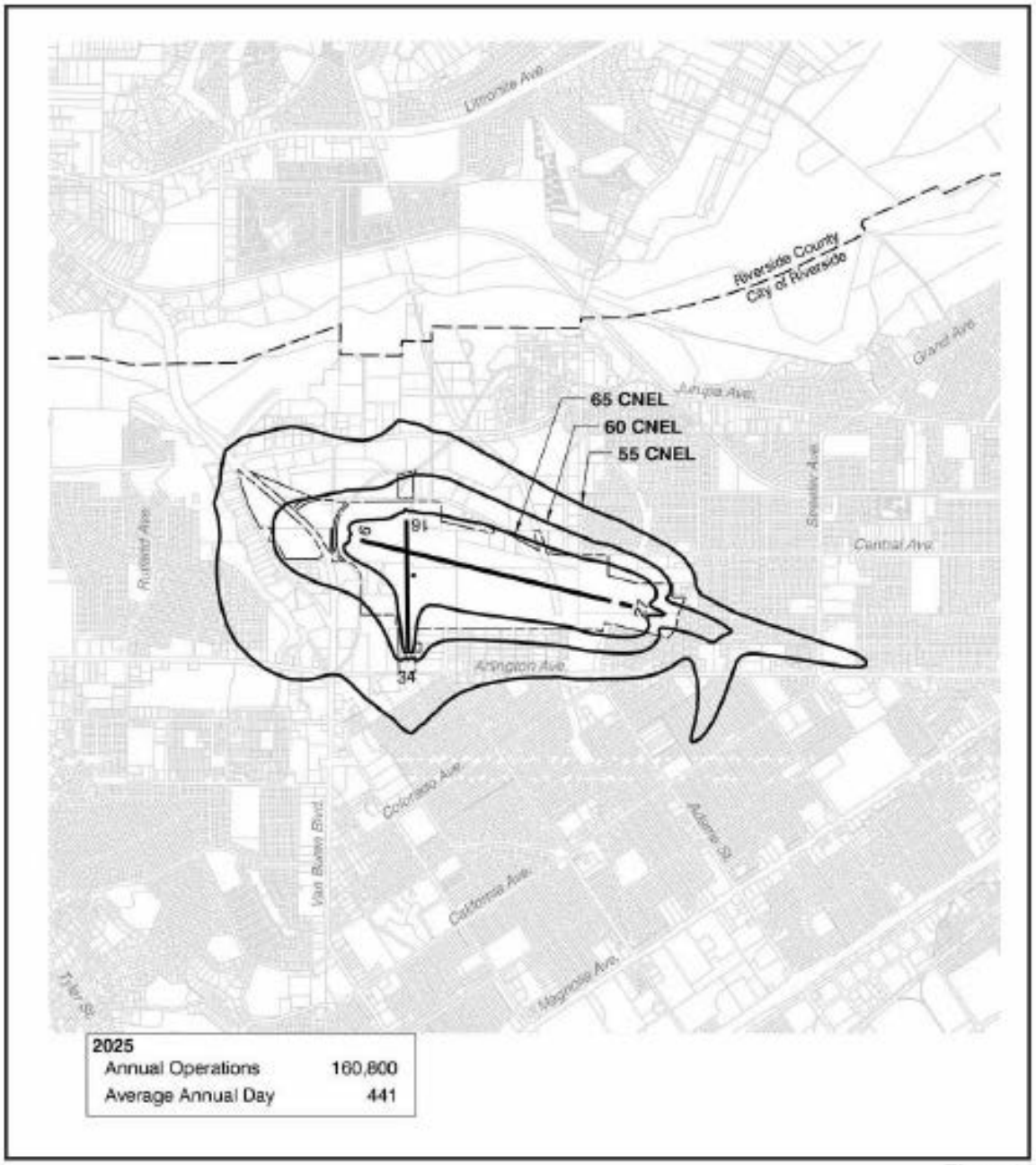


Figure 46

SOURCE: RIVERSIDE COUNTY ALUCP
WEST COUNTY AIRPORTS BACKGROUND DATA (DECEMBER 2004)

0 1,500 3,000 FEET

Riverside Municipal Airport
Future Noise Contours

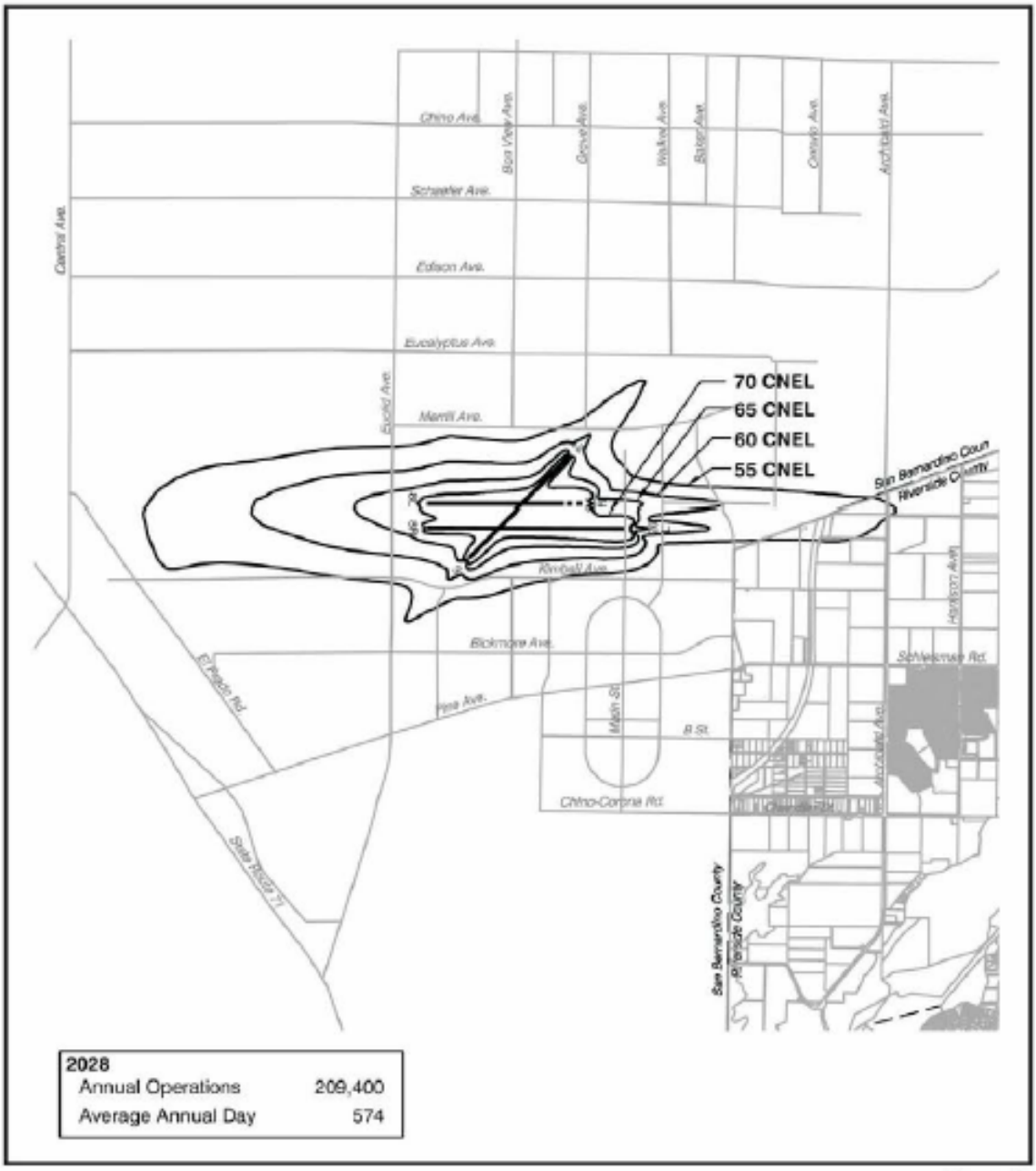


Figure 47

SOURCE: RIVERSIDE COUNTY ALUCP -
EAST COUNTY AIRPORTS BACKGROUND DATA (OCT 2004)

0 2,500 5,000 FEET

Chino Airport
Future Noise Contours

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Department of Public Health
Riverside County Community Health Agency

Office of Industrial Hygiene
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TDD: 909-358-512

MEMO: Requirements for Determining and Mitigating Non-transportation Noise Source Impacts to Residential Properties.

APPLICATION:

This document is intended to provide guidelines for the determination of community noise impact due to non-transportation (hereafter known as "stationary") noise sources. Noise sources covered by this standard include, but are not limited to: industrial facilities, mining activities, loading dock activities, loud speakers operation, sporting events, musical performances, well pumps, equipment, vehicles operated off the public roadways, or any noise producing activities associated with a permanent fixed base of operation (hereafter referred to as the "facility"). Temporary construction activities are not covered by the standard.

NOISE STANDARDS FOR STATIONARY NOISE SOURCES:

Facility-related noise, as projected to any portion of any surrounding property containing a "habitable dwelling, hospital, school, library or nursing home", must not exceed the following worst-case noise levels.

A) 45 dB(A) - 10 minute noise equivalent level ("leq"), between the hours of 10:00 p.m. to 7:00 a.m. (nighttime standard).

B) 65 dB(A) - 10 minute leq, between 7:00 a.m. and 10:00 p.m. (daytime standard).

REQUIREMENTS FOR DETERMINATION OF COMMUNITY NOISE IMPACT:

1. Noise originating from operations within the facility grounds shall be treated as "stationary" noise sources for which this standard will apply.
2. Noise Modeling Methodology: Noise predictions are to be made by an engineer, acoustical consultant, or other similar professional with experience in predicting community noise exposure using standard methods and practices of the noise consulting industry.
3. Required Modeling Parameters for Stationary Sources:
    i. Stationary sources are to be modeled as "point" sources.
    ii. Mobile point sources are to be modeled as emanating from the acoustical centroid of the activity, or at its closest approach to potentially impacted residential property lines, which ever yields the worst-case results.
    iii. Noise modeling for each piece of acoustically significant equipment, process or activity must be based on Reference Noise Levels (RNL). RNL may be obtained directly from the manufacturer (in the case of equipment) or generated from field studies. Regardless, the data must be representative of worst-case conditions. Directionality of the noise source must be taken into consideration if applicable.
    iv. Predicted noise levels are to be expressed in germs of worst-case "equivalent continuous sound levels" [or, Leq] averaged over a ten minute period.
    v. For modeling purposes, receivers are assumed to be positioned at the property line boundary at an elevation of five feet off the ground.

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vi. Terrain conditions for modeling noise propagation: Assumptions regarding ground effects, atmospheric absorption and other forms of noise attenuation must be fully justified.

NOISE REPORT FORMAT AND REQUIRED SUBMITTALS:

The noise Consultant's findings and recommendations must be submitted for review, and receive approval from, the Office of Industrial Hygiene. The resulting report must incorporate the requirements above and, at a minimum, contain the following information:

a) an adequate and accurate characterization of the current ambient noise environment;

b) a clear description of the proposed facility and its activities including a step-by-step flow chart of manufacturing processes if applicable;

c) the identity and characterization of all acoustically significant equipment and/or activities;

d) a discussion of analytical methodology and parameters used for noise modeling;

e) a table containing reference noise data accompanied by a detailed description of how it was obtained;

f) the facilities hours of operation;

g) a discussion of anticipated production volume, how it is expected to change over time and how such change will effect community noise;

h) a discussion of worst-case unmitigated noise impact;

i) a discussion of mitigation (if necessary);

j) a printed copy of computer input/output (if available) or manual calculations clearly illustrating the rationale for the Consultant's conclusions.

In addition, the final noise report must contain a scaled map(s) defining the acoustical contours surrounding the facility. Minimally, this map(s) must show:

a) The facility relative to the residential properties surrounding it. Include both unincorporated and incorporated (any adjoining Cities) area surrounding the project and potentially affected by project-related noise.

b) The 65 dB(A) 10 minute Leq noise contour reflecting the anticipated "worst-case" conditions between the hours of 7AM - 10 PM (daytime hours).

c) The 45 dB(A) 10 minute Leq noise contour reflecting the anticipated "worst-case" conditions between the hours of 10 PM - 7AM (nighttime hours).

d) The location and number of residential structures located within these contours.

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MEMO: Requirements for Determining and Mitigating Traffic Noise Impacts to Residential Structures.

NOISE STANDARDS:

1. The Noise Element of the General Plan indicates that to avoid future noise hazard, the maximum capacity design standard for highways and major roads will be used for determining the maximum future noise level or, in the case of freeways and airports, the estimated conditions 20 years in the future.
2. The interior noise levels in residential dwellings shall not exceed 45 Ldn/CNEL.
3. The exterior noise level shall not exceed 65 Ldn/CNEL.
4. Required Noise Prediction Model B Traffic Noise: FHWA RD 77-108 Highway Traffic Prediction Model, Sound 32 or the equivalent.

REQUIRED TRAFFIC NOISE MODELING PARAMETERS:

1. Roadway Classification: All roadways must be classified into one of the following categories as defined in the General Plan: Secondary, Major, Arterial, Urban Arterial, Expressway, Freeway, and Specific Plan Road.
2. Roadway Traffic Volume: All roadways must be modeled using Average Daily Trip (ADT) Level of Service "C" design capacities. For roadways classified by the General Plan as variable, future build-out traffic volumes must be obtained from the County's Transportation Department
3. or in the case of freeways, from Caltrans.
4. Required vehicle mix.
   - Freeways: Vehicle mix information must be obtained from Caltrans.
   - Roadways designated as major, arterial highways, or expressways:

VEHICLE	OVERALL %	DAY (7AM-7PM) %	EVENING (7PM-10PM) %	NIGHT (10PM-7AM) %
Auto	92	69.5	12.9	9.6
Medium Truck	3	1.44	0.06	1.5
Heavy Truck	5	2.4	0.1	2.5

   - Roadways designated as secondary, collectors, or smaller:

VEHICLE	OVERALL %	DAY (7AM-7PM) %	EVENING (7PM-10PM) %	NIGHT (10PM-7AM) %
Auto	97.4	73.6	13.6	10.22
Medium Truck	1.84	0.9	0.04	0.9
Heavy Truck	0.74	0.35	0.04	0.35

5. Traffic Speed: For County roads assume an average traffic speed of 40 MPH. For freeways, contact CALTRANS and use what speed they recommend.
6. Terrain conditions for modeling noise propagation: Assume Ahard site@ conditions in determining noise propagation (no more than 3 dB of attenuation per doubling of distance between source and receiver).
7. Noise attenuation attributed to standard residential architecture: It is assumed that standard residential design (with windows closed) will provide no more than 20 dB (A) of attenuation. Additional mitigation must be demonstrated via modeling.

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8. Receiver placement for modeling exterior noise levels (unmitigated): Noise levels must be estimated at the exterior face of the nearest residence at an elevation of five feet above the finished pad.
    - Receiver placement for noise barrier design: Set back: Barrier calculations shall be based on a hypothetical outdoor receiver located ten (10) feet behind the intervening noise barrier.
    - Receiver height: Initial calculations shall be based on a receiver height of five (5) feet above the ground. If these calculations result in a barrier less than or equal to six (6) feet in height, no further barrier calculations are necessary and this shall be selected as the required wall height.
9. However, if the resulting barrier height is calculated to be greater than six feet, it shall be re-calculated using a receiver height of three (3) feet. The resulting re-calculated wall height shall be then selected as the required wall height.
10. Receiver placement for architectural-based (indoor) noise mitigation B first floor: First floor interior noise level predictions are to be calculated assuming a hypothetical receiver is located in the center of the room nearest the noise source and elevated 5 feet above the pad (finished floor).

NOISE REPORT FORMAT AND REQUIRED SUBMITTALS:

The noise Consultants findings and recommendations must be submitted for review, and receive approval from, the Office of Industrial Hygiene. The resulting report must incorporate the requirements above and, at a minimum, contain the following information: a) a clear description of the proposed project; b) the identity and characterization of all acoustically significant roadways; c) a discussion of analytical methodology and parameters used for noise modeling; d) information obtained from applying requirements 6-10 (above); e) a discussion of mitigation (if necessary) including a clear diagram illustrating noise barrier placement; f) a printed copy of computer input/output (if available).

In addition to the report, Industrial Hygiene must be provided with the following depending on the design stage of the project. The first item that must be provided is a scaled map (blue-line) of the project. This map must clearly illustrate lot boundaries and the relative location of all acoustically significant roadways. Topographical elevations for lots and roadway centerlines must be included. Second, if architectural-based mitigation is necessary, and if the project has progressed to the point where plans for the homes have been drawn, copies must be provided (floor plans and exterior elevation drawings). Additionally, an updated blue-line showing exact pad location and finished floor elevation must be included.

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MEMO: Potential Studies Requiring Input from Department of Public Health

I. STUDIES

Except for WECS (Wind Energy Conversion Systems) Noise, Department of Public Health input is discretionary as determined by the Planning Department. Regularly, the Planning Department requests Department of Public Health reviews concerning the acoustical issues associated with a project. Less frequently, the Department may be requested to comment on ground vibration from trains (may apply to noise sensitive receptor within 1,000 feet of a rail corridor) and release of silica dust from sand and gravel pit operations. In addition, in response to community and planning commissioners comments, the Planning Department may request Department reviews of projects having the following associated issues: nuisance dust, cement dust, electromagnetic fields from power lines, and asbestos dust.

A. Noise Appraisals

Noise appraisals fall into three groups each with distinct criteria; Transportation noise receptors, e.g. tracts receiving noise from highways and airports; stationary noise sources, e.g. projects emitting significant noise impacting neighboring communities; and Wind Energy Conversion Systems noise (WECS or Windturbine Farms). An applicant should be aware that a given project may fall into more than one group. The following outlines the minimum criteria associated with each group.

1. Transportation noise receptors:

   (a) Interior noise levels in residential dwellings shall not exceed 45 Ldn (or CNEL).

   (b) Exterior noise levels shall not exceed 65 Ldn (or CNEL).

   (c) Acoustical parameters are outlined in the memo of Dec. 21, 1990 (contact the Office of Industrial Hygiene).

2. Stationary noise sources:

   During hours of 7 A.M. to 10 P.M. and 10 P.M. to 7 A.M., the noise levels shall not exceed 65 and 45 dB,A weighted ten minute Leq, respectively, as projected to any portion of a lot with occupied residence.

3. WECS Noise.:

   WECS shall comply with criteria established by Ordinance No. 348.258 and Resolution No. 93-378.

4. Consultants Expertise:

   The acoustical study demonstrating compliance with these categories shall be performed by a noise consultant with at least two years experience in acoustical design and mitigation. The consultant shall be able to utilize FHWA Highway Traffic Noise Prediction Model and Sound 32. Preferably the consultant shall be a member of the Institute of Noise Control Engineering or a Certified Industrial Hygienist.

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B. Other Studies

For other studies requiring our input, the applicant shall contact Industrial Hygiene for guidelines in providing a study prior to conducting the assessment or study.

II. FEES

Our current man-hour fee (subject to change by ordinance) is $95 per hour devoted to the project including review and comment, verbally and in writing. Any time consumed by traveling to and attending meetings (including public hearings) on behalf of the project is also included. In addition, incidental expenses such as mileage at .29/mile, meals, lodging, and miscellaneous transportation expenses may be incurred. Note, the incidental expenses other than mileage are rarely utilized.

III. DEPOSITS

For WECS, a $500 deposit is required. Frequently, expenses exceed this deposit and additional deposits are requested prior to completion of reviews and participation at public hearings. For all others, a $1,500 deposit is requested. This is generally sufficient, unless the project is complex and/or controversial, involving many revisions, and/or attendance at meetings.

COUNTY OF RIVERSIDE GENERAL PLAN UPDATE 2008: GENERAL PLAN AMENDMENT NO. 960

DRAFT ENVIRONMENTAL IMPACT REPORT NO. 521

APPENDIX EIR-7 NOISE STUDY (2011) – ADDITIONAL EXHIBITS

RIVERSIDE COUNTY
PLANNING DEPARTMENT

U.S. Marine Corps Bob Stump Training Range Complex (BSTRC)
1. Primary mission—training support for all aspects of Marine Corps tactical aviation
2. CMAGR and BMGR West provide the core training capabilities and capacities
3. ECR and YPG provide supplementary training capabilities and capacities
4. Close to Marine and Navy air stations, Camp Pendleton, and aircraft carriers
5. Year-round flying weather

R-2501N
MCAGCC
R-2501W
R-2501S
R-2501E
Twentynine Palms Expeditionary Airfield

U.S. Marine Corps Air Ground Combat Center at Twentynine Palms (MCAGCC)
1. Primary mission—training combined elements of Marine Air Ground Task Forces
2. Premier pre-deployment training range for Marine expeditionary forces
3. Current training capacity – expeditionary units of up to 13,000 troops
4. Proposed expansion would train expeditionary brigades of 15,000 troops
5. Ranges support combined arms training of infantry, armored, air, and support units
6. Fixed-wing aircraft and helicopter aircrews trained in support of ground forces

U.S. Marine Corps Chocolate Mountain Aerial Gunnery Range (CMAGR)
1. Primary mission—training in air-to-ground attack and air-to-air combat
2. Premier Marine Corps range for air-to-ground training with live explosive ordnance
3. Emphasis on training individual aircrews in flights of one, two, and four aircraft
4. Supports training with most types of conventional explosive and inert ordnance
5. Realistic air-to-ground targets in diverse terrain settings
6. Landing zones, observation posts, other ground sites that support air-ground training
7. Supports large force-on-force aviation training exercises that use all of the BSTRC
8. Hosts Navy SEALs desert training

U.S. Army Yuma Proving Ground (YPG)
1. Primary mission—testing ground combat and aircraft weapons systems
2. Restricted airspace available for air combat training when not needed for testing
3. Air-to-ground target range with limited training capability
4. Ground units deployment areas to support air combat training

U.S. Marine Corps Base (MCB) Camp Pendleton
1. Primary mission—training in amphibious and air assault and ground combat
2. Five amphibious assault landing beaches and inland ground combat ranges
3. Aviation training emphasis is on helicopter air assault and support of ground forces
4. MCAS Camp Pendleton is within the MCB

Camp Pendleton
R-2503C
R-2503B
R-2503A
R-2503D
Marine Corps Air Station Camp Pendleton

R-2507N
R-2507E
R-2507S
Kitty Baggage Range
Shade Tree Range
R-2510B
R-2510A
R-2512
Inkey Barley Range
Loam Lobby Range
Naval Air Facility El Centro

Marine Corps Air Station Miramar
MC Recruit Depot San Diego
Marine Corps Recruit Depot
1. Primary mission – basic training to make civilians into Marines
2. Individual and small unit training
Naval Air Station North Island
Naval Amphibious Base (NAB) Coronado

U.S. Navy El Centro Ranges (ECR)
1. Primary mission—training in air-to-air and air-to-ground combat
2. Four small air-to-ground ranges with basic training capabilities
3. Limited to inert ordnance
4. Restricted airspace can be scheduled to support CMAGR missions

R-2306D
R-2306B
R-2306C
R-2306E
R-2308A
R-2308B
Yuma Proving Ground
R-2306A
R-2309
R-2307
R-2306S
Laguna Army Airfield
R-2311
Marine Corps Air Station Yuma
Barry M. Goldwater Range West
R-2301W
R-2301E
Barry M. Goldwater Range East
R-2305
R-2304

Luke Air Force Base

U.S. Marine Corps Barry M. Goldwater Range West (BMGR West)
1. Primary mission—training in air-to-air, air-to-ground, and surface-to-air combat
2. Instrumented air combat training range (Tactical Aircrew Combat Training System)
3. Numerous ground units deployment areas to support air combat training
4. Air-to-ground range supporting urban combat operations training
5. Realistic battlefield settings in diverse terrain – limited to inert ordnance
6. Individual aircrew training as well as large-scale air-ground combat exercises
7. Core range for large force-on-force aviation training exercises hosted at the BSTRC

Military Airfield
Bob Stump Training Range Complex
Other Marine Corps Range
Other DoD Range
Special Use Airspace
Restricted Airspace
Military Operations Area / Air Traffic Control Assigned Airspace

50 Mile Distance from CMAGR
100 Mile Distance from CMAGR
150 Mile Distance from CMAGR
200 Mile Distance from CMAGR
State Boundary

BMGR West - Barry M. Goldwater Range West
BSTRC - Bob Stump Training Range Complex
ECR - El Centro Ranges
MCAGCC - Marine Corps Air Ground Combat Center
MCAS - Marine Corps Air Station
MCB - Marine Corps Base
YPG - Yuma Proving Ground

Data Source: US Department of Navy, CMAGR Land Withdrawl Draft LEIS, Figure 3-13 (2010)

Figure 4.15.18

December 16, 2013

0 20 40 Miles

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MILITARY AIRSPACE OVER SOUTHERN CALIFORNIA

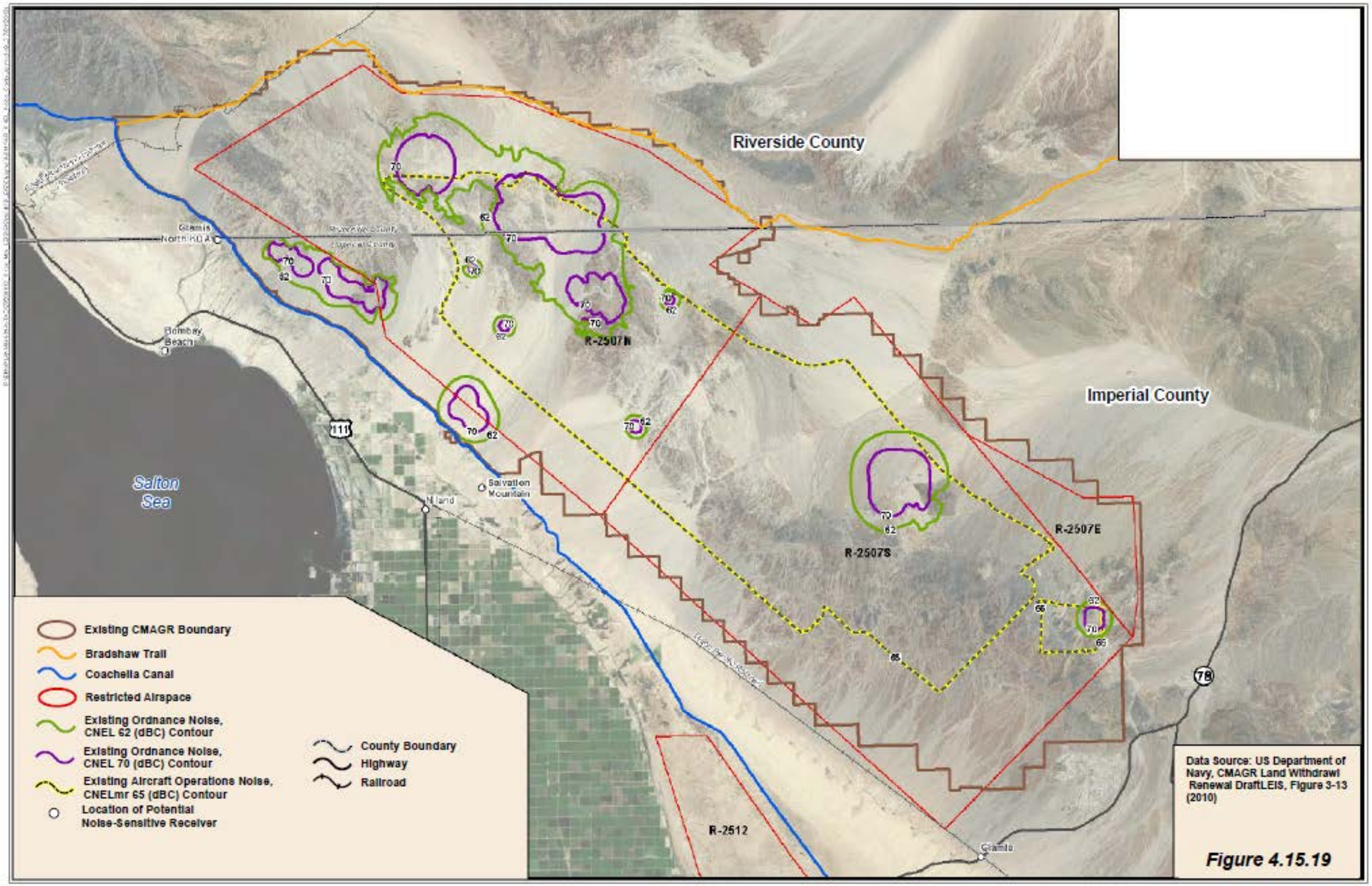


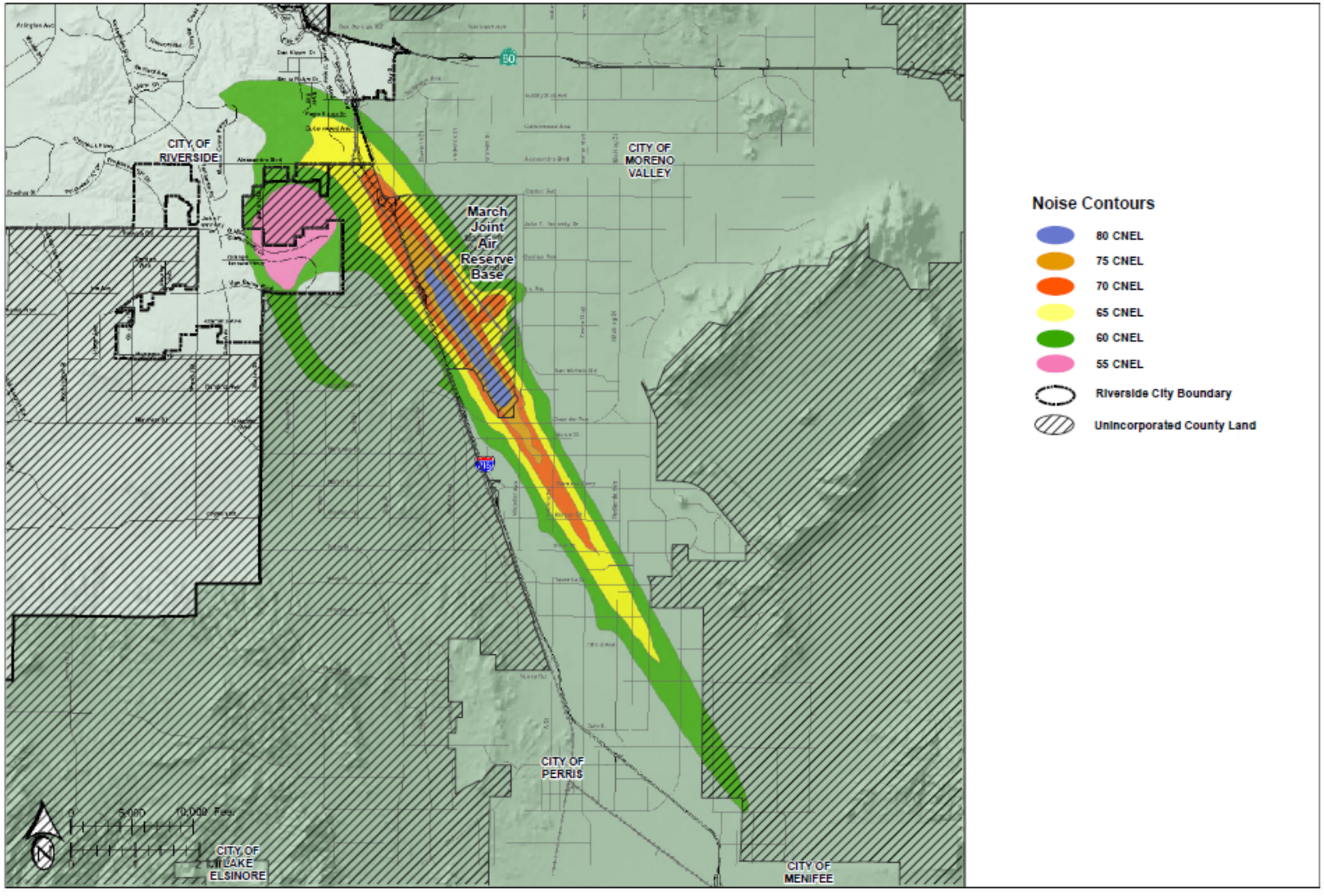
Figure 4.15.19

December 16, 2013

0 10 20 Miles

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CHOCOLATE MOUNTAIN AERIAL GUNNERY RANGE (CMAGR) EXISTING NOISE CONTOURS



Data Source: City of Riverside
2025 General Plan (2010)

Figure 4.15.20

December 16, 2013

Miles
0 1.25 2.5

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MARCH JOINT AIR RESERVE BASE
EXISTING NOISE CONTOURS

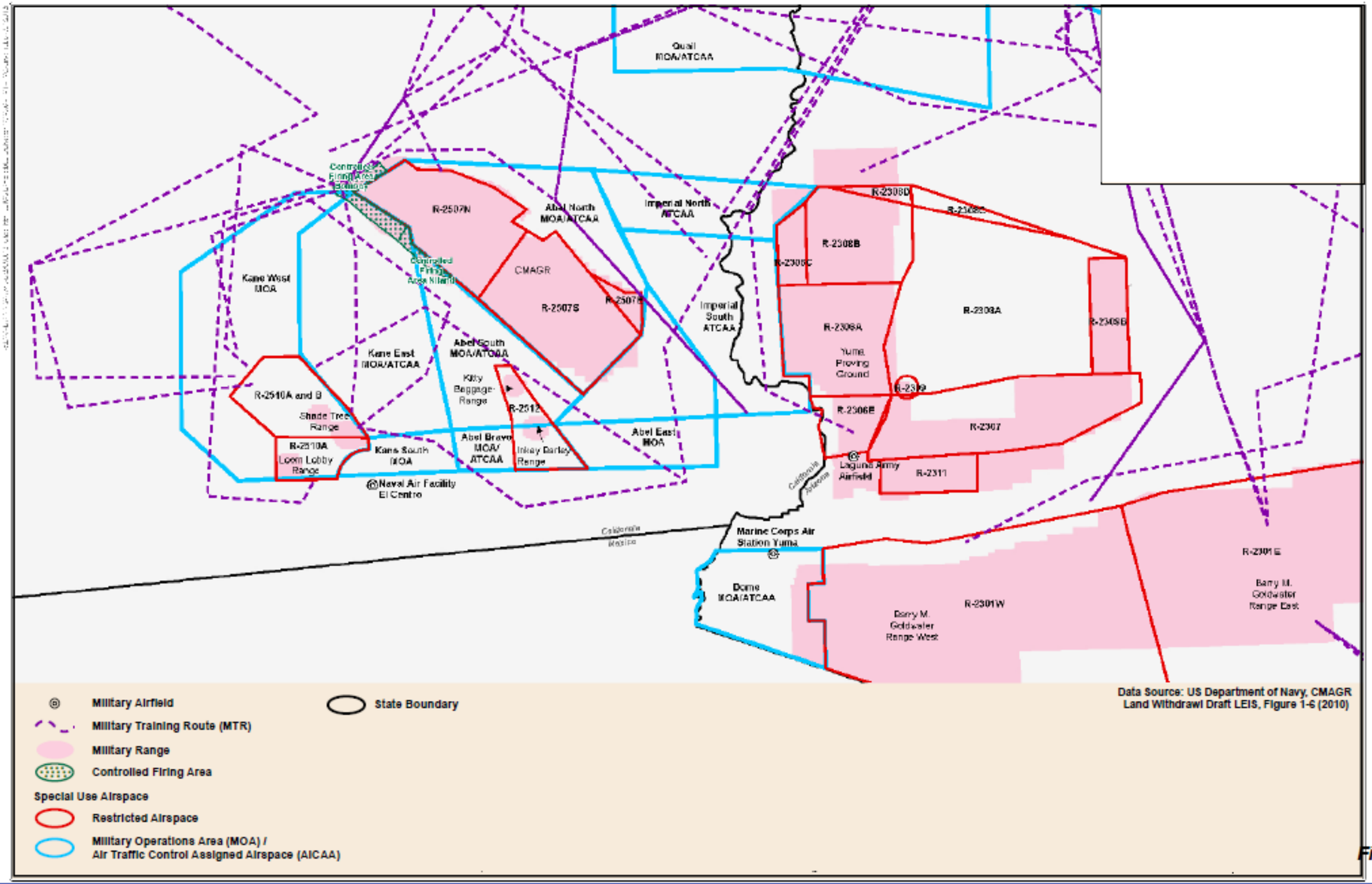


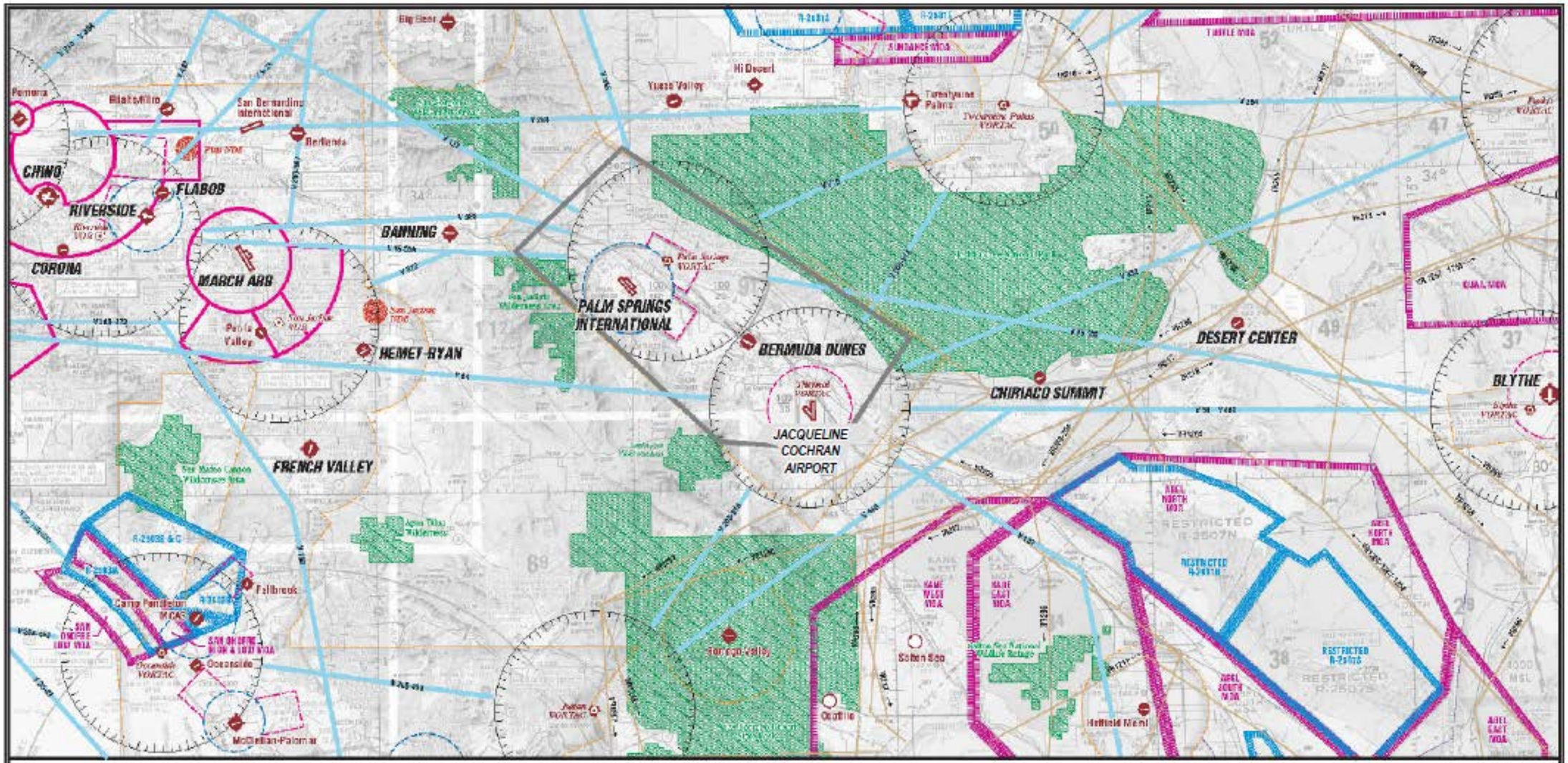
Figure 4.15.21

December 16, 2013

0 15 30 Miles

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MILITARY TRAINING AIRSPACE IN THE CMAGR OPERATING AREA



Airport with hard-surfaced runways 1,500' too 8,069' in length

Airport with other than hard-surfaced runways

Airports with hard-surfaced runways greater than 8,069' or some multiple runways less than 8,069'

Wilderness Areas

Non-Directional Radiobeacon (NDB)

Compass Rose

Military Operations Area (MOA)

Prohibited, Restricted, Warning and Alert Areas

VOR

VORTAC

Military Training Routes

Victor Airways

Class C Airspace

Class D Airspace

Class E Airspace

Class E Airspace with floor 700' above surface

Class E Airspace with floor 1200' or greater above surface that abuts Class G Airspace

Terminal Radar Service Area (TRSA)

Data Source: Riverside County Airport Lan Use Comission, Riverside County Airport Land Use Compatibility Plan Document, Map 2 (2004)

Figure 4.15.22

December 16, 2013

0 10 20 Miles

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SPECIAL USE AIRSPACE OVER RIVERSIDE COUNTY

City of Beaumont General Plan

City of Beaumont
550 East Sixth Street
Beaumont, California 92223

Approved March 2007

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Section 5.0 Safety Element

City of Beaumont General Plan

5.1 Introduction to the Element

The Safety Element establishes City policy relative to the reduction and mitigation of natural and manmade hazards that must be considered in future planning and decision-making. The public's health and safety is an important component of the General Plan due to the City's location in a seismically active region. This Element's scope has been expanded to include noise exposure and abatement.

The Element is concerned with identifying existing hazards and ways to reduce the risk from the hazards on persons and on property. State law requires that every safety element include the following components:

- The identification, mapping, and appraisal of seismic hazards of concern to planning and future development, including areas subject to liquefaction, ground-shaking, surface rupture, or seismic sea waves (Section 65302(f);
- An appraisal of mudslides, landslides, and slope stability that might occur as a result of a seismic disturbance (Section 65302(f); and,
- The identification of the potential for fires and other natural and manmade disasters and measures designed to reduce the loss of life, injury, and damage to property (Section 65302(i).

This Safety Element contains a plan that identifies evacuation routes and the locations of emergency shelters. The Safety Element also emphasizes the importance of emergency preparedness in reducing the impacts of natural and manmade disasters. Any effective disaster response program requires the cooperation of many governmental agencies. A primary goal of the City is to continue working with other agencies to reduce the potential for accidents (train derailments, hazardous materials incidents) and to minimize damage from larger disasters (such as earthquakes, wildfires, and flooding).

As indicated previously, this Element also addresses those issues mandated by the State of California for consideration in noise elements. The State recognizes that noise may have a significant impact on a community's well being, and therefore requires all jurisdictions to prepare a noise element to identify ways to minimize exposure to excessive noise levels.

Format of the Safety Element

The **Introduction** provides an overview of the Element's scope and content.

The **Safety Policies** section provides an overview of those issues related to public safety, risk, and noise. This section also indicates those City policies related to public safety, emergency preparedness, and noise abatement.

The **Safety Plan** identifies those programs that will be effective in health risk and the exposure of hazards in the City.

The State guidelines are also very specific as to the content of noise elements. Government Code Section 65302(f) indicates that the noise element should be prepared according to guidelines established by the State Department of Health Services. At a minimum, the Government Code requires that the Element analyzes and projects noise levels for:

- Highways and freeways;
- Primary arterials and major local streets;
- Passenger and freight on-line railroad operations and ground rapid transit systems;
- Commercial, general aviation, heliport, helistop, and military airport operations; aircraft over flights, jet engine test stands, and all other ground facilities and

maintenance functions related to airport operations;

- Local industrial plants, including, but not limited to, railroad classification yards; and,

- Other ground stationary sources identified by local agencies as contributing to the community noise environment.

The State General Plan Guidelines further indicate that noise exposure information should be used to develop the land use element (the Community Development Element in the Beaumont General Plan, to achieve noise-compatible land use patterns (Section 5302(f)). The policies related to noise issues stress the importance of protecting residents from excessive noise. Complementary policies and programs that address noise impacts are also found in the Community Development Element. In addition to considering public safety, this Element also considers issues related to noise. The Safety Element also identifies those health and safety issues (man-made and natural) that need to be considered in future planning and development.

The California Government Code states, "the General Plan and the parts and elements thereof shall comprise an integrated and internally consistent and compatible statement of policies." This Safety Element contains policies and programs designed to alleviate risk in the City. This Element indicates those areas of the City that may be subject to natural and man-made hazards including, but not limited to, flooding, seismic hazards, and exposure to high levels of noise. This Element, together with the Community Development Element, indicates those areas where planning and development must consider those hazards that are present in the formulation of development plans.

5.2 Safety Goals & Policies

The City of Beaumont is located in a seismically active region and, as a result, is subject to the potential risks typically associated with earthquakes. In addition, the residents and workers in the City may also be exposed to other types of hazards commonly found in an urban environment. The presence of numerous large industrial activities also requires special consideration in evaluating hazards in the City. The policies included in the Safety Element support the following goals:

- *Goal 1 (Safety Element).* The City of Beaumont will make every effort to mitigate the seismic hazards that are present within the General Plan's Planning Area.

- *Goal 2 (Safety Element).* The City of Beaumont will cooperate in those efforts that are directed towards flood control and safety.

- *Goal 3 (Safety Element).* The City of Beaumont will continue to support law enforcement efforts both locally and in the surrounding area.

- *Goal 4 (Safety Element).* The City of Beaumont will continue to enhance fire and emergency response services in the community.

- Go*al 5 (Safety Element).* The City of Beaumont will cooperate with ongoing efforts to reduce the health and safety hazards related to the exposure of hazardous materials.

- G*oal 6 (Safety Element).* The City of Beaumont will strive to control the adverse effects of noise in the environment.

- G*oal 7 (Safety Element).* The City of Beaumont will promote preparedness related to the adverse effects of high winds common in the Pass area.

Safety Goal 1. The City of Beaumont will make every effort to mitigate the seismic hazards that are present within the General Plan's Planning Area.-

The City of Beaumont, as is the remainder of the Southern California region, is located within a seismically active area at the junction of the Transverse Ranges and the Peninsular Ranges. These two physiographic provinces experience continual seismic activity associated with the lateral movement of the North American and Pacific tectonic plates. The San Andreas Fault system, located northeasterly of the City, is believed to form the boundary between these two plates, although some of the seismic motion is distributed to nearby related faults.

The effects of an earthquake may take many forms depending on a number of factors including distance from the epicenter, the characteristics of the underlying soils, the presence of groundwater, and topography. The primary affects include the following: surface rupture, ground shaking, liquefaction, and slope failure. Surface rupture refers to the actual "tearing apart" of the ground surface along a fault trace resulting from an earthquake. The State of California has promulgated regulations prohibiting the placement of structures over or in close proximity through the implementation of the Alquist-Priolo Special Studies Zones (APSSZ). The San Jacinto Fault is considered to be one of the most active faults in southern California. It is a northwesterly to southeasterly trending fault that crosses the southerly portion of the City and sphere of influence. The Working Group on California Earthquake Probabilities (1995) tentatively assigned a 43 percent (+/- 17 percent) probability of a major earthquake on the San Jacinto Valley segment of the San Jacinto fault for the 30-year interval from 1994 to 2024.

The San Andreas Fault Zone in the San Gorgonio Pass area is not readily evident on the ground's surface. The San Bernardino strand of the San Andreas Fault can be traced confidently through the Oak Glen area, approximately six miles to the northeast of the City. The Working group on California Earthquake Probabilities (1995) tentatively assigned a 28 percent (+/- 13 percent) probability of a major earthquake occurring on the San Bernardino Mountains segment of the San Andreas fault between 1994 and 2024.

The Banning Fault is poorly defined at the ground surface, but is believed to be located north of the City in the Cherry Valley area, based on inferred data. One source states that the branch of this fault, located nearest to the City, is considered inactive. The active Banning branch of the Coachella Valley segment of the San Andreas fault is located east of the City. Faults located within the Planning Area are shown in Exhibit 5-1.

The Beaumont Plains Fault Zone consists of a series of parallel faults oriented in a northwest to southeast direction throughout the Noble Creek area in the northern portion of the City. While evidence of Geologic investigations has found only doubtful evidence of recent activity (over the last 5,000 years), these faults were likely active before that. Trenching conducted in the late 1980s concluded that the faults trenched were inactive and not considered to be a ground rupture hazard.

The energy created from earthquakes moves out from the epicenter in waves that affect the various rock and soil types differently. In some instances ground shaking may cause unconsolidated soils to settle, which can result in significant damage to structures. Geologic investigations performed by the Department of Conservation Division of Mines and Geology indicates that no such soil conditions exist within the City limits. Liquefaction results when seismic induced ground-shaking causes water-laden, cohesion less soils to form a quicksand-like soil condition below the ground surface. Structural damage may ensue as building foundations lose ground support. Liquefaction occurs in areas where groundwater exists within 30 feet of the ground surface and where poorly consolidated, cohesion less soils predominate.

- *Safety Element Policy 1.* The City of Beaumont will continue to promote seismic safety through comprehensive land use planning.

- *Safety Element Policy 2.* The City of Beaumont will assist in the education of the community on how the resident and business person can minimize seismic risk by adequate knowledge and preparation.

- *Safety Element Policy 3.* The City of Beaumont will develop an information program to familiarize citizens with seismic risk and to develop seismic awareness.

- *Safety Element Policy 4.* The City of Beaumont will require special soils and structural investigations for all proposed structures of large scale or involving large groups of people.

- *Safety Element Policy 5.* The City of Beaumont will continue the code enforcement program, including identification of pre-1933 structures of large scale or occupied by large numbers of people, and require correction or demolition of structures found to be dangerous.

Safety Goal 2. The City of Beaumont will cooperate in those efforts that are directed towards flood control and safety.

Beaumont's location at the top of the San Gorgonio Pass causes streams in and around the City to drain into three distinct drainage areas. San Timoteo Creek drains westward from San Gorgonio Pass into the Santa Ana River Basin. Two drainage areas lie west of the peak of the pass. Part of the area drains generally south into Potrero Creek that traverses the "Badlands" area to flow into the San Jacinto River, which also flows into the Santa Ana River Basin. The third drainage area drains east into Smith Creek. Smith Creek descends into the east side of San Gorgonio Pass into the Whitewater River, continuing southeast through the Coachella Valley into the Salton Sea.

Flooding in and around the City of Beaumont has historically resulted from seasonal storms. Generalized winter storms occur between November and April, with the greatest frequency of storms occurring between December and March. Rainfall from these storms is absorbed due to prevailing arid conditions, and thus summer storms rarely result in significant flooding. Major, widespread flooding, although rare, results typically from generalized winter storms.

Minor floods occasionally exceed natural channel capacities, with localized inundation of adjacent urban and agricultural areas. For the most part, these are considered nuisance drainage problems. Planned regional drainage improvements have removed most developed areas of the City from significant flood hazards. When flooding occurs, it originates from the steep mountainous area to the north of the community, which contains sparse vegetation and is relatively arid. As a result, floodwaters develop rapidly and can cause flash floods.

Severe storms also produce high water levels in flood channels (north of the City) and ultimate flooding. The northern areas that have been subject to these floods are: Noble and Little San Gorgonio Creeks located north of Cherry Valley, and Smith and Pershing Creeks located northeast in Highland Springs. The periodic flash floods reach high velocities due to the steep terrain in the north, and carry a significant amount of debris which blocks the flood channel at slope areas of 1% to 2%, causing heavy deposition. When this occurs, debris blocks flood control channels, particularly where they cross under freeways, resulting in significant flooding in the vacant land areas within the City's Sphere of Influence. According to the most recent FEMA maps, those portions of the planning area located in a 100-year flood zone are found in the old town area, along Cherry Avenue, and along a portion of Highland Springs Road.

- *Safety Element Policy 6.* The City of Beaumont will continue to promote flood safety through comprehensive land use planning.

- *Safety Element Policy 7.* The City of Beaumont will assist in the education of the community on how the resident and business person can minimize flood risk by adequate knowledge and preparation.

- *Safety Element Policy 8.* The City of Beaumont will develop an information program to familiarize citizens with flood risk.

- *Safety Element Policy 9.* The City of Beaumont will continue to cooperate with other local and regional agencies with respect to flood control.

- *Safety Element Policy 10.* The City of Beaumont will require all new developments to mitigate potential flooding that may result from the development.

- *Safety Element Policy 11.* The City of Beaumont will support regional efforts to control and mitigate existing potential flood-related problems.

Safety Goal 3. The City of Beaumont will continue to support law enforcement efforts both locally and in the surrounding area.

The Beaumont Police Department, located in the City's downtown at 660 Orange Avenue, provides comprehensive law enforcement services for the City. Currently, the Department is staffed with twenty-five sworn officers and seven non-sworn personnel.

The Beaumont Police Department also currently offers its technical expertise to local residents that wish to organize neighborhood watch type organizations. The Department provides tours of the agency, specialized presentations on the operation of the Police Department, information concerning any law enforcement operations to the public, community members and businesses. The Department is an active participant with the Chamber of Beaumont "Graffiti Task Force." The Department coordinates a committee of law enforcement and school officials dealing with gangs and gang-related issues. The Department operates an emergency services communications van, which is used during natural disasters and other emergency situations.

- *Safety Element Policy 12* The City of Beaumont will continue to maintain adequate levels of police patrol services through coordinated land use and facility planning efforts.

- *Safety Element Policy 13.* The City of Beaumont will continue to support ongoing coordination with other law enforcement agencies in crime prevention efforts.

- *Safety Element Policy 14.* The City of Beaumont will continue to coordinate the review of development proposals with the Police Department to assure that police services can adequately and equitably protect the City's citizens.

- *Safety Element Policy 15.* The City of Beaumont will provide an atmosphere of security and safety for residents and businesses in the City.

- *Safety Element Policy 16.* The City of Beaumont will promote improved lighting in existing or potential crime problem areas.

- *Safety Element Policy 17.* The City of Beaumont encourages "neighborhood watch" programs in conjunction with neighborhood improvement associations to encourage cooperation between citizens and police.

Safety Goal 4. The City of Beaumont will continue to enhance fire and emergency response services in the community.

The City of Beaumont contracts with the Riverside County Fire Department for Citywide services, including fire protection, public service, and emergency medical aid response. All Riverside County stations are dispatched by the same County Fire 9-1-1 Center and are part of the "Integrated Fire Protection System," under contract with the State of California.

Wildfires pose the greatest risk in the open space and undeveloped portions of the General Plan's Planning Area. The severity of potential wildfires is influenced by four factors: vegetation, climate, slope, and how the fire was started. Most of the level, open space areas consist of grassland comprised of annual grasses, small shrubs, and an abundance of Russian thistle. In the southern and western portions of the General Plan's Planning Area, the vegetation is comprised of native chamise chaparral, California scrub oak, white sage, and manzanita. Sparse vegetation of canyon and live oak can be found also. The grasslands, shrubs, and chaparral in both the flat and hilly areas are considered to be highly flammable. However, since much of the Beaumont area consists of open space and flat areas containing sparse vegetation or included areas used for agriculture, the potential for wildfires is significantly reduced.

The amount of wild land vegetation available is considered potential fuel for a fire and is defined as fuel load. Light fuels typically consist of flammable grasses and annual herbs; medium fuels are brush and shrubs less than six feet in height; and heavy fuels are heavier brush and timber over six feet high. Since the majority of the fuel loads in Beaumont are light fuels with some medium fuels in the southern and western portions of the General Plan's Planning Area, the potential hazards of fire is considered to be moderate.

The majority of fires in Southern California occur when the marine airflow is displaced by the dry Santa Ana winds after long dry periods. Wind velocities can reach up to 100 miles per hour in exposed open space areas and relative humidity sometimes reaches zero. The westerly winds that blow with considerable force through the eastern portion of the San Gorgonio Pass can also contribute to fire hazards in Beaumont. However, since fuel loads are light and most of the open spaces are either used for agriculture or are sparsely vegetated, the severity and potential of fire hazards are not significant. In addition, private weed abatement efforts have greatly reduced potential fire hazards.

Riverside County's Fire Department is primarily responsible for fire protection in Beaumont. In addition, the California Department of Forestry has a fire station in Beaumont. The County Fire Department does implement a number of programs to help prevent fires such as building inspection, public education and awareness, and participation with the City's Planning Department in development review. The following policies are specifically designed to address fire protection issues:

- *Safety Element Policy 18.* The City of Beaumont will continue to implement those measures that will be effective in reducing the potential for wildfire.

- *Safety Element Policy 19.* The City of Beaumont will continue to strive to provide an adequate level of paramedic service for emergency medical aid to minimize trauma of injury or illness to patients.

- *Safety Element Policy 20.* The City of Beaumont will continue to provide technical and policy information regarding structural and wild land fire hazards to developers, interested parties and the general public through all available media.

- *Safety Element Policy 21.* The City of Beaumont will continue code enforcement efforts to reduce fire hazards associated with older buildings.

Safety Goal 5. The City of Beaumont will cooperate with ongoing efforts to reduce the health and safety hazards related to the exposure of hazardous materials.

Many of the City's businesses produce, use, and store hazardous materials. Public safety issues involve not only the use of these materials in populated areas, but also the transport and disposal of the substances in the urban environment. Chemical spills or other such accidents have the potential to impact entire neighborhoods. The transportation of chemicals and other hazardous substances through the City also presents public safety problems. Two major freeways and the Union Pacific railroad transportation routes carry a variety of materials that could pose health risks to Beaumont's residents in the event of an accident. The possibility of such an occurrence may be relatively high in Beaumont given the extent of freeway traffic that pass through the City.

- *Safety Element Policy 22.* The City of Beaumont will support legislation that reduces the level of risk from hazardous materials, hazardous waste, infectious waste, and radioactive materials to the public, industries, and businesses.

- *Safety Element Policy 23.* The City of Beaumont will continue to support regional efforts as needed to plan for and facilitate the establishment of regional treatment facilities to manage the hazardous wastes that are generated within the City.

Safety Goal 6. The City of Beaumont will strive to control the adverse effects of noise in the environment.

Noise may affect all types of land uses and activities, although some are more sensitive to noise levels than others. Land uses identified as noise sensitive in Beaumont include the schools, parks, and those areas that are developed as residential. The sources of noise in Beaumont fall into five basic categories. These include freeways, both the I-10 and the SR-60 Freeways; aircraft over flights; traffic of local streets; noise from railroad operations; and stationary sources (noise contours for the major roadways in the City are noted in Exhibit 5-2).

The ambient noise environment in the City will continue to be dominated by transportation-related noise over the life of this General Plan. Freeway noise will continue to impact those planning areas located along the I-10 and SR-60 Freeway corridors. Residential development located in these areas will be required to implement design measures that will attenuate the traffic noise. These measures may include, but not be limited to, noise walls, berms, extra insulation, sound proofing, and double-paned windows.

- *Safety Element 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.

- *Safety Element Policy 25.* The City of Beaumont will incorporate noise considerations into land use planning decisions.

- *Safety Element 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.

- *Safety Element Policy 27.* The City of Beaumont shall promote the effective enforcement of City, State and Federal noise standards by all appropriate City divisions.

Safety Goal 7. The City of Beaumont will promote prepardness related to the adverse effects of high winds common in the Pass area.

The prevailing winds in the Pass Area are primarily from the west in spring, summer, and early fall. During summer thunderstorms, the wind will sometimes be from the southeast, and in the winter, winds are variable. The westerly winds that blow through the far eastern portion of the Pass are a function of the marine air layer, which develops over Coastal Southern California. When this layer attains a thickness of over 3,000 feet (a condition associated with spring and early summer), it pours cool air through the San Gorgonio Pass and into the Coachella Valley, the velocity of this air movement being a function of the cross-sectional width of the channel containing the air. The spurs extending into the floor of the Pass from the San Jacinto Mountains constrict the flow of air and cause a corresponding rise in wind velocity. A 40-mph westerly wind at Cabazon becomes, at times, a 100-mph wind at Windy Point.

The large number of trees and windbreaks in developed portions of Beaumont greatly reduce the adverse impacts of wind. However, potentially hazardous conditions exist in open, sparsely developed areas. Such hazards can be placed in three major categories: 1) damage directly from the wind (e.g., falling trees or limbs, damaged power lines, and roofs), 2) blowing sand and dust, and 3) soil erosion. The latter two factors are most likely to be significant during a change from open space or agricultural to other land uses, as well as when agricultural land is exposed down to bare soil. At such times, plowing or grading operations, if not properly controlled, expose soils and create wind erosion hazards.

- *Safety Element Policy 28.* The City of Beaumont shall continue to implement design measures that will mitigate the effects of high winds.
- *Safety Element Policy 29.* The City of Beaumont will continue to consider the potential risk posed by high winds in the City in the review of new development applications including those for signs.

5.3 Safety Plan

Evacuation Routes

Pursuant to State law, Safety Elements must indicate evacuation routes that would be uses in the event of an emergency. Major evacuation routes are noted in Exhibit 5-3 and include the two freeways that traverse the Planning Area as well as a number of major roadways. The major roadways that are identified as evacuation routes include Brookside Avenue, 14th Street Highland Springs Road, and Beaumont Avenue. During any future development activities, measures will be taken to maintain these roadways' use at all times.

Noise Control and Abatement

A number of other Federal, State, and other governmental agencies have adopted standards and recommended noise criteria to protect people in both the working and home environments. A summary of major existing noise regulations are provided below:

- The *Federal Highway Works Administration* (FHWA) has established noise exposure standards for different land uses. These standards apply to the planning and design of federally funded highway projects, and are expressed in terms of both Equivalent Noise Level (Leq) and Day-Night Average Sound Level (Ldn).
- The *Department of Housing and Urban Development* (HUD) has adopted environmental criteria and standards for determining project acceptability and necessary mitigation measures to ensure that projects assisted by HUD provide a suitable living environment. Standards

include maximum levels of 65 dB Ldn for residential areas.

- The *Noise Control Act of 1972* authorized the Environmental Protection Agency (EPA) to publish descriptive data on the effects of noise and establish levels of sound "requisite to protect the public welfare with an adequate margin of safety." These levels are separated into health (hearing loss levels), and welfare (annoyance levels), with an adequate margin of safety.

- In March 1974, the *Environmental Protection Agency* (EPA) published "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare With an Adequate Margin of Safety" (EPA 550/9-74-004). This report indicates that 55 Ldn is the requisite level with an adequate margin of safety for areas with outdoor uses, this includes residences, and recreational areas. The EPA "levels document" does not constitute a standard, specification or regulation, but identifies safe levels of environmental noise exposure without consideration for economic cost for achieving these levels.

- The *Federal Highway Administration (FHWA*) has adopted and published noise abatement criteria for highway construction projects. The FHWA noise abatement criterion established an exterior noise goal for residential land uses of 67 Leq and an interior goal for residences of 52 Leq. The noise abatement criterion applies to private yard areas and assumes that typical wood frame homes with windows open provide 10dB noise reduction (outdoor to indoor) and 20 dB noise reduction with windows closed.

- The State requires every city and county to adopt *noise elements* as part of their general plans. Such noise elements must contain a noise/land use compatibility matrix. A recommended (but not mandatory) matrix is presented in the "Guidelines for the Preparation and Content of Noise Elements of the General Plan," (Office of Noise Control, California Department of Health, February 1976). These standards are indicated in the City's Health and Safety Element (refer to Table 5-1).

- The *California Motor Vehicle Code* establishes noise standards for those areas not regulated by the federal government. State standards regulate the noise levels of motor vehicles and motorboats; establish noise impact boundaries around airports; regulate freeway noise affecting classrooms, sound transmission control, and occupational noise control; and identify noise insulation standards. The California Motor Vehicle Code sets operational noise limits according to the type of vehicle and date of manufacture.

- *Sound Transmission Control Standards* contained in the *California Administrative Code, Title 24*, Building Standards, Chapter 2.35, outline noise insulation performance standards to protect persons within new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings. These standards require an interior noise level of 45 dB CNEL or less for residential projects. For residential buildings or structures within the 60 dB CNEL of an airport, or vehicular or industrial noise source, an acoustical analysis must be conducted to show compliance with the standards.

- The *California Occupational Noise Control Standards* contained in the California Code of Regulations, Title 8, Industrial Relations, Chapter 4, outline permissible noise exposure at a workplace. Employees should not be exposed to noise levels of 90 decibels for more than eight hours in any workday.

Noise and Land Use Compatibility

The State Office of Noise Control has prepared Guidelines for the Preparation and Content of Noise Elements of General Plans. These State

Guidelines provide a guide for compatibility of noise-sensitive land uses in areas subject to noise levels of 55 to 80 dB CNEL or Ldn.

Residential uses are normally unacceptable in areas exceeding 70 dB CNEL; and conditionally acceptable between 55-70 dB CNEL for low-density single-family dwelling units, duplexes, and mobile homes, and between 60-70 dB CNEL for multiple-family units. Schools, libraries, hospitals, and nursing homes are treated as noise-sensitive land uses, requiring acoustical studies within areas exceeding 60 dB CNEL.

Commercial/professional office buildings and industrial land uses are normally unacceptable in areas exceeding 75 dB CNEL, and are conditionally acceptable within 67 to 78 dB CNEL (for commercial/professional offices only). Table 5-1 indicates the range of acceptable noise levels for various land uses in the City. The noise level ranges shown in the Table should be considered guidelines with respect to the placement of land uses in the City.

Table 5-1
Noise and Land Use Compatibility Standards
(Ambient Exterior Noise Exposure)

Land Use	Desirable Maximum	Maximum Acceptable
Single-family Residential	55 dBA	65 dBA
Multiple-Family Residential	60 dBA	65 dBA
6th Street Corridor Overlay	65 dBA	70 dBA
6th Street Corridor Overlay	65 dBA	70 dBA
Public Facilities (incl. Schools)	60 dBA	70 dBA
All Commercial & Mixed-Use	65 dBA	75 dBA
Industrial	70 dBA	75 dBA

Chapter 9.02 - NOISE CONTROL

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.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

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.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

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.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

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.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

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

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

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.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

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.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

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.

l. 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.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

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.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

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.

(Ord. No. 1067, § 1(Exh. A), 1-19-2016)

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)

CONSTRUCTION NOISE MODELING

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/13/2020
Case Description: BEA-06

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Asphalt Demo	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	20		89.6	50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Dozer	No	40		81.7	50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Saw	89.6	82.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.6	84.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/13/2020
Case Description: BEA-06

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site Prep & Grading	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		50.0	0.0
Scraper	No	40		83.6	50.0	0.0
Tractor	No	40	84.0		50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Scraper	83.6	79.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.0	85.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/13/2020
Case Description: BEA-06

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Utility Trenching	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Excavator	No	40	80.7	50.0	0.0	

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/13/2020
Case Description: BEA-06

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Field Install	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	50.0	0.0
Generator	No	50		80.6	50.0	0.0
Tractor	No	40	84.0		50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.0	82.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/13/2020
Case Description: BEA-06

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Building Construction	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	50.0	0.0
Generator	No	50		80.6	50.0	0.0
Tractor	No	40	84.0		50.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.0	82.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/13/2020
Case Description: BEA-06

**** Receptor #1 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Paving	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Spec Usage (%)	Actual Lmax (dBA)	Receptor Lmax (dBA)	Estimated Distance (feet)	Shielding (dBA)
Tractor	No	40	84.0		50.0	0.0
Pavement Scarafier	No	20		89.5	50.0	0.0
Roller	No	20		80.0	50.0	0.0

Results

	Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
	Calculated (dBA)		Day		Evening		Night		Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pavement Scarafier	89.5	82.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	80.0	73.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	89.5	84.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 07/13/2020
Case Description: BEA-06

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Architectural Coating	Residential	65.0	60.0	55.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Noise Limits (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq	Noise Limit Exceedance (dBA) Day Lmax	Leq	Evening Lmax	Leq	Night Lmax	Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

TRAFFIC NOISE INCREASE CALCULATIONS

Traffic Noise Calculator: FHWA 77-108 **Project Title: BEA-06 Existing Plus Project**

	Output						Inputs												
	dBA at 50 feet			Distance to CNEL Contour															
ID	$L_{eq\text{-}24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever
1	62.0	65.5	66.0	20	63	198	Beaumont Ave	North of Cherry Valley Blvd	5,090	35	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
2	67.8	71.3	71.8	76	240	758	Beaumont Ave	Cherry Valley Blvd to Brookside Ave	10,290	50	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
3	69.5	72.9	73.5	111	350	1108	Beaumont Ave	South of Brookside Ave	15,040	50	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
4	68.5	71.9	72.5	88	279	882	Cherry Valley Blvd	West of School Site	14,620	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
5	67.2	70.7	71.2	66	208	659	Cherry Valley Blvd	West of Beaumont Ave	10,930	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
6	63.3	66.8	67.3	27	86	271	Cherry Valley Blvd	East of Beaumont Ave	5,550	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
7	67.3	70.8	71.3	68	214	677	Brookside Avenue	West of School Site	11,230	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
8	66.4	69.9	70.4	55	174	551	Brookside Avenue	West of Beaumont Ave	11,300	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
9	64.1	67.6	68.1	32	103	324	Brookside Avenue	East of Beaumont Ave	6,650	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50

Traffic Noise Calculator: FHWA 77-108 **Project Title: BEA-06 Existing**

	Output						Inputs												
	dBA at 50 feet			Distance to CNEL Contour															
ID	$L_{eq-24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever
1	61.9	65.4	65.9	19	62	195	Beaumont Ave	North of Cherry Valley Blvd	5,000	35	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
2	67.4	70.9	71.4	69	219	692	Beaumont Ave	Cherry Valley Blvd to Brookside Ave	9,400	50	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
3	69.1	72.6	73.1	102	324	1024	Beaumont Ave	South of Brookside Ave	13,900	50	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
4	67.7	71.1	71.6	73	231	730	Cherry Valley Blvd	West of School Site	12,100	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
5	66.8	70.3	70.8	60	189	597	Cherry Valley Blvd	West of Beaumont Ave	9,900	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
6	63.3	66.8	67.3	27	85	268	Cherry Valley Blvd	East of Beaumont Ave	5,500	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
7	67.0	70.5	71.0	63	200	633	Brookside Avenue	West of School Site	10,500	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
8	66.3	69.8	70.3	54	170	537	Brookside Avenue	West of Beaumont Ave	11,000	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
9	64.1	67.6	68.1	32	102	322	Brookside Avenue	East of Beaumont Ave	6,600	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50

Traffic Noise Calculator: FHWA 77-108 **Project Title: BEA-06 Future No Project**

	Output						Inputs												
	dBA at 50 feet			Distance to CNEL Contour															
ID	$L_{eq\text{-}24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever
1	62.2	65.6	66.2	21	65	206	Beaumont Ave	North of Cherry Valley Blvd	5,300	35	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
2	67.7	71.2	71.7	74	233	737	Beaumont Ave	Cherry Valley Blvd to Brookside Ave	10,000	50	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
3	69.4	72.8	73.4	108	342	1083	Beaumont Ave	South of Brookside Ave	14,700	50	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
4	67.9	71.4	71.9	77	244	772	Cherry Valley Blvd	West of School Site	12,800	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
5	67.0	70.5	71.0	63	200	633	Cherry Valley Blvd	West of Beaumont Ave	10,500	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
6	63.5	67.0	67.5	28	89	283	Cherry Valley Blvd	East of Beaumont Ave	5,800	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
7	67.3	70.7	71.3	67	212	670	Brookside Avenue	West of School Site	11,100	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
8	66.6	70.1	70.6	57	181	571	Brookside Avenue	West of Beaumont Ave	11,700	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
9	64.4	67.8	68.3	34	108	342	Brookside Avenue	East of Beaumont Ave	7,000	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50

Traffic Noise Calculator: FHWA 77-108 **Project Title: BEA-06 Future With Project**

	Output						Inputs												
	dBA at 50 feet			Distance to CNEL Contour															
ID	$L_{eq-24hr}$	L_{dn}	CNEL	70 dBA	65 dBA	60 dBA	Roadway	Segment	ADT	Posted Speed Limit	Grade	% Autos	% Med Trucks	% Heavy Trucks	% Daytime	% Evening	% Night	Number of Lanes	Site Condition	Distance to Reciever
1	62.2	65.7	66.2	21	66	210	Beaumont Ave	North of Cherry Valley Blvd	5,390	35	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
2	68.1	71.5	72.1	80	254	802	Beaumont Ave	Cherry Valley Blvd to Brookside Ave	10,890	50	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
3	69.7	73.2	73.7	117	369	1167	Beaumont Ave	South of Brookside Ave	15,840	50	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
4	68.7	72.1	72.7	92	292	924	Cherry Valley Blvd	West of School Site	15,320	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
5	67.4	70.9	71.4	70	220	695	Cherry Valley Blvd	West of Beaumont Ave	11,530	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
6	63.6	67.0	67.6	29	90	285	Cherry Valley Blvd	East of Beaumont Ave	5,850	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
7	67.6	71.0	71.5	71	226	714	Brookside Avenue	West of School Site	11,830	45	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
8	66.7	70.2	70.7	59	185	585	Brookside Avenue	West of Beaumont Ave	12,000	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50
9	64.4	67.9	68.4	34	109	344	Brookside Avenue	East of Beaumont Ave	7,050	40	0.0%	92.0%	3.0%	5.0%	73.3%	13.1%	13.6%	2	Hard	50

Attenuation Calculation				
	RCNM Reference		Off-Campus - North	
Phase	dBA Leq	distance (ft)	dBA Leq	distance (ft)
Asphalt Demolition	85		64	540
Paving	85		64	540
Site Prep and Grading	85		63	600
Utility Trenching	77	50	55	600
Athletic Field Installation	83		57	930
Building Construction	83		55	1130
Architectural Coating	74		47	1130

Attenuation calculated through Inverse Square Law: Lp(R2) = Lp(R1) - 20Log(R2/R1)

	RCNM Reference		On Campus - South	
Phase	dBA Leq	distance (ft)	dBA Leq[1]	distance (ft)
Asphalt Demolition	85		63	600
Paving	85		63	600
Site Prep and Grading	85		61	780
Utility Trenching	77	50	53	780
Athletic Field Installation	83		60	670
Building Construction	83		71	180
Architectural Coating	74		63	180

Appendix D Geotechnical Investigation

Appendices

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Beaumont Unified School District
350 West Brookside Avenue
Beaumont, California 92223

Geotechnical Engineering, Geohazards, and Percolation Testing Report
Proposed New Classroom
Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

March 20, 2020

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March 20, 2020

File No.: 300414-003
Doc No.: 20-03-709

Beaumont Unified School District
350 West Brookside Avenue
Beaumont, California 92223

Attention: Ms. Lisa Hendrix

Subject: **Geotechnical Engineering, Geohazards, and Percolation Testing Report**

Projects: **Proposed New Classroom**
Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems Pacific (Earth Systems) is pleased to present this Geotechnical Engineering and Geohazards Report for the proposed new classroom at the existing Beaumont High School located at 39139 Cherry Valley Boulevard in the city of Beaumont in Riverside County, California. This report presents our findings and recommendations for site grading and foundation design, incorporating the information provided to our office. The site is suitable for the proposed development, provided the recommendations in this report are followed in design and construction. This report should stand as a whole and no part of the report should be excerpted or used to the exclusion of any other part.

This report completes our scope of services in accordance with our proposal PER-20-1-003R, dated January 22, 2020 and the Beaumont Unified School District Contract Number C-0010910. Unless requested in writing, the client is responsible for distributing this report to the appropriate governing agency or other members of the design team.

We appreciate the opportunity to provide our professional services. Please contact our office if there are any questions or comments concerning this report or its recommendations.

Respectfully submitted,
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Laboratory Test Results

**Geotechnical Engineering, Geohazards,
and Percolation Testing Report
Proposed New Classroom
Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California**

Section 1
INTRODUCTION

1.1 Project Description

This Geotechnical Engineering and Geohazards Report has been prepared for the proposed Beaumont High School new classroom and associated site improvements located at 39139 Cherry Valley Boulevard in the city of Beaumont, Riverside County, California, see Plate 1 (Site Vicinity Map). We understand that the proposed expansion involves the addition of one new modular building with an approximate footprint area of 18,000 square feet. In addition, appurtenant site work is assumed to include underground utilities, stormwater management BMP's, landscaping, reconfigurations and expansion of flatwork, access drives, parking areas, and drainage structures. This report will address proposed site improvements as shown on Plate 2, which is a copy of the Site Plan prepared by DLR Group.

Based on information from the Project Architect, we have assumed a two-story steel-framed modular construction founded on shallow permanent foundations (18 inch crawl space with raised floor), and that there will be no below grade basement levels. We have assumed the anticipated loads will be less than 50 kips for isolated spread footings and 3 kip/lineal foot for continuous footings. As the basis for the foundation recommendations, all loading is assumed to be dead plus actual live load.

No preliminary design loading was provided by the structural engineer. If actual structural loading exceeds these assumed values, we will need to re-evaluate the given recommendations.

1.2 Site Description and Aerial Photo Review

The proposed new classroom building and site improvements are located within the northern portion of the existing campus of Beaumont High School where basketball courts, grass fields and parking areas currently exist in the city of Beaumont, Riverside County, California. The approximate latitude and longitude near the center of the proposed new classroom building are 33.9656°N/116.9808°W. Plate 1 in Appendix A presents the approximate site location. The site is bounded on the west by existing residential/commercial developments, on the north by Cherry Valley Boulevard, on the east by Beaumont Avenue, and on the south by Brookside Avenue. Generally, the site is surrounded by rural residential homes. Detention basins are present to the east of the site. Concrete lined and bottomed water diversion channels are present directly to the west of the site, and approximately 1,400 feet east of the site. Westerly channels are approximately 14 feet deep and trapezoidal. Easterly channels are approximately 6 feet deep (12 feet below site grades and also trapezoidal. Topographically, the existing campus site varies in elevation from approximately 2,698 feet at the southwest corner to 2,780

feet at the northeast corner. The approximate elevation at the proposed new classroom building is 2,740 feet. Drainage across the campus is by sheet flow from north to south.

Earth Systems personnel also reviewed select historical aerial photographs of the project site. Historical aerial photographs revealed items of interest. It appears the campus was constructed between 2002 and 2006. Other permanent buildings were added between 2010 and 2013 throughout the campus. The campus has remained relatively unchanged since 2013.

1.3 Purpose and Scope of Services

The purpose for our services was to evaluate the site soil and geologic conditions at our exploration locations and to provide professional opinions and recommendations, from a geologic and geotechnical point of view, regarding the proposed development of the site. We understand that the proposed school site expansion will be developed under the regulation of the Division of the State Architect (DSA), the current California Building Code (2019), and California Geological Survey (CGS) Note 48 requirements (2019) for geotechnical reports submitted to DSA.

The conclusions and recommendations included in this report are based upon the data collected for this commission. The scope of services included:

Task 1 - Literature and Photograph Reviews

We began our services by reviewing select geologic and geotechnical literature pertaining to the project. This included a review of various hazard, fault, and geologic maps prepared by the California Geological Survey, the U.S. Geological Survey, the County of Riverside and other governmental agencies as they relate to the project area. Geotechnical and geologic data provided by John R. Byerly (2004 and 2009) was reviewed for previous published geologic data and grading information. Historical aerial photographs were reviewed using Google Earth Pro and Historical Aerials websites, including previous reviews by Byerly (2009). The aerial photographs reviewed are listed in the References section of this report.

Task 2 – Utility Clearance, USA Dig Alert

Each of our proposed field exploration locations was located and marked in the field, and cleared with known utility lines as identified by Underground Service Alert (USA), “Dig Alert” and the District’s private utility locating firm. Boring locations were adjusted to avoid conflicting with existing utilities. Our exploration locations were located in the field by consumer grade Global Positioning System (GPS) accurate to ± 15 feet in conjunction with pacing based upon the control provided or sighting from landmarks identified on the project topographic map.

Task 3 – Field Exploration

We evaluated the general subsurface conditions at the site by drilling eight small diameter borings, from approximately 6½ feet to 50½ feet in depth. The borings were located in general accordance with CGS Note 48 requirements for school facilities which requires a minimum of one exploration point within the near-vicinity of the building footprint for every 5,000 square feet of first floor area, with a minimum of two borings per structure. Should the proposed structure be moved from the presently proposed and previously discussed location, the current

boring locations may not satisfy the required criteria and additional borings may be required. Based on the footprint area of approximately 18,000 square-feet for the new classroom building, four exploration borings were excavated within the proposed building footprint. In addition, four borings were excavated within the surrounding areas for other proposed improvements. Plate 3 shows the surface geology and the approximate location of each boring.

Task 4 - Laboratory Testing

Laboratory tests were performed on selected samples to evaluate the physical characteristics of the materials encountered during our field exploration. Laboratory testing included moisture content, dry unit weight, maximum density/optimum moisture content, sieve analysis, consolidation/collapse potential, Expansion Index, R-value, and direct shear characteristics. The testing was performed in general accordance with American Society for Testing and Materials (ASTM) or appropriate test procedures. Two selected samples were also tested for a preliminary screening level of corrosion potential (pH, electrical resistivity, water-soluble sulfates and water-soluble chlorides). Earth Systems does not practice corrosion engineering; however, these test results may be used by a qualified engineer in designing an appropriate corrosion plan for the project.

Task 5 – Percolation Testing

Two percolation tests were performed within borings at the proposed stormwater infiltration locations, as designated by the DLR Group. These borings extended vertically as recommended by the Civil Engineer to near the bottom of the planned infiltration system. The holes were drilled on February 15, 2020 with the same drill rig as the exploratory borings. Plate 2 shows the approximate location of each test (B-1 and B-8).

Task 6 – Analysis and Report

Earth Systems analyzed the field data obtained, performed engineering analyses, and provided recommended design parameters for earthwork and foundations for the structure as described within. Our report includes:

- A description of the proposed project including a site plan showing the approximate boring locations;
- A description of the surface and subsurface site conditions including groundwater conditions, as encountered in our field exploration;
- A description of the site geologic setting and possible associated geology-related hazards, including liquefaction, subsidence, and seismic settlement analysis;
- A site-specific geologic map and geologic cross section;
- A discussion of regional geology and site seismicity, including a regional geology map;
- A description of local and regional active faults, their distances from the site, their potential for future earthquakes;
- A discussion of other geologic hazards such as ground shaking, landslides, flooding, and tsunamis;

- A discussion of site conditions, including the geotechnical suitability of the site for the general type of construction proposed;
- A "General Procedure" and Site Specific Procedure seismic analysis including recommendations for geotechnical seismic design coefficients and soil profile type in accordance with the 2019 California Building Code;
- A "screening level" slope stability analysis of the adjacent descending slope and channel at the proposed classroom location, including the Factor of Safety for both gross static and pseudostatic slope stability analysis;
- Recommendations for imported fill for use in compacted fills;
- Recommendations for foundation design including parameters for shallow foundations, deep foundations, and subgrade preparation;
- Anticipated total and differential settlements for the recommended foundation system;
- Recommendations for lateral load resistance (earth pressures and drainage);
- Recommendations for site preparation, earthwork, and fill compaction specifications;
- Discussion of anticipated excavation conditions;
- Recommendations for underground utility trench backfill;
- Recommendations for stability of temporary trench excavations;
- Recommendations for location-specific infiltration rates;
- Recommendations for slabs-on-grade, including recommendations for reducing the potential for moisture transmission through interior slabs;
- Recommendations for collapsible or expansive soils (if applicable);
- Recommendations for asphalt concrete and Portland cement concrete parking and drives;
- A discussion of the corrosion potential of the near-surface soils encountered during our field exploration;
- An appendix, which includes a summary of the field exploration (computer generated boring logs) and laboratory testing program (computer generated plots).

Not Contained in This Report: Although available through Earth Systems, the current geotechnical scope of our services does not include:

- An environmental Phase 1 assessment.
- A study for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater, or air on, below, or adjacent to the subject property, nor exploration or delineation of past development or remaining structures/debris.

  The client did not direct Earth Systems to provide any service to investigate or detect the presence of moisture, mold, or other biological contaminates in or around any structure, or any service that was designed or intended to prevent or lower the risk or the occurrence of the amplification of the same. Client is hereby informed that mold is ubiquitous to the environment, with mold amplification occurring when building materials are impacted by moisture. Site conditions are outside of Earth Systems' control, and mold amplification will likely occur or continue to occur in the presence of moisture. As such, Earth Systems cannot and shall not be held responsible for the occurrence or recurrence of mold.

Section 2
METHODS OF EXPLORATION AND TESTING

2.1 Field Exploration

Exploratory Borings

The subsurface exploration program included advancing eight exploratory borings. The borings were drilled to depths ranging from approximately 6½ to 50½ feet below existing grades using a truck-mounted drill rig equipped with 8-inch hollow-stem augers provided by Cal-Pac Drilling of Calimesa, California. The borings were advanced to observe soil profiles and obtain samples for laboratory testing. The approximate boring locations are shown on Plate 3, in Appendix A. The locations shown are approximate, established by consumer grade Global Positioning System (GPS) accurate to ± 15 feet in conjunction with pacing based upon the control provided.

Staff from Earth Systems maintained a log of the subsurface conditions encountered and obtained samples for visual observation, classification and laboratory testing. Subsurface conditions encountered in the borings were categorized and logged in general accordance with the Unified Soil Classification System (USCS) and ASTM D 2487 and 2488 (current edition). Our typical sampling interval within the borings was approximately every 2½ or 5 feet to the full depth explored; however, sampling intervals were adjusted depending on the materials encountered onsite. Samples were obtained within the test borings using a SPT or Modified California (MC) ring sampler (ASTM D 3550 with those similar to ASTM D 1586). The SPT sampler has an approximate 2-inch outside diameter and 1.5-inch inside diameter. The MC sampler has an approximate 3-inch outside diameter and a 2.4-inch inside diameter. The ring sampler was mounted on a drill rod and driven using a rig-mounted 140-pound automatic hammer falling for a height of 30 inches. The number of blows necessary to drive the MC or SPT sampler within the borings was recorded.

Bulk samples of the soil materials were obtained from the drill auger cuttings, representing a mixture of soils encountered at the depths noted. The depth to groundwater, if any, was measured in the boreholes. Following drilling, sampling, and logging, the borings were backfilled with the cuttings and tamped upon completion. Our field exploration was provided under the direction of a State of California Registered Geotechnical Engineer from our firm.

Design parameters provided by Earth Systems in this report have considered an estimated 72% hammer efficiency based on data provided by the drilling subcontractor and accepted SP 117A criteria. The number of blows necessary to drive either a SPT sampler or a MC type ring sampler within the borings was recorded. Since the MC sampler was used in our field exploration to collect ring samples, the N-values using the California sampler can be roughly correlated to SPT N-values using a conversion factor that may vary from about 0.5 to 0.7. In general, a conversion factor of approximately 0.63 from a study at the Port of Los Angeles (Zueger and McNeilan, 1998 per SP 117A) is considered satisfactory. A value of 0.63 was applied in our calculations for this project.

The final logs of the borings represent our interpretation of the contents of the field logs and the results of laboratory testing performed on the samples obtained during the subsurface exploration. The final logs are included in Appendix A of this report. The stratification lines

represent the approximate boundaries between soil types, although the transitions may be gradual. In reviewing the logs and legend, the reader should recognize the legend is intended as a guideline only, and there are a number of conditions that may influence the soil characteristics observed during drilling. These include, but are not limited to cementation, oversize rocks, variations in soil moisture, presence of groundwater, and other factors.

The boring logs present field blowcounts per 6 inches of driven embedment (or portion thereof) for a total driven depth attempted of 18 inches. The blow counts on the logs are uncorrected (i.e. not corrected for overburden, sampling, etc.). Consequently, the user must correct the blow counts per standard methodology if they are to be used for design and exercise judgment in interpreting soil characteristics, possibly resulting in soil descriptions that vary somewhat from the legend. Where necessary in gravelly soils, blow counts were recorded in one inch intervals to evaluate consistency of the soil matrix rather than the combined gravel/soil. Blowcounts of gravel were omitted.

Percolation Test Holes

Two borings were drilled within the proposed stormwater infiltration locations for percolation testing. These holes were drilled on February 15, 2020 with the same drill rig as the exploration borings. These borings extended vertically as recommended by the Civil Engineer to near the bottom of the planned infiltration system. Test holes reached depths of approximately 7 to 18 feet bgs. Percolation testing consisted of field testing in general accordance with Riverside County Flood Control and Water Conservation District (RCFCWCD), 2011, Design Handbook for Low Impact Development Best Management Practices under the test procedure for "Deep Percolation Testing". This method consists of borings having diameters from 8 to 12 inches in diameter. The bottom of the holes corresponded to the bottom elevation of the proposed infiltration surface. The bottom of the test holes were covered with 2 inches of gravel. The holes were presoaked. The holes were then filled with potable water to a depth of at least 5 times the hole's radius above the gravel at the bottom of the test hole. A check for sandy soil or non-sandy soils was made. Additional filling of the boreholes was made and drops of the water within certain time periods were measured. Borings were 8 inches in diameter.

The percolation locations are shown on the Boring Location Map, Plate 3, in Appendix A, as B-1 and B-8. The locations shown are approximate, established by pacing and line-of-sight bearings from adjacent landmarks and consumer grade GPS coordinates (+/- 15 feet). Refusal and groundwater were not encountered at the test hole locations.

Staff from Earth Systems maintained a log of the subsurface profile encountered in the test zone and performed visual observation of the soils. Subsurface conditions encountered were categorized and logged in general accordance with the Unified Soil Classification System (USCS) and ASTM D 2487 and 2488 (current edition).

2.2 Laboratory Testing

Samples were reviewed along with field logs to select those that would be analyzed further. Those selected for laboratory testing include, but were not limited to, soils that would be exposed and those deemed to be within the influence of the proposed structures. Test results are presented in graphic and tabular form in Appendix B of this report. Testing was performed

in general accordance with American Society for Testing and Materials (ASTM) or other appropriate test procedure. A selected sample was also tested for a screening level of corrosion potential (pH, electrical resistivity, water-soluble sulfates, and water-soluble chlorides). Earth Systems does not practice corrosion engineering; however, these test results may be used by a qualified corrosion engineer in designing an appropriate corrosion control plan for the project.

Our testing program consisted of the following:

- Density and Moisture Content of select samples of the site soils (ASTM D 2937 & 2216).
- Maximum Dry Density/Optimum Moisture Content tests to evaluate the moisture-density relationship of typical soils encountered (ASTM D 1557).
- Particle Size Analysis to classify and evaluate soil composition. The gradation characteristics of selected samples were made by sieve analysis procedures (ASTM D 6913).
- Consolidation and Collapse Potential to evaluate the compressibility and hydroconsolidation (collapse) potential of the soil upon wetting (ASTM D 5333).
- Direct Shear to evaluate the relative frictional strength of the surficial slope soils. Specimens were in a saturated condition prior to and during testing and were sheared under normal loads ranging from 1.0 to 4.0 kips per square foot (ASTM D 3080).
- Expansion Index tests to evaluate the expansive nature of the soil. The samples were surcharged under 144 pounds per square foot at moisture contents of near 50% saturation. Samples were then submerged in water for 24 hours and the amount of expansion was recorded with a dial indicator (ASTM D 4829).
- Chemical Analyses (Soluble Sulfates and Chlorides (ASTM D 4327), pH (ASTM G 187), and Electrical Resistivity/Conductivity (APHA 2320-B) to evaluate the potential for adverse effects of the soil on concrete and steel.
- R-Value for pavement section analysis (CTM 301).

Section 3
DISCUSSION

3.1 Soil Conditions

The field exploration and literature review indicate that site geologic materials consist generally of artificial fill (af) overlying Quaternary alluvial deposits (Qa and Qoa). Per Dibblee (2003), the mapped native materials are identified as Quaternary alluvial deposits of probable Pleistocene age. Byerly (2009) suggests that the surficial soils were Holocene, however, most of these soils were removed during remedial grading. There is approximately 19 feet of engineered fill under the proposed building site.

The artificial fill consists of medium dense to very dense interbedded lenses of sands with varying amounts of silt and gravel and (Unified Soils Classification System symbols of SM, SP-SM, SW-SM, and SW) that appears to be locally derived. Fills and disturbed soils are typically within past use areas with surficial disturbance and were generally on the order of 15 feet thick. This includes noted removals as documented by Byerly (2004). The observed native alluvial soils consist of interbedded lenses or beds of silt and sands with varying amounts of silt and gravel (ML, SM, SP-SM, and SW per the Unified Soil Classification System, (USCS)). Site soil moisture observations varied between slightly moist to moist with lab moistures ranging between 4 and 22 percent. A detailed description of the observed soils is provided on the boring logs in Appendix A.

3.2 Groundwater

No groundwater or perched water was encountered during our field exploration (maximum depth 50½ feet). Groundwater depths are influenced by the fault systems in the project vicinity; however, the site is not within a mounded groundwater area. Beaumont High School is located within the Beaumont groundwater storage unit. Historic groundwater elevations near Beaumont High School were approximately 2,260 feet in 1966-1967 based on the United States Geological Survey Water-Supply Paper 1999-D (Bloyd, 1971).

Based on calculation of percent saturation of soil samples collected considering moisture content and density, isolated zones of increased moisture were observed and tested. Despite decades of landscape irrigation on and surrounding the site, as well as nearby recharge basins, saturated conditions were not observed or indicated in our testing and soils above and below the increased moisture zones showed low moisture content indicating the zone is slowing water migration, but not perching it. As soils are generally granular, the potential for saturated perched water conditions to develop is considered low.

Nearby state monitored wells were researched for their recent and historic well readings. The following is a summary of our findings for the three wells closest to the site.

- Well No. 02S01W27L001S is located approximately 1,000 feet east of the project site. The surface elevation of this well is approximately 2,811 feet and the groundwater readings as measured from 2011 to 2019 varied from 2,273 to 2,231 feet.

- Well No. 02S01W27P002S is located approximately 1,300 feet east of the project site. The surface elevation of this well is approximately 2,754 feet and the groundwater readings as measured from 2011 to 2019 varied from 2,221 to 2,266 feet.

Based on the above data, groundwater is not anticipated to be encountered during construction and is expected to be much deeper than 50 feet (over 200 feet) at the site such that liquefaction is not a concern. Fluctuations of the groundwater level and localized zones of increased soil moisture content may be anticipated during and following the rainy season or from irrigation.

3.3 Collapse and Consolidation Potential

Collapsible soil deposits generally exist in regions of moisture deficiency. Collapsible soils are generally defined as soils that have potential to suddenly decrease in volume upon increase in moisture content even without an increase in external loads. Soils susceptible to collapse include loess, weakly cemented sands and silts where the cementing agent is soluble (e.g. soluble gypsum, halite), valley alluvial deposits within semi-arid to arid climate, and certain granite residual soils above the groundwater table. In arid climatic regions, granular soils may have a potential to collapse upon wetting. Collapse (hydro-consolidation) may occur when the soils are lubricated or the soluble cements (carbonates) in the soil matrix dissolve, causing the soil to densify from its loose configuration from deposition.

The degree of collapse of a soil can be defined by the Collapse Potential [CP] value, which is expressed as a percent of collapse of the total sample using the Collapse Potential Test (ASTM Standard Test Method D 5333). Based on the Naval Facilities Engineering Command (NAVFAC) Design Manual 7.1, the severity of collapse potential is commonly evaluated by the following Table 1, Collapse Potential Values.

Table 1
Collapse Potential Values

Collapse Potential Value	Severity of Problem
0-1%	No Problem
1-5%	Moderate Problem
5-10%	Trouble
10-20%	Severe Trouble
> 20%	Very Severe Trouble

Table 1 can be combined with other factors such as the probability of ground wetting to occur on-site and the extent or depth of potential collapsible soil to evaluate the potential hazard by collapsible soil at a specific site. A hazard ranking system associated with collapsible soil as developed by Hunt (1984) is presented in Table 2, Collapsible Soil Hazard Ranking System

Table 2
Collapsible Soil Hazard Ranking System

Degree of Hazard	Definition of Hazard
No Hazard	No hazard exists where the potential collapse magnitudes are non-existent under any condition of ground wetting.
Low Hazard	Low hazards exist where the potential collapse magnitudes are small and tolerable or the probability of significant ground wetting is low.
Moderate Hazard	Moderate hazards exist where the potential collapse magnitudes are undesirable or the probability of substantial ground wetting is low, or the occurrence of the collapsible unit is limited.
High Hazard	High hazard exist where potential collapse magnitudes are undesirably high and the probability of occurrence is high.

The results of collapse potential tests performed on four selected samples from depths ranging from 7½ to 30 feet below the ground surface indicated a collapse potential on the order of 0.3 to 0.8 percent. Based on the above criteria and our field and laboratory findings, we estimate the potential for collapse is “No Problem”.

3.4 Expansive Soils

Expansive soils are characterized by their ability to undergo significant volume change (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors, and may cause unacceptable settlement or heave of structures, concrete slabs supported-on-grade, or pavements supported over these materials. Depending on the extent and location below finished subgrade, expansive soils can have a detrimental effect on structures. Based on our laboratory testing and experience with the project, the expansion potential of the on-site soils is generally “very low” as defined by ASTM D 4829 and the 2019 California Building Code. In general the majority of site soils observed were granular and “very low” in expansion.

Testing and/or observation of the subgrade soils during grading of the building pad and at footing grade should be performed to further evaluate the expansion potential and confirm or modify the recommendations presented herein.

3.5 Corrosivity

Two samples of the near-surface soils within the site were tested for potential corrosion of concrete and ferrous metals. Soils in the upper 0 to 5 feet were tested as a blended (composite) sample and an in-situ sample. The tests were conducted in general accordance with the ASTM Standard Test Methods to evaluate pH, resistivity, and water-soluble sulfate and chloride content. The test results are presented in Appendix B. These tests should be considered as only an indicator of corrosivity for the samples tested. Other earth materials found on site may be more, less, or of a similar corrosive nature.

Water-soluble sulfates in soil can react adversely with concrete. ACI 318 provides the relationship between corrosivity to concrete and sulfate concentration, presented in the table below:

Table 3

Water-Soluble Sulfate in Soil (ppm)	Corrosivity to Concrete
0-1,000	Negligible
1,000 – 2,000	Moderate
2,000 – 20,000	Severe
Over 20,000	Very Severe

In general, the lower the pH (the more acidic the environment), the higher the soil corrosivity will be with respect to ferrous structures and utilities. As soil pH increases above 7 (the neutral value), the soil is increasingly more alkaline and less corrosive to buried steel structures, due to protective surface films, which form on steel in high pH environments. A pH between 5 and 8.5 is generally considered relatively passive from a corrosion standpoint. High chloride levels tend to reduce soil resistivity and break down otherwise protective surface deposits, which can result in corrosion of buried steel or reinforced concrete structures. Soil resistivity is a measure of how easily electrical current flows through soils and is the most influential factor. Based on the findings of studies presented in ASTM STP 1013 titled "Effects of Soil Characteristics on Corrosion" (ASTM, 1989), the approximate relationship between soil resistivity and soil corrosivity was developed as shown in Table 4.

Table 4

Soil Resistivity (Ohm-cm)	Corrosivity to Ferrous Metals
0 to 900	Very Severely Corrosive
900 to 2,300	Severely Corrosive
2,300 to 5,000	Moderately Corrosive
5,000 to 10,000	Mildly Corrosive
10,000 to >100,000	Very Mildly Corrosive

Test results show pH values ranging from 6.7 to 7.6, chloride contents of not detected (ND) to 6 ppm, sulfate contents of 10 to 12 ppm and minimum resistivity's of 9,600 to 20,800 Ohm-cm. Although Earth Systems does not practice corrosion engineering, the corrosion values from the soils tested are normally considered as being very mildly to mildly corrosive to buried metals and as possessing a "negligible" exposure to sulfate attack for concrete as defined in American Concrete Institute (ACI, 2011) 318, Section 4.3. The results of all chemical testing have been provided in Appendix B. The above values can potentially change based on several factors, such as importing soil from another job site and the quality of construction water used during grading and subsequent landscape irrigation.

3.6 Stormwater Percolation Testing

Two borings were drilled within the proposed storm water infiltration locations for percolation testing using the same drill rig as the exploratory borings. These holes were drilled and initially soaked on February 15, 2020 and tested on February 18, 2020. These test locations represent the soils at the assumed bottom of the proposed infiltration systems. We installed 3-inch diameter perforated pipe along the entire length of the test holes. Then we backfilled the holes between the pipe and borehole sidewalls with clean gravel. After the gravel placement, we inundated the borehole with clean potable water. The percolation locations are shown on the Boring Location Map (Plate 3), in Appendix A.

The presence of gravel and the PVC pipe were accounted for in the percolation rate calculation. The borings were pre-saturated twice with potable water subsequent to drilling and again immediately prior to testing. The testing and empirical conversion were performed according to the Riverside County – Low Impact Development BMP Design Handbook. The test holes were filled with potable water to a minimum of 5 times the hole's radius. Actual water head in the Test Zone is indicated in Table 5 below.

The percolation results were correlated to approximate infiltration using Porchet techniques. The soils encountered at each test location and the results of our percolation testing are presented in Table 5 below.

Table 5
Empirical Infiltration Rate Results

Test Boring	Soil Condition	USCS Soil Description in Test Zone	Test Zone Below Existing Ground Surface (feet)	Estimated Porchet Empirical Infiltration Rate (in/hr)*
B-1	Fill	Poorly Graded Sand with Silt (SP-SM)	5-7	1.8
B-8	Alluvium (Native)	Gravelly Sand with Silt (SP-SM)	15-18	11.6

* Field Values, No factor of safety applied. Typical factors of safety range from 3 to 10 depending on the type of system which will be designed using the field values and depending on the level of pre-treatment and influent which will be discharged into the basins.
** Please refer to the Recommendations section for design and maintenance recommendations.

3.7 Geologic Setting

Regional Geology: The site is situated in the margin between the Transverse Ranges geomorphic province to the north and the Peninsular Ranges Geomorphic Province of California (see Plate 4). The Transverse Ranges consist of an east-west trending group of mountain ranges and valleys that include the San Gabriel, San Bernardino, and Little San Bernardino Mountains. The Peninsular Ranges Province is a distinct geomorphic region characterized as a complex series of northwest-southeast oriented mountain ranges and valleys generally sub-parallel to faults composing the San Andreas rift zone. The Peninsular Ranges Province is further

described by sub-units, which include the Perris Block, the San Ana Mountains, and the San Jacinto Mountains.

Regional earth units consist predominantly of igneous rocks of the southern California batholith and Mesozoic meta-sedimentary rocks, and Quaternary older and younger alluvial fan deposits that drape the southern margin of the San Bernardino Mountains (Plates 5 & 6). The project site is located the west of the San Gorgonio Pass area upon the broad alluvial fan complex that emanates from the San Bernardino Mountains located to the north and northeast. The site is located on the local alluvial fan complex originating from deposition from Little San Gorgonio Creek and Noble Creek. Locally, the geomorphology is defined as the Cherry Valley Surface of the Beaumont Plain (Plate 6).

Regional active and potentially active faults in the vicinity of the project site include the San Andreas and related faults, the San Jacinto fault zone, Pinto Mountain fault, and Elsinore fault zone (see Plates 5, 7, & 8). Local faulting includes the Banning fault, San Gorgonio Pass fault zone and Beaumont Plain fault zone (Plate 5, 6, 7, & 8). No active faults have been mapped within the project limits based upon local and regional select published geologic maps by the California Geologic Survey (2010) or United States Geologic Survey fault database (2006). The site is not located within a currently designated Alquist-Priolo Earthquake fault zone (Plate 7).

The nearest mapped fault is a segment of the Beaumont Plain fault zone located approximately 0.3 miles southwest of the project site. Per the City of Beaumont General Plan, the Beaumont Plain fault zone is not considered active. Per Mr. Dave Jones (email communication 2016) of the County of Riverside, trench data observed on a project located several miles northwest of the campus revealed data that the Beaumont Plain fault zone may be considered active. The San Gorgonio Pass fault is located about one mile northwest of the campus. The San Jacinto fault zone is located approximately 6.5 miles southwest of the site, and segments of the San Andreas fault are located approximately 2.3 to 8.5 miles northeast of the campus (see Plates 5-8). The mapped Banning fault in this area is not zoned by the State or County and is not considered “active”.

Local Faulting and Lineaments: A lineament analysis of areas surrounding the school site was performed as required by CGS guidelines as documented by Byerly (2009) for the existing building located just south of the proposed new classroom. Per Byerly (2009), no lineaments or fault related structures were noted in the area that now encompasses the new classroom site. Confirmation review by Earth Systems of aerial photographs confirmed a tonal and vegetative lineament located just northeast of the campus, with no fault related lineaments across the proposed new building site.

No significant lineaments suggestive of faulting within the new building limits were noted on the photographs nor documented by Byerly (2004 and 2009). No currently mapped faults are shown within the campus limits.

Local Geology: The site is within an area of broad coalesced alluvial fans (Beaumont Plain) at the southern margin of the San Bernardino Mountains (see Plate 5). Per Dibblee (2003), the site is situated on uplifted and dissected Pleistocene alluvial fans resulting from deposition of drainages that emanate from the San Bernardino Mountains located north and northeast of

Beaumont. Subsequent mass grading has removed the older and younger alluvial deposits and replaced these soils with variable depths of engineered fill.

3.8 Geologic Hazards

Geologic hazards that may affect the region include seismic hazards (ground shaking, surface fault rupture, soil liquefaction, and other secondary earthquake-related hazards), slope instability, flooding, ground subsidence, and erosion. A discussion follows on the specific hazards to this site.

3.8.1 Seismic Hazards

Seismic Sources: Approximately 40 active faults or seismic zones lie within 42 miles of the project site as shown on Table A-1 in Appendix A. The primary seismic hazard to the site is strong ground shaking from earthquakes along regional faults including the San Andreas, Elsinore, and San Jacinto faults.

Surface Fault Rupture: The project site does not lie within a currently delineated State of California, *Alquist-Priolo* Earthquake Fault Zone (CGS 2018). Well-delineated fault lines cross through this region as shown on California Geological Survey (CGS) maps (Jennings, 2010) or United States Geologic Survey fault database (2006); however, no active faults are mapped in the immediate vicinity of the site. The closest active faults are segments of the San Gorgonio Pass (Cherry Hills) fault, and Beaumont Plain fault zone. Therefore, active fault rupture is unlikely to occur at the project site. Byerly (2009) noted that no evidence of fault rupture was noted during mass grading of the campus. While fault rupture would most likely occur along previously established fault traces, future fault rupture could occur at other locations.

Historic Seismicity: The site is located within an active seismic area in southern California where large numbers of earthquakes are recorded each year. Plate 9, Earthquake Epicenter Map, depicts epicenters of significant seismic events greater than magnitude 5.5 that have occurred in southern California between 1812 and 2010. Magnitudes that are above 6 and postdate accurate instrumental measurements (after 1933) are based on moment magnitudes (M_W). Magnitudes that are below 6 or earthquakes prior to 1933 are based on local magnitudes (M_L).

Several historic seismic events (5.9 M or greater) have significantly affected the Beaumont area in the last 100 years. These include:

- *Wrightwood Earthquake* – On December 8, 1812, a magnitude 7.5 M_W earthquake occurred in the Wrightwood area along the San Andreas fault. This event was strongly felt in the in the southern California area and caused multiple deaths in San Juan Capistrano. Intense ground shaking was likely experienced in the Beaumont area, but due to the sparse population, minimal damage was reported.
- *Fort Tejon Earthquake* – A magnitude 7.9 earthquake occurred on January 9, 1857 along the San Andreas fault from Parkfield to San Bernardino. This event was strongly felt in the southern California area and caused structural damage, as well as injuries. Strong shaking was reported to last one to three minutes.

- *San Jacinto Earthquake* – On December 25, 1899, a magnitude 6.5 M_L earthquake occurred along the San Jacinto fault in the Hemet and San Jacinto areas. Strong ground shaking caused significant structural damage and injuries in the Hemet/San Jacinto areas. Two miners were reported to be trapped in the Winchester area.
- *Glen Ivy-Elsinore Earthquake* – On May 15, 1910, a magnitude 6 earthquake is thought to have originated along the Elsinore fault near Temescal Valley. Toppled chimneys and minor damage was reported, with shaking felt in Los Angeles and San Diego.
- *North San Jacinto Earthquake* – On July 22, 1923, a magnitude 6.3 earthquake occurred along the San Jacinto fault south of San Bernardino. Strong ground shaking resulted in damaged chimneys, broken glass with some significant damage to poorly constructed structures, including a hospital.
- *Landers and Big Bear Earthquakes* – Early on June 28, 1992, a magnitude 7.5 M_S (7.3M_W) earthquake occurred near Landers, the largest seismic event in Southern California for 40 years. Surface rupture occurred just south of the town of Yucca Valley and extended some 43 miles toward Barstow. About three hours later, a magnitude 6.6 M_S (6.4M_W) earthquake occurred near Big Bear Lake. No significant structural damage from these earthquakes was reported in the Paloma Valley area.

Of significance are the multiple earthquake events along the San Jacinto fault at the turn of the century in 1890, 1892, 1894, 1899, 1918, and 1923. Additional earthquakes in the region along this fault zone occurred in 1937 and 1954 suggesting that the San Jacinto fault is a significant source of large to major earthquakes. Of interest, the only significant historic earthquake along the local Elsinore fault was in 1910.

The table below lists select significant recorded earthquakes felt in the project area and the estimated intensity of ground shaking near the site based on the Modified Mercalli Scale. A description of damage based on the Modified Mercalli Scale is included as Table 7.

Table 6
Significant Historical Earthquakes

Earthquake	~ Distance to Epicenter Miles (km)		Earthquake Magnitude*	Estimated Intensity**	Date
San Jacinto	12	19	6.7	VIII	1899
San Jacinto	15	18	6.8	VII	1918
N. San Jacinto	16	26	6.3	VII	1923
Big Bear	18	29	6.5	VII	1992
N. Palm Springs	21	34	6.0	IV-V	1986
Glen Ivy-Elsinore	30	48	6.0	VI	1910
Landers	35	56	7.3	VI	1992
Lytle Creek	42	68	6.2	V	1894
Desert Hot Springs	43	69	6.0	V-VI	1948
Wrightwood	47	76	7.5	IV	1812
Hector Mine	59	95	7.1	IV-V	1992
Ridgecrest	129	208	7.1	II-III	2019

* Moment Magnitude after 1933 or above 6, or Local Magnitude prior to 1933 or below 6 (S.C.E.C.)
** Modified Mercalli Scale

From this analysis, it appears that the past maximum intensity in the Beaumont area from historical earthquakes due to regional faults is on the order of VIII on the Modified Mercalli Scale. Anticipated intensities from a local 7+ magnitude earthquake along the nearby San Gorgonio Pass, San Andreas, or San Jacinto faults are VIII-IX. Refer to Table A-1 in Appendix A for a list of active faults and their approximate distances from the site.

Table 7
Modified Mercalli Intensity Scale of 1931[1], (1956 version)[2]

Masonry A, B, C, D. To avoid ambiguity of language, the quality of masonry, brick or otherwise, is specified by the following lettering.

Masonry A Good workmanship, mortar, and design; reinforced, especially laterally and bound together by using steel, concrete, etc.; designed to resist lateral forces.

Masonry B Good workmanship and mortar; reinforced, but no designed in detail to resist lateral forces.

Masonry C Ordinary workmanship and mortar; no extreme weaknesses like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.

Masonry D Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.

I.	**Not felt. Marginal and long-period effects of large earthquakes.**
II.	**Felt by persons at rest, on upper floors, or favorably placed.**
III.	**Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.**
IV.	**Hanging objects swing. Vibrations like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frame creak.**
V	**Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.**
VI.	**Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken visibly, or heard to rustle.**
VII.	**Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices also unbraced parapets and architectural ornaments. Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.**
VIII.	**Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.**
IX.	**General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. General damage to foundations. Frame structures, if not bolted, shifted off foundations Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluviated areas sand and mud ejected, earthquake fountains, sand craters.**
X.	**Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.**
XI.	**Rails bent greatly. Underground pipelines completely out of service.**
XII.	**Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.**

[1]Original 1931 version in Wood, H.O., and Neumann, F., 1931, Modified Mercalli intensity scale of 1931: Seismological Society of America Bulletin, v. 53, no. 5, p. 979-987.

[2]1956 version prepared by Charles F. Richter, in Elementary Seismology, 1958, p. 137-138, W. H. Freeman & Co.

Seismic Risk: While accurate earthquake predictions are not possible, various agencies have conducted statistical risk analyses. In 2013, the California Geological Survey (CGS) and the United States Geological Survey (USGS) presented new earthquake forecasts for California (USGS UCERF3). We have used these maps in our evaluation of the seismic risk at the site. The recent Working Group of California Earthquake Probabilities (WGCEP, 2014) estimated a 31 percent conditional probability that a magnitude 6.7 or greater earthquake may occur in 30 years (2014 as base year) along the nearby San Bernardino South segment of the San Andreas fault, but about 33 to 43% along the Mojave South and San Bernardino North segments near Cajon Pass. For the nearby San Jacinto fault, the 30-year probability is about 14 percent. The revised estimate for an 8+ magnitude earthquake along the local San Andreas fault is about 7%. For the San Gorgonio Pass fault, the 30-year Probability for a 6.7+ magnitude earthquake is about 4%.

Secondary seismic hazards related to ground shaking include soil liquefaction, ground subsidence, tsunamis, and seiches. Other hazards include flooding and slope instability. The site is far inland, so the hazard from tsunamis is non-existent.

Seiching and Seismic Induced Flooding: Seiching is defined as a periodic oscillation of liquid within a container or reservoir. Its period is determined by the resonant characteristics of the container, as controlled by its physical dimensions. At the present time, several water storage reservoirs and percolation/flood control facilities are located upstream in the proximity of the campus. These include detention basins and water tanks located just east of Beaumont Avenue, east of the campus, and several flood control basins located approximately 0.3 miles northeast of the campus. Byerly (2009) suggested that there is a potential flood hazard to the campus in the event of a catastrophic failure of the basins. We concur that there may be a hazard due to seismic induced failure of the tanks or basins, but the extent of flooding is not quantified. This will be a civil engineering consideration.

The campus aquatic center is located about 140 feet east of the planned new building. Seiching of pool water could occur. Whether the flood water leaks past the existing buildings between the pool and proposed building site is subject to conjecture. However, the proximity of the pool suggests a potential for flooding due to seiching of pool water.

Soil Liquefaction and Lateral Spreading: Liquefaction is the loss of soil strength from sudden shock (usually earthquake shaking), causing the soil to become a fluid mass. Liquefaction describes a phenomenon in which saturated soil loses shear strength and deforms as a result of increased pore water pressure induced by strong ground shaking during an earthquake. Dissipation of the excess pore pressures will produce volume changes within the liquefied soil layer, which can cause settlement. Shear strength reduction combined with inertial forces from the ground motion may also result in lateral migration (lateral spreading). Factors known to influence liquefaction include soil type, structure, grain size, relative density, confining pressure, depth to groundwater, and the intensity and duration of ground shaking. Soils most susceptible to liquefaction are saturated, loose sandy soils and low plasticity clay and silt.

In general, for the effects of liquefaction to be manifested, groundwater levels must be within 50 feet of the ground surface and the soils within the saturated zone must also be susceptible to liquefaction. The project lies in a zone designated by Riverside County Safety Element and

online Land Information System to have a "low" liquefaction potential due to relatively deep or unknown groundwater, but susceptible sediments. We consider the potential for liquefaction to occur at this site is low because a groundwater research indicates water is generally more than 50 feet below the ground surface historically and perched water conditions were not encountered, and were of a low potential to develop. The potential for lateral spreading is considered low due to non-liquefiable geologic materials.

There is a free-face condition about 90 feet west of the proposed classroom, within the flood control channel. However, the channel is ephemeral and is generally dry. The channel is lined and bottomed with Portland cement concrete and the depth to groundwater greater than 50 feet. The upper approximately 20 feet of soil onsite is engineered fill. Additionally, based on the granular nature of site soils, and lack of confining layers, the potential for lateral water migration from channels or nearby basins and perching is considered very low. Our experience with local basins and levees in the area indicates that impounded water tends to migrate and infiltrate vertically downward in the sandy soils with negligible lateral extent. Thus, the likelihood of liquefaction induced instability (lateral spreading) or static instability is considered low at the project site.

Dry Seismic Settlement: The amount of dry seismic settlement is dependent on relative density of the soil, ground motion, and earthquake duration. In accordance with current CGS policy (Earth Systems discussion with Jennifer Thornburg, CGS May 2014), we used a site peak ground acceleration of ⅔ PGA_M (PGA_M = 0.979) and an earthquake magnitude of 8.2 to evaluate dry seismic settlement potential. The design peak ground acceleration values were obtained from the SEAOC/OSHPD online application (https://seismicmaps.org/).

Based upon methods presented by Tokimatsu and Seed (1987), the potential for seismically induced dry settlement of soils above the groundwater table for the full soil column height (50 feet) was calculated in our deep boring at the site and estimated to be 2.1 inches (Boring B-7). Seismic settlement is based on post grading recommendations stated in Section 5.1. Due to the general uniformity of the soils encountered, seismic settlement is expected to occur on an areal basis and as such per Special Publication 117A (CGS, 2008), the differential settlement is estimated to be approximately ½ of the total estimated dry seismic settlement (1 inch) considering soil remediation as recommended in Section 5.1.

Fissuring and Ground Subsidence: The Riverside County Parcel report indicates that the site is within a "Susceptible" potential subsidence area. In areas of fairly uniform thickness of alluvium, fissures are thought to be the result of tensional stress near the ground surface and generally occur near the margins of the areas of maximum subsidence. Surface runoff and erosion of the incipient fissures augment the appearance and size of the fissures.

Changes in pumping regimes can affect localized groundwater depths, related cones of depression, and associated subsidence such that the prediction of where fissures might occur in the future is difficult. In the project area, groundwater depths remain fairly deep and we consider the current subsidence potential very low. However, in the event of future nearby aggressive groundwater pumping and utilization, the occurrence of deep subsidence cannot be ruled out. Changes in regional groundwater pumping could result in areal subsidence. The risk of areal subsidence in the future is more a function of whether groundwater recharge

continues and/or over-drafting stops, than geologic processes, and therefore the future risk cannot be predicted or quantified from a geotechnical perspective.

Seismic Hazard Zones: This portion of Riverside County has been mapped for the California Seismic Hazard Mapping Act (Ca. PRC 2690 to 2699) with respect to active fault hazards.

Site Acceleration and Seismic Coefficients: In developing site-specific seismic design criteria, the characteristics of the earth units underlying the site are an important input to evaluate the site response at a given site. Based on the results of our evaluation at the site, the project site is underlain by artificial fill overlying Quaternary alluvial deposits. Based on our estimation of blowcounts (average 33 blows) for the upper 100 feet of site soils (see Appendix A for output), the site classification for site response is Site Class D according to Table 20.3-1 of ASCE7-16. The D characterization is defined as a soil profile consisting of stiff soil with shear wave velocities between 600 to 1,200 fps, and average blows >15, but less than 50.

Probabilistic Analysis and General Procedure: The Seismic Design Category for this site is E. The Code seismic parameter S_1 is 0.75 g (> 0.2 g). The site is not within a designated Alquist-Priolo Earthquake Fault Zone, or County Fault Zone. Per ASCE 7-16, a probabilistic analysis is required. A multi-segment fault rupture and magnitude of 8.2 for the San Andreas fault and 7.0 M event on the San Gorgonio fault (footwall location) were selected as the dominant seismic events for the analysis. The site-specific shear wave velocity, based upon boring blowcount data was estimated to be 282 m/s. Although the site is not within a State-designated “fault rupture hazard zone”, it is located in an active seismic region.

It is assumed that the 2019 CBC and ASCE 7-16 guidelines will apply for the seismic design parameters. The 2019 CBC includes several seismic design parameters that are influenced by the geographic site location with respect to active faults, and with respect to subsurface soil or rock conditions. The “general procedure” (i.e. probabilistic) seismic design parameters presented below were determined by the U.S. Seismic Design Maps "risk-targeted" calculator on the SEAOC/OSHPD website for ASCE 7-16 for the site coordinates (33.9656° North Latitude and 116.9808° West Longitude, Soil Site Class D, for Occupancy (Risk) Category III (which includes school structures)). A listing of the calculated 2019 CBC and ASCE 7-16 Seismic Parameters is presented in Table 8 and again in Appendix A for General Procedures.)

Table 8
****Summary of Seismic Parameters – 2019 CBC "General Procedure"**

Site Class (ASCE 7-16)	D
Occupancy (Risk) Category	III
Seismic Design Category	E
Maximum Considered Earthquake (MCE) Ground Motion	
Spectral Response Acceleration, Short Period – S_s	2.178 g
Spectral Response Acceleration at 1 sec. – S_1	0.750 g
Site Coefficient – F_a	1.00
Site Coefficient – F_v	1.70
Site-Modified Spectral Response Acceleration, Short Period – S_{MS}	2.178
Site-Modified Spectral Response Acceleration at 1 sec. – S_{M1}	1.275
Design Earthquake Ground Motion**	
Short Period Spectral Response – S_{DS}	1.452**
One Second Spectral Response – S_{D1}	0.850**
Site Modified Peak Ground Acceleration - PGA_M	0.979**g
Values appropriate for a 2% probability of exceedance in 50 years	

**The seismic factor S_1 is greater than 0.2 g and the Site Class is "D", as such the above values in Table 8 are not valid unless the Exception of ASCE7-16 for Site Class D, Section 11.4.8 applies. If the Exceptions do not apply, then "Site Specific" Ground Motion Hazard Analysis seismic evaluation parameters should be used, as presented in Table 9, and detailed in Appendix A in Table A-3a which may be used for design. Tables A-3b and A-3c are presented for reference only.

The values in Table 9 represent a composite evaluation considering the effects of the predominating San Andreas fault and San Gorgonio fault. The site-specific study considers soil amplification effects. The United States Geological Survey (USGS, 2009) has undertaken a probabilistic earthquake analyses that covers the continental United States. A reasonable site-specific spectral response curve may be developed from USGS Unified Hazard Tool web page, which adjusts for site-specific ground factors. The interactive webpage appears to be a precise calculation based on site coordinates. For the purposes of this study, the Dynamic: Conterminous U.S. 2014 (Update) (Version 4.20) values have been chosen for use in the analysis.

NGA West 2014 attenuation relationships were used in the analyses. These attenuations included those of Abrahamson, Silva and Kamai, Boore and Stewart, Campbell and Bozorgnia, Chiou and Youngs.

Table 9
Summary of Seismic Parameters – 2019 CBC "Site-Specific Procedure"

Site Class (ASCE 7-16)	D
Occupancy (Risk) Category	III
Seismic Design Category	E
Maximum Considered Earthquake (MCE) Ground Motion	
Spectral Response Acceleration, Short Period – S_s	2.178 g
Spectral Response Acceleration at 1 sec. – S_1	0.750 g
Site Coefficient – F_a	1.00
Site Coefficient – F_v	2.50
Site-Modified Spectral Response Acceleration, Short Period – S_{MS}	2.306 g
Site-Modified Spectral Response Acceleration at 1 sec. – S_{M1}	2.787 g
Design Earthquake Ground Motion	
Short Period Spectral Response – S_{DS}	1.537 g
One Second Spectral Response – S_{D1}	1.858 g
Site Modified Peak Ground Acceleration - PGA_M	0.972 g
Values appropriate for a 2% probability of exceedance in 50 years	

Table 8 and 9 are summaries only. The actual seismic parameter design sheets (General Procedure output and Table A-3a) in Appendix A should be referenced for design values.

3.8.2 Other Hazards

Landslides and Slope Instability: Topographically, the new proposed classroom site is generally flat except for an approximately 12-foot high descending slope and concrete lined channel located west of the site. Earth Systems performed a screening level static and seismic slope stability analysis for the 12-foot high slope in the proposed site configuration. Two soils (artificial fill and quaternary alluvium) were used in the study and given conservative engineering soil parameters based on laboratory data, SPT blow counts, and soil classification determinations. Soil property values varied depending on the analysis performed. Saturated Ultimate direct shear values were used for static analysis and saturated direct Peak values were used for seismic analysis. A surcharge load was included at the top of slope as significant structure (new proposed classroom building) loads are located near the top of slope; 200 psf surcharge loads were included for the slab and 2,000 psf for footings of the proposed new classroom building, and 100 psf surcharge load was included for flatwork per the CBC. Laboratory soil strength cohesion parameters were reduced by at least 30% in accordance with typical practice and SP117 (values utilized were considered 1/3 of direct shear lab values for cohesion). Pseudo-static "k" values of 0.47g horizontal and 0.16g vertical (1/3 of horizontal) were utilized, considering SP117A 15cm threshold as it is recommended structures be set back

from slopes per the recommendations of this report. Groundwater is expected to be over 200 feet deep and the potential for perched water is low.

For the slope analysis, we used the Janbu and Bishop Simplified Methods in the Slide 8 (Roscience) software, which provided the results for static and seismic models. Results included in Appendix A provide the engineering soil parameters and Factor of Safety for the static and seismic loading conditions. Note, acceptable Factor of Safety for static loading conditions are 1.5 and 1.1 for pseudo static conditions. Results indicate a factor of safety above 1.5 for static conditions and above 1.1 for seismic conditions. Therefore, the potential for global static and pseudo static slope instability of the proposed conditions are considered low.

Flooding: The project site lies in an area designated as Zone A: "Special Flood Hazard Areas subject to inundation by the 1% annual chance flood. The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood. Zone A – No base flood elevations determined. This project area and Zone A are identified on FEMA Map No.: 06065C0803G, Panel 803 of 3805, Map Revised August 28, 2008. Appropriate project design by the project civil engineer, construction, and maintenance can minimize the site sheet flooding potential.

The High School aquatic center is located just east of the new classroom location. Flooding associated with pool seiching is possible.

Section 4
CONCLUSIONS

The following is a summary of our conclusions and professional opinions based on the data obtained from a review of selected technical literature and the field explorations.

General: Based on our field exploration, laboratory testing, and geotechnical analyses conducted for this study, it is our professional opinion that the site is suitable, from a geotechnical standpoint, for construction of the school expansion as proposed, provided the recommendations presented in this report are incorporated into project design and construction.

The recommendations presented in this report may change pending a review of final grading plans and foundation plans. Recommendations presented in this report should not be extrapolated to other areas or be used for other projects (beyond those expressly identified within) without our prior review and comment.

Geotechnical Constraints and Mitigation:

- The primary geologic hazard is moderate to severe ground shaking from earthquakes originating on regional and local faults. A major earthquake originating on the nearby segments of the San Gorgonio Pass fault, San Andreas fault, San Jacinto fault, and other associated faults would be the critical seismic events that may affect the site within the design life of the building. Engineered design and earthquake-resistant construction increase safety and allow development within seismic areas.
- The underlying geologic condition for seismic design is Site Class D. The site is about 6.2 miles from a Type A seismic source and 1 mile from a Type B seismic source as defined by the California Geological Survey. A qualified professional should design any permanent structure constructed on the site. The ***minimum*** seismic design should comply with the 2019 edition of the California Building Code.
- Due to the spectral acceleration S_1 (0.75 g) being greater than 0.2, a site-specific response spectra may be required Site Specific evaluation was presented previously in this report. The Seismic Design Category is E.
- The site is not within a County of Riverside designated fault zone, nor is the site within a currently designated Alquist-Priolo Earthquake Fault Zone. No known faults or fault related lineaments cross the building site. Therefore, the potential for surface fault rupture at the site is considered very low.
- The potential for ground subsidence and liquefaction settlement hazards are considered low for this project. The site is not within an area of documented areal subsidence.
- Due to increased seismic design criteria for ground acceleration, PGAm, soils under the design condition are now subject to increased estimated dry seismic settlement over past reports. Structural design may have to accommodate this increased potential.
- The soils are susceptible to wind and water erosion.
- Other geologic hazards, including flooding and landslides, are considered low potential on this site.

- Based on current conditions, groundwater is not anticipated to be encountered during construction.
- The existing on-site fill and alluvial soils are very low in Expansion Index and suitable for location under structures or hardscape after remedial grading. Building structure recommendations provided within are based upon using a granular fill material, very low in expansion potential.
- Soil conditions documented in Byerly (2004 and 2009) appear substantiated at our exploration locations. Maximum density laboratory results for fill compaction appear consistent with our testing.
- Laboratory testing of a soil sample showed potentially very mild to mild corrosivity to buried metallic elements and "negligible" for sulfate exposure to concrete. See Section 3.5 for further information. Site soils should be reviewed by an engineer competent in corrosion evaluation.
- In our professional opinion, structure foundations can be supported on shallow foundations bearing on a zone of properly prepared and compacted soils placed as recommended in Section 5.1. The recommendations that follow are based on "very low" expansion category soils.

Section 5
RECOMMENDATIONS

5.1 Site Development and Grading

A representative of Earth Systems should observe site clearing, grading, and the bottoms of excavations before placing fill. Local variations in soil conditions may warrant increasing or decreasing the depth of recompaction and over-excavation. Proper geotechnical observation and testing during construction is imperative to allow the geotechnical engineer the opportunity to verify assumptions made during the design process, to verify that our geotechnical recommendations have been properly interpreted and implemented during construction, and is required by the 2019 California Building Code. Preventative measures to reduce seasonal flooding and erosion should be incorporated into site grading plans. Dust control should also be implemented during construction. Site grading should be in strict compliance with the requirements of the South Coast Air Quality Management District (SCAQMD).

Observation of fill placement by the Geotechnical Engineer of Record should be in conformance with Section 17A of the 2019 California Building Code. California Building Code requires full time observation by the geotechnical consultant during site grading (fill placement). Therefore, we recommend that Earth Systems be retained during the construction of the proposed improvements to provide testing and observe compliance with the design concepts and geotechnical recommendations, and to allow design changes in the event that subsurface conditions or methods of construction differ from those assumed while completing this study. Additionally, the California Building Code requires the testing agency to be employed by the project owner or representative (i.e. architect) to avoid a conflict of interest if employed by the contractor. Unless noted otherwise, grading should be performed in general accordance with Appendix J of the 2019 CBC.

Clearing and Grubbing: At the start of site grading, existing vegetation, trees (including the entire rootball), large roots, overly wet and/or soft soil, undocumented fill, pavements, foundations, construction debris, septic tanks, leach fields, deleterious material, trash, and abandoned underground utilities should be removed from the proposed building areas. Organic growth should be stripped off the surface and removed from the construction area. Areas disturbed during demolition and clearing should be properly backfilled and compacted as described below.

Undocumented fill, and buried utilities may be located in the vicinity of the planned structures and within other areas of the project site. All buried structures which are removed should have the resultant excavation backfilled with soil compacted as engineered fill described herein or with a minimum 2-sack sand slurry approved by the project geotechnical engineer. Abandoned utilities should be removed entirely, or pressure-filled with concrete or grout and be capped. Abandoned buried utilities structures, or foundations should not extend under building limits.

After stripping and grubbing operations, areas to receive fill should be stripped of loose or soft earth materials until a firm subgrade is exposed, as evaluated by the geotechnical engineer or

geologist (or their representative). Before the placement of fill or after cut, the existing surface soils within the building pads and improvement areas should be over-excavated as follows:

Building Pad Preparation: Subsequent to stripping and grubbing operations, building areas should be stripped of loose or soft earth materials until a uniform, firm subgrade is exposed, as evaluated by the geotechnical engineer or geologist (or their representative). Because of the relatively non-uniform nature of the site soils expected to exist after stripping, and especially after demolition, we recommend recompaction of soils in the building areas. Prior to the placement of fill, subsequent to cut, or prior to structure construction (after demolition), the existing surface soils within the building pad and foundation areas should be over-excavated to a minimum depth of 3 feet below existing grade, finish grade, or a minimum of 1 foot below the footing level in shallow foundation areas, whichever is deeper. The undisturbed bottom of the exposed over-excavation should have a relative compaction of at least 90% (ASTM D 1557) or as approved by the project geotechnical engineer. If this criterion is not met, additional over-excavation may be required.

The over-excavation should extend horizontally for 3 feet beyond the outer edge of exterior footings and 2 feet beyond interior footings, where possible. The approved bottom of the sub-excavation should be scarified 6 inches, moisture conditioned to near optimum moisture content, and recompacted to at least 90 percent relative compaction (ASTM D 1557) prior to fill placement. Moisture conditioned and compacted engineered fill should then be placed to finish subgrade elevation in suitable compacted lifts. Compaction should be to at least 90% relative compaction prior to the placement of subsequent lifts. Compaction should be verified by testing.

Over-excavations should extend to a depth where the project geotechnical engineer or his representative has deemed the exposed soils as being suitable for receiving compacted fill. The materials exposed at the bottom of excavations should be observed by a geotechnical engineer or geologist from our office prior to the placement of any compacted fill soils. Additional removals may be required as a result of observation and/or testing of the exposed subgrade subsequent to the required over-excavation.

Auxiliary Structures Subgrade Preparation: Auxiliary structures such as fence or retaining walls, play courts, etc. should have the foundation subgrade prepared similar to the building pad recommendations given above. The over-excavation should extend horizontally for 2 feet beyond the outer edge. The exposed soils should then be moisture conditioned to near optimum moisture content, and recompacted to at least 90 percent relative compaction (ASTM D 1557). Moisture conditioned, engineered fill may then be placed to finished subgrade in appropriate loose lifts, compacted prior to the placement of subsequent lifts. In play court areas, the upper 12 inches of subgrade should be compacted to at least 98% relative compaction. Compaction should be verified by testing.

Subgrade Preparation: In areas to receive fill not supporting structures or hardscape the subgrade should be scarified; moisture conditioned, and compacted to at least 90% relative compaction (ASTM D 1557) for a depth of 1 foot below existing grade, or finished subgrade, whichever is deeper. Compaction should be verified by testing.

Pavement and Hardscape Area Preparation: In street, drive, permanent parking, and hardscape areas the subgrade should be over-excavated a minimum depth of one foot below existing grade or finish grade (whichever is deeper). The excavation bottom should be scarified 12 inches, moisture conditioned to near or over optimum moisture content and be recompacted to at least 90% relative compaction. Engineered fill should then be moisture conditioned, placed in suitable lifts, and compacted to a minimum of 90% relative compaction to finish grade, with the upper 1 foot compacted to at least 95% relative compaction in parking and drive areas. Compacted fill should be placed to finish subgrade elevation. Compaction should be verified by testing.

Retention Basin and Infiltrator Bottom Preparation: Compaction effort should be kept to a minimum at retention basin bottom areas and bottom areas used for any infiltrators (except under foundations). The subgrade below the bottom of basins and infiltrator bottoms should be compacted to approximately 85% relative compaction. Side slopes and any other fill or foundation subgrade should be compacted to at least 90% relative compaction. Slope construction should be per this report. Loose rock, such as pea gravel or open graded rock placed in the basin bottoms does not require compaction testing, but should be placed in lifts no greater than 2 feet and consolidated by thoroughly wetting and consolidating by passes with heavy equipment (such as a loader with full bucket or full water truck) until firm such that none to minimal deformation (less than ½ inch) occurs under the weight of passing of equipment. Infiltrator bottoms (chamber systems) are recommended to be at least 6 feet deep below existing grades.

Slope Construction: Please see Section 5.5 for detailed slope preparation recommendations.

All over-excavations should extend to a depth where the project geologist, engineer or his representative has deemed the exposed soils as being suitable for receiving compacted fill. The materials exposed at the bottom of excavations should be observed by a geotechnical engineer or geologist from our office prior to the placement of any compacted fill soils to verify that all old fill is removed. Additional removals may be required as a result of observation and/or testing of the exposed subgrade subsequent to the required over-excavation.

Engineered Fill Soils: The existing fill and native soils when processed and blended appropriately are considered to be suitable for use as engineered fill. Engineered fill should be generally free from expansive soil (have an Expansion Index (EI) less than 21), vegetation, trash, large roots, overly wet and/or soft soil, clods larger than 3 inches, construction debris, oversized rock (greater than 6 inches) and other deleterious material as determined by the geotechnical engineer or his representative. Pulverized asphalt concrete from demolition activities may be processed to 3 inch minus and blended into parking and drive area fills only, if needed. Asphalt concrete should not be placed in the building pad and structure areas, or areas not covered with asphalt or hardscape (i.e. also do not use in grass, playfield, or landscape areas, etc.). Deleterious materials should be hauled offsite. Engineered fill soils should consist of granular sandy materials and should have a “very low” Expansion Index.

Within areas to receive foundations and slabs-on-grade the fill should be “very low” in Expansion Index. Expansive soils which are identified should be blended or removed and

replaced with low permeability soils which are “very low” in expansion potential under the observation of the Geotechnical Engineer or his representative.

Imported fill soils should be “very low” expansion potential granular soils meeting the USCS classifications of ML (as pre-approved by the geotechnical engineer), SM, SP-SM, or SW-SM with a maximum rock size of 3 inches and 5 to 35-percent passing the No. 200 sieve (unless otherwise approved by the geotechnical engineer). The geotechnical engineer should evaluate the import fill soils before hauling to the site. However, because of the potential variations within the borrow source, import soil will not be prequalified by Earth Systems.

Engineered fill (and any import) should be placed in maximum 8-inch lifts (loose) and compacted to at least 90 percent relative compaction (ASTM D 1557) near its optimum moisture content prior to the placement of subsequent lifts. Within pavement areas, the upper 12 inches of subgrade should be compacted to at least 95 percent relative compaction (ASTM D 1557). Compaction should be verified by testing. In general, oversize rocks larger than 6 inches in greatest dimension should be removed from fill. Oversize material may be hauled offsite, used for landscaping, or crushed for use in engineering fill. Crushed rock should conform to the specification for import fill.

A program of compaction testing, including frequency and method of test, should be developed by the project geotechnical engineer at the time of grading. Acceptable methods of test may include Nuclear methods such as those outlined in ASTM D 6938 (Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods). Additionally, a minimum of 5% of the in-place density tests should be performed using an alternative method for quality assurance of compaction levels. Alternative methods may include methods outlined in ASTM D 1556 (Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method) or correlation probing with a hand probe. Fill must remain less than 30% retained on a ¾” sieve and meet the requirements for oversize.

All soils should be moisture conditioned prior to application of compactive effort and prior to foundation, slab-on-grade and pavement placement. Moisture conditioning of soils refers to adjusting the soil moisture to or just above optimum moisture content. If the soils are overly moist so that instability occurs, or if the minimum recommended compaction cannot be readily achieved, it may be necessary to aerate to dry the soil to optimum moisture content or use other means to address soft soils (as approved by the geotechnical engineer prior to use).

Shrinkage and Bulking: The shrinkage factor for earthwork for the alluvial materials is expected to range from -3 to 5 percent for the upper excavated or scarified site soils based upon evaluation of 4 in-place densities (one standard deviation = 2, 95% Confidence Interval). This estimate is based on compactive effort to achieve an weighted average relative compaction of about 93 percent.

Shrinkage is highly dependent on and may vary with contractor methods for compaction. Losses from site clearing, oversize rock removal, and removal of existing site improvements, as well as the addition of excavated soil (footings, piers, etc.) may significantly affect earthwork quantity calculations and should be considered.

Dust Control: The proposed site lies within an area of high potential for wind erosion. The site soils have a fine-grained component of their composition. As such, exposed soil surfaces may be subject to disturbed fine particulate matter (PM_{10}) which can create airborne dust if the soil surface or roadways are not maintained. During construction, watering the soil surface can reduce airborne dust. Alternatively, a dust control palliative may be spray applied to the soil surface to act as a tackifier which contains loose soil particles. Palliatives must be reapplied periodically as they weather and degrade. Further guidance for dust palliatives can be found in reviewing the United States Department of Agriculture publication *Dust Palliative Selection and Application Guide*, Document No. 9977-1207-SDTDC. The recommended soil input parameters are Plasticity Index less than 3, and fines content 10-20 percent.

5.2 Excavations and Shoring

Excavations should be made in accordance with Cal/OSHA requirements. Using the Cal/OSHA standards and general soil information obtained from the field exploration, classification of the near surface on-site soils will likely be characterized as Type C. Actual classification of site specific soil type per Cal/OSHA specifications as they pertain to trench safety should be based on real-time observations and determinations of exposed soils by the contractors *Competent Person* (as defined by OSHA) during grading and trenching operations.

Our site exploration and knowledge of the general area indicates there is a high potential for caving of site excavations (overexcavation areas, utilities, footings, etc.). Excavations within sandy soil should be kept moist, but not saturated, to reduce the potential of caving or sloughing. Where excavations over 4 feet deep are planned, lateral bracing or appropriate cut slopes of 1.5:1 (horizontal/vertical) should be provided. No surcharge loads from stockpiled soils or construction materials should be allowed within a horizontal distance measured from the top of the excavation slope and equal to the depth of the excavation.

Conventional equipment should be capable of performing the onsite excavations. Remedial grading operations will be taking place near areas where existing structures and foundations may be present. The contractor should verify the locations of such foundations to avoid disturbance and caving during excavating operations. Excavations which parallel structures, pavements, or other flatwork, should be planned so that they do not extend into a plane having a downward slope of 1:1 (horizontal: vertical) from the bottom edge of the footings, pavements, or flatwork. Shoring or other excavation techniques, such as alternating ‘A’, ‘B’, ‘C’ slot cuts, may be required where these recommendations cannot be satisfied due to space limitations or foundation layout.

The “ABC slot cutting method” as described below should be performed during the grading operation (over-excavation and recompaction). The excavation and backfill of all the designated “A” slots should be performed first with the “B” slots either unopened or cut at a 1.5:1 (horizontal: vertical) slope from the face of the existing building grade to the bottom of excavation. Once the A-slots are completed, work may progress on the B-slots, then after the B slots, C slots may be opened.

Excavation and Backfill Sequence for A-slots:

1. Excavate all the A-slots for the entire excavation depth up to 4 feet. The slots may be at most 5 feet wide.
2. In maximum 8 inch loose lifts, moisture condition and backfill with minimum 90% compacted fill using the excavated soils for the entire width and height of the A-slot.

Excavation and Backfill Sequence for B-slots:

3. Excavate all the B-slots for the entire excavation depth up to 4 feet. The slots may be at most 5 feet wide.
4. In maximum 8-inch loose lifts, moisture condition and backfill with minimum 90% compacted fill using the excavated soils for the entire width and height of the B-slot.

Excavation and Backfill Sequence for C-slots:

5. Excavate all the C-slots for the entire excavation depth up to 4 feet. The slots may be at most 5 feet wide.
6. In maximum 8-inch loose lifts, moisture condition and backfill with minimum 90% compacted fill using the excavated soils for the entire width and height of the C-slot.

The excavation sequence should be approved by the geotechnical engineer. The bottom of the over-excavation slot should be scarified 8 inches, moisture-conditioned to near optimum and compacted to 90% relative compaction (ASTM D 1557). Prior to subsequent placement, compaction should be verified by testing.

The contractor should carefully review the boring logs in this report, and perform their own assessment of potential construction difficulties, and methods should be selected accordingly. The method of excavation and support is ultimately left to the contractor. Due to the close proximity of existing structures, we recommend that existing structures be monitored for both vertical and horizontal movement during construction.

To reduce the undermining and disturbance of the existing structure foundations in the project area we recommend that construction techniques utilizing vibratory methods (i.e. vibratory compaction, etc.) be limited to a distance far enough away from existing structures where the effects of vibratory equipment are not felt such that the potential for vibratory induced settlement is reduced. The contractor should have an onsite means of immediately controlling potential caving or other ground loss conditions which may occur in the expected site soils in order to prevent any damage to existing structures.

A representative from our firm should be present during all site demolition and clearing and grading operations to monitor site conditions; substantiate proper use of materials; evaluate compaction operations; and verify that the recommendations contained herein are met.

Shoring: Shoring may be required where soil conditions, space, or other restrictions do not allow a sloped excavation or slot cutting is not an option. A braced or cantilevered shoring system may be used. Trench boxes should not be placed below or within the pipe zone elevation as their removal may loosen compacted backfill. Positive trench shoring may be required (jacks and plates).

A temporary cantilevered shoring system should be designed to resist an active earth pressure equivalent to a fluid weighing as shown in the table below. Braced or restrained excavations above the groundwater table should be designed to resist a uniform horizontal equivalent soil pressure as presented in the table below.

Table 10
Temporary Cantilevered and Braced Shoring System Parameters

Equivalent Fluid Pressure pounds per cubic foot (pcf)	
Cantilevered	**Braced**
39	60

The values provided above assume a level ground surface adjacent to the top of the shoring and do not include a factor of safety. Fifty percent of an areal surcharge (including construction equipment) placed adjacent to the shoring may be assumed to act as an additional uniform horizontal pressure against the shoring. Special cases such as combinations of slopes and shoring or other surcharge loads may require an increase in the design values recommended above. These conditions should be evaluated by the project geotechnical or shoring engineer on a case-by-case basis. Retaining walls subjected to traffic loads should include a uniform surcharge load equivalent to at least 250 psf for auto or delivery truck (2 axle) traffic kept at least 3 feet from the back of the wall. Retaining walls with closer traffic or heavier non-construction HS20 type traffic loads should be designed for a 400 psf surcharge load. Retaining walls should be designed with a minimum factor of safety of 1.5.

The wall pressures above the groundwater do not include hydrostatic pressures; it is assumed that drainage will be provided. If drainage is not provided, shoring should be evaluated on a case-by-case basis.

Cantilevered shoring must extend to a sufficient depth below the excavation bottom to provide the required lateral resistance. We recommend required embedment depths be determined using methods for evaluating sheet pile walls and based on the principles of force and moment equilibrium. For this method, the allowable passive pressure against shoring, which extends below the level of excavation, may be assumed to be equivalent to a fluid weighing 300 pcf. Additionally, we recommend a factor of safety of at least 1.2 be applied to the calculated embedment depth and that passive pressure be limited to 2,000 psf.

The contractor should be responsible for the structural design and safety of all temporary shoring systems. The contractor should carefully review the boring logs in this report, and perform their own assessment of potential construction difficulties, and methods should be selected accordingly. Shoring should be sealed to prevent the piping of soil material and potential soil loss conditions which can cause settlement. The method of excavation and

support is ultimately left to the contractor with guidance and restrictions provided by the designer and owner. We recommend that existing structures be monitored for both vertical and horizontal movement. A representative from our firm should be present during grading operations to monitor site conditions; substantiate proper use of materials; evaluate compaction operations; and verify that the recommendations contained herein are met.

5.3 Utility Trenches

Backfill of utilities within roads or public right-of-ways should be placed in conformance with the requirements of the governing agency (water district, public works department, etc.). Utility trench backfill within private property should be placed in conformance with the provisions of this report. Backfill operations should be observed and tested to monitor compliance with these recommendations.

Trench Width and Vertical Loads on Pipelines: Vertical loads to the pipeline are highly dependent upon the geometry of the trench. In general, the narrower the trench is at the top of the pipe/conduit with respect to the diameter of the conduit, the less vertical load is applied to the conduit. This is because as the trench backfill and bedding compress or consolidate over time, the weight of the soil mass is partially offset by the frictional resistance along the trench sidewalls. In addition, the type of bedding supporting the pipeline affects the bearing strength of the conduit. This is accounted by a load factor that is multiplied to the design strength of the conduit. The pipe manufacturer recommendations for trench installation and maximum width should be followed to reduce the potential for overloading the pipe due to excess backfill load.

Pipe Subgrade and Bedding: Pipeline subgrade should be compacted to a minimum of 90% relative compaction (ASTM D 1557) or be in a firm condition as evaluated by the geotechnical engineer or his representative for a depth of 6 inches below any bedding. Bedding material shall consist of sand 100 percent passing a No. 4 sieve and less than 5 percent fines (passing a No. 200 sieve) with a sand equivalent of 30 or more if jetted, and a fines content no greater than 15 percent with a sand equivalent of 30 or more if mechanically compacted, or as approved by the project inspector and geotechnical engineer. The unprocessed native soils are not typical of that used for bedding and import will be required if needed. Bedding should be compacted to at least 90% relative compaction or firm (less than 2" insertion of a ½" probe under typical 200 pound user weight).

Pipe-Zone, Trench–Zone, Trench Backfill and Compaction: Backfill of utilities should be placed in conformance with the requirements of the specifications. Backfill of utilities within roads or public right-of-ways should be placed in conformance with the requirements of the governing agency (water district, public works department, etc.).

Pipe zone backfill material (the pipe area from the bedding to 12 inches above the top of pipe) may consist of native soils screened to a ¾" maximum particle size or import sand (as described above for bedding) as dictated by the pipe designer or manufacturer. The pipe zone backfill material should be placed in maximum 8-inch lifts (loose) and compacted near its optimum moisture content. Pipe zone backfill should be compacted to a minimum of 90% relative compaction (ASTM D 1557) or to a firm condition as evaluated by the geotechnical engineer or his representative. Compaction should be assured in the pipe haunches.

The native soil is suitable for use as trench zone and street zone (and manholes) backfill (from the top of pipe zone up to finished grade), provided it is free of significant organic or deleterious matter and oversize materials. This backfill shall contain no particles larger than 3 inches in greatest dimension. The final backfill material should be placed in maximum 8-inch lifts (loose) and compacted to at least 90% relative compaction (ASTM D 1557) near its optimum moisture content for the trench zone and 95% for the street zone (upper 12 inches) where below pavement. Compaction should be verified by testing.

Backfill materials should be brought up at substantially the same rate on both sides of the pipe or conduit. Reduction of the lift thickness may be necessary to achieve the above recommended compaction. Care should be taken to not overstress the piping during compaction operations. Mechanical compaction is recommended; ponding or jetting is not recommended.

Alternatively, if the utility cannot accommodate the increased stress, or if compaction is difficult, we recommend the pipe be encased by at least 1 foot of 1-sack cement-sand slurry (at least 1 foot as measured from the top of pipe). Backfill operations should be observed and tested to monitor compliance with these recommendations.

In general, coarse-grained sand and/or gap graded gravel (i.e. ¾-inch rock or pea-gravel, etc.) should not be used for pipe or trench zone backfill due to the potential for soil migration into the relatively large void spaces present in this type of material and water seepage along trenches backfilled with coarse-grained sand and/or gravel. Water seepage or soil migration will cause settlement of the overlying soils. Rock backfill, where permitted, should be wrapped in filter fabric such as Mirafi 140N where there is contact with native or other fill soils.

Compaction should be verified by testing. Backfill operations should be observed and tested to monitor compliance with these recommendations. Trench backfill compacted per these requirements can be expected to settle 0.1 to 0.3 percent of the trench depth. This can cause an elevation difference between backfilled trenches and the surrounding soil or pavement. Increased relative compaction can reduce settlement if the potentials presented are not acceptable. The geotechnical engineer should be consulted on a case-by-case basis to provide further recommendations to reduce the settlement potential.

STRUCTURES

In our professional opinion, foundations for new structures (as presented within) can be supported on shallow foundations bearing on a zone of properly prepared and compacted soils placed as recommended in Section 5.1. The recommendations that follow are based on “very low” expansion category soils.

5.4 Foundations

Footing design of widths, depths, and reinforcing are the responsibility of the Structural Engineer, considering the structural loading and the geotechnical parameters given in this report. A minimum footing depth of 12 inches (wall footings), 15 inches (for 2 story structures), and 18 inches (column footings) below lowest adjacent grade should be maintained and considers a “very low” Expansion Index soil. Lowest adjacent grade is the lowest grade within 2

feet laterally of the foundation bottom. A representative of Earth Systems should observe foundation excavations to verify compaction (minimum 90% per ASTM D 1557) before placement of reinforcing steel or concrete. Loose soil or construction debris should be removed from footing excavations before placement of concrete. *All footing excavations should be probed for uniformity. Soft or loose zones should be excavated and recompacted to finish foundation bottom subgrade. The bottom of all foundations should be tested to confirm compaction effort and moisture contents as stated in Section 5.1 of this report are met.*

Minimum Slope Setback for Foundations: Earth Systems recommends a minimum setback distance of 5 feet. The 2019 California Building Code provides setback distances for foundations along slopes. Setback distances are measured differently for foundations located above the slope and those located below the slope. For foundations located at the top of the slope, the measurement is taken horizontally from the outside face of the foundation footing to the face of the slope. For foundations located below the slope, the horizontal distance is measured from the face of the structure foundation to the toe of the slope. For pools and slopes steeper than 1(H):1(V), please contact Earth System for these setbacks with submittal of detailed information using plan form.

Conventional Spread Foundations: Allowable soil bearing pressures are given below for foundations bearing on recompacted soils as described in Section 5.1. Allowable bearing pressures are net (weight of footing and soil overburden may be neglected).

- Continuous wall foundations, 12-inch minimum and 18-inch maximum width and 12-inch minimum depth below grade (15 inches for 2 story structures):

  2,000 psf for dead plus design live loads

  No increase permitted in allowable bearing without footing specific analysis by the geotechnical engineer.
- Isolated pad foundations, 2 x 2-foot minimum and 5 x 5-foot maximum in plan and 24 inches below grade:

  2,000 psf for dead plus design live loads

  No increase permitted in allowable bearing without footing specific analysis by the geotechnical engineer.

A one-third (⅓) increase in the allowable bearing pressure may be used when calculating resistance to wind or seismic loads.

If the anticipated loads exceed the estimated values stated in Section 1.1 (50 kips for isolated footings and 3 kip/linear-ft for continuous footings), the geotechnical engineer must reevaluate the allowable bearing values as the allowable bearing was controlled by the allowable total settlement from dry seismic, collapse, and static loads. Underground utilities should be designed for an anticipated settlement within the building areas.

The spacing between any large spread footings should be evaluated by the geotechnical engineer during the plan review stage to confirm or modify the settlement estimates and bearing capacity due to large footings and the influences from adjacent footings. A preliminary analysis suggests spacing the footings (adjacent edge to adjacent edge) a lateral distance from

one another of the width of the largest footing from any adjacent footing, such that influence effects are minor.

A 1:1 (h:v) influence zone may be considered for footing design which extends downward and outward from the footing outside edges. Other structures or footings within this 1:1 projection should include surcharge loading and vice versa if other footings or structures project onto new footings.

Maximum foundation sizes given above are based on settlement due to Dead + sustained Live loads. Transient loads such as earthquake or wind loads are not subject to the stated size limitations; however, the allowable bearing pressure (including ⅓ increase) should be followed considering the relevant foundation sizes given above.

The table below is based upon the above presented allowable, short term, and ultimate bearing pressures. Values may be increased by the provisions given above. Short Term allowable bearing may use the values presented below (based on Allowable Stress Design) or be based on Code mandated structural reductions, whichever is less. Ultimate bearing capacities consider a factor of safety of 3 (ASD design) to control settlement (6,000 psf ultimate) and a safety factor of 2.25 on transient loads (2,667 psf). Ultimate bearing to soil failure depends on foundation size and could be much greater than 6,000 psf. The restrictions of Section 1605A.1.1 apply to the cited bearing values for Allowable Stress Design (ASD).

Table 11

	Allowable Bearing Capacity (psf) (FS = 3)	**Short Term (Wind/Seismic) (FS = 2.25)**	**Ultimate Bearing Capacity (FS = 1)**
Continuous Foundations	2,000	2,667	6,000
Isolated Pad Foundations	2,000	2,667	6,000

FS = Factor of Safety

Footings should be designed and reinforced by the structural engineer for the specific loading, settlement, or expansive soil conditions. A minimum of four, #4 reinforcing bars should be placed. Two near the top of the footing and two near the bottom (3 inches above and below). This reinforcing is not intended to supersede any structural requirements provided by the structural engineer.

An average modulus of subgrade reaction, k, of 200 pounds per cubic inch (pci) can be used to design lightly loaded footings and slabs founded upon compacted fill. Other foundations such as mat slabs, will require the use of differing modulus of subgrade reaction values than used for lightly loaded slabs.

Stepped foundations should be designed in accordance with the 2019 CBC. CBC 2019 and ACI Section 4.3, Table 4.3.1 should be followed for recommended cement type, water cement ratio, and compressive strength. Seismic Design Category for compressive strength determination is ‘E’. Due to the negligible sulfates in the site soils, normal cements may be and should be proportioned in accordance with ACI recommendations considering the time of year for placement. Hot weather proportions should be used during high ambient heat days during placement and curing.

Expected Settlement: Estimated total static settlement should be less than ¾ inch, based on footings founded on firm soils as recommended. Differential static settlement between similarly loaded and sized bearing members should be less than 3/8 inch. As such, considering static and seismic differential settlement applied over a typical foundation distance of 40 feet, we recommend the structural engineer design for an angular distortion of 1:360 (1-3/8 inch in 40 feet). Settlement will not result in the complete loss of soil support, but will be manifested as a tilting of the structure over the applied distance. Bearing loss is a negligible potential at the site. ASCE 7-16, Table 12.13-3, for "Other multistory structures" allows a maximum differential settlement threshold of 0.006L for type III Risk Category structures. Assuming L=40 feet, the differential threshold is 2.88 inches. As such, the estimated differential settlement is less than the threshold.

Settlement calculations are presented in Appendix A and collapse results are provided in Section 3.4. The actual settlement of large spread footings should be evaluated by the geotechnical engineer during the plan review stage based on the actual column loads to confirm or modify the settlement estimates presented. Due to the generally granular nature of the site soils, a substantial portion of the total static settlement is expected to occur during construction.

Minor Deep Foundations: Although no specific elements were identified by the architect, for miscellaneous structural components such as light poles, canopy footings, gate posts, temporary retaining walls, and flag poles, may be supported on cast-in-place piles, or direct embed in drilled holes filled with concrete, and the design be based on parameters presented in the subsequent sections of this report. Construction employing poles or posts may utilize design methods presented in Section 1807A of the CBC for Silty Sand (SM) material class. For designs utilizing allowable frictional resistance, Earth Systems recommends the use of Section 1810A.3.3.1.4 and .5 of the CBC. For piles with an axial load, these design methods apply for piles spaced at least 3 pile diameters center to center for axial loads as graded in accordance with Section 5.1. Piles spaced closer than these limits could have soil strength reduction and should be evaluated on a case-by-case basis by geotechnical engineer. Pile length should be at least 8 feet.

For piers founded in areas with native soil at the surface, an additional 1.5 feet should be added to the calculated pile embedment due to the potential effects of long-term surficial disturbance and erosion. Additionally, where piers are constructed adjacent to the tops of slopes, there should be a minimum distance between the top of the slope and the closest edge of the pier of H/3, where 'H' is the height of the slope, otherwise a lateral resistance reduction must be applied. For piers founded closer than a distance H/3 to the crest or within the slope area itself, the calculated lateral resistance of the soil should be reduced by 30 percent. The above recommendations have considered slopes no steeper than 2:1 (horizontal:vertical). Steeper slopes will require additional analysis and may change the recommendations presented.

The on-site soils are expected to be excavatable with conventional drilling. Drilled piers should have a minimum 3 inches of clearance between the embedded post and the soil side wall to allow for adequate placement and flow of concrete.

Drill holes may end up oversize. Casing or other means may be required in a drilled hole. Any "slough" or loose soils at the bottom of the shaft must be removed or tamped prior to setting

rebar cages and placing concrete. Extreme care must be exercised to carefully position reinforcing steel cages and place concrete without disturbing the sidewalls of the drilled shafts. We recommend centralizers be used to positively locate rebar cages within the pier shaft. It is recommended that pier excavations that have not received concrete, not be left open and concrete should be placed immediately. Caving is a moderate concern.

Normally, drilled pier excavations should be made without the use of water. If necessary, water may be used to facilitate removal of cuttings unless it aggravates caving problems. Added water that may accumulate at the bottom of the hole should be removed from the drilled hole prior to placing the concrete. Sidewalls which have softened from the addition of water should be cleaned of the soft/loose material. Each excavation should be completed in a continuous operation and the concrete should be placed without undue delay. The contractor should use appropriate means to clean the bottom of the excavation so that no loose material is present at the base of the pier. We do not recommend over drilling beyond specified pier tip elevations to eliminate the need for bottom cleaning in order to account for slough or loose materials at the excavation bottom. To reduce the potential for caving and sidewall sloughing which may contaminate concrete during placement, and segregation, concrete should be placed by tremie methods and not directly chute-dumped into the hole.

Where casing is used with drilled holes and cannot be withdrawn, the skin friction capacity is theoretically reduced, as are passive resistance and stiffness. The amount of reduction is subject to assessment by the geotechnical consultant. The use of casing with drilled holes should be approved prior to use by the geotechnical engineer.

If casing is required, it should be withdrawn as the concrete is being placed, maintaining a 3-foot minimum head of concrete within the casing. This is to prevent reduction in the diameter of the drilled shaft due to earth pressure on the fresh concrete and to prevent extraneous material from falling in from the sides and mixing with the concrete. Concrete placement should continue in this manner until suitable concrete extends to the top of the excavation or forms. The upper eight feet of the pier should be consolidated by vibratory means.

Pier capacity is greatly dependent on the soil conditions at the location of the pier and upon contractor means and methods of placement. It is recommended that drilling operations and concrete placement be performed in the continuous presence of the geotechnical consultant or his representative to confirm that suitable materials for pier support are penetrated, that the dimensions of the installed piers meet the design dimensions, and that the installation has been performed as specified by the 2019 California Building Code. Observation during drilling is required by the 2019 California Building Code on a full-time basis by the geotechnical engineer or his representative. If subsurface conditions noted during drilled pier installation are significantly different than those encountered in our borings, it may be necessary to adjust the overall length of the pier.

Prior to the placement of steel, and again prior to and during the placement of concrete, the excavation must be examined by the geotechnical consultant before proceeding with construction. The contractor should provide all aid and assistance required by the geotechnical and geologic consultants for field monitoring of the drilled pier operations.

Piers are accepted or rejected based on visual observation and testing during construction. The contractor should not allow nor cause any of this work to be permanently enclosed or covered up until it has been observed, tested, and accepted by the geotechnical engineer and all legally constituted authorities having jurisdiction.

5.5 Slope Construction

New slopes are not generally proposed for this project; however, minor slopes (less than 5 feet in height) may be constructed. Site soils are highly susceptible to erosion. Compacted fill slopes protected against erosion (per approved methods such as significant planting, facing, or erosion blankets, etc.) may be constructed at 2:1 (horizontal: vertical) or flatter inclinations. Unprotected slopes with exposed native soils or compacted fill at the surface should be expected to require repair after heavy nuisance or storm runoff occurs due to significant erosion. Slope recommendations may change pending a more in-depth geotechnical evaluation once design plans are developed. Slopes used as nuisance or storm drainage channel slopes which should be no steeper than 3:1 and protected with heavy 12" minimum Rip-Rap.

Compacted fill should be placed at near optimum moisture content and compacted to a minimum 90 percent of the maximum dry unit weight, as measured in relation to ASTM D 1557 test procedures. The exposed face of any cut or fill slope (upper 12 inches) should have a minimum relative compaction of 90 percent, as measured in relation to ASTM D 1557 test procedures, and be compacted at near optimum moisture content. Due to the erodible site soils, slope faces should be protected with facing or densely spaced vegetation to reduce the erosion potential.

Surficial Slope Failures: Site soils are highly susceptible to erosion from wind and water sources. All slopes will be exposed to weathering, resulting in decomposition of surficial earth materials, thus potentially reducing shear strength properties of the surficial soils. In addition, these slopes become increasingly susceptible to rodent burrowing. As these slopes deteriorate, they can be expected to become susceptible to surficial instability such as soil slumps, erosion, soil creep, and debris flows. Development areas immediately adjacent to ascending or descending slopes should address future surficial sloughing of soil material and erosion. Such measures may include debris fences, slope facing, catchment areas or walls, diversion ditches or berms, soil planting, velocity reducers or other techniques to contain soil material away from developed areas and reduce erosion. Additionally, foundations should be set back at least 5 feet from the edge of slope or as per the 2019 CBC, whichever is greater.

Operation and maintenance inspections should be done after a significant rainfall event and on a time-based criteria (annually or less) to evaluate distress such as erosion, slope condition, rodent infestation burrows, etc. Inspections should be recorded and photographs taken to document current conditions. The repair procedure should outline a plan for fixing and maintaining surficial slope failures, erosional areas, gullies, animal burrows, etc. Repair methods could consist of excavating and infilling with compacted soil erosional features, track walking the slope faces with heavy equipment, as determined by the type and size of repair. These repairs should be performed in a prompt manner after their occurrence. Slope inclinations should be maintained and a maintenance program should include identifying areas

where slopes begin to steepen. Where future maintenance is not possible, slopes should be faced to reduce the erosion and degradation potential.

Slope faces are highly erodible even if compacted and will gradually erode and move down slope presenting maintenance issues and debris deposited in drainage devices and flatwork areas. The minimum material necessary to support landscaping should be specified by the landscape consultant (typically less than 6 inches).

5.6 Slabs-on-Grade

Subgrade: Concrete slabs-on-grade and flatwork should be supported by compacted and moisture conditioned soil placed in accordance with Section 5.1 of this report.

Vapor Retarder: In areas of moisture-sensitive floor coverings, coatings, adhesives, underlayment, goods or equipment stored in direct contact with the top of the slab, bare slabs, humidity controlled environments, or climate-controlled cooled environments, an appropriate vapor retarder that maintains a permeance of 0.01 perms or less after ASTM E1745's mandatory conditioning tests should be installed to reduce moisture transmission from the subgrade soil to the slab. For these areas, a vapor retarder (Stego wrap 15-mil thickness or equal) should underlie the floor slabs. If a Class A vapor retarder (ASTM E 1745) is specified, the retarder can be placed directly on non-expansive soil and be covered with a minimum 2 inches of clean sand.

Clean sand is defined as well or poorly-graded sand (ASTM D 2488) of which less than 5 percent passes the No. 200 sieve and all the material passes a No. 4 sieve. The site soils do not fulfill the criteria to be considered clean sand. Alternatively, the slab designer may consider the use of other vapor retarder systems that are recommended by the American Concrete Institute.

Low-slump concrete should be used to help reduce the potential for concrete shrinkage. The effectiveness of the membrane is dependent upon its quality, the method of overlapping, its protection during construction, the successful sealing of the membrane around utility lines, and sealing the membrane at perimeter terminations and at all penetrations. Capillary breaks, if any, beneath slabs should consist of a minimum of at least four inches of permeable base material (Caltrans) with the following specified gradation.

Table 12

Percent Passing Sieve Size

Sieve Size	Percent Passing
1 inch	100
¾ Inch	90-100
3/8 Inch	40-100
#4	25-40
#8	18-33
#30	5-15
#50	0-7
#200	0-3

Where vapor retarders are placed directly on a gravel capillary break, they should be a minimum of 15 mil thickness.

Where concrete is placed directly on the vapor retarder "plastic", proper curing techniques are essential to minimizing the potential of slab edge curl and shrinkage cracking. The edges of slabs can curl upward because of differential shrinkage when the top of the slab dries to lower moisture content than the bottom of the slab. Curling and cracking are caused by the difference in drying shrinkage between the top and bottom of the slab. Curling and cracking can be exacerbated by hot weather, or dry condition concrete placement, even with proper curing techniques.

The following minimum slab recommendations are intended to address geotechnical concerns such as potential variations of the subgrade and are not to be construed as superseding any structural design. A design engineer should be retained to provide building specific systems to handle subgrade moisture to ensure compliance with SB800 with regards to moisture and moisture vapor.

Slab Thickness and Reinforcement: Structure slabs should be a minimum of 4 inches in actual thickness and be reinforced with # 3 bars at 18 inches on center both ways. Reinforcement should be placed on positive supports at mid-slab and not lifted into place during concrete placement. Flatwork slabs should be a minimum of 4 inches thick. Play court slabs should be designed and reinforced by a specialty designer. The thickness and reinforcing, as well as jointing presented within are not applicable to play courts. Drive slabs should be per Section 5.9. Slabs in contact with earth should use closer joints to control cracking or be thickened to allow adequate earth to rebar clearance. Reinforcing bars should extend at least 40 bar diameters into the footings and slabs. Concrete slabs-on-grade and flatwork should be supported by compacted and moisture conditioned soil placed in accordance with this report. If slabs are structural, they should be designed for the specific settlement conditions presented within.

Slab thickness and reinforcement of slabs-on-grade are contingent on the recommendations of the structural engineer or architect and the Expansion Index of the supporting soil. Based upon our findings, a modulus of subgrade reaction of approximately 200 pounds per cubic inch can

be used in concrete lightly loaded (not mat) slab design for the expected compacted subgrade. Mat slab design will require differing modulus values. ACI Section 4.3, Table 4.3.1 should be followed for recommended cement type, water cement ratio, and compressive strength.

If heavily loaded flatwork is proposed (forklift drive areas, heavy racking, etc.), the actual thickness should be designed by the structural engineer utilizing techniques of the American Concrete Institute (ACI) and may be greater than 4 inches in thickness. Concrete floor slabs may either be monolithically placed with the foundations or doweled (No. 4 bar embedded at least 40 bar diameters) after footing placement. The thickness and reinforcing given are not intended to supersede any structural requirements provided by the structural engineer. The project architect or concrete inspector should continually observe all reinforcing steel in slabs during placement of concrete to check for proper location within the slab. The minimum concrete rebar cover should be per the project architect or structural engineer.

Slab-On-Grade Control Joints: Control joints should be provided in all regular concrete slabs-on-grade at a maximum spacing of 26 to 36 times the slab thickness (12 feet maximum on-center each way, 4 to 6 feet for sidewalks) as recommended by American Concrete Institute [ACI] guidelines. All joints should form approximately square patterns to reduce the potential for randomly oriented shrinkage cracks. Control joints in the slabs should be tooled at the time of the concrete placement or saw cut (¼ of slab depth) as soon as practical but not more than 8 hours from concrete placement. We recommend a concrete joint location plan be included with the project plans by the architect.

Construction (cold) joints should consist of thickened butt joints with ¾-inch dowels at 18 inches on center embedded per ACI or a thickened keyed-joint to resist vertical deflection at the joint. All control joints in exterior flatwork should be sealed to reduce the potential of moisture or foreign material intrusion. These procedures will reduce the potential for randomly oriented cracks but may not prevent them from occurring.

Curing and Quality Control: The contractor should take precautions to reduce the potential of curling and cracking of slabs in this arid desert region using proper batching, placement, and curing methods. Curing is highly affected by temperature, wind, and humidity.

Quality control procedures should be used, including trial batch mix designs, batch plant inspection, and on-site special inspection and testing. Curing should be in accordance with ACI recommendations contained in ACI 211, 304, 305, 308, 309, and 318. Additionally, the concrete should be vibrated during placement. Concrete should be wet cured for at least 7 days with burlap or plastic and not allowed to dry out to minimize surface cracking. Slabs should be protected from wind during this time. Play courts should be wet cured for at least 14 days, covered in burlap and protected from wind.

5.7 Retaining Walls and Lateral Earth Pressures

Walls which are restrained at the top such as retaining wall returns, below-grade walls and top of walls tied to floor slabs should be designed with “at rest” earth pressures. Retaining walls, free to tilt at the top, may be designed for “active” earth pressures.

The following list presents lateral earth pressures for use in wall design. The values are given as equivalent fluid pressures ***without*** surcharge loads or hydrostatic pressure. Clay soils are not suitable for wall backfill as they are not free draining. Silty sand material may be harvested and used for backfill or free draining material should be imported as wall backfill. For native or import free draining material, active and restrained walls equivalent fluid pressures are as follows:

- Conventional cantilever retaining walls may be backfilled with compacted on-site soils verified by the contractor to be "very low" in expansion potential. Provided the wall is backfilled at a 1:1 projection upward from the heels of the wall footings with onsite sand, an active pressure of 39 pcf of equivalent fluid weight for well-drained, level backfill may be used. Similarly, an active pressure of 48 pcf of equivalent fluid weight may be used for well-drained backfill sloping at 2H:1V (horizontal to vertical). For the restrained level backfill condition, a pressure of 60 pcf of equivalent fluid weight should be used. The equivalent fluid pressure and later discussed passive pressure values given are assumed to have an inherent Factor of Safety of 1.5.
- In addition to the active or at rest soil pressure, the proposed wall structures should be designed (where not excepted) to include forces from dynamic (seismic) earth pressure. Dynamic pressures are <u>additive</u> to active and at-rest earth pressures (and follow their load distribution) and should be considered as 72 pcf for flexible walls, and 90 pcf for rigid walls. Seismic pressures are based on PGA_M of 0.979g, Friction Soil Angle of 33^o, and a maximum total density of 135 pcf.
- Retaining wall foundations should be placed upon compacted fill described in Section 5.1.
- A backdrain or an equivalent system of backfill drainage should be incorporated into the wall design, whereby the collected water is conveyed to an approved point of discharge. Design should be in accordance with the 2019 California Building Code. Drain rock should be wrapped in filter fabric such as Mirafi 140N as a minimum and should have a volume of 1 cubic foot per foot of length. Backfill immediately behind the retaining structure should be a free-draining granular material. Waterproofing should be according to the designer's specifications. Water should not be allowed to pond or infiltrate near the top of the wall. To accomplish this, the final backfill grade should divert water away from retaining walls.
- Compaction on the retained side of the wall within a horizontal distance equal to one wall height (to a maximum of 6 feet) should be performed by hand-operated or other lightweight compaction equipment (90% compaction relative to ASTM D 1557 at near optimum moisture content). This is intended to reduce potential locked-in lateral pressures caused by compaction with heavy grading equipment or dislodging modular block type walls.
- The above recommended values do not include compaction or truck-induced wall pressures. Care must be taken during the compaction operation not to overstress the wall. Heavy construction equipment should be maintained a distance of at least 6 feet away from the walls while the backfill soils are placed. Upward sloping backfill or surcharge loads from nearby footings can create larger lateral pressures. Should any walls be considered for retaining sloped backfill or placed next to foundations, our office

should be contacted for recommended design parameters. Surcharge loads should be considered if they exist within a zone between the face of the wall and a plane projected 45 degrees upward from the base of the wall. The increase in lateral earth pressure should be taken as 50% of the surcharge load within this zone. Retaining walls subjected to traffic loads should include a minimum uniform surcharge load equivalent of 250 psf for auto and 400 psf for truck traffic kept back at least 3 feet from the wall back edge. Retaining walls should be designed with a minimum factor of safety of 1.5.

Frictional and Lateral Coefficients:

- Resistance to lateral loads (including those due to wind or seismic forces) may be provided by combined frictional resistance between the bottom of concrete foundations and the underlying soil, and by passive soil pressure against the foundations. An allowable coefficient of friction of 0.35 may be used between cast-in-place concrete foundations and slabs and the underlying soil. An allowable coefficient of friction of 0.30 may be used between pre-cast or formed concrete foundations and slabs and the underlying soil
- Allowable passive pressure may be taken as equivalent to the pressure exerted by a fluid weighing 350 pounds per cubic foot (pcf). The upper 1 foot of soil should not be considered when calculating passive pressure unless confined by overlying asphalt concrete pavement or Portland cement concrete slab. The soils pressures presented have considered onsite fill soils. Testing or observation should be performed during grading by the soils engineer or his representative to confirm or revise the presented values.
- Passive resistance for thrust blocks bearing against firm natural soil or properly compacted backfill can be calculated using an equivalent fluid pressure of 350 pcf. The maximum passive resistance should not exceed 2,000 psf.
- Construction employing poles or posts may utilize design methods presented in Section 1807A.3 of the CBC for Sandy soils (SM) material class.
- The passive resistance of the subsurface soils will diminish or be non-existent if trench sidewalls slough, cave, or are over widened during or following excavations. If this condition is encountered, our firm should be notified to review the condition and provide remedial recommendations, if warranted.

5.8 Seismic Design Criteria

This site is subject to strong ground shaking due to potential fault movements along regional faults including the San Andreas fault zone. Engineered design and earthquake-resistant construction increase safety and allow development of seismic areas. The minimum seismic design should comply with the 2019 edition of the California Building Code and ASCE 7-16 using the seismic coefficients given in Section 3.8. The site is not within Alquist-Priolo or other hazard zone; however, the spectral acceleration S_1 is greater than 0.2 g and the site is in the near proximity of several known faults. Therefore, a site-specific response evaluation is provided.

General Procedure and site-specific seismic parameters are presented in Section 3.8 and Appendix A considering a Site Class D (results in Appendix A Table A-3a). Our site-specific

analysis considered the San Andreas fault (M8.2 multi-segment) and closer San Gorgonio Pass fault (M7.0), resulting in a composite response spectrum using the more conservative values from each spectrum as has been requested previously by the California Geological Survey (CGS). The San Gorgonio Pass spectrum has higher values up to about 1 second, whereas the San Andreas spectrum values are higher above 1 second. The results of the analysis are listed below and on Tables A-3 and A-4 in Appendix A.

The intent of the CBC lateral force requirements is to provide a structural design that will resist collapse to provide reasonable life safety from a major earthquake but may experience some structural and nonstructural damage. A fundamental tenet of seismic design is that inelastic yielding is allowed to adapt to the seismic demand on the structure. In other words, *damage is allowed*. The CBC lateral force requirements should be considered a *minimum* design. The owner and the designer may evaluate the level of risk and performance that is acceptable. Performance based criteria could be set in the design. The design engineer should exercise special care so that all components of the design are fully met with attention to providing a continuous load path. An adequate quality assurance and control program is urged during project construction to verify that the design plans and good construction practices are followed. This is especially important for sites lying close to the major seismic sources.

Earthquake Performance Statement: Depending upon the extent of structural and geotechnical design of structures, exterior flatwork, walls, utilities, roadways, and other similar site improvements, some damage due to seismic events will occur. Note that all of southern California in general is in earthquake country. Site developments in southern California are typically not designed to mitigate anticipated seismic events without some damage. In fact, the Building Code is intended to provide Life-Safety performance, not complete damage-free design. In other words, some damage from earthquakes in the form of structural damage, settlement, cracking, and disruption of utilities can occur. It is not the current standard of care for site designers to fully mitigate all anticipated earthquake induced hazards.

Estimated peak horizontal site acceleration is based upon a probabilistic analysis (2 percent probability of occurrence in 50 years) and is approximately 0.9 g for a stiff soil site. Actual accelerations may be more or less than estimated. Vertical accelerations are typically ⅓ to ⅔ of the horizontal accelerations, but can equal or exceed the horizontal accelerations, depending upon the local site effects and amplification.

5.9 Driveways and Parking Areas

Pavement structural sections for associated drive areas including recommendations for standard asphalt concrete, and Portland cement concrete are provided below and are based upon on-site soils as described in Section 5.1. Soils differing from those described will require differing pavement sections. The appropriate pavement section depends primarily on the shear strength of the subgrade soil exposed after grading in the near finished subgrade elevation and the anticipated traffic over the useful life of the pavement. R-value testing or observation of subgrade soils should be performed of near finished subgrade elevation soils to verify and/or modify the preliminary pavement sections presented within this report.

Pavement Area Preparation: In street, drive, and parking areas, the exposed subgrade should be overexcavated as recommended in Section 5.1, moisture conditioned, and compacted. Compaction should be verified by testing. Aggregate base should be compacted to a minimum 95% relative compaction (ASTM D 1557).

Automobile Traffic and Parking Areas: Pavement sections presented in the following table for automobile type traffic areas and are based on a tested R-value and current Caltrans design procedures. Traffic Indices (TI) of 5 and 7 were used to facilitate the design of asphalt concrete pavements for parking and main drives, including fire lanes. The fire lane calculation assumed a conservative traffic flow of one fire truck per day entering and exiting the site on the same path (20 year life cycle), and a maximum loading of an 88,000 lb Tandem Axle apparatus (approximate 20,000 lb front axle load and two 34,000 lb rear axles loads) which is based upon the *Emergency Vehicle Size and Weight Regulation Guideline*, dated November 22, 2011, prepared by the Fire Apparatus Manufacturers' Association.

Based on the above stated traffic pattern and apparatus loads, a Traffic Index of 4.6 is calculated for fire lanes. For comparison, a 40 year fire lane life cycle analysis results in a Traffic Index of 5. The TI's assumed below should be reviewed by the project Civil Engineer to evaluate the suitability for this project. All design should be based upon an appropriately selected traffic index. Changes in the traffic indices will affect the corresponding pavement section.

Table 13
Preliminary Flexible Pavement Section Recommendations
On-site/Interior Automobile Drive Areas

R-Value of Subgrade Soils - 74 (Tested) (60 used for design) Design Method – CALTRANS

Traffic Index (Assumed)*	Pavement Use	Flexible Pavements**	
		Asphaltic Concrete Thickness (inches)	Aggregate Base Thickness (inches)
5	Parking Areas & Fire Lanes***	3	4
7	Main Drive Areas	4	4

*The presented Traffic Indices should be confirmed by the project civil engineer. Changes to the Traffic Index will result in a differing pavement section required.

**Pavement Sections were calculated using Caltrans software CalFP Version 1.5.

***Where fire lanes will be a part of a main drive use with other traffic, busses, or trucks, the Main Drive Area pavement section should be used.

Conventional, rigid pavements, i.e. Portland cement concrete (PCC) pavements, are recommended in areas that will be subject to relatively high static wheel loads and/or heavy vehicle loading and unloading and turning areas (i.e. truck/bus lanes). This is due to rutting and shoving that can occur due to the heavy vehicle loads and the repetitious set path which is followed at the bus/delivery trucks areas where the same wheel track and stopping occurs generally in the same spot each time. The vehicle load combined with hot summer asphalt (AC)

concrete causes the upper surface of the AC to creep forming ruts in conjunction with the braking and accelerating forces which shove the AC. Turning forces also do the same.

The pavement section below is based upon the American Concrete Institute (ACI) *Guide for Construction of Concrete Parking Lots, ACI 330R*, and the assumptions outlined below.

Table 14
Preliminary Portland Cement Concrete Pavement Sections

Area	Minimum Pavement PCC Thickness (inches)	Minimum 28 Day Flexural Strength (psi)	Concrete Compressive Strength (psi)
Truck/Bus Access or Loading/Unloading Areas (Traffic Category C, ADTT =100)	6.0	500	3,250

Should the actual traffic category vary from those assumed and listed above, these sections should be modified. All above recommended preliminary pavement sections are contingent on the following recommendations being implemented during construction:

- Pavement should be placed upon compacted fill processed as described in Section 5.1. The upper 12 inches of subgrade soils beneath the asphalt concrete and conventional PCC pavement section should be compacted to a minimum of 95% relative compaction (ASTM D 1557).
- Subsequent to utility installation, the entire pavement (including PCC) final subgrade should be scarified 12 inches, moisture conditioned to near optimum moisture content, and compacted to a minimum 95% relative compaction immediately prior (within a few days) to the placement and compaction of aggregate base to re-establish proper moisture content and compaction in site soils.
- Subgrade soils and aggregate base should be in a stable, non-pumping condition at the time of placement and compaction. Exposed subgrades should be proof-rolled to verify the absence of soft or unstable zones.
- Aggregate base materials should be compacted at near optimum moisture content to at least 95 percent relative compaction (ASTM D 1557) and should conform to Caltrans Class II criteria. Standard Specifications for Public Works Construction "Greenbook" standards (Crushed Aggregate Base class) may be used in lieu of Caltrans. Compaction efforts should include rubber tire proof-rolling of the aggregate base with heavy compaction-specific equipment (i.e. fully loaded water trucks).
- All concrete curbs separating pavement from landscaped areas should extend at least 6 inches into the subgrade soils to reduce the potential for movement of moisture into the aggregate base layer (this reduces the risk of pavement failures due to subsurface water originating from landscaped areas).

- Asphaltic concrete should be ½-in. or ¾-in. maximum-medium grading and compacted to a minimum of 95% of the 75-blow Marshall density (ASTM D 1559) or equivalent.
- Portland cement concrete pavements should be constructed with transverse joints at maximum spacing of 15 feet. A thickened edge should be used where possible and, as a minimum, where concrete pavements abut asphalt pavements. The thickened edge should be 1.2 times the thickness of the pavement (7.2 inches for a 6-inch pavement), and should taper back to the PCC thickness over a horizontal distance on the order of 3 feet.
- All longitudinal or transverse control joints should be constructed by hand forming or placing pre-molded filler such as "zip strips." Expansion joints should be used to isolate fixed objects abutting or within the pavement area.

  The expansion joint should extend the full depth of the PCC pavement. Joints should run continuously and extend through integral curbs and thickened edges. We recommend that joint layout be adjusted to coincide with the corners of objects and structures. In addition, the following is recommended for concrete pavements:

  1. Slope pavement at least ½ percent to provide drainage;
  2. Provide rough surface texture for traction;
  3. Cure PCC concrete with curing compound or keep continuously moist for a minimum of seven days;
  4. Keep all traffic off concrete until PCC compressive strength exceeds 2,000 pounds per square inch (truck traffic should be limited until the concrete meets the design strength (3,250 psi); and
  5. Consideration should be given to having PCC construction joints keyed or using slip dowels on 24-inch centers to strengthen control and construction joints. Dowels placed within dowel baskets should be incorporated into the concrete at each saw-cut control joint (i.e. dowel baskets and dowels are set in place prior to placement of concrete).
- Portland cement concrete placement and curing should, at a minimum, be in accordance with the American Concrete Institute [ACI] recommendations contained in ACI 211, 304, 305, 308, 309, and 318.
- Within the structural pavement section areas, positive drainage (both surface and subsurface) should be provided. In no instance should water be allowed to pond on the pavement. Roadway performance depends greatly on how well runoff water drains from the site. This drainage should be maintained both during construction and over the entire life of the project.
- Proper methods, such as hot-sealing or caulking, should be employed to limit water infiltration into the pavement base course and/or subgrade at construction/expansion joints and/or between existing and reconstructed asphalt concrete sections (if any). Water infiltration could lead to premature pavement failure.
- To reduce the potential for detrimental settlement, excess soil material, and/or fill material removed during any footing or utility trench excavation, should not be spread or placed over compacted finished grade soils unless subsequently compacted to at least 90% of the

maximum dry unit weight, as evaluated by ASTM D 1557 test procedure, at near optimum moisture content, or 95% if placed under areas designated for pavement.

- Where new roadways will be installed against existing roadways, the repaired asphalt concrete pavement section should be designed and constructed to have at least the pavement and aggregate base section as the original pavement section thickness (for both AC and base) or upon the newly calculated pavement sections presented within, whichever is greater.
- Pavement designs assume that heavy construction traffic will not be allowed on the base cap or finished pavement sections.

5.10 Surface and Subsurface Site Drainage and Maintenance

Positive drainage should be maintained away from the structures (5 percent for 10 feet minimum) to prevent ponding and subsequent saturation of the foundation soils. Gutters and downspouts in conjunction with a 1 to 2% hardscape grade can be considered as a means to convey water away from foundations if increased fall is not provided. Drainage should be maintained for paved areas. Water should not pond on or near paved areas or foundations. Ponded water can saturate subgrade soils and lead to pavement failure. The following recommendations are provided in regard to site drainage and structure performance:

- Water control and conveyance is a critical aspect of project design. It is highly recommended that landscape irrigation or other sources of water be collected and conducted to an approved drainage device. Landscaping grades should be lowered and sloped such that water drains to appropriate collection and disposal areas. All runoff water should be controlled, collected, and drained into proper drain outlets. Control methods may include curbing, ribbon gutters, 'V' ditches, or other suitable containment and redirection devices.
- It is highly recommended that landscape irrigation or other sources of water be collected and conducted to an approved drainage device. Site drainage should be devised such that runoff should be directed away from the tops of all graded slopes. Water should not freely flow over slopes. Diversion and conveyance structures which can accommodate water and eroded soil should be constructed at the tops and toes of all slopes. Lined swales at the top and bottom of slopes are recommended.
- In no instance should water be allowed to flow or pond against structures, slabs or foundations or flow over unprotected slope faces. Adequate provisions should be employed to control and limit moisture changes in the subgrade beneath foundations or structures to reduce the potential for soil saturation. Landscape borders should not act as traps for water within landscape areas. Potential sources of water such as piping, drains, over-spray broken sprinklers, etc., should be frequently examined. Any such leakage, over-spray, or plugging should be immediately repaired.
- We recommend infiltrating structures and dry wells be located a minimum of 30 feet from building structures.
- Maintenance of drainage systems and infiltration structures can be the most critical element in determining the success of a design. They must be protected and maintained

from sediment-laden water both during and after construction to prevent clogging of the surficial soils any filter medium. The potential for clogging can be reduced by pre-treating structure inflow through the installation of maintainable forebays, biofilters, or sedimentation chambers. In addition, sediment, leaves, and debris must be removed from inlets and traps on a regular basis. Since these and other factors (such as varying soil conditions) may affect the rate of water infiltration, it is imperative to apply a conservative factor of safety [FOS] to unfactored Basic Percolation/Infiltration Rates to provide a reliable basis for design. In order to account not only for the unknown factors above but also for changes of conditions during the use of the structures such as potential clogging effects due to washing in of soil fines, a FOS between 3 and 10 should be applied to lower infiltration rates.

- The factor of safety should be selected by the project drainage engineer and may be dependent on agency guidelines and the presence of testing, filters, and sedimentation structures. If these measures are provided, the factor of safety can be reduced.
- The drainage pattern should be established at the time of final grading and maintained throughout the life of the project. Additionally, drainage structures should be maintained (including the de-clogging of piping, basin bottom scarification, soil crust removal, etc.) throughout their design life. Maintenance of these structures should be incorporated into the facility operation and maintenance manual. Structural performance is dependent on many drainage-related factors such as landscaping, irrigation, lateral drainage patterns and other improvements.

Section 6
LIMITATIONS AND ADDITIONAL SERVICES

6.1 Uniformity of Conditions and Limitations

Our findings and recommendations in this report are based on selected points of field exploration, laboratory testing, and our understanding of the proposed project. Furthermore, our findings and recommendations are based on the assumption that soil conditions do not vary significantly from those found at specific exploratory locations. Variations in soil or groundwater conditions could exist between and beyond the exploration points. The nature and extent of these variations may not become evident until construction. Variations in soil or groundwater may require additional studies, consultation, and possible revisions to our recommendations.

The planning and construction process is an integral design component with respect to the geotechnical aspects of this project. Because geotechnical engineering is an inexact science due to the variability of natural processes and because we sample only a small portion of the soil and material affecting the performance of the proposed structure, unanticipated or changed conditions can be disclosed during demolition and construction. Proper geotechnical observation and testing during construction is imperative to allow the geotechnical engineer the opportunity to verify assumptions made during the design process and to verify that our geotechnical recommendations have been properly interpreted and implemented during construction. Therefore, we recommend that Earth Systems be retained during the construction of the proposed improvements to observe compliance with the design concepts and geotechnical recommendations, and to allow design changes in the event that subsurface conditions or methods of construction differ from those assumed while completing this study. If we are not accorded the privilege of performing this review, we can assume no responsibility for misinterpretation or the applicability of our recommendations. The above services can be provided in accordance with our current Fee Schedule.

Our evaluation of subsurface conditions at the site has considered subgrade soil and groundwater conditions present at the time of our study. The influence(s) of post-construction changes to these conditions such as introduction or removal of water into or from the subsurface will likely influence future performance of the proposed project. It should be recognized that definition and evaluation of subsurface conditions are difficult. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions due to the limitation of data from field studies. The availability and broadening of knowledge and professional standards applicable to engineering services are continually evolving. As such, our services are intended to provide the Client with a source of professional advice, opinions and recommendations based on the information available as applicable to the project location and scope. If the scope of the proposed construction changes from that described in this report, the conclusions and recommendations contained in this report are not considered valid unless the changes are reviewed, and the conclusions of this report are modified or approved in writing by Earth Systems.

Findings of this report are valid as of the issued date of the report. However, changes in conditions of a property can occur with passage of time, whether they are from natural

processes or works of man, on this or adjoining properties. In addition, changes in applicable standards occur, whether they result from legislation or broadening of knowledge. Accordingly, findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of one year.

This report is issued with the understanding that the owner or the owner's representative has the responsibility to bring the information and recommendations contained herein to the attention of the architect and engineers for the project so that they are incorporated into the plans and specifications for the project. The owner or the owner's representative also has the responsibility to verify that the general contractor and all subcontractors follow such recommendations. It is further understood that the owner or the owner's representative is responsible for submittal of this report to the appropriate governing agencies.

Earth Systems has striven to provide our services in accordance with generally accepted geotechnical engineering practices in this locality at this time. No warranty or guarantee, express or implied, is made. This report was prepared for the exclusive use of the Client and the Client's authorized agents.

Earth Systems should be provided the opportunity for a general review of final design and specifications in order that earthwork and foundation recommendations may be properly interpreted and implemented in the design and specifications. If Earth Systems is not accorded the privilege of making this recommended review, we can assume no responsibility for misinterpretation or applicability of our recommendations. The owner or the owner's representative has the responsibility to provide the final plans requiring review to Earth Systems' attention so that we may perform our review.

Any party other than the client who wishes to use this report shall notify Earth Systems of such intended use. Based on the intended use of the report, Earth Systems may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Earth Systems from any liability resulting from the use of this report by any unauthorized party.

In addition, if there are any changes in the field to the plans and specifications, the Client must obtain written approval from Earth Systems' engineer that such changes do not affect our recommendations. Failure to do so will vitiate Earth Systems' recommendations.

Although available through Earth Systems, the current scope of our services does not include an environmental assessment or an investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater, or air on, below, or adjacent to the subject property.

6.2 Additional Services

This report is based on the assumption that an adequate program of client consultation, construction monitoring, and testing will be performed during the final design and construction phases to check compliance with these recommendations. Maintaining Earth Systems as the geotechnical consultant from beginning to end of the project will provide continuity of services.

The geotechnical engineering firm providing tests and observations shall assume the responsibility of Geotechnical Engineer of Record.

Construction monitoring and testing would be additional services provided by our firm. The costs of these services are not included in our present fee arrangements, but can be obtained from our office. The recommended review, tests, and observations include, but are not necessarily limited to, the following:

- Consultation during the final design stages of the project;
- A review of the foundation and grading plans to observe that recommendations of our report have been properly implemented into the design;
- Observation and testing during site preparation, grading, and placement of engineered fill as required by CBC Sections 17A and Appendix J or local grading ordinances;
- Consultation as needed during construction.

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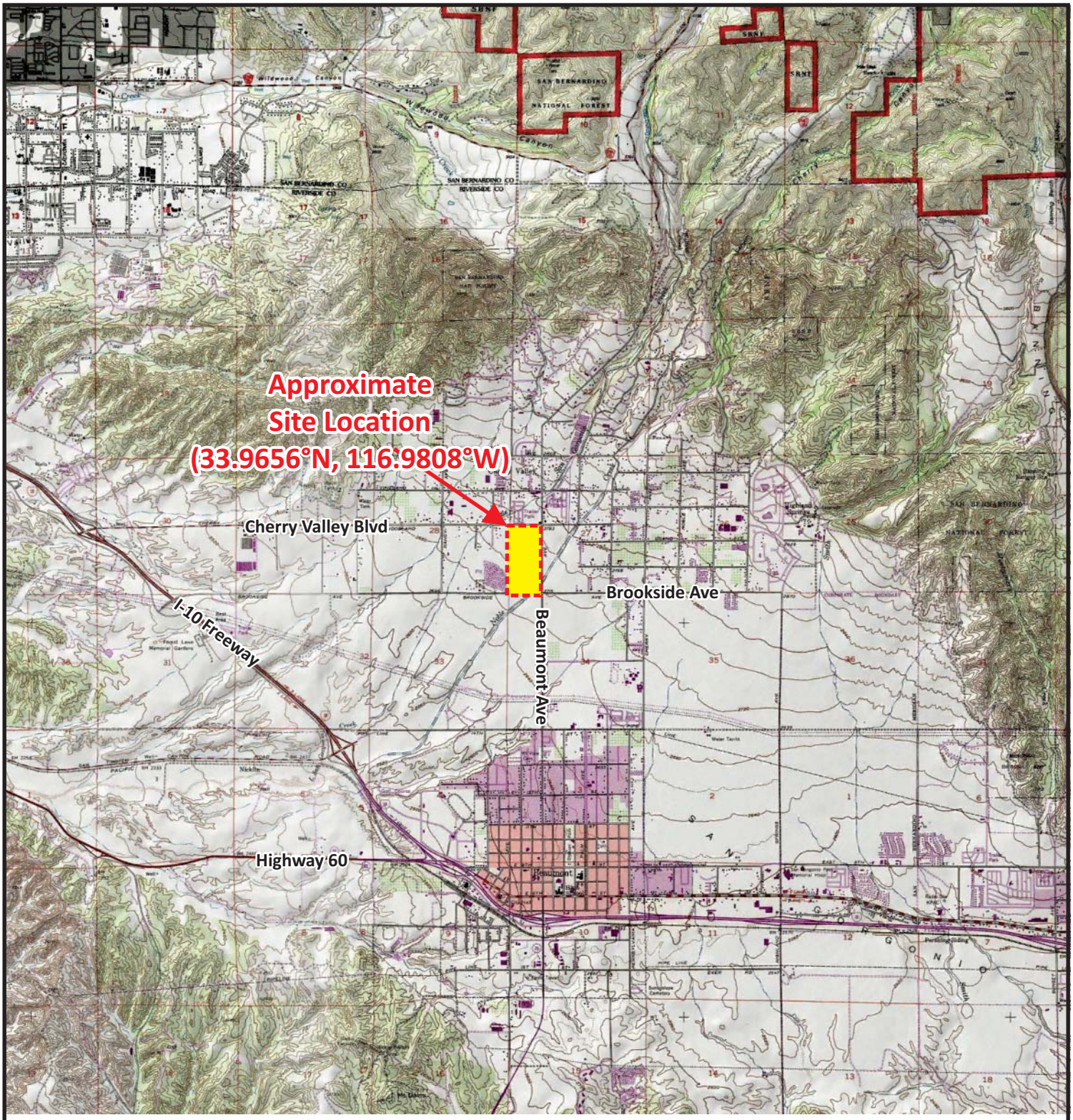
Aerial Photographs:

Google Earth: 1996-2018

Historicaerials.com: 1959-2016

APPENDIX A

Plate 1 – Site Vicinity Map
Plate 2 – Proposed Site Improvements
Plate 3 – Boring Location Map & Site Geology
Plates 3a & 3b – Geologic Cross Sections, A-A' & B-B'
Plate 4 – State of California Geomorphic Map
Plate 5 – Regional Geologic Map
Plate 6 – Local Geologic Map
Plate 7 – Alquist-Priolo Earthquake Faults Zones
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Plate 9 – Earthquake Epicenter Map
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Dry Seismic Settlement (2 pages)
Spread Footing Static Load Settlement (1 page)
Continuous Footing Static Load Settlement (1 page)
Slope Stability Output (4 pages)



Source: Google Earth satellite image with USGS topographic map overlay.

LEGEND

Approximate School Site Location

Approximate Scale: 1" = 1 Mile

0 1 Mile 2 Miles

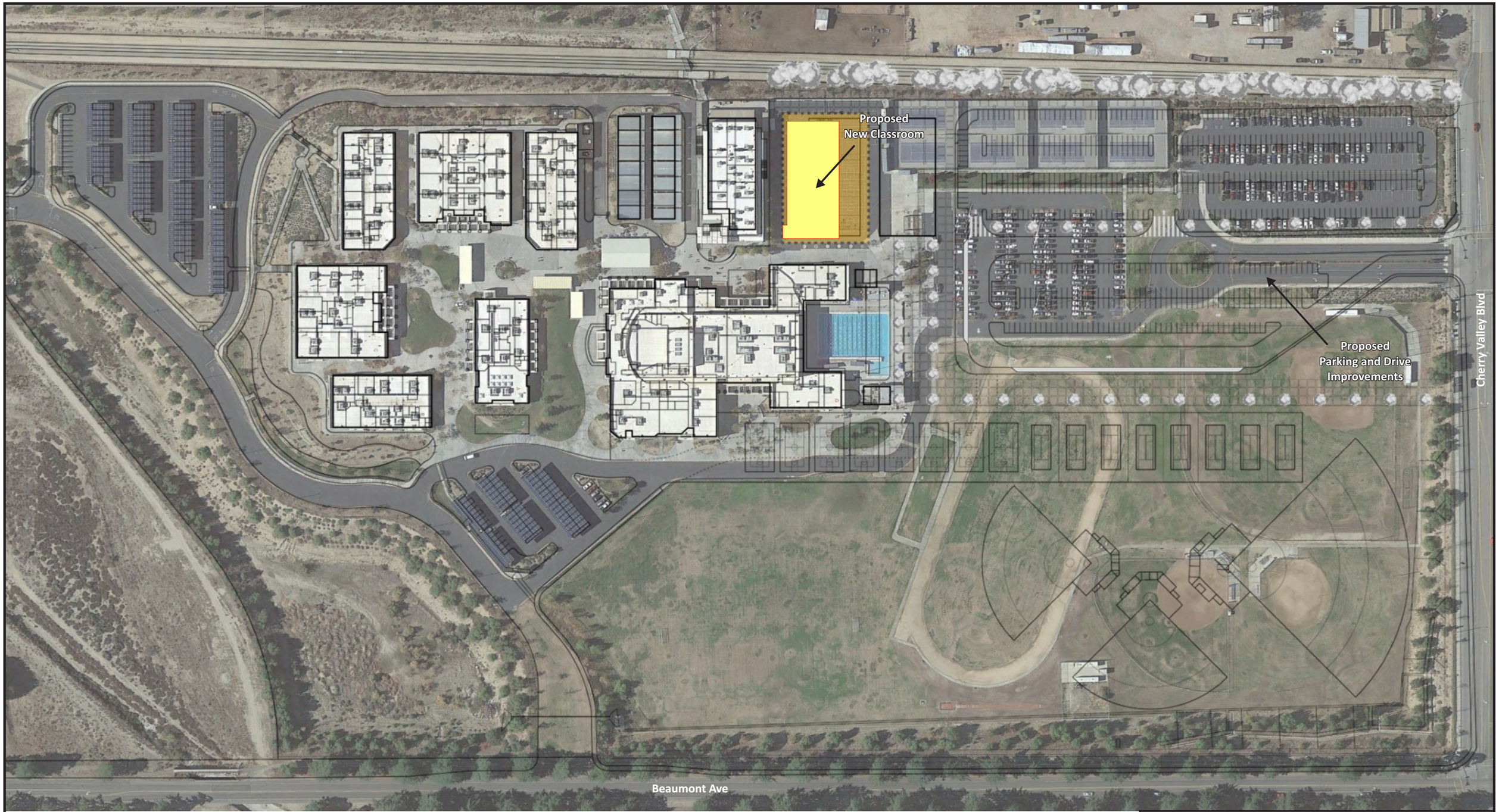
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Plate 1
Site Vicinity Map

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems

3/20/2020	File No.: 300414-003



Approximate Scale: 1" = 150’

0’ 150’ 300’

Source: Google Earth satellite image dated 12/2/2018 with Site Plan Overlay.

Plate 2
Proposed Site Improvements

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems

3/20/2020 | File No.: 300414-003



Approximate Scale: 1" = 150'

0' 150' 300'

Source: Google Earth satellite image dated 12/2/2018 with Beaumont High School Topographic Survey Sheets 2 & 3 overlay .

D-64

LEGEND

B-8	Approximate Boring Locations
B B'	Approximate Cross-Section Locations
af/Qa	Artificial Fill over Quaternary Alluvium

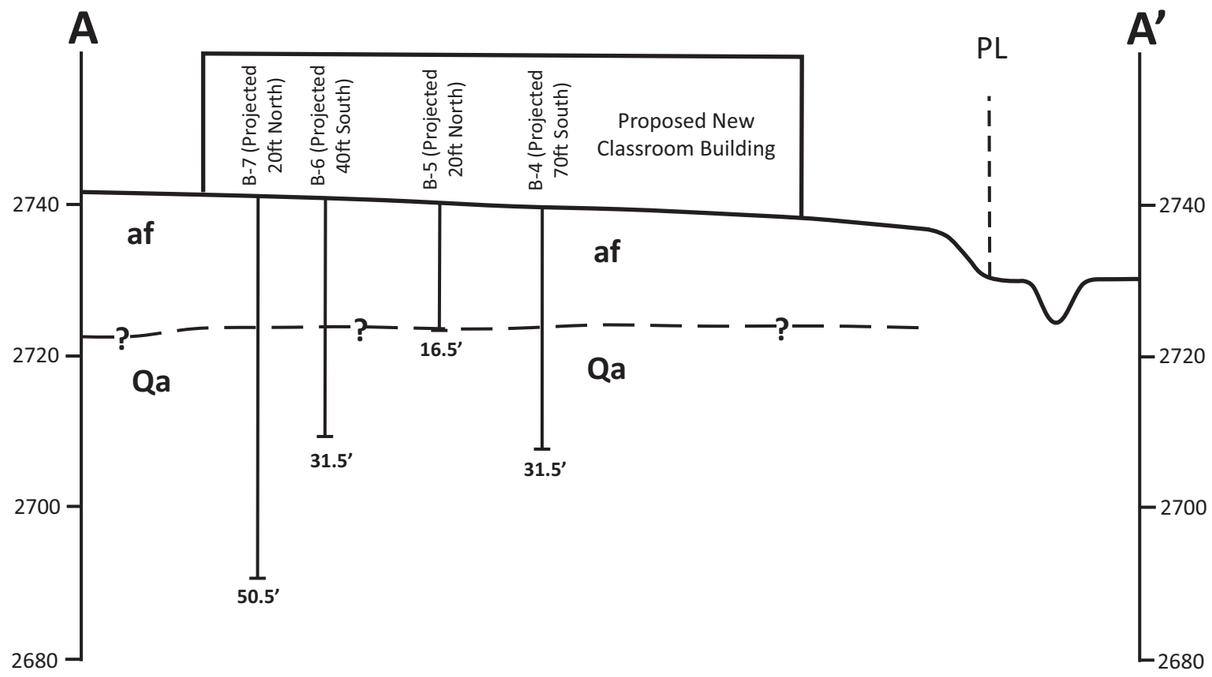
Plate 3
Boring Location Map & Site Geology

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems

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A-A’



Approximate Horizontal Scale: 1" = 50’
Approximate Vertical Scale: 1" = 20’

LEGEND

af - Artifical Fill
Qa - Quaternary Alluvium

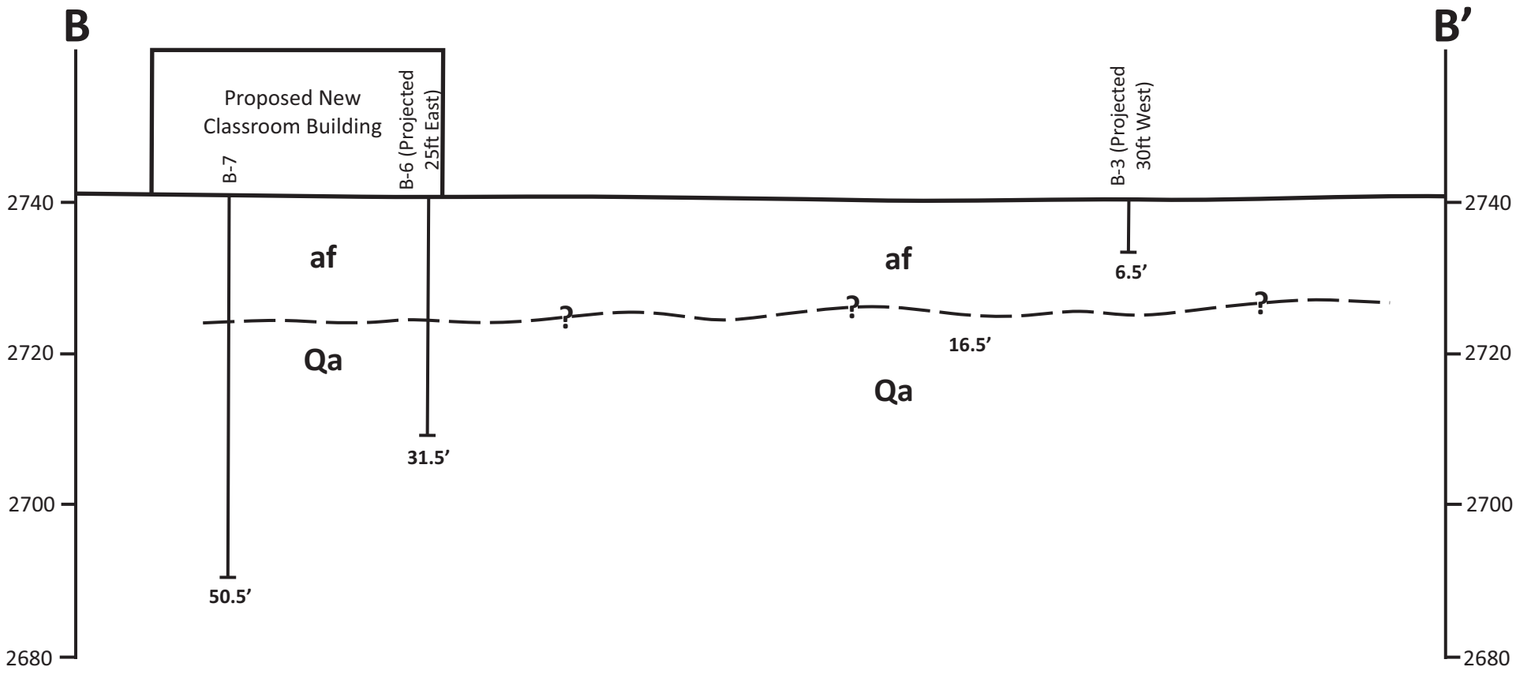
Plate 3a
Geologic Cross-Section A-A’

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems

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B-B’



Approximate Horizontal Scale: 1" = 50’
Approximate Vertical Scale: 1" = 20’

LEGEND

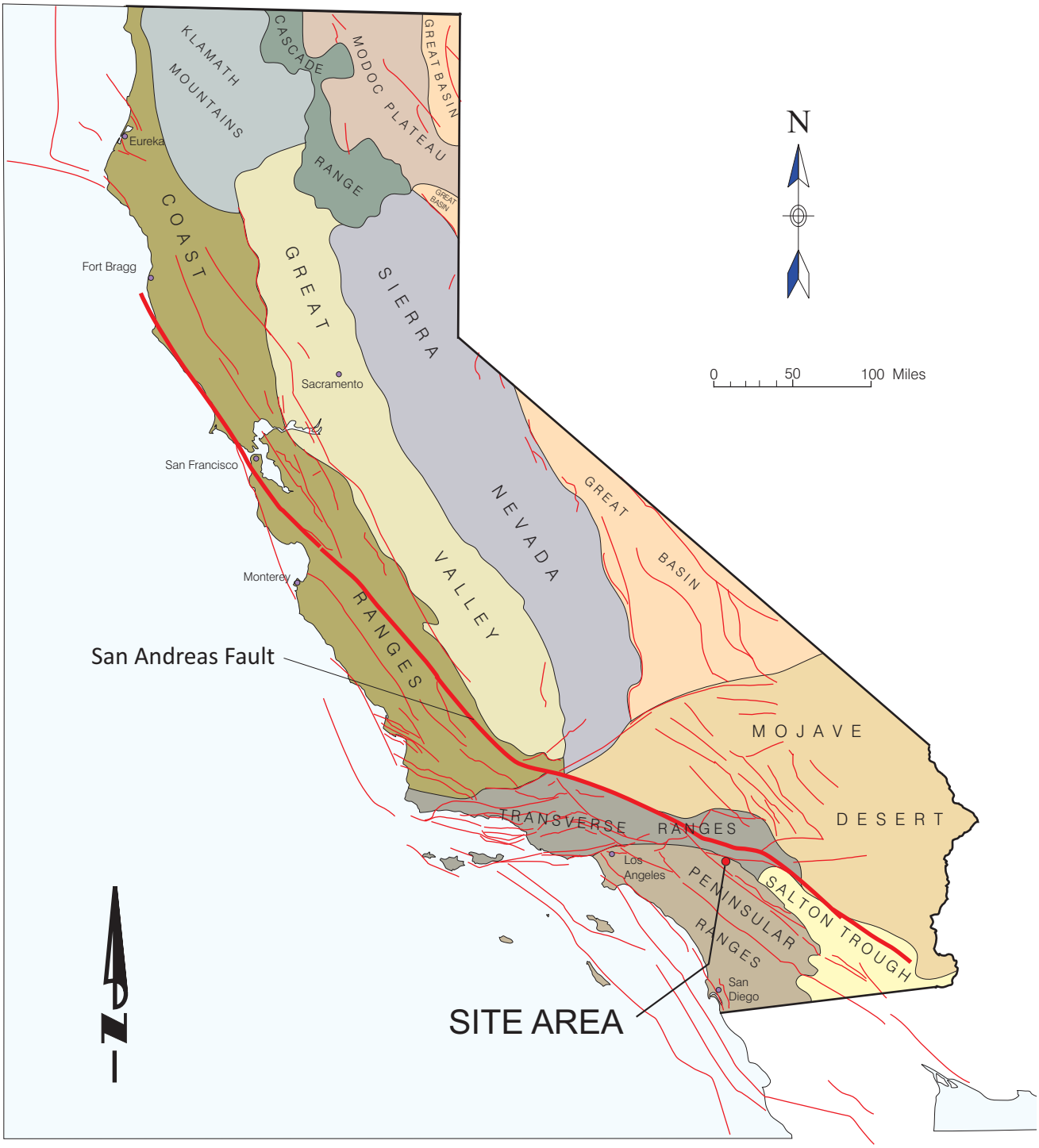
af - Artifical Fill
Qa - Quaternary Alluvium

Plate 3b
Geologic Cross-Section B-B’

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

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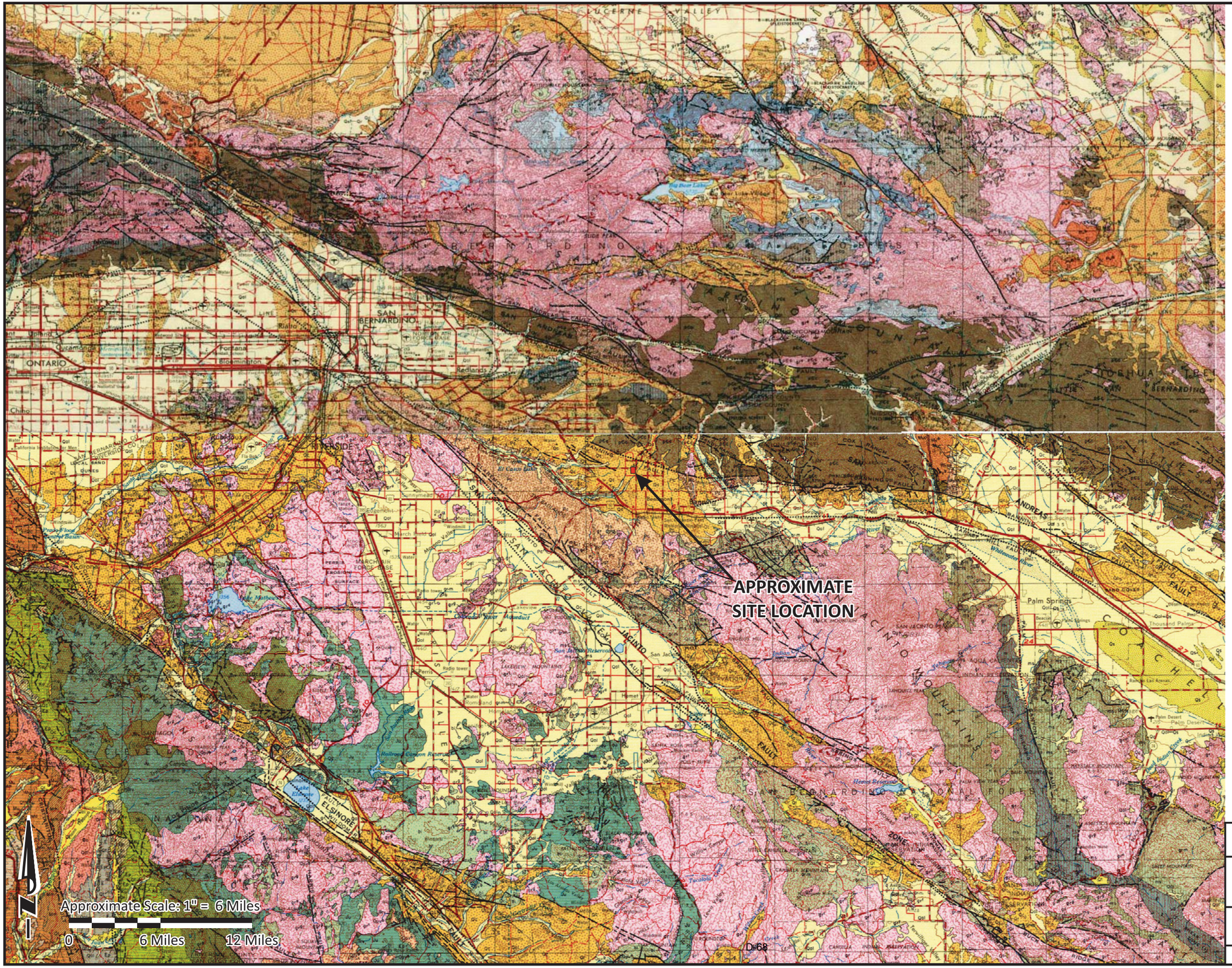
Map showing geomorphic provinces of California and major active and potentially active faults. Fault locations are based on Jennings (1994).

Plate 4
State of California Geomorphic Map

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems

3/20/2020	File No.: 300414-003



LEGEND

Qs	Dune sand
Qal	Alluvium
Ql	Lake deposits
Qg	Glacial deposits
Qr	River terrace deposits
Qm	Pleistocene marine and marine terrace deposits
Qpv	Pleistocene volcanic rocks Qpv^r-rhyolite Qpv^a-andesite Qpv^b-basalt Qpv^p-pyroclastic rocks
Qc	Pleistocene nonmarine
QP	Plio-Pleistocene nonmarine
	Quaternary and/or Pliocene cinder cones
Pc	Undivided Pliocene nonmarine
Pu	Upper Pliocene marine
Pmlc	Middle and/or lower Pliocene nonmarine
Pml	Middle and/or lower Pliocene marine
Pv	Pliocene volcanic rocks Pv^r-rhyolite Pv^a-andesite Pv^b-basalt Pv^p-pyroclastic rocks
Mc	Undivided Miocene nonmarine
Muc	Upper Miocene nonmarine
Mu	Upper Miocene marine
Mm	Middle Miocene marine
Ml	Lower Miocene marine
Mv	Miocene volcanic rocks Mv^r-rhyolite Mv^a-andesite Mv^b-basalt Mv^p-pyroclastic rocks
Oc	Oligocene nonmarine
Ec	Eocene nonmarine
E	Eocene marine
Ep	Paleocene marine
Tc	Tertiary nonmarine
Tm	Tertiary marine
Ti	Tertiary intrusive (hypabyssal) rocks Ti^r-rhyolite Ti^a-andesite Ti^b-basalt
Tl	Tertiary lake deposits
Tv	Tertiary volcanic rocks Tv^r-rhyolite Tv^a-andesite Tv^b-basalt Tv^p-pyroclastic rocks
Ku	Upper Cretaceous marine
Ju	Upper Jurasssic marine
gr	Mesozoic granitic rocks
bi	Mesozoic basic intrusive rocks
ub	Mesozoic ultrabasic intrusive rocks
JRv	Jurassic-Triassic metavolcanic rocks
m ls	Pre-Cretaceous metamorphic rocks (ls=limestone)
ms	Pre-Cretaceous metasedimentary rocks
mv	Pre-Cretaceous metavolcanic rocks
gr-m	Pre-Cenozoic granitic and metamorphic rocks
pCc	Precambrian igneous and metamorphic rock complex
pC	Undivided Precambrian metamorphic rocks pCg=gneiss pCs=schist pCls=limestone and/or dolomite
pCgr	Undivided Precambrian granitic rocks

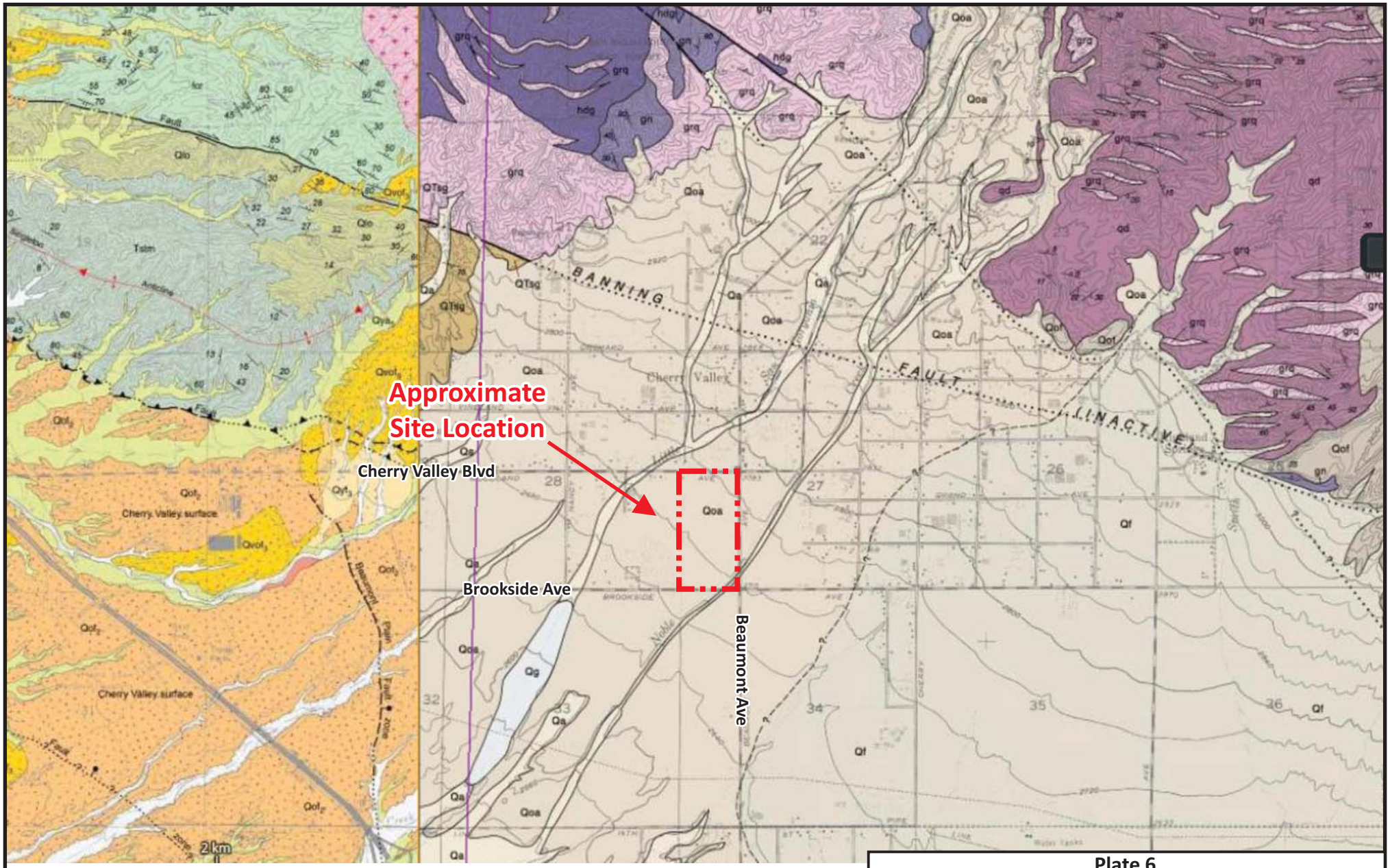
Source: CGS Geologic Map of California, Santa Ana & San Bernardino

Plate 5
Regional Geologic Map

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems

3/20/2020 | File No.: 300414-003



Sources: Dibble, 2003 & Matti, 2015

LEGEND

- Approximate Site Location

Qa, Qg, Qyf – Holocene sediments (alluvium, gravels/sand, & younger alluvial fans)
Qoa, Qof, Qvof – Pleistocene older sediments (alluvium, older fans, and very old fans).
Tstm, Qst, QTsg – Plio-Pleistocene San Timoteo Fm. (Sandstone, Siltstone, Conglomerate)
grq – Cretaceous Granitic Rock
hdg – Cretaceous Gabbro

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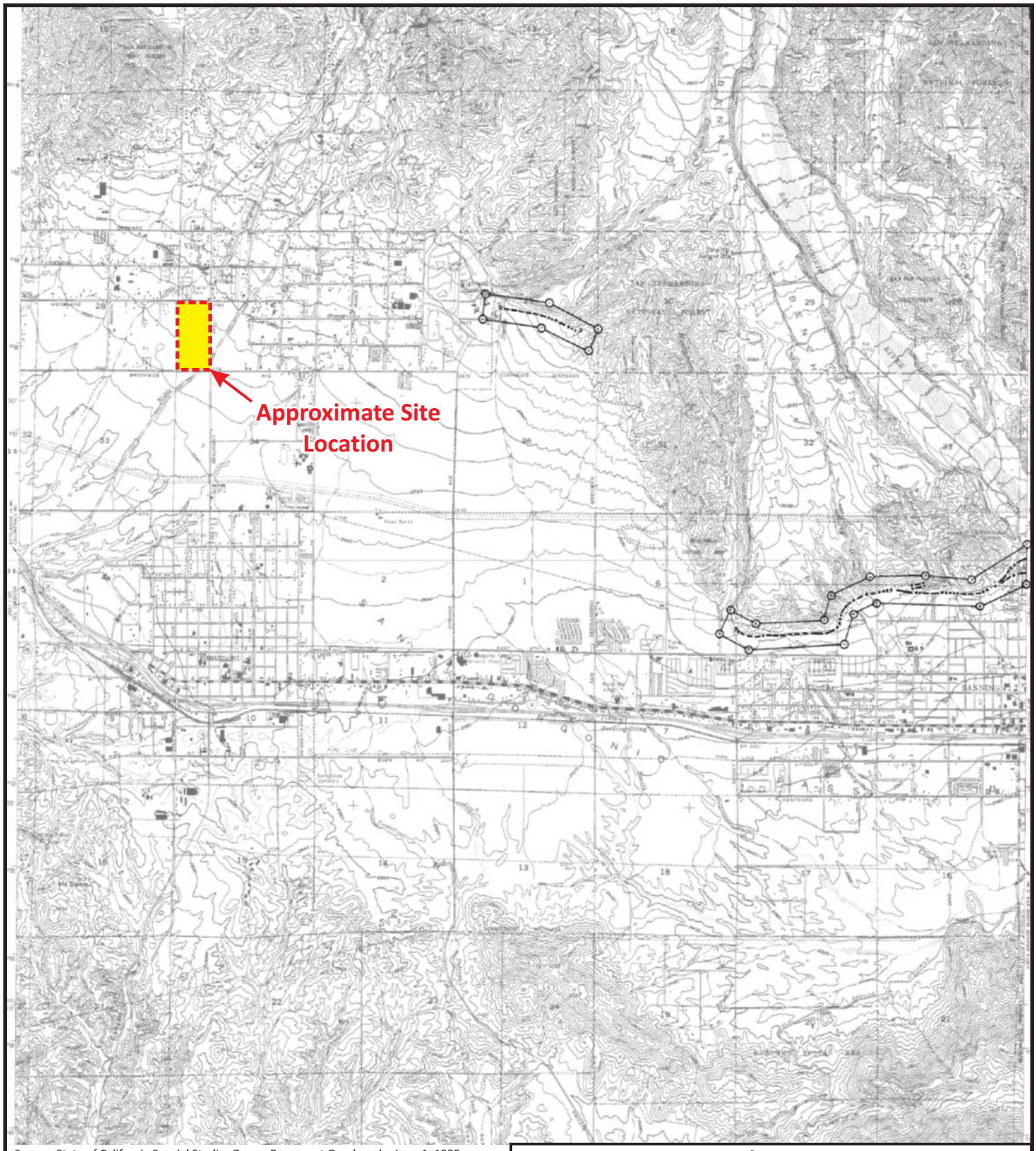
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Plate 6
Local Geologic Map

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems

3/20/2020 | File No.: 300414-003



Source: State of California Special Studies Zones, Beaumont Quadrangle, June 1, 1995.

LEGEND

Approximate Site Location

Approximate Scale: 1" = 1 Mile

0 1 Mile 2 Miles

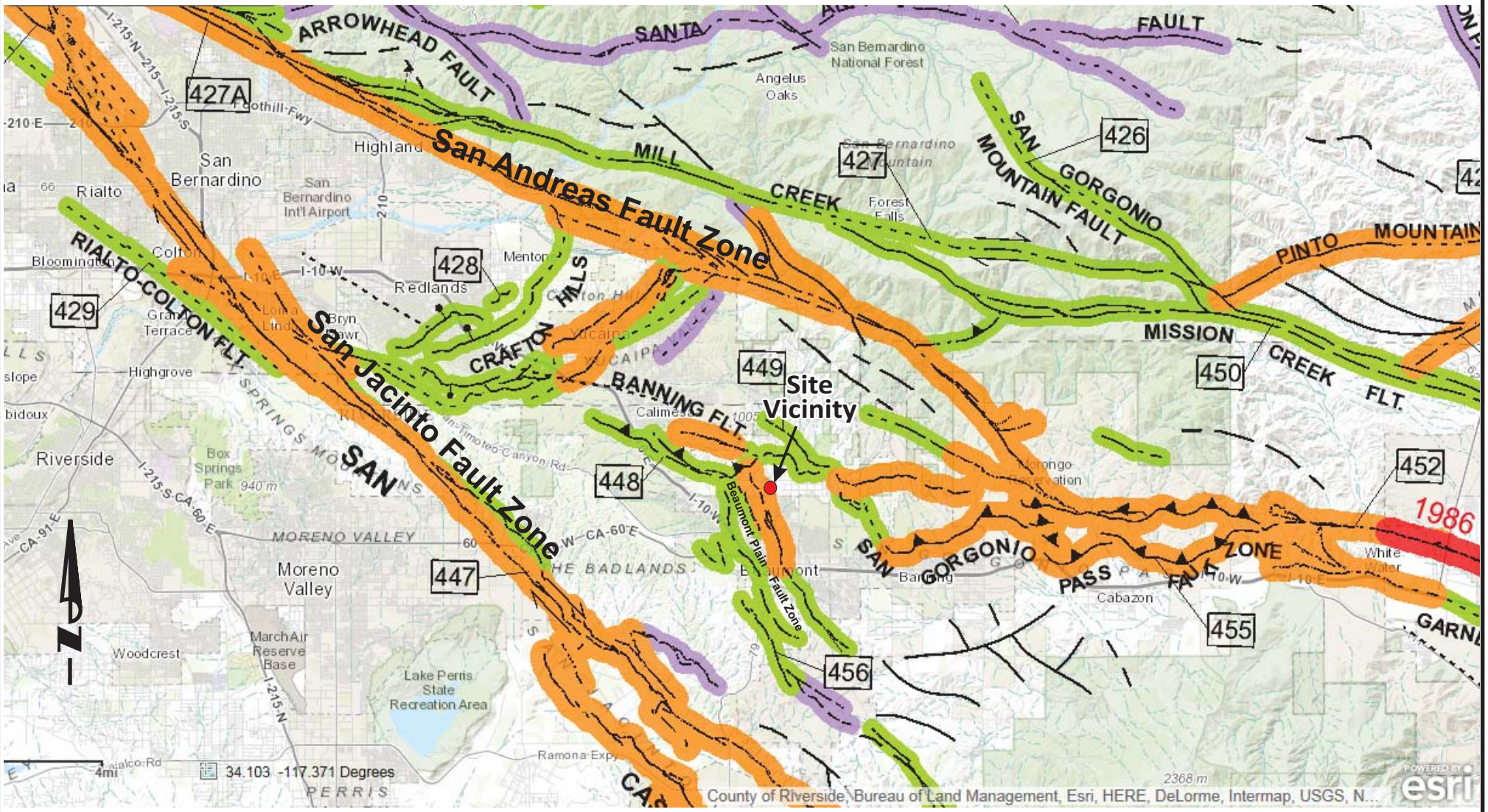
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Plate 7
Alquist-Priolo Earthquake Fault Zones

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems

3/20/2020	File No.: 300414-003



Source: CGS Data Map Series, Map No. 6, Fault Activity Map of California, 2010

LEGEND

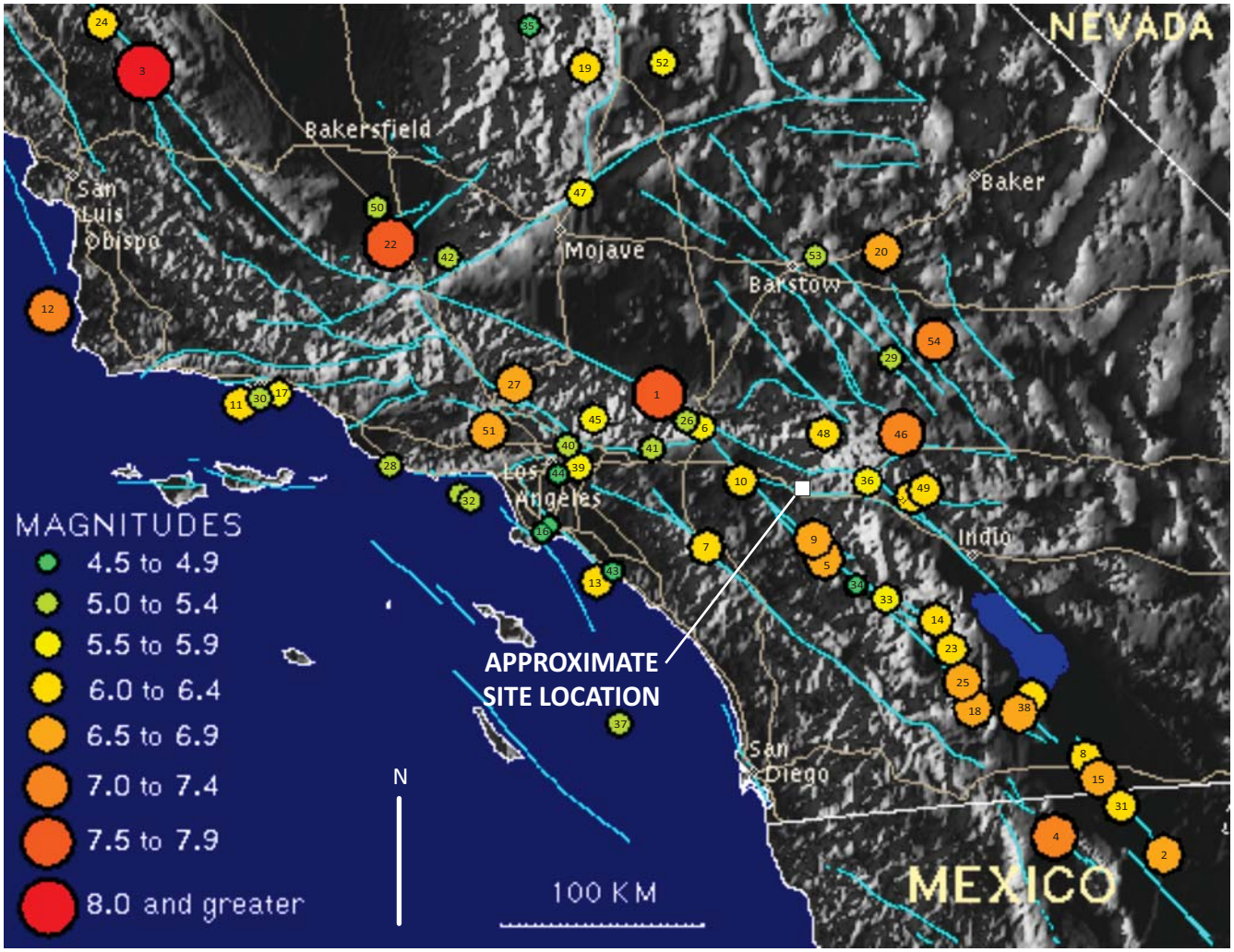
- Fault along which historic (last 200 years) displacement has occurred.
- Fault along which Holocene (last 11,700 years) displacement, has occurred.
- Fault along which Late Quaternary (past 700,000 years) displacement has occurred.
- Fault along which Quaternary (past 1.6 million years) displacement has occurred.

Plate 8
Regional Fault Map

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems

3/20/2020 | File No.: 300414-003



HISTORIC EARTHQUAKES AND EPICENTERS

1. 1812, WRIGHTWOOD
2. 1852, VOLCANO LAKE
3. 1857, FORT TEJON
4. 1892, LAGUNA SALADA
5. 1899, SAN JACINTO
6. 1899, CAJON PASS
7. 1910, ELSINORE
8. 1915, IMPERIAL VALLEY
9. 1918, SAN JACINTO
10. 1923, NORTH SAN JACINTO
11. 1925, SANTA BARBARA
12. 1927, LOMPOC
13. 1933, LONG BEACH
14. 1937, SAN JACINTO
15. 1940, IMPERIAL VALLEY
16. 1941, TORRANCE-GARDENA
17. 1941, SANTA BARBARA
18. 1942, FISH CREEK MOUNTAINS
19. 1946, WALKER PASS
20. 1947, MANIX
21. 1948, DESERT HOT SPRINGS
22. 1952, KERN COUNTY
23. 1954, SAN JACINTO
24. 1966, PARKFIELD
25. 1968, BORREGO MOUNTAINS
26. 1970, LYTLE CREEK
27. 1971, SAN FERNANDO
28. 1973, POINT MAGU
29. 1975, GALWAY LAKE
30. 1978, SANTA BARBARA
31. 1979, IMPERIAL VALLEY
32. 1979, MALIBU
33. 1980, WHITE WASH
34. 1982, ANZA GAP
35. 1983, DURRWOOD MEADOWS SWARM
36. 1986, NORTH PALM SPRINGS
37. 1986, OCEANSIDE
38. 1987, ELMORE RANCH & SUPERSTITION HILLS
39. 1987, WHITTIER NARROWS
40. 1988, PASADENA
41. 1988, UPLAND
42. 1988, TEJON RANCH
43. 1989, NEWPORT BEACH
44. 1989, MONTEBELLO
45. 1991, SIERRA MADRE
46. 1992, LANDERS
47. 1992, MOJAVE
48. 1992, BIG BEAR
49. 1992, JOSHUA TREE
50. 1993, WHEELER RIDGE
51. 1994, NORTHRIDGE
52. 1995, RIDGECREST
53. 1997, CALICO
54. 1999, HECTOR MINE

SOURCE: SOUTHERN CALIFORNIA EARTHQUAKE CENTER, WEB PAGE, 2005

MAP SHOWING LOCATIONS OF SIGNIFICANT HISTORICAL EARTHQUAKES IN SOUTHERN CALIFORNIA FROM 1812 TO 2000

Plate 9
Earthquake Epicenter Map

Beaumont High School
39139 Cherry Valley Boulevard
Beaumont, Riverside County, California

Earth Systems

3/20/2020	File No.: 300414-003

Table A-1
Fault Parameters

Fault Section Name	Distance (miles)	Distance (km)	Upper Seis. Depth (km)	Lower Seis. Depth (km)	Avg Dip Angle (deg.)	Avg Dip Direction (deg.)	Avg Rake (deg.)	Trace Length (km)	Fault Type	**Mean Mag**	Mean Return Interval (years)	Slip Rate (mm/yr)
San Gorgonio Pass	0.9	1.5	0.0	18.5	60	11	na	29	B'	**6.9**		
San Andreas (San Bernardino S)	6.2	9.9	0.0	12.8	90	210	180	43	A	**7.6**	150	16
Mission Creek	6.2	10.0	0.0	17.7	65	5	180	31	B'	**6.9**		
San Jacinto (San Jacinto Valley, stepover)	6.5	10.5	0.0	16.1	90	224	180	24	A	**7.4**	199	9
San Jacinto (San Jacinto Valley) rev	7.5	12.1	0.0	16.1	90	223	180	18	A	**7.4**	199	18
San Jacinto (Stepovers Combined)	7.6	12.2	0.0	16.5	90	229	180	25	B'	**6.7**		
San Andreas, (North Branch, Mill Creek)	8.5	13.7	0.0	18.2	76	204	180	106	A	**7.5**	110	17
San Jacinto (Anza, stepover)	9.0	14.5	0.0	16.8	90	224	180	25	A	**7.6**	151	9
San Andreas (San Gorgonio Pass-Garnet HIll)	10.3	16.6	0.0	12.8	58	20	180	56	A	**7.6**	219	10
San Jacinto (San Bernardino)	15.1	24.3	0.0	16.1	90	225	180	45	A	**7.4**	205	6
Pinto Mtn	16.1	26.0	0.0	15.5	90	175	0	74	B	**7.2**		2.5
San Jacinto (Anza) rev	16.3	26.2	0.0	16.8	90	216	180	46	A	**7.6**	151	18
San Andreas (San Bernardino N)	18.8	30.2	0.0	12.8	90	212	180	35	A	**7.5**	103	22
Cleghorn	25.4	40.8	0.0	15.5	90	187	0	25	B	**6.7**		3
Helendale-So Lockhart	26.6	42.7	0.0	12.8	90	51	180	114	B	**7.4**		0.6
Fontana (Seismicity)	27.4	44.2	0.0	16.3	80	313	na	24	B'	**6.7**		
North Frontal (East)	27.6	44.5	0.0	16.6	41	187	90	27	B	**6.9**		0.5
North Frontal (West)	27.7	44.6	0.0	15.7	49	171	90	50	B	**7.2**		1
Elsinore (Glen Ivy stepover)	28.8	46.4	0.0	13.2	90	216	180	11	A	**7.1**	322	2.5
Elsinore (Glen Ivy) rev	29.7	47.7	0.0	13.2	90	218	180	26	A	**7.0**	222	5
Elsinore (Stepovers Combined)	29.9	48.1	0.0	13.7	90	224	180	12	B'	**6.3**		
Elsinore (Temecula stepover)	29.9	48.1	0.0	14.2	90	212	180	12	A	**7.6**	725	2.5
Cucamonga	30.2	48.7	0.0	7.8	45	347	90	28	B	**6.6**		5
Elsinore (Temecula) rev	30.3	48.7	0.0	14.2	90	230	180	40	A	**7.4**	431	5
Lenwood-Lockhart-Old Woman Springs	32.8	52.8	0.0	13.2	90	43	180	145	B	**7.5**		0.9
Burnt Mtn	33.2	53.4	0.0	15.9	67	265	180	21	B	**6.7**		0.6
Chino, alt 2	34.9	56.2	0.0	13.4	65	234	150	29	B	**6.7**		1
Landers	35.0	56.3	0.0	15.1	90	60	180	95	B	**7.4**		0.6
Eureka Peak	35.2	56.7	0.0	15.0	90	75	180	19	B	**6.6**		0.6
Whittier, alt 1	36.2	58.2	0.0	12.4	70	24	150	46	A	**7.1**	530	2.5
Whittier, alt 2	36.2	58.2	0.0	14.1	75	24	150	46	A	**7.1**	530	2.5
Chino, alt 1	36.2	58.2	0.0	9.0	50	236	150	24	B	**6.6**		1
Joshua Tree (Seismicity)	37.9	60.9	0.0	13.3	90	271	na	17	B'	**6.5**		
Johnson Valley (No)	38.7	62.2	0.0	15.9	90	51	180	35	B	**6.8**		0.6
San Andreas (Mojave S)	40.5	65.2	0.0	13.1	90	206	180	98	A	**7.7**	102	29
Blue Cut	41.2	66.3	0.0	13.1	90	177	na	79	B'	**7.1**		
Earthquake Valley (No Extension)	41.4	66.6	0.0	18.8	90	221	180	33	B'	**6.9**		
San Jose	41.9	67.4	0.0	15.8	74	334	30	20	B	**6.6**		0.5
Yorba Linda	42.4	68.2	0.0	13.3	90	153	na	18	B'	**6.5**		
San Jacinto (Clark) rev	42.4	68.3	0.0	16.8	90	214	180	47	A	**7.6**	211	14

Reference: USGS OFR 2007-1437 (CGS SP 203) Based on Site Coordinates of 33.96559 Latitude, -116.98081 Longitude

Mean Magnitude for Type A Faults based on 0.1 weight for unsegmented section, 0.9 weight for segmented model (weighted by probability of each scenario with section listed as given on Table 3 of Appendix G in OFR 2008-1437). Mean magntude is average of Ellworths-B and Hanks & Bakun moment area relationship.

Site Coordinates: 33.966 N 116.981 W

Table A-2
Historic Earthquakes in Vicinity of Project Site, M >= 5.5

Day	Year	Epicenter Latittude (Degrees)	Epicenter Longitude (Degrees)	Distance from Site (mi)	Magnitude M_W
11/22	1880	34.00	117.00	2.6	**5.5**
12/19	1880	34.00	117.00	2.6	**5.9**
12/25	*1899	33.80	117.00	11.5	**6.7**
4/21	*1918	33.75	117.00	14.9	**6.8**
6/28	1992	34.16	116.85	15.4	**5.5**
7/23	*1923	34.00	117.25	15.6	**6.2**
1/16	1930	34.20	116.90	16.8	**5.5**
9/20	*1907	34.20	117.10	17.6	**5.8**
6/28	1992	34.20	116.83	18.3	**6.5**
2/7	1889	34.10	116.70	18.6	**5.6**
10/16	1999	34.24	117.04	19.2	**5.6**
7/8	1986	34.00	116.61	21.4	**6.0**
12/16	1858	34.20	117.40	28.9	**6.0**
7/22	1899	34.20	117.40	28.9	**5.9**
6/6	1918	33.60	116.70	29.9	**5.5**
10/2	1928	33.60	116.70	29.9	**5.5**
5/15	1910	33.70	117.40	30.2	**6.0**
6/14	1892	34.20	117.50	33.8	**5.5**
6/29	1992	34.10	116.40	34.5	**5.7**
6/28	1992	34.13	116.41	34.6	**5.8**
6/28	1992	34.20	116.44	34.9	**7.3**
7/22	1899	34.30	117.50	37.6	**6.4**
4/23	1992	33.96	116.32	37.8	**6.2**
6/28	1992	34.12	116.32	39.3	**5.7**
3/15	1979	34.33	116.44	39.9	**5.5**
7/30	1894	34.30	117.60	42.3	**6.2**
4/11	1910	33.50	116.50	42.4	**5.8**
2/28	1990	34.14	117.70	42.9	**5.7**
12/4	1948	34.00	116.23	43.1	**6.0**
3/25	1937	33.46	116.44	46.7	**5.6**
12/8	1812	34.37	117.65	47.3	**7.5**
8/28	1889	34.20	117.90	55.0	**5.6**
2/9	*1890	33.40	116.30	55.3	**6.8**
4/3	1926	34.00	116.00	56.2	**5.5**
7/28	1769	34.00	118.00	58.4	**6.0**
10/16	1999	34.59	116.27	59.2	**7.1**
3/11	1933	33.64	117.97	61.0	**6.4**
6/28	1991	34.27	117.99	61.4	**5.6**
9/21	1856	33.10	116.70	61.9	**5.5**
10/16	1999	34.68	116.29	63.1	**5.8**

From full earthquake catalog in USGS OFR 2008-1437h as updated with current events through 2019. For events with an asterisk, alternate solutions are given in

2019 California Building Code (CBC) (ASCE 7-16) Seismic Design Parameters - General Procedure

(Values presented should only be used by a Structural Engineer to determine if the exception in 11.4.8 (ASCE 7-16) can be used)

			CBC Reference	ASCE 7-16 Reference
Seismic Design Category		**E**		
Site Class		**D**	Table 1613.5.6	Table 11.6-2
Latitude:		33.966 N	Table 1613.5.2	Table 20.3-1
Longitude:		-116.981 W		
Maximum Considered Earthquake (MCE) Ground Motion				
Short Period Spectral Reponse	S_S	**2.178 g**	Figure 1613.5	Figure 22-1
1 second Spectral Response	S_1	**0.750 g**	Figure 1613.5	Figure 22-2
Site Coefficient	F_a	1.00	Table 1613.5.3(1)	Table 11.4-1
Site Coefficient	F_v	1.70	Table 1613.5.3(2)	Table 11-4.2
	S_{MS}	2.178 g	$= F_a*S_S$	
	S_{M1}	1.275 g	$= F_v*S_1$	
Design Earthquake Ground Motion				
Short Period Spectral Reponse	S_{DS}	**1.452 g**	$= 2/3*S_{MS}$	
1 second Spectral Response	S_{D1}	**0.850 g**	$= 2/3*S_{M1}$	

Site Specific Evaluation May Be Required Due to Site Class = D or E and S1>=0.2. The Presented SDS and SD1 are NOT Valid Unless the Exception of ASCE7-16, Section 11.4.8 Applies

To	0.12	sec	$= 0.2*S_{D1}/S_{DS}$
Ts (11.4.8 ASCE 7-16 Exception Assumed)	0.59	sec	$= S_{D1}/S_{DS}$
Risk Category	III		Table 1604.5
Seismic Importance Factor	1.25		
F_{PGA}	1.10		
PGA_M	**0.98**		
Vertical Coefficient (C_V)	1.50		Table 11.9-1

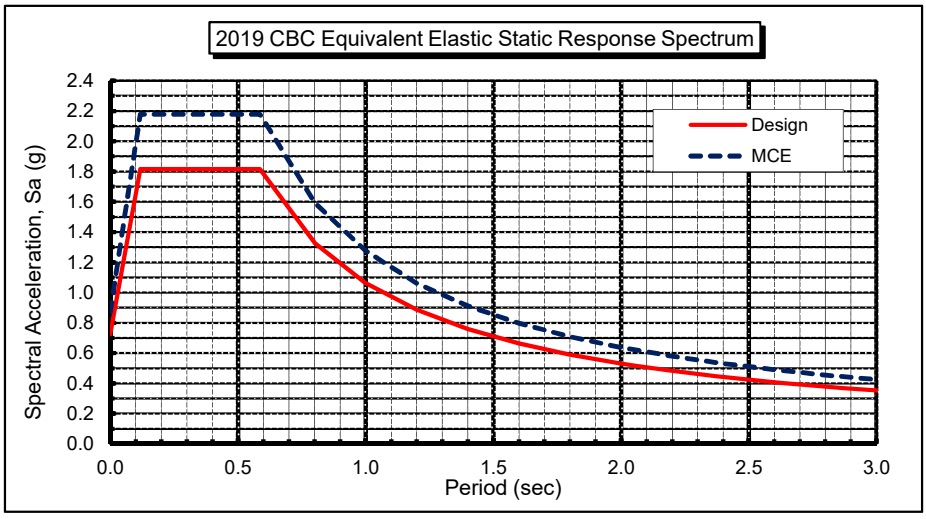


Table 11.5-1	Design
Period T (sec)	Sa (g)
0.00	0.726
0.05	1.191
0.12	1.815
0.59	1.815
0.80	1.328
1.00	1.063
1.20	0.885
1.40	0.759
1.60	0.664
1.80	0.590
2.00	0.531
2.20	0.483
2.40	0.443
2.60	0.409
2.80	0.379
3.00	0.354

33.96559 -116.98081 Lat/Long

Table A-3a - Spectral Response Values - Composite - Site Specific

Probabilistic and Deterministic Response Spectra for MCE compared to Code Spectra for 5% Viscous Damping Ratio

orgonio / SAF Sources

Natural Period T (seconds)	GeoMean Probab. 2% in 50 year MCE Spectrum (1) 2475-year (ASCE 21.2.1)	Max Rotated Probab. 2% in 50 year MCEr Spectrum (2) 2475-year (ASCE 21.2.1.1)	Max 84th Percentile Determ. MCE Spectrum (3) 1.5*Fa = 1.500 (ASCE 21.2.2)	Determ. Lower Limit MCE Spectrum (4) (3) * 1.00=Scaling (ASCE 21.2.2)	Determ. MCE Spectrum (5) Max (3),(4) (ASCE 21.2.2)	Site Specific MCE Ground Response (6) Min (2),(5) (ASCE 21.2.3)	Site Specific MCE Spectrum Comparator (6b) Max (6),1.5*(8) (ASCE 21.2.3)	2019 CBC MCE Spectrum (7)	Site Specific Design Spectrum (8) (ASCE 21.3)	2019 CBC Design Spectrum (9) 2/3*(7)
0.00	0.972	0.983	1.041	1.041	1.041	0.983	0.983	0.871	0.655	0.581
0.05	1.297	1.311	1.142	1.142	1.142	1.142	1.142	1.251	0.762	0.834
0.10	1.621	1.639	1.528	1.528	1.528	1.528	1.528	1.630	1.019	1.087
0.15	1.868	1.889	1.866	1.866	1.866	1.866	1.866	2.010	1.244	1.340
0.20	2.115	2.138	2.125	2.125	2.125	2.125	2.125	2.178	1.417	1.452
0.30	2.397	2.469	2.476	2.476	2.476	2.469	2.469	2.178	1.646	1.452
0.40	2.397	2.461	2.573	2.573	2.573	2.461	2.461	2.178	1.641	1.452
0.50	2.398	2.562	2.525	2.525	2.525	2.525	2.525	2.178	1.683	1.452
0.75	2.061	2.182	2.206	2.206	2.206	2.182	2.182	2.178	1.455	1.452
1.00	1.723	2.000	1.988	1.988	1.988	1.988	1.988	1.875	1.326	1.250
1.50	1.378	1.599	1.496	1.496	1.496	1.496	1.496	1.250	0.997	0.833
2.00	1.032	1.244	1.206	1.206	1.206	1.206	1.206	0.938	0.804	0.625
3.00	0.720	0.900	0.986	0.986	0.986	0.900	0.900	0.625	0.600	0.417
4.00	0.533	0.690	0.849	0.849	0.849	0.690	0.690	0.469	0.460	0.313
5.00	0.416	0.557	0.703	0.703	0.703	0.557	0.557	0.375	0.372	0.250
8.00	0.294	0.394	0.427	0.427	0.427	0.394	0.394	0.234	0.262	0.156
10.00	0.276	0.370	0.243	0.243	0.243	0.243	0.243	0.150	0.162	0.100

C_{RS}:	0.919	
C_{R1}:	0.893	
Site Specific To:	0.245	$= 0.2*S_{D1}/S_{DS}$
Site Specific Ts:	1.226	$= S_{D1}/S_{DS}$

The value of Fa used in Column (3) is defined within ASCE 21.2.2 Supplement 1. This Fa value only applies within Column (3).

Probabilistic Spectrum from 2014 USGS Ground Motion Mapping Program adjusted for site conditions and maximum rotated component of ground motion using NGA, Column 2 has risk coefficients C_R applied if ASCE7-16 Section 21.2.1.1 - Method 1 is used.

Reference: ASCE 7-16, Chapters 21.2, 21.3, 21.4, 21.5, 11.4, and 11.8

Calculation Utilized ASCE7-16, Section 21.2.1.1 - Method 1

Short-Period Seismic Design Category:	1-Second Period Seismic Design Category:
E	E

Vertical Coefficient (C_V)
1.50

1 g = 980.6 cm/sec^2 =32.2 ft/sec^2

PSV (ft/sec) = $32.2(S_a)T/(2p)$

Key: Probab. = Probabilistic, Determ. = Deterministic, MCE = Maximum Considered Earthquake

Site Coefficients	
F_{PGA}	1.10
F_a	1.00
F_v	2.50

Mapped MCE Acceleration Values		
PGA	0.890	g
S_S	2.178	g
S_1	0.750	g

Site Class	**D**
Risk Category	**III**

Site-Specific Design Acceleration Values		
PGA_M	**0.972**	**g**
S_{DS}	**1.515**	**g**
S_{D1}	**1.858**	**g**

Site-Specific MCE_R, 5% damped, Spectral Response Acceleration Parameter		
S_{MS}	**2.272**	**g**
S_{M1}	**2.787**	**g**

33.96559 -116.98081 Lat/Long

For Reference Only

Table A-3b - Spectral Response Values - San Andreas Fault
Probabilistic and Deterministic Response Spectra for MCE compared to Code Spectra
for 5% Viscous Damping Ratio

San Andreas

Natural Period T (seconds)	GeoMean Probab. 2% in 50 year MCE Spectrum (1) 2475-year (ASCE 21.2.1)	Max Rotated Probab. 2% in 50 year MCEr Spectrum (2) 2475-year (ASCE 21.2.1.1)	Max 84th Percentile Determ. MCE Spectrum (3) 1.5*Fa = 1.500 (ASCE 21.2.2)	Determ. Lower Limit MCE Spectrum (4) (3) * 1.00=Scaling (ASCE 21.2.2)	Determ. MCE Spectrum (5) Max (3),(4) (ASCE 21.2.2)	Site Specific MCE Ground Response (6) Min (2),(5) (ASCE 21.2.3)	Site Specific MCE Spectrum Comparator (6b) Max (6),1.5*(8) (ASCE 21.2.3)	2019 CBC MCE Spectrum (7)	Site Specific Design Spectrum (8) (ASCE 21.3)	2019 CBC Design Spectrum (9) 2/3*(7)
0.00	0.972	0.983	0.811	0.811	0.811	0.811	0.811	0.871	0.541	0.581
0.05	1.297	1.311	0.884	0.884	0.884	0.884	1.001	1.251	0.667	0.834
0.10	1.621	1.639	1.186	1.186	1.186	1.186	1.304	1.630	0.869	1.087
0.15	1.868	1.889	1.463	1.463	1.463	1.463	1.608	2.010	1.072	1.340
0.20	2.115	2.138	1.680	1.680	1.680	1.680	1.742	2.178	1.162	1.452
0.30	2.397	2.469	1.930	1.930	1.930	1.930	1.930	2.178	1.286	1.452
0.40	2.397	2.461	2.029	2.029	2.029	2.029	2.029	2.178	1.353	1.452
0.50	2.398	2.562	2.029	2.029	2.029	2.029	2.029	2.178	1.353	1.452
0.75	2.061	2.182	1.787	1.787	1.787	1.787	1.787	2.178	1.191	1.452
1.00	1.723	2.000	1.655	1.655	1.655	1.655	1.655	1.875	1.104	1.250
1.50	1.378	1.599	1.393	1.393	1.393	1.393	1.393	1.250	0.929	0.833
2.00	1.032	1.244	1.206	1.206	1.206	1.206	1.206	0.938	0.804	0.625
3.00	0.720	0.900	0.986	0.986	0.986	0.900	0.900	0.625	0.600	0.417
4.00	0.533	0.690	0.849	0.849	0.849	0.690	0.690	0.469	0.460	0.313
5.00	0.416	0.557	0.703	0.703	0.703	0.557	0.557	0.375	0.372	0.250
8.00	0.294	0.394	0.427	0.427	0.427	0.394	0.394	0.234	0.262	0.156
10.00	0.276	0.370	0.243	0.243	0.243	0.243	0.243	0.150	0.162	0.100

C_{RS}:	0.919	
C_{R1}:	0.893	
Site Specific To:	0.305	$= 0.2*S_{D1}/S_{DS}$
Site Specific Ts:	1.526	$= S_{D1}/S_{DS}$

The value of Fa used in Column (3) is defined within ASCE 21.2.2 Supplement 1. This Fa value only applies within Column (3).

Probabilistic Spectrum from 2014 USGS Ground Motion Mapping Program adjusted for site conditions and maximum rotated component of ground motion using NGA, Column 2 has risk coefficients C_R applied if ASCE7-16 Section 21.2.1.1 - Method 1 is used.

Reference: ASCE 7-16, Chapters 21.2, 21.3, 21.4, 21.5, 11.4, and 11.8

Calculation Utilized ASCE7-16, Section 21.2.1.1 - Method 1

Short-Period Seismic Design Category:	1-Second Period Seismic Design Category:
E	E

Vertical Coefficient (C_V)
1.50

1 g = 980.6 cm/sec^2 =32.2 ft/sec^2

PSV (ft/sec) = $32.2(S_a)T/(2p)$

Key: Probab. = Probabilistic, Determ. = Deterministic, MCE = Maximum Considered Earthquake

Site Coefficients	
F_{PGA}	1.10
F_a	1.00
F_v	2.50

Mapped MCE Acceleration Values		
PGA	0.890	g
S_S	2.178	g
S_1	0.750	g

Site Class	**D**
Risk Category	**III**

Site-Specific Design Acceleration Values		
PGA_M	**0.811**	**g**
S_{DS}	**1.217**	**g**
S_{D1}	**1.858**	**g**

Site-Specific MCE_R, 5% damped, Spectral Response Acceleration Parameter		
S_{MS}	**1.826**	**g**
S_{M1}	**2.787**	**g**

33.96559 -116.98081 Lat/Long

For Reference Only

Table A-3c - Spectral Response Values - San Gorgonio Fault
Probabilistic and Deterministic Response Spectra for MCE compared to Code Spectra
for 5% Viscous Damping Ratio

San Gorgonio

Natural Period T (seconds)	GeoMean Probab. 2% in 50 year MCE Spectrum (1) 2475-year (ASCE 21.2.1)	Max Rotated Probab. 2% in 50 year MCEr Spectrum (2) 2475-year (ASCE 21.2.1.1)	Max 84th Percentile Determ. MCE Spectrum (3) 1.5*Fa = 1.500 (ASCE 21.2.2)	Determ. Lower Limit MCE Spectrum (4) (3) * 1.00=Scaling (ASCE 21.2.2)	Determ. MCE Spectrum (5) Max (3),(4) (ASCE 21.2.2)	Site Specific MCE Ground Response (6) Min (2),(5) (ASCE 21.2.3)	Site Specific MCE Spectrum Comparator (6b) Max (6),1.5*(8) (ASCE 21.2.3)	2019 CBC MCE Spectrum (7)	Site Specific Design Spectrum (8) (ASCE 21.3)	2019 CBC Design Spectrum (9) 2/3*(7)
0.00	0.972	0.983	1.041	1.041	1.041	0.983	0.983	0.871	0.655	0.581
0.05	1.297	1.311	1.142	1.142	1.142	1.142	1.142	1.251	0.762	0.834
0.10	1.621	1.639	1.528	1.528	1.528	1.528	1.528	1.630	1.019	1.087
0.15	1.868	1.889	1.866	1.866	1.866	1.866	1.866	2.010	1.244	1.340
0.20	2.115	2.138	2.125	2.125	2.125	2.125	2.125	2.178	1.417	1.452
0.30	2.397	2.469	2.476	2.476	2.476	2.469	2.469	2.178	1.646	1.452
0.40	2.397	2.461	2.573	2.573	2.573	2.461	2.461	2.178	1.641	1.452
0.50	2.398	2.562	2.525	2.525	2.525	2.525	2.525	2.178	1.683	1.452
0.75	2.061	2.182	2.206	2.206	2.206	2.182	2.182	2.178	1.455	1.452
1.00	1.723	2.000	1.988	1.988	1.988	1.988	1.988	1.875	1.326	1.250
1.50	1.378	1.599	1.496	1.496	1.496	1.496	1.496	1.250	0.997	0.833
2.00	1.032	1.244	1.175	1.175	1.175	1.175	1.175	0.938	0.783	0.625
3.00	0.720	0.900	0.797	0.797	0.797	0.797	0.797	0.625	0.532	0.417
4.00	0.533	0.690	0.559	0.559	0.559	0.559	0.559	0.469	0.373	0.313
5.00	0.416	0.557	0.393	0.393	0.393	0.393	0.393	0.375	0.262	0.250
8.00	0.294	0.394	0.213	0.213	0.213	0.213	0.213	0.234	0.142	0.156
10.00	0.276	0.370	0.094	0.094	0.094	0.094	0.150	0.150	0.100	0.100

C_{RS}:	0.919	
C_{R1}:	0.893	
Site Specific To:	0.211	$= 0.2*S_{D1}/S_{DS}$
Site Specific Ts:	1.053	$= S_{D1}/S_{DS}$

The value of Fa used in Column (3) is defined within ASCE 21.2.2 Supplement 1. This Fa value only applies within Column (3).

Probabilistic Spectrum from 2014 USGS Ground Motion Mapping Program adjusted for site conditions and maximum rotated component of ground motion using NGA, Column 2 has risk coefficients C_R applied if ASCE7-16 Section 21.2.1.1 - Method 1 is used.

Reference: ASCE 7-16, Chapters 21.2, 21.3, 21.4, 21.5, 11.4, and 11.8

Calculation Utilized ASCE7-16, Section 21.2.1.1 - Method 1

Short-Period Seismic Design Category:	1-Second Period Seismic Design Category:
E	E

Vertical Coefficient (C_V)
1.50

1 g = 980.6 cm/sec^2 =32.2 ft/sec^2

PSV (ft/sec) = $32.2(S_a)T/(2p)$

Key: Probab. = Probabilistic, Determ. = Deterministic, MCE = Maximum Considered Earthquake

Site Coefficients	
F_{PGA}	1.10
F_a	1.00
F_v	2.50

Mapped MCE Acceleration Values		
PGA	0.890	g
S_S	2.178	g
S_1	0.750	g

Site Class	**D**	
Risk Category	**III**	

Site-Specific Design Acceleration Values		
PGA_M	**0.972**	**g**
S_{DS}	**1.515**	**g**
S_{D1}	**1.595**	**g**

Site-Specific MCE_R, 5% damped, Spectral Response Acceleration Parameter		
S_{MS}	**2.272**	**g**
S_{M1}	**2.392**	**g**

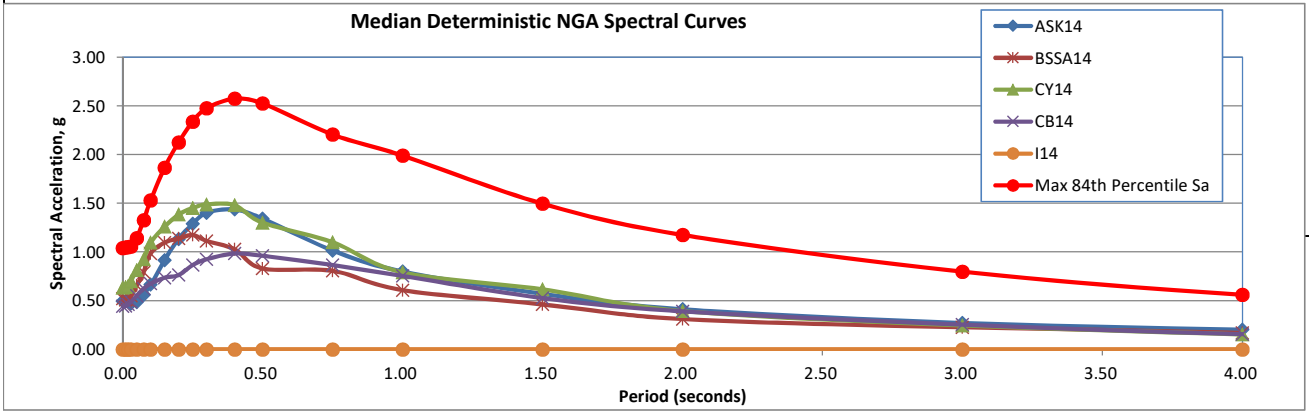
33.9656 -116.9808 Lat/Long

Table A-4 - Spectral Response Values
Deterministic NGA Response Spectra for Largest Median Earthquake Ground Motion

Average of NGA: Abrahamson - Silva - Kamai (2014), Boore - Stewart - Seyhan - Atkinson (2013), Campbell-Bozorgnia (2013), Chiou - Youngs (2014), and Idriss (2013)

Mean Spectra Response from Attentuation Relationships

	ASK14		BSSA14		CB14		CY14		I14		Average		
		Median		Median		Median		Median		Median		Mean	Max 84th Percentile
Input Variables	Period (sec)	Sa (g)	Period (sec)	Sa (g)	Period (sec)	Sa (g)	Period (sec)	Sa (g)	Period (sec)	Sa (g)	**Period (sec)**	Sa (g)	**Sa (g)**
	Weight:	**0.25**	Weight:	**0.25**	Weight:	**0.25**	Weight:	**0.25**	Weight:	**0.00**			
M	0.00	0.50	0.00	0.51	0.00	0.44	0.00	0.63	0.00	-	**0.00**	0.521	**1.04**
7.00	0.01	0.50	0.01	0.52	0.01	0.45	0.01	0.63	0.01	-	**0.01**	0.524	**1.05**
R_{RUP}	0.02	0.49	0.02	0.51	0.02	0.46	0.02	0.64	0.02	-	**0.02**	0.526	**1.05**
1.50	0.03	0.47	0.03	0.51	0.03	0.49	0.03	0.65	0.03	-	**0.03**	0.528	**1.06**
R_{JB}	0.05	0.48	0.05	0.55	0.05	0.55	0.05	0.70	0.05	-	**0.05**	0.571	**1.14**
1.50	0.075	0.56	0.075	0.66	0.075	0.62	0.075	0.81	0.075	-	**0.075**	0.663	**1.33**
$V_{S\,30}$	0.10	0.67	0.10	0.79	0.10	0.67	0.10	0.93	0.10	-	**0.10**	0.764	**1.53**
282	0.15	0.92	0.15	0.98	0.15	0.74	0.15	1.10	0.15	-	**0.15**	0.933	**1.87**
F_{RV}	0.20	1.13	0.20	1.10	0.20	0.76	0.20	1.26	0.20	-	**0.20**	1.063	**2.13**
1	0.25	1.29	0.25	1.14	0.25	0.87	0.25	1.38	0.25	-	**0.25**	1.169	**2.34**
F_{NM}	0.30	1.40	0.30	1.17	0.30	0.92	0.30	1.45	0.30	-	**0.30**	1.238	**2.48**
0	0.40	1.44	0.40	1.11	0.40	0.98	0.40	1.49	0.40	-	**0.40**	1.255	**2.57**
W	0.50	1.34	0.50	1.03	0.50	0.96	0.50	1.48	0.50	-	**0.50**	1.202	**2.52**
999.00	0.75	1.01	0.75	0.83	0.75	0.86	0.75	1.30	0.75	-	**0.75**	1.003	**2.21**
Z_{TOR}	1.00	0.80	1.00	0.81	1.00	0.75	1.00	1.10	1.00	-	**1.00**	0.864	**1.99**
0.00	1.50	0.57	1.50	0.61	1.50	0.53	1.50	0.79	1.50	-	**1.50**	0.623	**1.50**
$Z_{2.5}$	2.00	0.41	2.00	0.46	2.00	0.39	2.00	0.62	2.00	-	**2.00**	0.470	**1.17**
2.00	3.00	0.27	3.00	0.31	3.00	0.25	3.00	0.39	3.00	-	**3.00**	0.307	**0.80**
dip	4.00	0.20	4.00	0.23	4.00	0.15	4.00	0.24	4.00	-	**4.00**	0.207	**0.56**
60	5.00	0.15	5.00	0.17	5.00	0.10	5.00	0.15	5.00	-	**5.00**	0.145	**0.39**
	7.50	0.08	7.50	0.08	7.50	0.04	7.50	0.06	7.50	-	**7.50**	0.065	**0.17**
	10.00	0.04	10.00	0.04	10.00	0.03	10.00	0.03	10.00	-	**10.00**	0.035	**0.09**

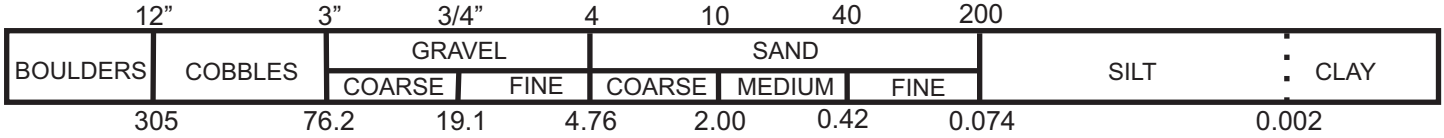


DESCRIPTIVE SOIL CLASSIFICATION

Soil classification is based on ASTM Designations D 2487 and D 2488 (Unified Soil Classification System). Information on each boring log is a compilation of subsurface conditions obtained from the field as well as from laboratory testing of selected samples. The indicated boundaries between strata on the boring logs are approximate only and may be transitional.

SOIL GRAIN SIZE

U.S. STANDARD SIEVE



SOIL GRAIN SIZE IN MILLIMETERS

RELATIVE DENSITY OF GRANULAR SOILS (GRAVELS, SANDS, AND NON-PLASTIC SILTS)

Very Loose	*N=0-4	RD=0-30	Easily push a 1/2-inch reinforcing rod by hand
Loose	N=5-10	RD=30-50	Push a 1/2-inch reinforcing rod by hand
Medium Dense	N=11-30	RD=50-70	Easily drive a 1/2-inch reinforcing rod with hammer
Dense	N=31-50	RD=70-90	Drive a 1/2-inch reinforcing rod 1 foot with difficulty by a hammer
Very Dense	N>50	RD=90-100	Drive a 1/2-inch reinforcing rod a few inches with hammer

*N=Blows per foot in the Standard Penetration Test at 60% theoretical energy. For the 3-inch diameter Modified California sampler,140-pound weight, multiply the blow count by 0.63 (about 2/3) to estimate N. If automatic hammer is used, multiply a factor of 1.3 to 1.5 to estimate N. RD=Relative Density (%). C=Undrained shear strength (cohesion).

CONSISTENCY OF COHESIVE SOILS (CLAY OR CLAYEY SOILS)

Very Soft	*N=0-1	*C=0-250 psf	Squeezes between fingers
Soft	N=2-4	C=250-500 psf	Easily molded by finger pressure
Medium Stiff	N=5-8	C=500-1000 psf	Molded by strong finger pressure
Stiff	N=9-15	C=1000-2000 psf	Dented by strong finger pressure
Very Stiff	N=16-30	C=2000-4000 psf	Dented slightly by finger pressure
Hard	N>30	C>4000	Dented slightly by a pencil point or thumbnail

MOISTURE DENSITY

Moisture Condition: An observational term; dry, damp, moist, wet, saturated.
Moisture Content: The weight of water in a sample divided by the weight of dry soil in the soil sample expressed as a percentage.
Dry Density: The pounds of dry soil in a cubic foot.

MOISTURE CONDITION

Dry.....Absence of moisture, dusty, dry to the touch
Damp.....Slight indication of moisture
Moist.....Color change with short period of air exposure (granular soil)
Below optimum moisture content (cohesive soil)
Wet.....High degree of saturation by visual and touch (granular soil)
Above optimum moisture content (cohesive soil)
Saturated.....Free surface water

PLASTICITY

DESCRIPTION	FIELD TEST
Nonplastic	A 1/8 in. (3-mm) thread cannot be rolled at any moisture content.
Low	The thread can barely be rolled.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit.
High	The thread can be rerolled several times after reaching the plastic limit.

GROUNDWATER LEVEL

Water Level (measured or after drilling)

Water Level (during drilling)

RELATIVE PROPORTIONS

Trace.....minor amount (<5%)
with/some.....significant amount
modifier/and...sufficient amount to influence material behavior (Typically >30%)

LOG KEY SYMBOLS

Bulk, Bag or Grab Sample

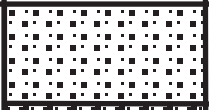
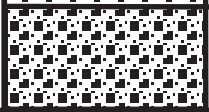
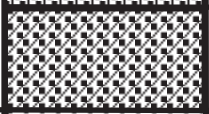
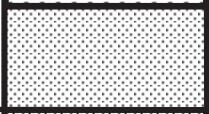
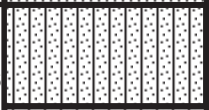
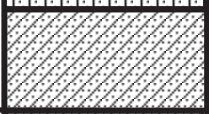
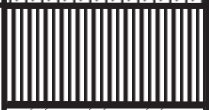
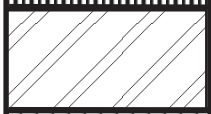
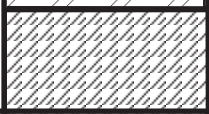
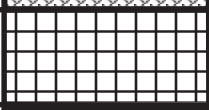
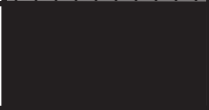
Standard Penetration Split Spoon Sampler (2” outside diameter)

Modified California Sampler (3” outside diameter)

No Recovery

Terms and Symbols Used on Boring Logs

Earth Systems

MAJOR DIVISIONS			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS More than 50% of material is larger than No. 200 sieve size	GRAVEL AND GRAVELLY SOILS More than 50% of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS		GW	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures. Little or no fines
		GRAVELS WITH FINES		GM	Silty gravels, gravel-sand-silt mixtures
				GC	Clayey gravels, gravel-sand-clay mixtures
	SAND AND SANDY SOILS More than 50% of coarse fraction passing No. 4 sieve	CLEAN SAND (Little or no fines)		SW	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sands, little or no fines
		SAND WITH FINES (appreciable amount of fines)		SM	Silty sands, sand-silt mixtures
				SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS More than 50% of material is smaller than No. 200 sieve size	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	Inorganic silts and very fine sands, rock flour, silty low clayey fine sands or clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts and organic silty clays of low plasticity
		LIQUID LIMIT GREATER THAN 50		MH	Inorganic silty, micaceous, or diatomaceous fine sand or silty soils
				CH	Inorganic clays of high plasticity, fat clays
				OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS				PT	Peat, humus, swamp soils with high organic contents
VARIOUS SOILS AND MAN MADE MATERIALS					Fill Materials
MAN MADE MATERIALS					Asphalt and concrete

Soil Classification System

Earth Systems

Earth Systems

1680 Illinois Avenue, Suite 20, Perris, CA 92571
Phone (951) 928-9799

Boring No. B-1

Project Name: Beaumont High School, New Classroom
Project Number 300414-003
Boring Location: Plate 3

Drilling Date: February 15, 2020
Drilling Method: Mobile B-61 w/autohammer
Drill Type: 8" HSA
Logged By: R. Howe

Depth (Ft.)	Sample Type (Bulk, SPT, MOD Calif.)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description of Units
0				AC			ASPHALT CONCRETE: 3" over 2" aggregate base
				SM			SILTY SAND: brown, dense, damp, fine grained sand, fill
5							
10							
15							
20							
25							Terminated at 7 feet No groundwater encountered Backfilled with cuttings
30							

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Earth Systems

1680 Illinois Avenue, Suite 20, Perris, CA 92571
Phone (951) 928-9799

Boring No. B-2

Project Name: Beaumont High School, New Classroom
Project Number 300414-003
Boring Location: Plate 3

Drilling Date: February 15, 2020
Drilling Method: Mobile B-61 w/autohammer
Drill Type: 8" HSA
Logged By: R. Howe

Depth (Ft.)	Sample Type (Bulk / SPT / MOD Calif.)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description of Units	Graphic Trend: Blow Count / Dry Density
0				SW-SM			WELL GRADED SAND WITH SILT: red brown, medium dense, damp, fine to coarse grained sand, minor fine gravel, fill	
	MOD Calif.	20,18,16						
5	MOD Calif.	20,24,24		SW			WELL GRADED GRAVELLY SAND: gray to brown, dense, damp, fine to coarse grained sand, fine gravel	
10								
15								
20								
25							Terminated at 6-1/2 feet No groundwater encountered Backfilled with cuttings	
30								

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Earth Systems

1680 Illinois Avenue, Suite 20, Perris, CA 92571
Phone (951) 928-9799

Boring No. B-3

Project Name: Beaumont High School, New Classroom
Project Number 300414-003
Boring Location: Plate 3

Drilling Date: February 15, 2020
Drilling Method: Mobile B-61 w/autohammer
Drill Type: 8" HSA
Logged By: R. Howe

Depth (Ft.)	Sample Type (Bulk / SPT / MOD Calif.)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description of Units
0				AC			ASPHALT CONCRETE: 3"
				SP-SM			POORLY GRADED SAND WITH SILT: reddish brown, dense, damp, fine to medium grained sand, minor coarse sand, some fine gravel, fill
	MOD Calif.	20,26,20					
5	MOD Calif.	12,11,16		SM	130	4	SILTY SAND: reddish brown, medium dense, damp, fine grained sand, trace clay
10							
15							
20							
25							Terminated at 6-1/2 feet No groundwater encountered Backfilled with cuttings
30							

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Earth Systems

1680 Illinois Avenue, Suite 20, Perris, CA 92571
Phone (951) 928-9799

Boring No. B-4

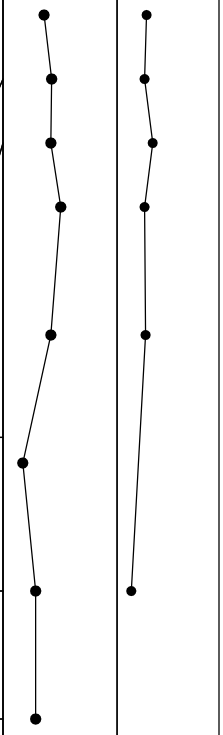
Project Name: Beaumont High School, New Classroom
Project Number 300414-003
Boring Location: Plate 3

Drilling Date: February 15, 2020
Drilling Method: Mobile B-61 w/autohammer
Drill Type: 8" HSA
Logged By: R. Howe

Depth (Ft.)	Sample Type (Bulk / SPT / MOD Calif.)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description of Units
0				AC			ASPHALT CONCRETE: 3" over aggregate base 2"
	MOD	13,26,28		SM	129	8	SILTY SAND WITH GRAVEL: red brown, dense, damp, fine to coarse grained sand, fine gravel, cobble fragments, fill
5	MOD	22,28,36		SM	127	7	
	MOD	16,27,36		SW	135	4	SILTY SAND WITH GRAVEL: brown, dense, damp, fine to medium grained sand
10	MOD	14,26,50			127	4	WELL GRADED GRAVELLY SAND: brown, very dense, damp, fine to coarse grained sand, fine gravel, cobble fragments
15	MOD	12,25,38			128	5	
20	Bulk	14,14,12		SW			WELL GRADED GRAVELLY SAND: brown, medium dense, damp, fine to coarse grained sand, cobble fragments, native
25	MOD	11,20,23		SM	114	4	SILTY SAND WITH GRAVEL: brown to gray, dense, damp, fine to coarse grained sand, fine to coarse gravel, cobble fragments
30	Bulk	13,20,23		SW			WELL GRADED SAND: light brown, dense, damp fine to coarse grained sand, some fine gravel
35							
40							
45							
50							
55							
60							Terminated at 31-1/2 feet No groundwater encountered Backfilled with cuttings

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density



Earth Systems

1680 Illinois Avenue, Suite 20, Perris, CA 92571
Phone (951) 928-9799

Boring No. B-5

Project Name: Beaumont High School, New Classroom
Project Number 300414-003
Boring Location: Plate 3

Drilling Date: February 15, 2020
Drilling Method: Mobile B-61 w/autohammer
Drill Type: 8" HSA
Logged By: R. Howe

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Depth (Ft.)	Sample Type (Bulk / SPT / MOD Calif.)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0				AC			ASPHALT CONCRETE: 3"
				SM			SILTY SAND WITH GRAVEL: brown, dense, damp, fine to medium grained sand, fill
	MOD Calif.	12,20,26			133	6	
5	MOD Calif.	15,28,34		SW-SM	121	6	WELL GRADED SAND WITH SILT: brown, very dense, damp, fine to coarse grained sand, trace fine gravel
		50/4"					no recovery, cobble fragments
10	MOD Calif.	16,50/5"			120	6	cobble fragments
15	MOD Calif.	13,26,31		SW	129	6	WELL GRADED GRAVELLY SAND: brown, dense, damp, fine to coarse grained sand, fine to coarse gravel
20							
25							Terminated at 16-1/2 feet No groundwater encountered Backfilled with cuttings
30							

Graphic Trend
Blow Count Dry Density

Earth Systems

1680 Illinois Avenue, Suite 20, Perris, CA 92571
Phone (951) 928-9799

Boring No. B-6

Project Name: Beaumont High School, New Classroom
Project Number 300414-003
Boring Location: Plate 3

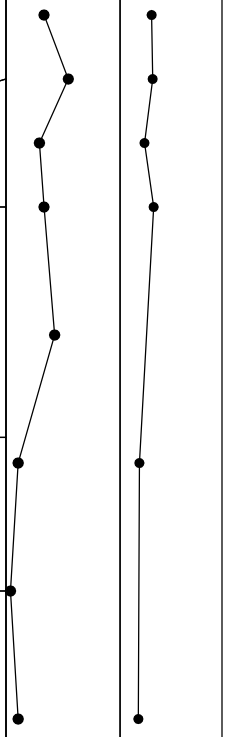
Drilling Date: February 15, 2020
Drilling Method: Mobile B-61 w/autohammer
Drill Type: 8" HSA
Logged By: R. Howe

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk / SPT / MOD Calif.)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description of Units
0				AC			ASPHALT CONCRETE: 3" over 3" aggregate base
	MOD Calif.	19,23,27		SM	131	6	SILTY SAND WITH GRAVEL: brown, dense, damp, fine to coarse grained sand, fine gravel, fill
5	MOD Calif.	12,34,48		SW-SM	132	5	WELL GRADED GRAVELLY SAND WITH SILT: brown, very dense, damp, fine to coarse grained sand, fine to coarse gravel
	MOD Calif.	15,18,26			124	5	
10	MOD Calif.	15,20,30		SM	133	7	SILTY SAND WITH GRAVEL: red brown, dense, damp, fine to coarse grained sand, fine gravel
15	Bulk	11,17,17					
20	MOD Calif.	8,8,8		SM	119	8	SILTY SAND: red brown, medium dense, damp fine grained sand, trace fine gravel, native
25	Bulk	3,3,3		SM			SILTY SAND WITH GRAVEL: red brown, loose, damp, fine grained sand, fine gravel
30	MOD Calif.	5,7,11			118	12	moist
35							
40							
45							
50							
55							
60							Terminated at 31-1/2 feet No groundwater encountered Backfilled with cuttings



Earth Systems

1680 Illinois Avenue, Suite 20, Perris, CA 92571
Phone (951) 928-9799

Boring No. B-7

Project Name: Beaumont High School, New Classroom
Project Number 300414-003
Boring Location: Plate 3

Drilling Date: February 15, 2020
Drilling Method: Mobile B-61 w/autohammer
Drill Type: 8" HSA
Logged By: R. Howe

Description of Units

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Depth (Ft.)	Sample Type (Bulk / SPT / MOD Calif.)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description
0				AC			ASPHALT CONCRETE: 3" over 6" aggregate base
	SPT	15,28,37		SM	135	6	SILTY SAND WITH GRAVEL: brown, dense, damp, fine to coarse grained sand, fine to coarse gravel, fill
5	SPT	17,30,50			133	5	
	SPT	18,34,40		SP-SM	131	6	POORLY GRADED SAND WITH SILT: red brown, dense, damp, fine to coarse grained sand, trace fine to coarse gravel
10	SPT	22,35,50		SP-SM	128	5	
							POORLY GRADED SAND WITH SILT: gray to brown, dense, damp, fine to medium grained sand
15	SPT	18,33,40		SW-SM	130	4	WELL GRADED GRAVELLY SAND WITH SILT: brown, dense, damp, fine to coarse grained sand, fine gravel
20	SPT	7,10,14		SP	118	5	POORLY GRADED SAND: red brown, medium dense, damp, fine to coarse grained sand, trace fine gravel, native
25	MOD Calif.	8,10,15			--	3	
30	SPT	5,7,9		SM	120	12	SILTY SAND: red brown, medium dense, moist, fine grained sand, very silty
35	MOD Calif.	3,5,5		ML	--	22	SANDY SILT: red brown, firm, moist, fine grained sand
40	SPT	7,13,14		SM	125	8	SILTY SAND: red brown, medium dense, damp, fine to coarse grained sand
45	MOD Calif.	3,11,15		SP-SM	--	10	POORLY GRADED SAND WITH SILT: red brown to gray, medium dense, damp, fine grained sand
50	SPT	50/6"		SW	120	6	WELL GRADED GRAVELLY SAND: red brown to gray, very dense, damp, fine to coarse grained sand
55							Terminated at 50-1/2 feet No groundwater encountered Backfilled with cuttings
60							

Earth Systems

1680 Illinois Avenue, Suite 20, Perris, CA 92571
Phone (951) 928-9799

Boring No. B-8

Project Name: Beaumont High School, New Classroom
Project Number 300414-003
Boring Location: Plate 3

Drilling Date: February 15, 2020
Drilling Method: Mobile B-61 w/autohammer
Drill Type: 8" HSA
Logged By: R. Howe

Depth (Ft.)	Sample Type (Bulk / SPT / MOD Calif.)	Penetration Resistance (Blows/6")	Symbol	USCS	Dry Density (pcf)	Moisture Content (%)	Description of Units
0				SP-SM			POORLY GRADED SAND WITH SILT: brown, moist, fine grained sand, some fine gravel
5							
10							
15				SP-SM			POORLY GRADED GRAVELLY SAND WITH SILT: brown, moist, fine grained sand
20							
25							Terminated at 18 feet No groundwater encountered Backfilled with cuttings
30							

Note: The stratification lines shown represent the approximate boundary between soil and/or rock types and the transition may be gradational.

Graphic Trend
Blow Count Dry Density

Boring No.	B-7	Project and Number	Beaumont High Schoo	300414-003
		ESSW Field Staff		
		Drilling Company	CalPac	
		Drilling Method	6-8" H S A	HSA Inner Diameter 3"
		Site Latitude (North)	Decimal Degrees	33.9656
		Site Longitude (West)	Decimal Degrees	116.9808

Date Drilled
2/15/2020

Hammer Weight (lbs)
140

Hammer Drop (inches)
30

Hammer Efficiency (E_M)
72

Borehole Correction (Cb)*
1

*inside diameter of Hollow Stem Auger

Sampler Correction Mod Cal to SPT
0.63

Sampler Liner Correction (Cs)
1.2 Applied if SPT Sampler Used
1.0 Applied if Cal Sampler Used

Rod Length Above Ground (ft)
3

Depth to Estimate Vs Over (ft)*
100

*Caltrans Estimation Method

*N_{sub} Value Desired For Column 6
70

*Only Used for Calculating Nsub otherwise not used by program (i.e.N50, N70, N80, etc)

Calculation Results
Ave. SPT N_{60HE}-value (blows/ft)
25
(Based on Upper 50 feet)
Ave. Shear Wave Velocity (ft/sec)
872
(Based on Upper 50 feet)
Soil Profile Type (Site Class)
D
(Based on Upper 50 feet)
Ave. Friction Angle (degrees)
34
(Based on Upper 50 feet)
Estimated Shear Wave Velocity ** Based on Depth Less than 100' ft
924 (ft/sec Upper 100 feet)
Soil Profile Type (Site Class)**
D Based on Ave. Shear Wave Velocity (ft/sec)
282 (m/sec Upper 100 feet)
Ave. Field SPT N-value (blows/ft)
20.7
(Based on Upper 50 feet)
Ave. Field SPT N-value (blows/ft)
33.4
(Based on Upper 100 feet)

Soil Profile Type (Site Class)**
D Based on Ave. Field Blow Count
33 (Upper 100 feet)

	Equipment variable	Typical Correction (%/100)
Energy ratio (Skempton, 1986)	Donut Hammer	0.50 to 1.00
	Safety Hammer	0.70 to 1.20
	Automatic-Trip Donut-type Hammer	0.80 to 1.30

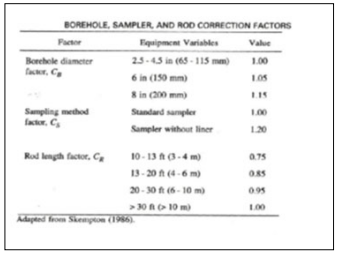
→ Hammer energy as related to the standard 60% delivered energy, i.e. a 72% hammer has and energy ratio of 1.2, i.e. (72/60=1.2)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Bottom of Layer Depth (ft)	Blow Count***	Type of Sampler	d_i (feet)	N_{60} (blows/ft)	N70 (blows/ft)	N_{60HE} (blows/ft)	V_{si}** (m/sec)	V_{si} (ft/sec)	Φ_i (degrees)	d_i/N_{60HEi}	d_i/V_{si}	d_i/Φ_i	Consistency if Coarse Grained (Based on ASTM and Corrected for N60)	Consistency if Fine Grained (Based on ASTM and Corrected for N60)
2.5	65	c	2.5	36.86	31.59	49.14	310.94	1019.90	37.16	0.05088	0.00245	0.067268	Dense	Hard
5.0	80	c	2.5	45.36	38.88	60.48	330.24	1083.20	38.49	0.04134	0.00231	0.064956	Dense	Hard
7.5	74	c	2.5	41.96	35.96	55.94	322.86	1058.98	37.98	0.04469	0.00236	0.065821	Dense	Hard
10.0	85	c	2.5	48.20	41.31	64.26	336.10	1102.41	38.89	0.03890	0.00227	0.064286	Dense	Hard
15.0	73	c	5.0	46.91	40.21	55.19	321.59	1054.81	37.89	0.09060	0.00474	0.131945	Dense	Hard
20.0	24	c	5.0	17.24	14.77	18.14	232.92	763.96	31.80	0.27557	0.00654	0.157244	Medium Dense	Very Stiff
25.0	25	s	5.0	34.20	29.31	30.00	269.48	883.90	34.32	0.16667	0.00566	0.145698	Dense	Hard
30.0	16	c	5.0	12.10	10.37	12.10	207.08	679.21	30.01	0.41336	0.00736	0.166603	Medium Dense	Stiff
35.0	10	s	5.0	14.40	12.34	12.00	206.60	677.65	29.98	0.41667	0.00738	0.166786	Medium Dense	Stiff
40.0	27	c	5.0	20.41	17.50	20.41	241.01	790.51	32.36	0.24495	0.00633	0.15453	Medium Dense	Very Stiff
45.0	26	s	5.0	37.44	32.09	31.20	272.57	894.01	34.53	0.16026	0.00559	0.144804	Dense	Hard
50.0	100	c	5.0	75.60	64.80	75.60	352.32	1155.61	40.00	0.06614	0.00433	0.125002	Very Dense	Hard
		Total:	50.0	"d" Feet				Total:		2.01002	0.05731	1.454942		

**Used When Boring Depths are less than 100 feet to estimate Shear Wave Velocity over 100 feet. Caltrans Geotechnical Services Design Manual, Version 1.0, August 2009 using N60HE corrected only for Hammer Energy (Empirical Calculation)

*** Uncorrected blowcount not to exceed 100 blows as entry per CBC

Consistency classification based upon ASCE 1996



BOREHOLE, SAMPLER, AND ROD CORRECTION FACTORS

Factor	Equipment Variables	Value
Borehole diameter factor, C_B	2.5 - 4.5 in (65 - 115 mm)	1.00
	6 in (150 mm)	1.05
	8 in (200 mm)	1.15
Sampling method factor, C_S	Standard sampler	1.00
	Sampler without liner	1.20
Rod length factor, C_R	10 - 13 ft (3 - 4 m)	0.75
	13 - 20 ft (4 - 6 m)	0.85
	20 - 30 ft (6 - 10 m)	0.95
	> 30 ft (> 10 m)	1.00

Adapted from Skempton (1986).

Spreadsheet Version 2.6, 2019: Prepared by Kevin L. Paul, PE, GE

LIQUEFY-v 2.3.XLS - A SPREADSHEET FOR EMPIRICAL ANALYSIS OF LIQUEFACTION POTENTIAL AND INDUCED GROUND SUBSIDENCE

Coryright & Developed 2007 by Shelton L. Stringer, PE, GE, PG , EG - Earth Systems Southwest

Project: Beaumont High School
Job No: 300414-003
Date: 3/20/2020
Boring: B-7 Data Set: 1

Methods: **Liquefaction Analysis using 1996 & 1998 NCEER workshop method (Youd & Idriss, editors)**
Journal of Geotechnical and Enviromental Engineering (JGEE), October 2001, Vol 127, No. 10, ASCE
Settlement Analysis from Tokimatsu and Seed (1987), JGEE,Vol 113, No.8, ASCE
Modified by Pradel, JGEE, Vol 124, No. 4, ASCE

EARTHQUAKE INFORMATION:

Magnitude: 8.2 7.5
PGA, g: 0.65 0.82
MSF: 0.80
GWT: 200.0 feet
Calc GWT: 200.0 feet
Remediate to: 3.0 feet

SPT N VALUE CORRECTIONS:

Energy Correction to N60 (C_E): 1.33 Automatic Hammer
Drive Rod Corr. (C_R): 1 Default
Rod Length above ground (feet): 3.0
Borehole Dia. Corr. (C_B): 1.00
Sampler Liner Correction for SPT?: 1 Yes
Cal Mod/ SPT Ratio: 0.63

Threshold Acceler., g: #N/A

Total (ft) Liquefied Thickness	Total (in.) Induced Subsidence
0	2.1

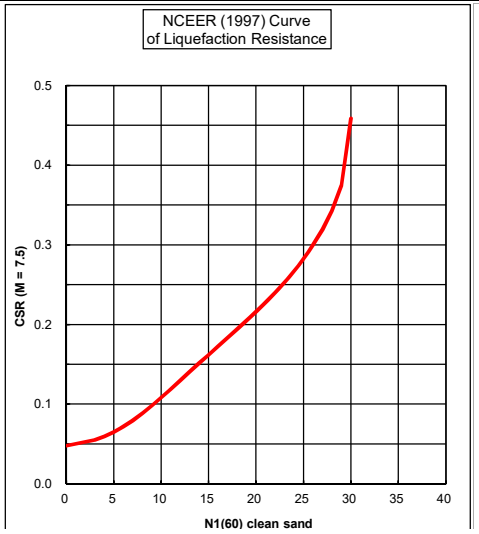
upper 50 ft

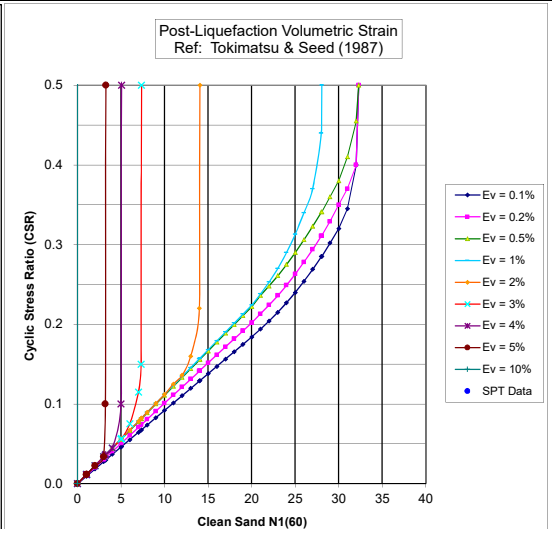
Required SF: 1.50
Minimum Calculated SF: #N/A

SETTLEMENT (SUBSIDENCE) OF DRY SANDS

Nc = 22.5

Base Depth (feet)	Cal Mod N	SPT N	Liquef. Suscept. (0 or 1)	Total Unit Wt. (pcf)	Fines Content (%)	Depth of SPT (feet)	Rod Length (feet)	Tot.Stress at SPT po (tsf)	Eff.Stress at SPT p'o (tsf)	rd	C_N	C_R	C_S	$N_{1(60)}$	Rel. Dens. Dr (%)	*Trigger FC Adj.* $\Delta N_{1(60)}$	*Equiv. Sand* $N_{1(60)CS}$	Kσ	M = 7.5 Available CRR	M =7.5 Induced CSR*	**Liquefac. Safety Factor**	*Post FC Adj.* $\Delta N_{1(60)}$	$N_{1(60)CS}$	Volumetric *Strain (%)*	**Induced Subsidence (in.)**	p (tsf)	G_{max} (tsf)	τ_{av} (tsf)	Shear Strain γ	Strain E_{15}	Strain Enc	**Dry Sand Subsidence (in.)**
								0.000																								
4.0	65	**41**	1	143	14	3.0	6.0	0.215	0.215	0.99	1.70	0.75	1.00	69.4	100	5.1	74.6	1.00	1.200	0.531	**Non-Liq.**	5.1	74.6	0.02	**0.01**	0.144	713	0.091	3.1E-04	6.4E-05	7.6E-05	**0.01**
7.5	80	**50**	1	139	14	5.5	8.5	0.390	0.390	0.99	1.65	0.75	1.00	82.8	100	5.7	88.5	1.00	1.200	0.528	**Non-Liq.**	5.7	88.5	0.01	**0.01**	0.261	1,019	0.164	3.3E-04	5.6E-05	6.7E-05	**0.01**
10.0	74	**47**	1	138	14	8.0	11.0	0.564	0.564	0.98	1.37	0.75	1.00	63.7	95	4.9	68.6	1.00	1.200	0.525	**Non-Liq.**	4.9	68.6	0.03	**0.01**	0.378	1,125	0.235	4.7E-04	1.1E-04	1.3E-04	**0.01**
15.0	85	**54**	1	134	5	10.5	13.5	0.735	0.735	0.98	1.20	0.77	1.00	65.9	97	0.0	65.9	1.00	1.200	0.522	**Non-Liq.**	0.0	65.9	0.03	**0.02**	0.493	1,267	0.305	5.3E-04	1.3E-04	1.5E-04	**0.02**
20.0	73	**46**	1	136	5	15.5	18.5	1.071	1.071	0.97	0.99	0.87	1.00	53.0	87	0.0	53.0	1.00	1.200	0.519	**Non-Liq.**	0.0	53.0	0.05	**0.03**	0.717	1,422	0.440	7.2E-04	2.2E-04	2.7E-04	**0.03**
25.0	24	**15**	1	124	2	20.5	23.5	1.408	1.408	0.96	0.87	0.94	1.00	16.4	48	0.0	16.4	0.94	0.177	0.540	**Non-Liq.**	0.0	16.4	0.81	**0.49**	0.943	1,102	0.571	2.7E-03	3.4E-03	4.1E-03	**0.49**
30.0		**25**	1	124	4	25.5	28.5	1.718	1.718	0.94	0.78	0.99	1.30	33.5	69	0.0	33.5	0.86	1.200	0.580	**Non-Liq.**	0.0	33.5	0.16	**0.10**	1.151	1,546	0.685	1.2E-03	6.7E-04	8.1E-04	**0.10**
35.0	16	**10**	1	134	40	30.5	33.5	2.030	2.030	0.92	0.72	1.00	1.00	9.7	37	6.9	16.6	0.88	0.179	0.558	**Non-Liq.**	6.9	16.6	0.79	**0.47**	1.360	1,330	0.791	2.6E-03	3.3E-03	3.9E-03	**0.47**
40.0		**10**	1	134	55	35.5	38.5	2.365	2.365	0.89	0.67	1.00	1.11	9.8	38	7.0	16.8	0.85	0.181	0.556	**Non-Liq.**	7.0	16.8	0.73	**0.44**	1.585	1,442	0.891	2.5E-03	3.0E-03	3.6E-03	**0.44**
45.0	27	**17**	1	136	14	40.5	43.5	2.701	2.701	0.85	0.63	1.00	1.00	14.2	45	2.8	17.0	0.83	0.183	0.545	**Non-Liq.**	2.8	17.0	0.65	**0.39**	1.809	1,545	0.970	2.2E-03	2.7E-03	3.3E-03	**0.39**
50.0		**26**	1	136	8	45.5	48.5	3.040	3.040	0.80	0.59	1.00	1.24	25.4	60	0.6	26.0	0.73	0.300	0.585	**Non-Liq.**	0.6	26.0	0.24	**0.14**	2.037	1,890	1.031	1.4E-03	9.9E-04	1.2E-03	**0.14**
50.5	100	**63**	1	128	4	50.0	53.0	3.346	3.346	0.75	0.56	1.00	1.00	47.1	82	0.0	47.1	0.63	1.200	0.637	**Non-Liq.**	0.0	47.1	0.07	**0.00**	2.242	2,417	1.069	8.1E-04	2.9E-04	3.5E-04	**0.00**





$N_{1(60)} = C_N*C_E*C_B*C_R*C_S*N$

C_R = 0.75 for Rod lengths < 3m, 1.0 for > 10m
= $\min(1,\max(0.75,1.4666-2.556/(z(ft))^{0.5}))$

$C_N = (1\ atm/p'o)^{0.5}$, max 1.7

$C_S = \max(1.1,\min(1.3,1+N_{1(60)}/100))$ for SPT without liners

$MSF = 10^{2.24}/M^{2.56}$

z = Depth (m)

pa = 1 atm = 101 KPa = 1.058 tsf

p = 0.67*po

τ_{av} = 0.65*PGA*po*rd

$G_{max} = 447*N_{1(60)CS}^{(1/3)}*p^{0.5}$

a = 0.0389*(p/1)+0.124

$b = 6400*(p/1)^{(-0.6)}$

$\gamma = [1+a*EXP(b*\tau_{av}/G_{max})]/[(1+a)*\tau_{av}/G_{max}]$

$E_{15} = \gamma*(N_{1(60)CS}/20)^{-1.2}$

$E_{nc} = (Nc/15)^{0.45}*E15$

$Nc = (MAG-4)^{2.17}$

S = 2*H*E_{nc}

rd = (1-0.4113*z^0.5+0.04052*z+0.001753*z^1.5)/(1-0.4177*z^0.5+0.05729*z-0.006205*z^1.5+0.00121*z^2))

$\Delta N_{1(60)}$ = min(10,IF(FC<35,exp(1.76-(190/FC^2)),5)+IF(FC<=5,1,IF(FC<35,0.99+(FC^1.5/1000),1.2))*N1(60) - N1(60)

$N_{1(60)CS} = N_{1(60)CS} + \Delta N_{1(60)}$

$K\sigma$ = min of 1.0 or $(p'o/1.058)^{(IF(Dr>0.7,0.6,IF(Dr<0.5,0.8,0.7))-1)}$

$Dr = (N_{1(60)}/70)^{0.5}$

CSReq = 0.65*PGA*(po/p'o)*rd

CSR* = CSReq/MSF/Kσ

$CRR_{7.5}$ = (0.048-0.004721*N+0.0006136*N^2-0.00001673*N^3)/(1-0.1248*N+0.009578*N^2-0.0003285*N^3+0.000003714*N^4))

N = $N_{1(60)CS}$

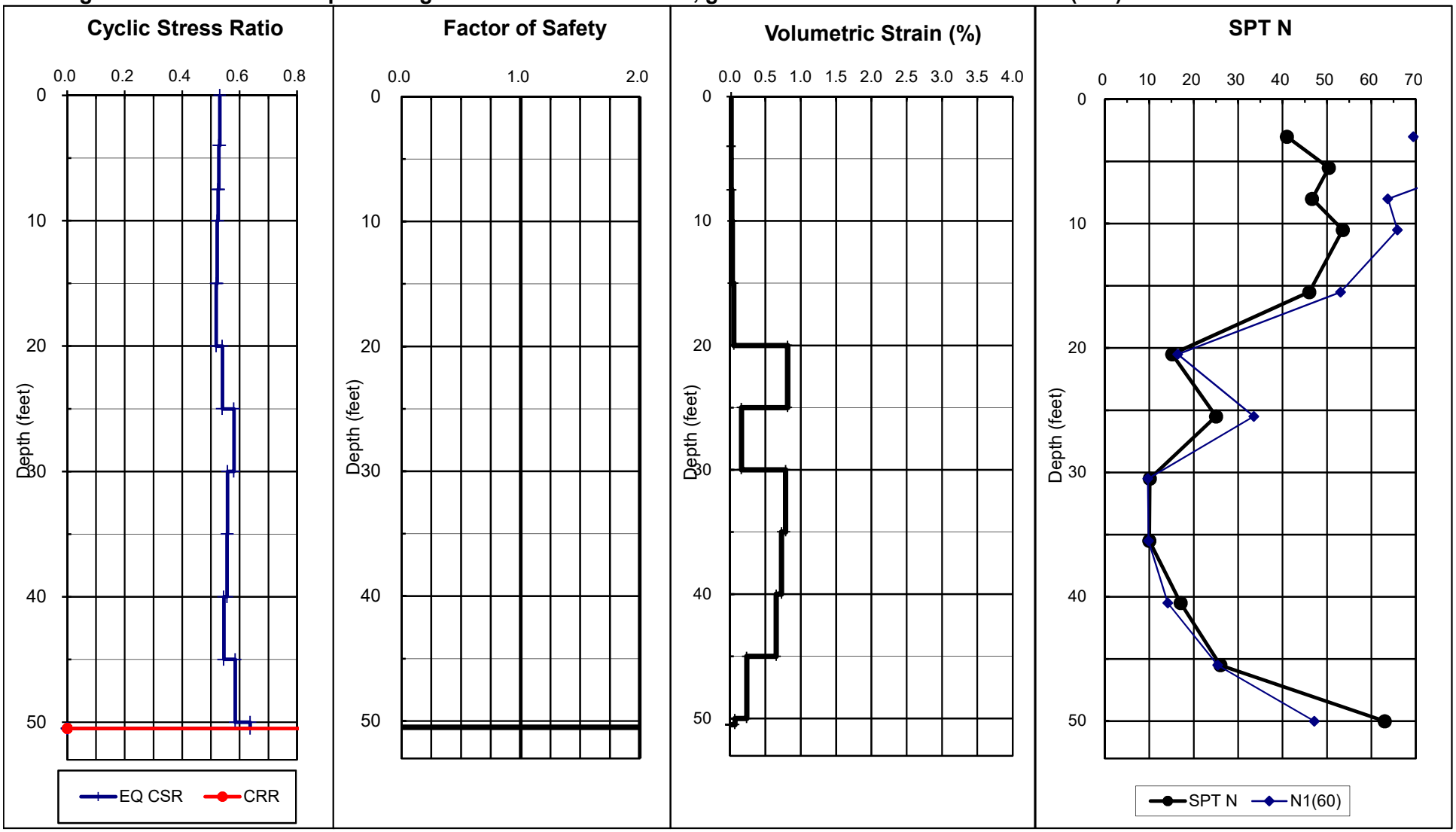
SF = $CRR_{7.5,1atm}/CSR*$

EARTH SYSTEMS - EVALUATION OF LIQUEFACTION POTENTIAL AND INDUCED SUBSIDENCE

Beaumont High School **Project No: 300414-003** 1996/1998 NCEER Method

Ground Compaction Remediated to 3 foot depth

Boring: B-7 **Earthquake Magnitude: 8.2** **PGA, g: 0.65** **Calc GWT (feet): 200**

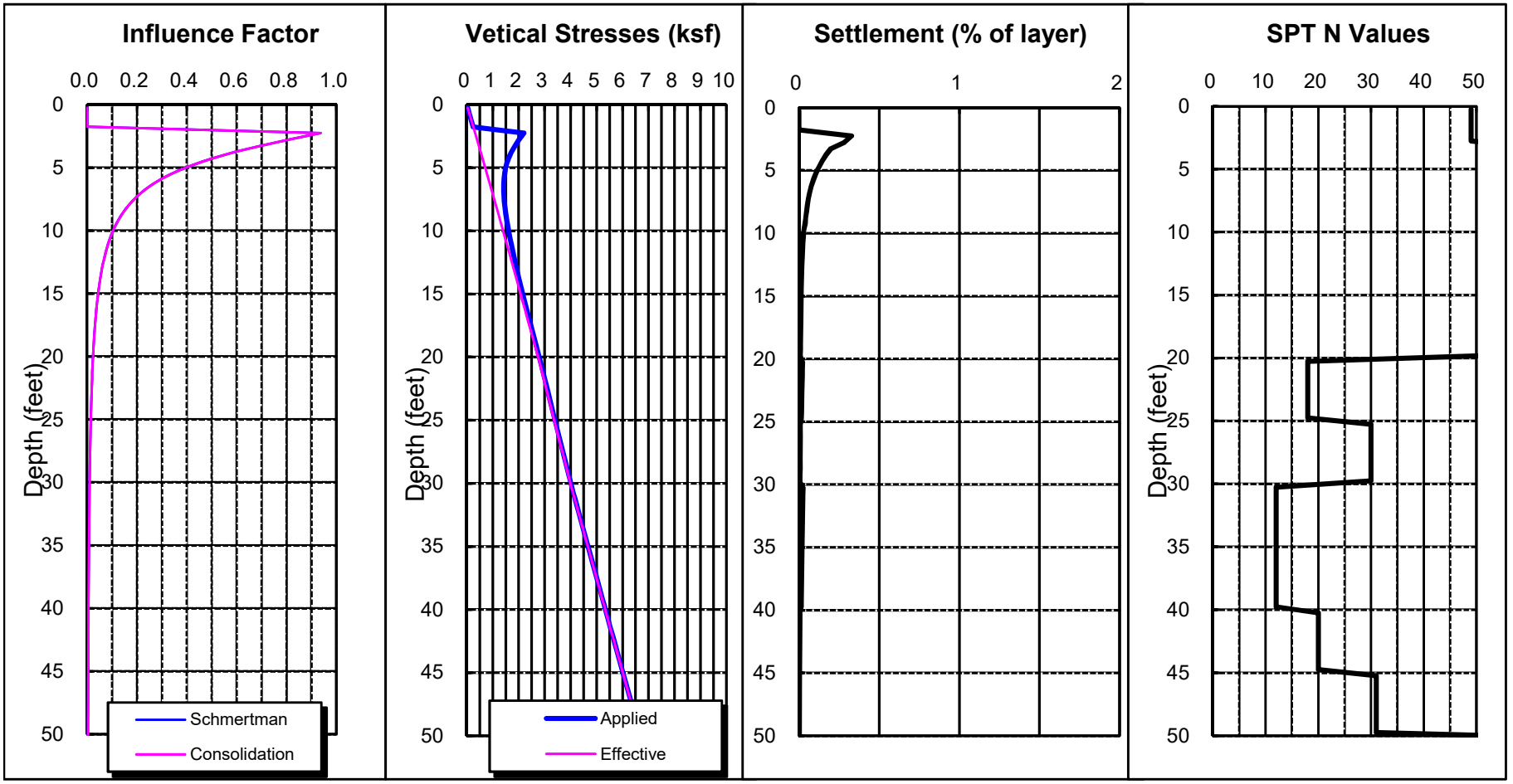


Total Thickness of Liquefiable Layers: 0.0 feet **Estimated Total Ground Subsidence: 2.1 inches**

EARTH SYSTEMS - SETTLEMENT ANALYSES

Beaumont High School 300414-003

Width, ft: 5.0 Length, ft: 5.0 Net pressure, ksf: 2.00 **Settlement, inches: 0.2**



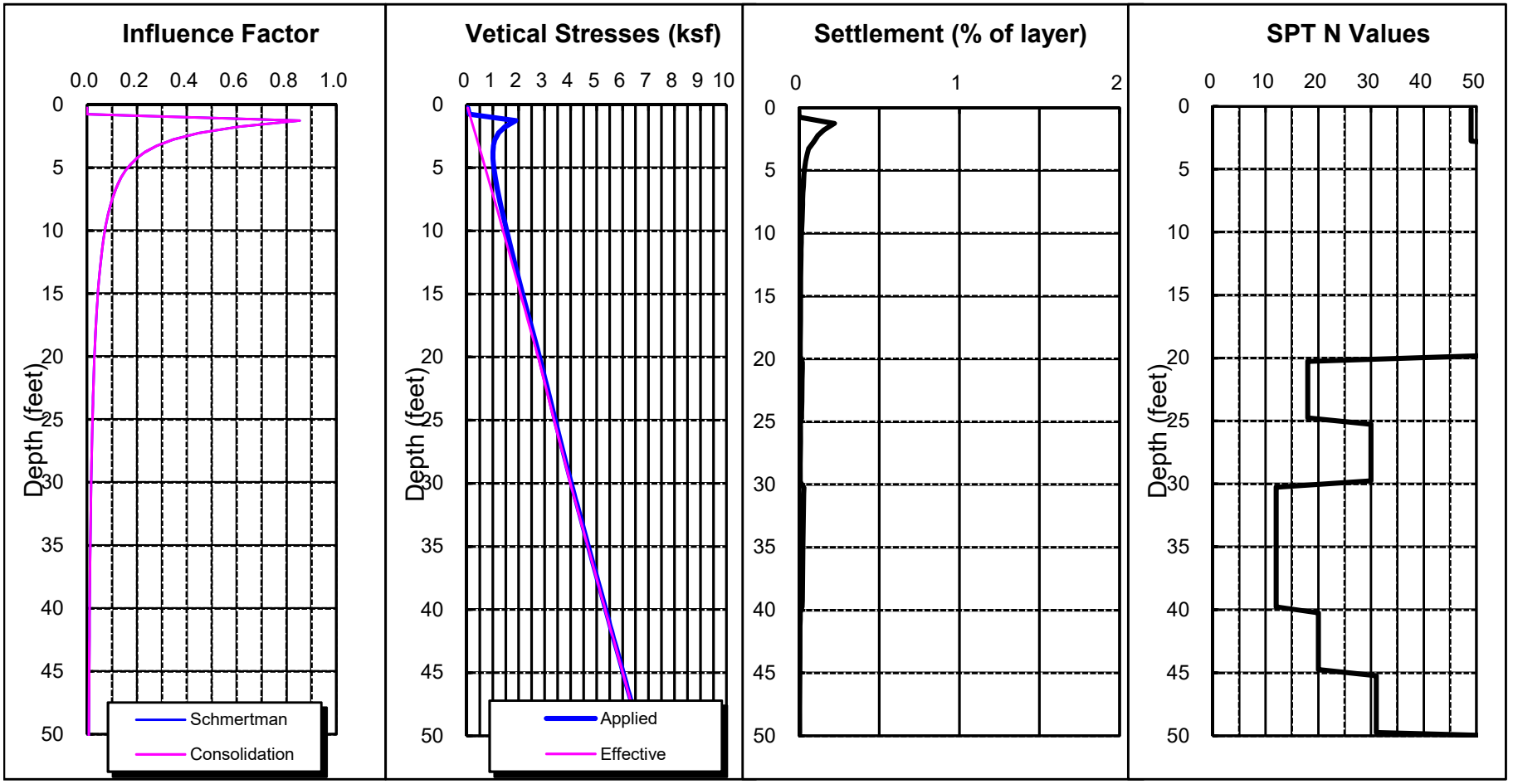
Load, Q: 50 kips Embedment, feet: 2.0 **Boring: B-7**

EARTH SYSTEMS - SETTLEMENT ANALYSES

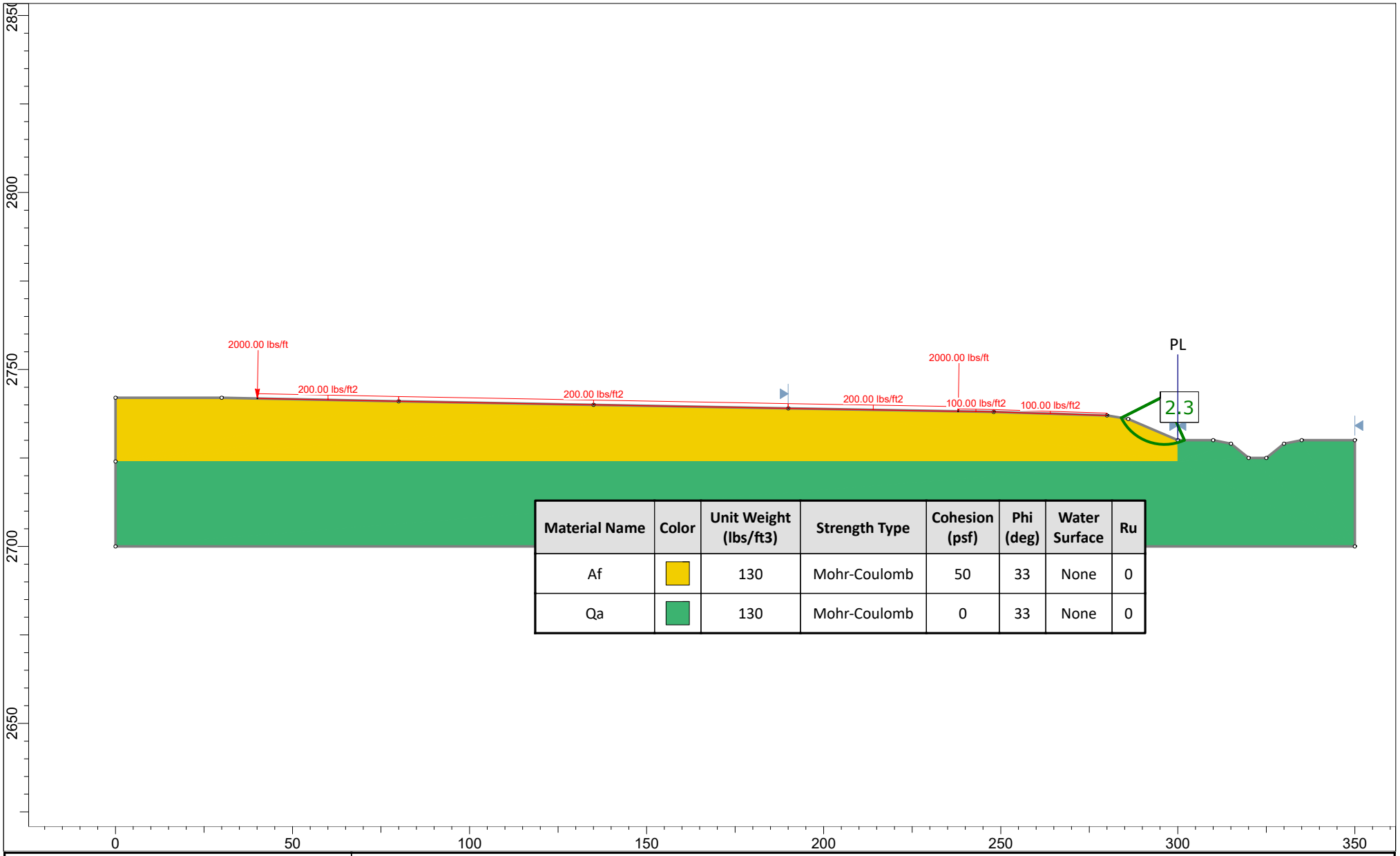
Beaumont High School

300414-003

Width, ft: 1.5 Length, ft: 40.0 Net pressure, ksf: 2.00 **Settlement, inches: 0.1**



Load, Q: 3 kpf Embedment, feet: 1.0 **Boring: B-7**

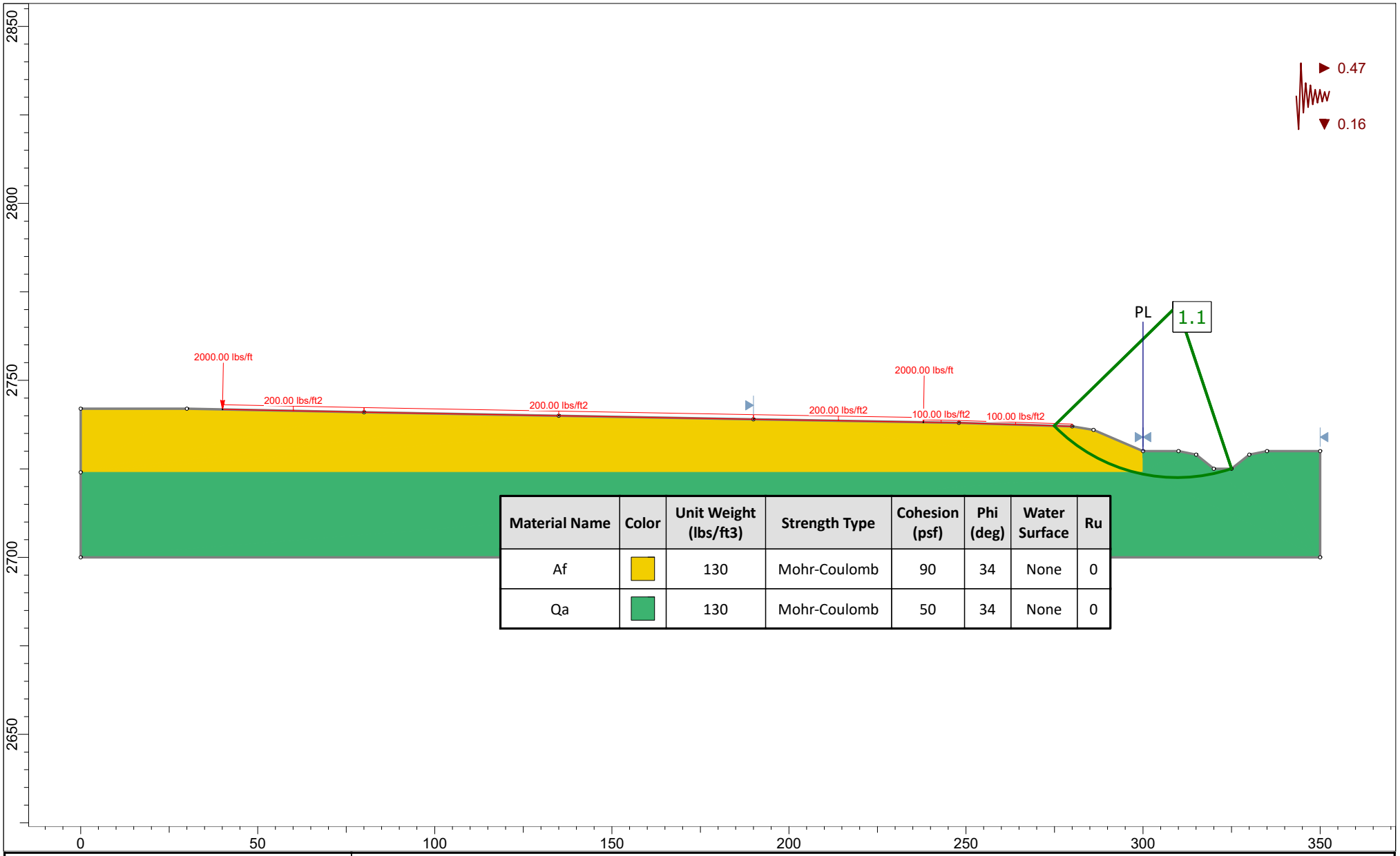


Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Af		130	Mohr-Coulomb	50	33	None	0
Qa		130	Mohr-Coulomb	0	33	None	0

rocscience

SLIDEINTERPRET 8.026

Project	300414-003_Beaumont High School		
Analysis Description	Cross Section A-A'		
Drawn By		*Scale* 1:449	*Company* Earth Systems
Date			*File Name* Section A-A'_2.slmd



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Ru
Af		130	Mohr-Coulomb	90	34	None	0
Qa		130	Mohr-Coulomb	50	34	None	0

rocscience

SLIDEINTERPRET 8.026

Project	300414-003_Beaumont High School		
Analysis Description	Cross Section A-A' - Seismic		
Drawn By		Scale 1:449	Company Earth Systems
Date			File Name Section A-A'_Seismic_2.slmd

APPENDIX B

Laboratory Test Results

File No.: 300414-003 March 20, 2020

Lab No.: 20-042

UNIT DENSITIES AND MOISTURE CONTENT ASTM D2937 & D2216

Job Name: Beaumont High School

Sample Location	Depth (feet)	Unit Dry Density (pcf)	Moisture Content (%)	USCS Group Symbol
B3	5	130	4	SM
B4	2.5	129	8	SM
B4	5	127	7	SM
B4	7.5	135	4	SW
B4	10	127	4	SW
B4	15	128	5	SW
B4	25	114	4	SM
B5	2.5	133	6	SM
B5	5	121	6	SW-SM
B5	10	120	6	SW-SM
B5	15	129	5	SW
B6	2.5	131	6	SM
B6	5	132	5	SW-SM
B6	7.5	124	5	SW-SM
B6	10	133	7	SM
B6	20	119	8	SM
B6	30	118	12	SM

File No.: 300414-003 March 20, 2020

Lab No.: 20-042

UNIT DENSITIES AND MOISTURE CONTENT ASTM D2937 & D2216

Job Name: Beaumont High School

Sample Location	Depth (feet)	Unit Dry Density (pcf)	Moisture Content (%)	USCS Group Symbol
B7	2.5	135	6	SM
B7	5	133	5	SM
B7	7.5	131	6	SP-SM
B7	10	128	5	SP-SM
B7	15	130	4	SW-SM
B7	20	118	5	SP
B7	25	---	3	SP
B7	30	120	12	SM
B7	35	---	22	ML
B7	40	125	8	SM
B7	45	---	10	SP-SM
B7	50	120	6	SW

File No.: 300414-003 30/20/20

Lab No.: 20-042

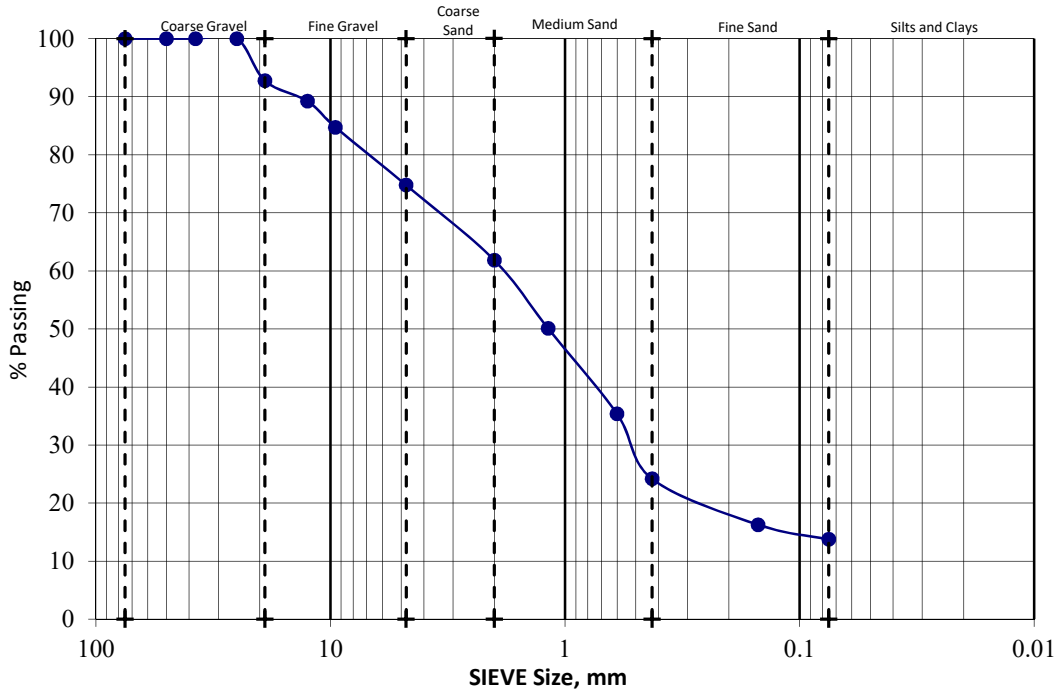
SIEVE ANALYSIS ASTM D6913

Job Name: Beaumont High School

Sample ID: B7 @ 0-5 feet

Description: Silty Sand w/Gravel (SM)

Sieve Size	% Passing
3"	100
2"	100
1-1/2"	100
1"	100
3/4"	93
1/2"	89
3/8"	85
#4	75
#10	62
#16	50
#30	35
#40	24
#100	16
#200	14



% Coarse Gravel:	7	% Coarse Sand:	13				
% Fine Gravel:	18	% Medium Sand:	38			Cu:	NA
		% Fine Sand:	10			Cc:	NA
% Total Gravel	25	% Total Sand	61	% Fines:	13.7		Gradation
							NA

File No.: 300414-003 March 20, 2020

Job Name: Beaumont High School

Lab Number: 20-042

ASTM D-1140 or Earth Systems Method (circle one)

AMOUNT PASSING NO. 200 SIEVE

(Earth Systems Method Transfers Sample until water runs clear)

Sample Location	Depth (feet)	Fines Content (%)	USCS Group Symbol	Soaking Time
B7	10	5.3	SP-SM	10
B7	20	2.3	SP	10
B7	25	4.1	SP	10
B7	40	14.2	SM	10
B7	45	7.6	SP-SM	10

File No.: 300414-003
Lab No.: 20-042

March 20, 2020

CONSOLIDATION TEST **ASTM D 2435 & D 5333**

Beaumont High School
B6 @ 7 1/2 feet

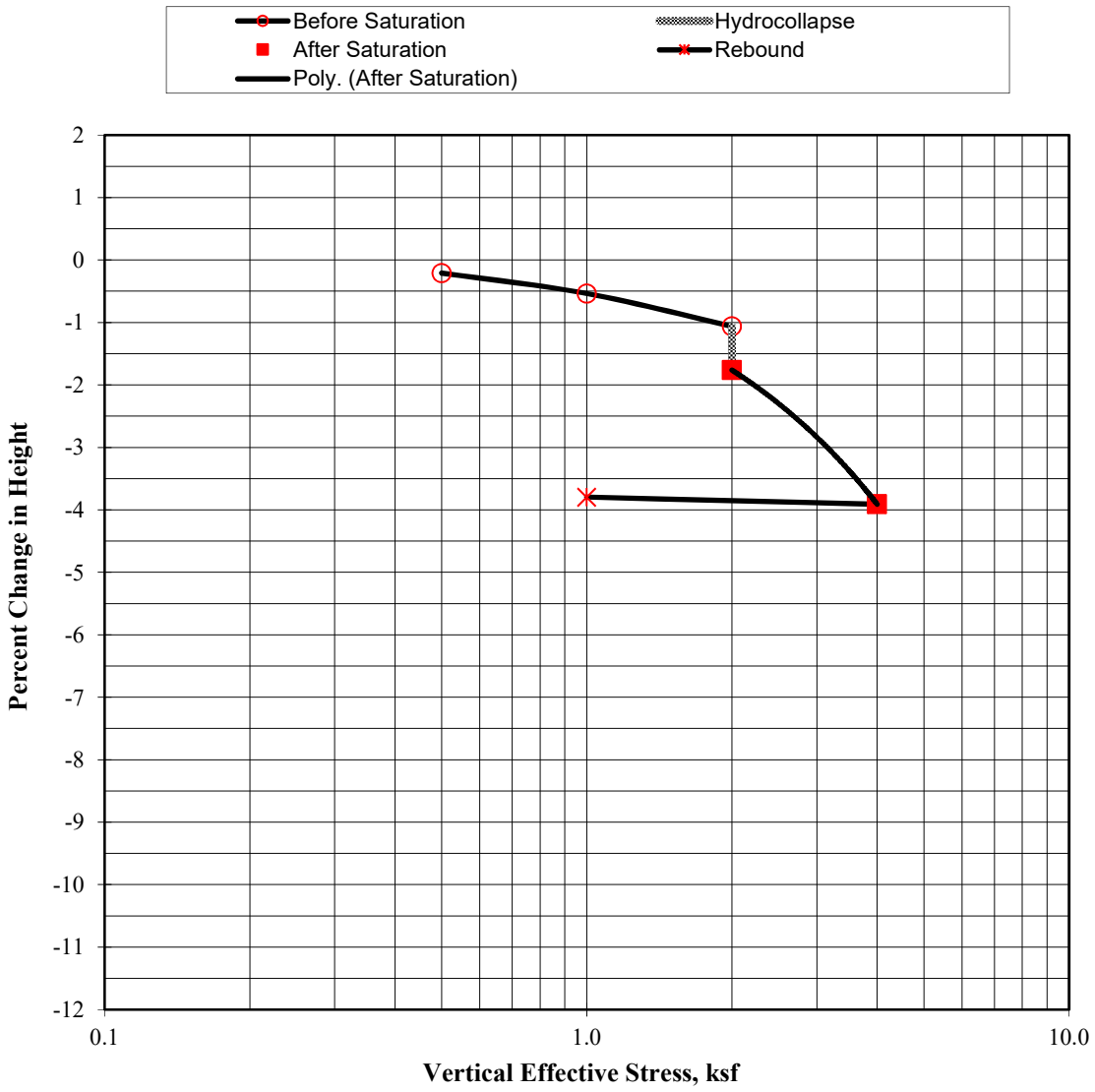
Gravelly Sand w/Silt (SW-SM)

Ring Sample

Initial Dry Density: 118.3 pcf
Initial Moisture: 6.1%
Specific Gravity: 2.67
Initial Void Ratio: 0.409

Hydrocollapse: 0.7% @ 2.0 ksf

% Change in Height vs Normal Pressure Diagram



File No.: 300414-003
Lab No.: 20-042

March 20, 2020

CONSOLIDATION TEST **ASTM D 2435 & D 5333**

Beaumont High School
B6 @ 10 feet

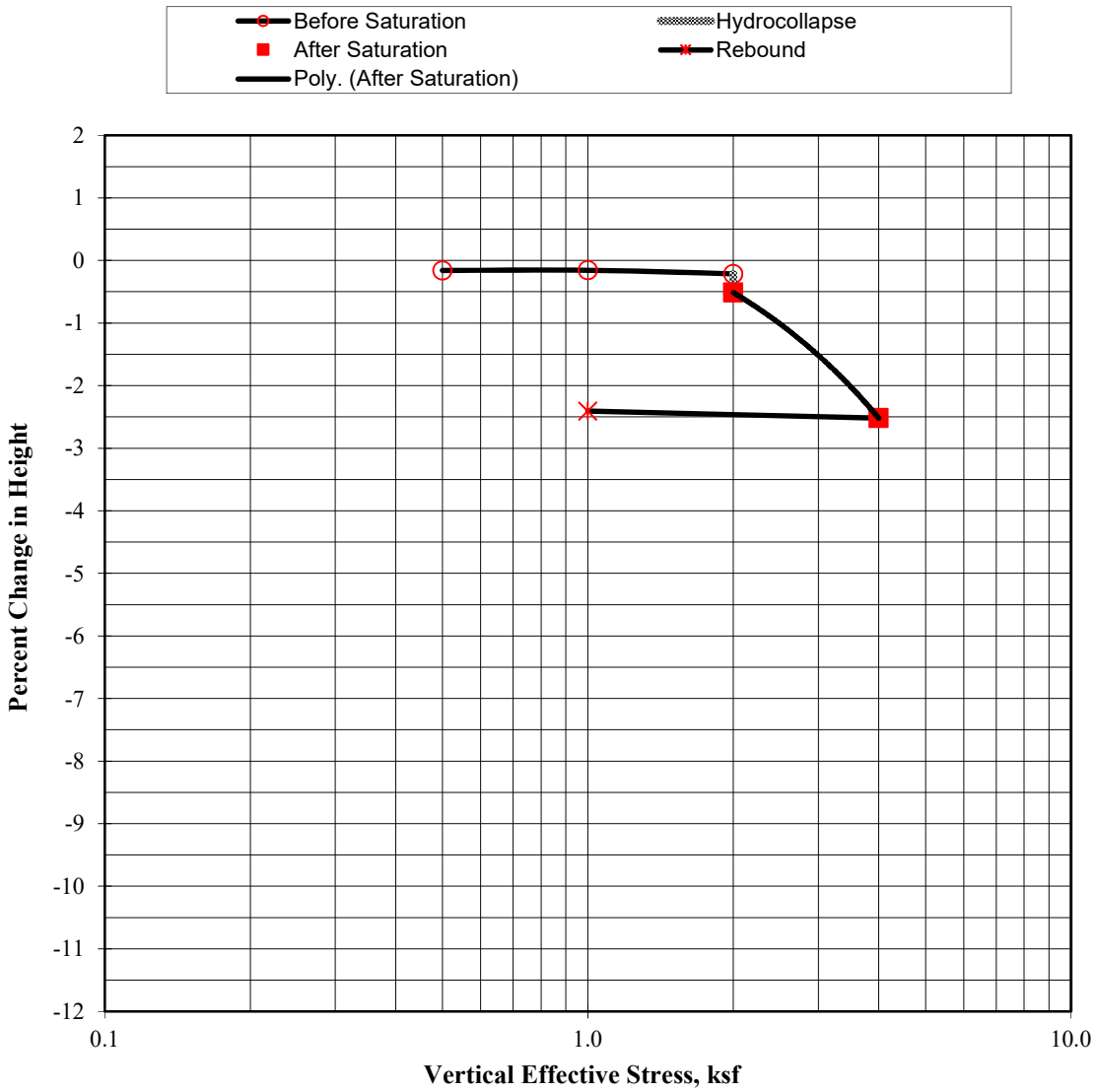
Silty Sand w/ Gravel (SM)

Ring Sample

Initial Dry Density: 123.6 pcf
Initial Moisture: 7.8%
Specific Gravity: 2.67
Initial Void Ratio: 0.349

Hydrocollapse: 0.3% @ 2.0 ksf

% Change in Height vs Normal Pressure Diagram



File No.: 300414-003
Lab No.: 20-042

March 20, 2020

CONSOLIDATION TEST **ASTM D 2435 & D 5333**

Beaumont High School
B6 @ 20 feet

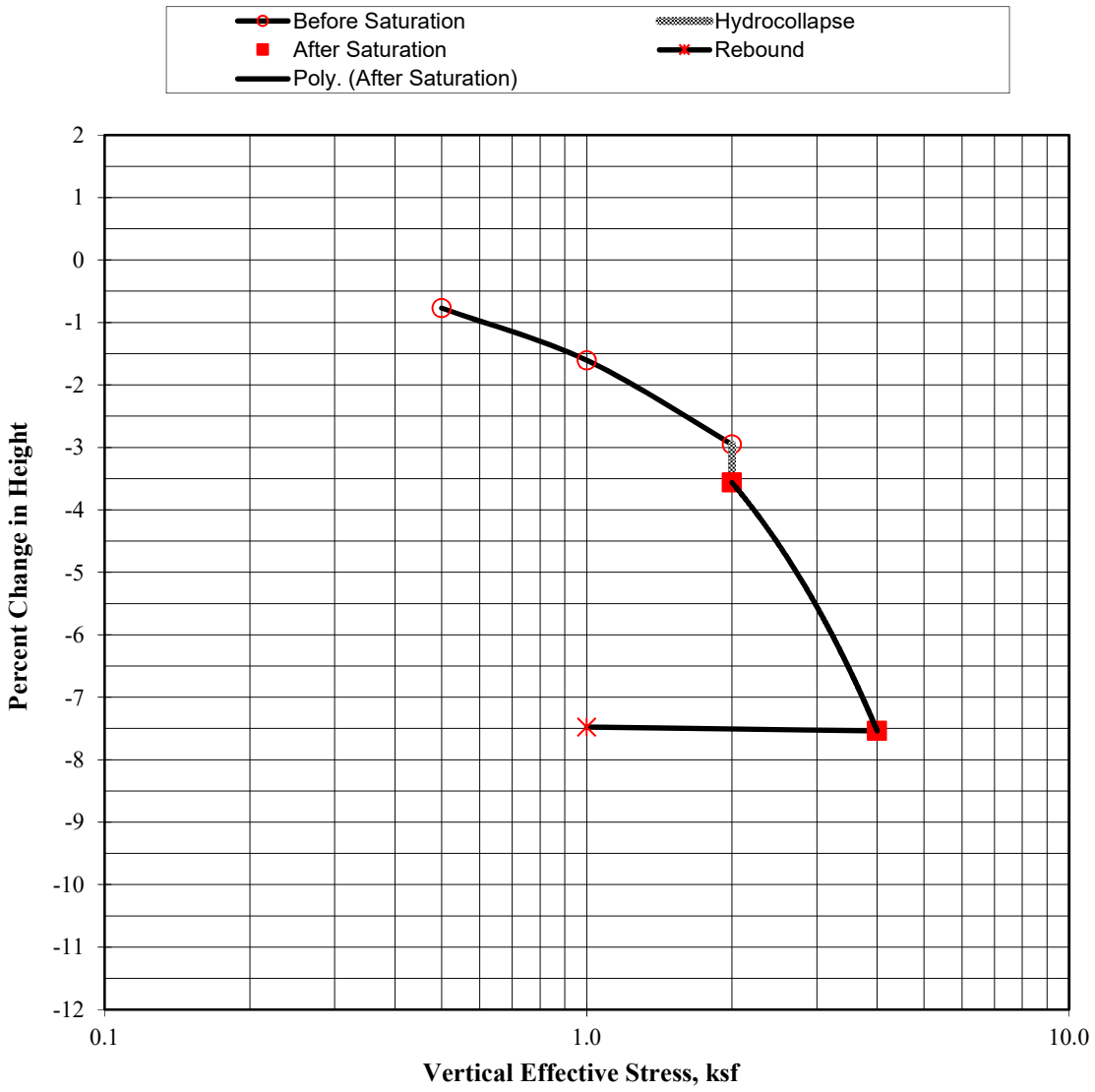
Silty Sand (SM)

Ring Sample

Initial Dry Density: 112.1 pcf
Initial Moisture: 8.5%
Specific Gravity: 2.67
Initial Void Ratio: 0.488

Hydrocollapse: 0.6% @ 2.0 ksf

% Change in Height vs Normal Pressure Diagram



File No.: 300414-003
Lab No.: 20-042

March 20, 2020

CONSOLIDATION TEST **ASTM D 2435 & D 5333**

Beaumont High School
B7 @ 30 feet

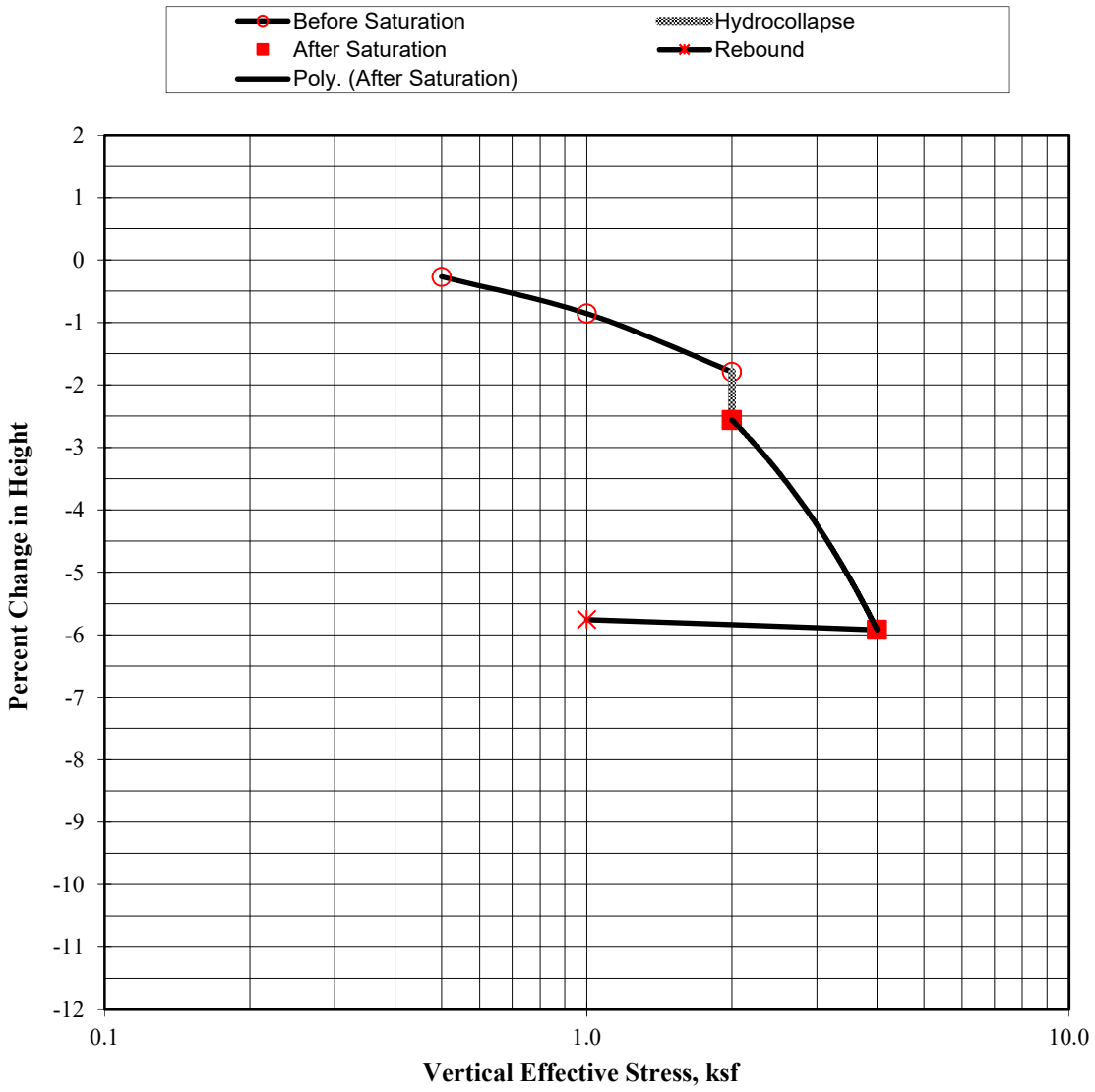
Silty Sand (SM)

Ring Sample

Initial Dry Density: 112.6 pcf
Initial Moisture: 12.8%
Specific Gravity: 2.67
Initial Void Ratio: 0.481

Hydrocollapse: 0.8% @ 2.0 ksf

% Change in Height vs Normal Pressure Diagram



File No.: 300414-003 March 20, 2020
Lab No.: 20-042

EXPANSION INDEX **ASTM D-4829**

Job Name: Beaumont High School
Sample ID: B7 @ 0-5 feet
Soil Description: Silty Sand w/Gravel (SM)

Initial Moisture, %:	8.1	
Initial Compacted Dry Density, pcf:	117.8	
Initial Saturation, %:	51	
Final Moisture, %:	19.8	
Volumetric Swell, %:	-1.0	
Expansion Index, EI:	**0**	**Very Low**

EI	ASTM Classification
0-20	Very Low
21-50	Low
51-90	Medium
91-130	High
>130	Very High

File No.: 300414-003 March 20, 2020

Lab No.: 20-042

MAXIMUM DRY DENSITY / OPTIMUM MOISTURE

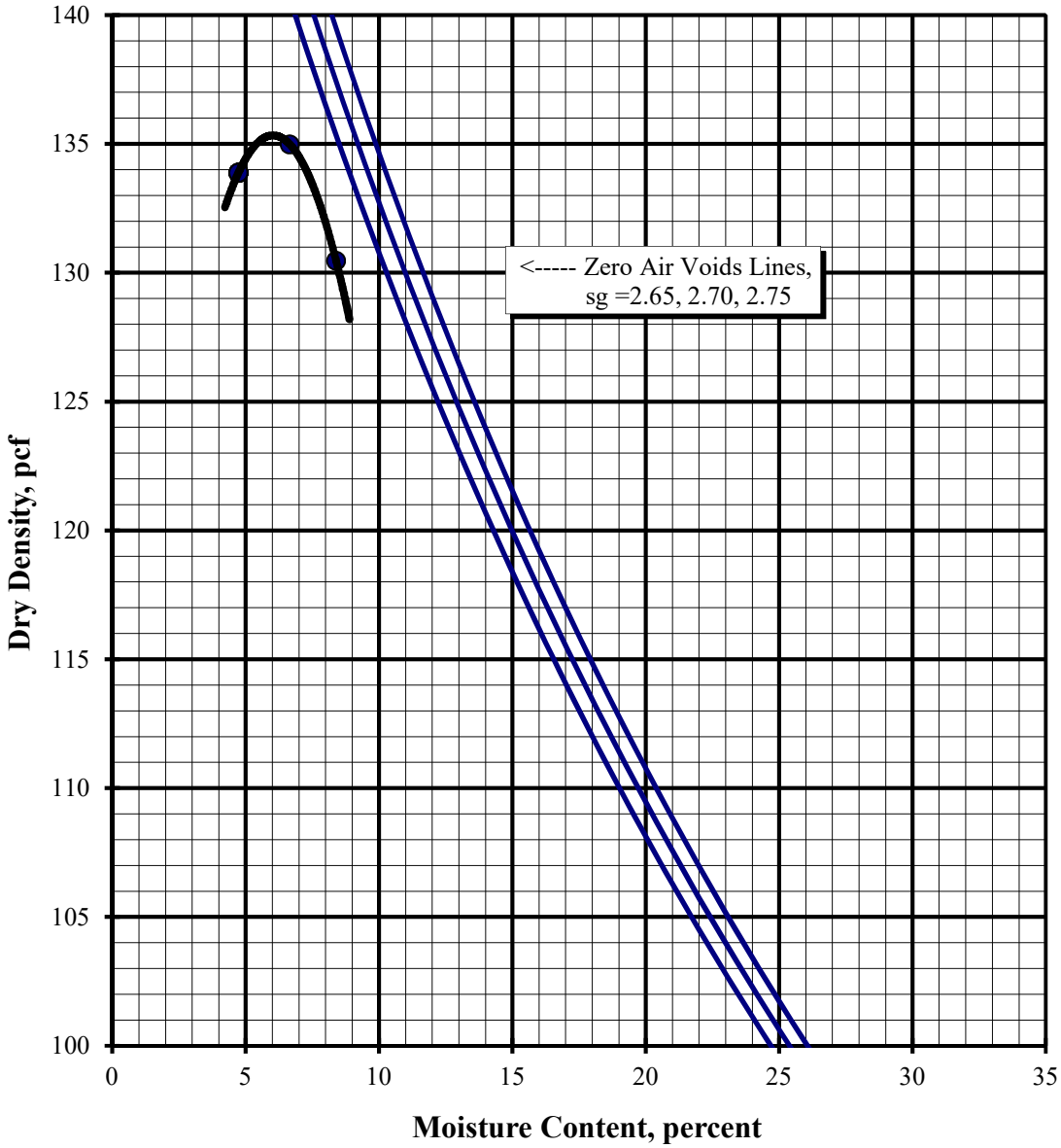
ASTM D 1557 (Modified)

Job Name: Beaumont High School
Sample ID: 1
Location: B7 @ 0-5 feet
Description: Silty F-C Sand w/F-C Gravel (SM)

Procedure Used: C
Preparation Method: Moist
Rammer Type: Mechanical
Lab Number: 20-042

Maximum Dry Density: 135.2 pcf
Optimum Moisture: 6.2%
Corrected for Oversize (ASTM D4718)

Sieve Size	% Retained (Cumulative)
3/4"	7.3
3/8"	15.3
#4	25.2



File No.: 300414-003 3/20/2020

Lab No.: 20-042

SOIL CHEMICAL ANALYSES

Job Name:	Beaumont High School	
Job No.:	300414-003	
Sample ID:	B3	B7
Sample Location:	5 feet	0-5 feet
Resistivity (Units)		
as-received (ohm-cm)	21,600	200,000
saturated (ohm-cm)	9,600	20,800
pH	6.7	7.6
Electrical Conductivity (mS/cm)	0.05	0.03
Chemical Analyses		
Cations		
calcium Ca^{2+} (mg/kg)	21	18
magnesium Mg^{2+} (mg/kg)	7.9	6.1
sodium Na^{1+} (mg/kg)	30	18
potassium K^{1+} (mg/kg)	3.3	4
Anions		
carbonate CO_3^{2-} (mg/kg)	ND	ND
bicarbonate HCO_3^{1-}(mg/kg)	88	134
fluoride F^{1-} (mg/kg)	17	17
chloride Cl^{1-} (mg/kg)	6	ND
sulfate SO_4^{2-} (mg/kg)	12	10
phosphate PO_4^{3-} (mg/kg)	ND	ND
Other Tests		
ammonium NH_4^{1+} (mg/kg)	ND	ND
nitrate NO_3^{1-} (mg/kg)	13	11
sulfide S^{2-} (qual)	na	na
Redox (mV)	na	na

Note: Tests performed by Subcontract Laboratory:
HDR Engineering, Inc.
431 West Baseline Road
Claremont, California 91711 Tel: (909) 962-5485

mg/kg = milligrams per kilogram (parts per million) of dry soil.
Redox = oxidation-reduction potential in millivolts
ND = not detected
na = not analyzed
T.O.P. = top of pipe

Resistivity per ASTM G187, Cations per ASTM D6919, Anions per ASTM D4327, and Alkalinity per APHA 2320-B. Electrical conductivity in millisiemens/cm and chemical analyses were made on a 1:5 soil-to-water extract.

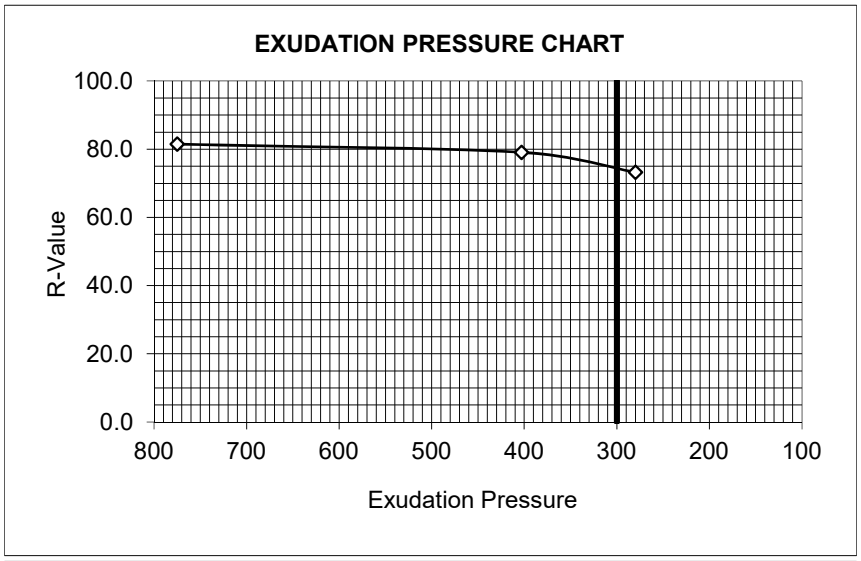
General Guidelines for Soil Corrosivity

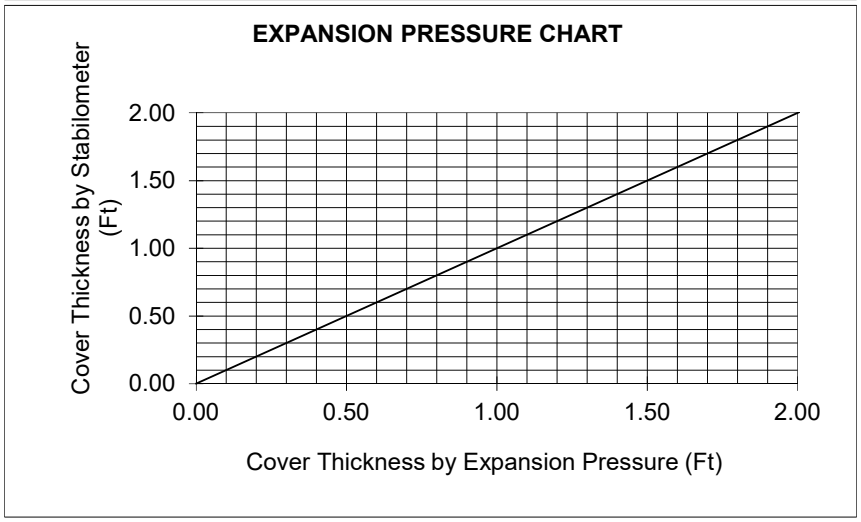
Chemical Agent	Amount in Soil	Degree of Corrosivity
Soluble Sulfates[1]	0 -1,000 mg/Kg (ppm) [0-.1%]	Low
	1,000 - 2,000 mg/Kg (ppm) [0.1-0.2%]	Moderate
	2,000 - 20,000 mg/Kg (ppm) [0.2-2.0%]	Severe
	> 20,000 mg/Kg (ppm) [>2.0%]	Very Severe
Resistivity[2] (Saturated)	0- 900 ohm-cm	Very Severely Corrosive
	900 to 2,300 ohm-cm	Severely Corrosive
	2,300 to 5,000 ohm-cm	Moderately Corrosive
	5,000-10,000 ohm-cm	Mildly Corrosive
	10,000+ ohm-cm	Progressively Less Corrosive

1 - General corrosivity to concrete elements. American Concrete Institute (ACI) Water Soluble Sulfate in Soil by Weight, ACI 318, Tables 4.2.2 - Exposure Conditions and Table 4.3.1 - Requirements for Concrete Exposed to Sulfate-Containing Solutions. ***It is recommended that concrete be proportioned in accordance with the requirements of the two ACI tables listed above (4.2.2 and 4.3.1). The current ACI should be referred to for further information.***

2 - General corrosivity to metallic elements (iron, steel, etc.). Although no standard has been developed and accepted by corrosion engineering organizations, it is generally agreed that the classification shown above, or other similar classifications, reflect soil corrosivity. Source: Corrosionsource.com. The classification presented is excerpted from ASTM STP 1013 titled "Effects of Soil Characteristics on Corrosion" (February, 1989)

3 - Earth Systems does not practice corrosion engineering. Results should be reviewed by an engineer competent in corrosion evaluation, especially in regard to nitrites and ammonium.



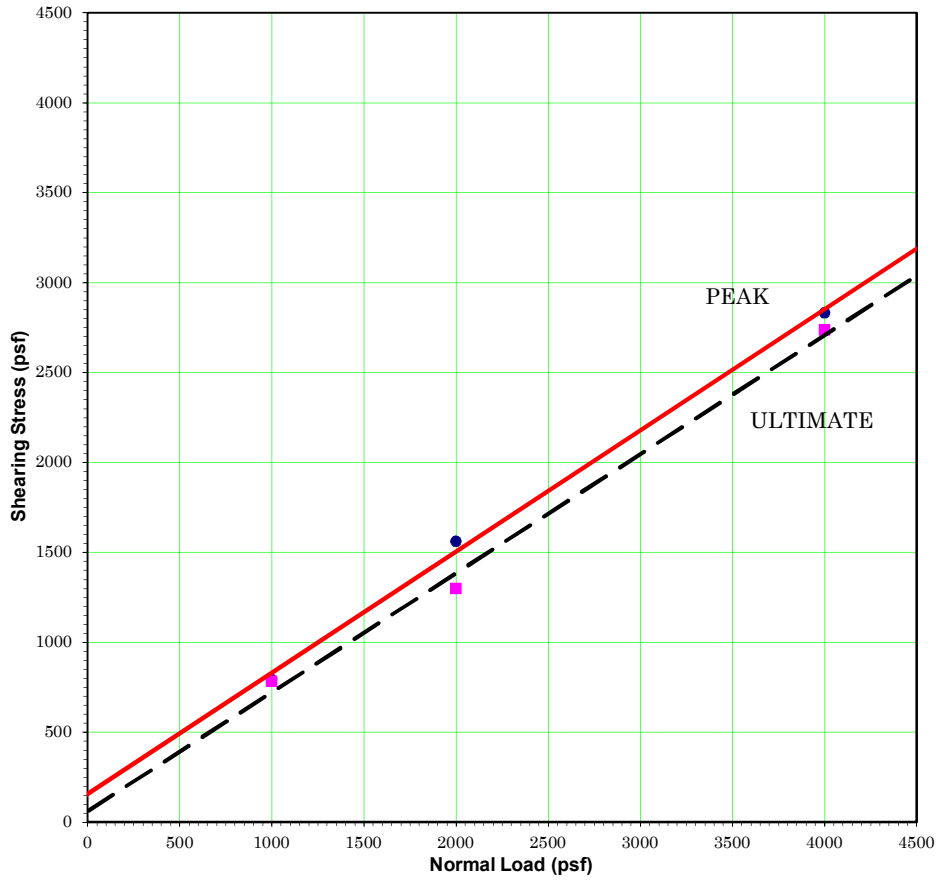


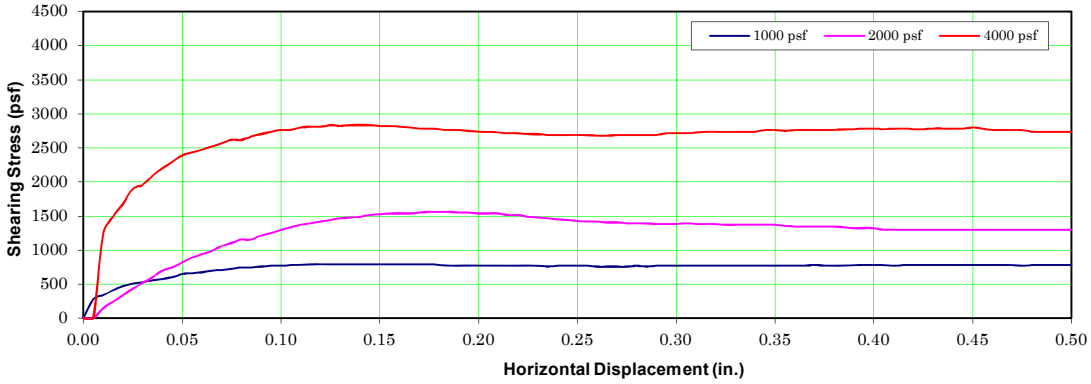
JOB NAME: Beaumont High School
SAMPLE I. D.: B7 @ 0-5 feet
SOIL DESCRIPTION: Silty Sand w/Gravel (SM)

SPECIMEN NUMBER	D	E	F
EXUDATION PRESSURE	280	403	775
RESISTANCE VALUE	73.2	79.1	81.5
EXPANSION DIAL(0.0001")	-0.0041	-0.0012	-0.0011
EXPANSION PRESSURE (PSF)	0.0	0.0	0.0
% MOISTURE AT TEST	9.4	8.5	7.8
DRY DENSITY AT TEST	132.8	134.3	136.0

R-VALUE @ 300 PSI EXUDATION	**74**
R-VALUE by Expansion Pressure*	**N/A**

**Based on Traffic Index = 8.00 & Gravel Factor = 1.34*





DIRECT SHEAR DATA*

Sample Location: B6 at 30 feet
Material: Silty Sand w/Gravel (SM)
Dry Density (pcf): 117.9

	Initial	Final
Moisture Content (%):	12	17.3
Saturation (%):	78	100
	Peak	**Ultimate**
ϕ Angle of Friction (degrees):	34	33
c Cohesive Strength (psf):	150	50

Test Type: Peak and Ulitimate
Shear Rate (in/min): 0.007

* Test Method: ASTM D-3080

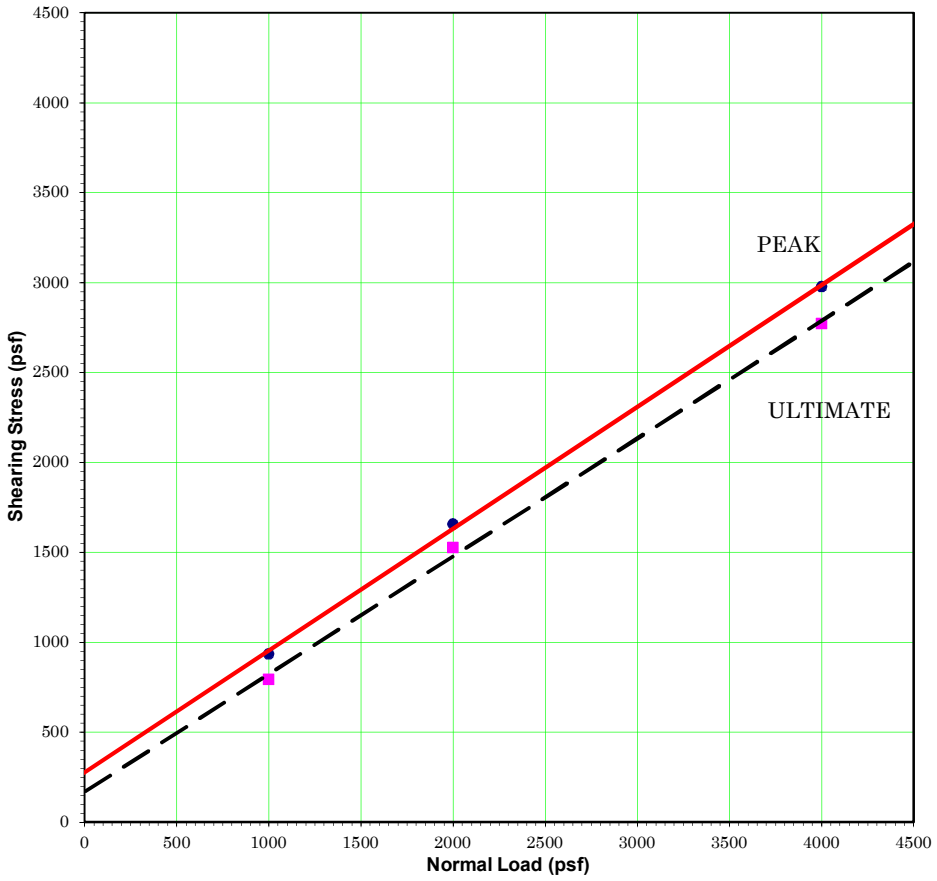
DIRECT SHEAR TEST

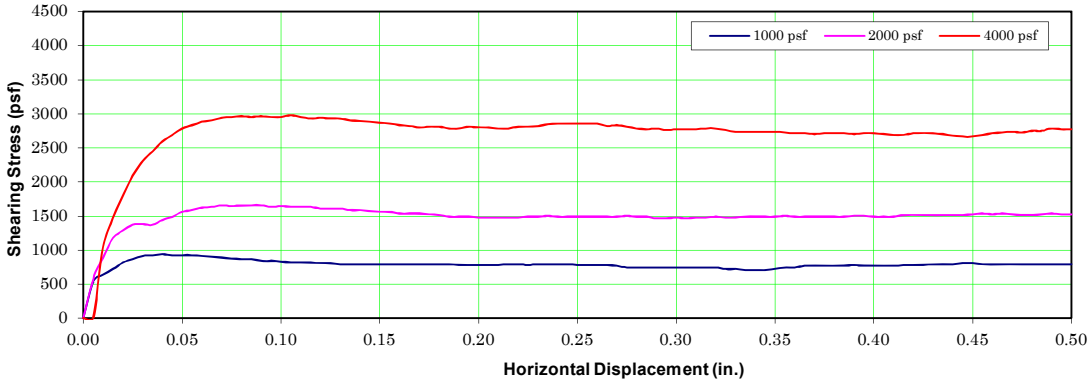
Beaumont High School

Beaumont, California

Earth Systems Pacific

3/20/2020 | 300414-003





DIRECT SHEAR DATA*

Sample Location: B7 at 0-5 feet - Remolded 90%
Material: Silty Sand w/Gravel (SM)
Dry Density (pcf): 121.7

	Initial	Final
Moisture Content (%):	6.2	13.1
Saturation (%):	45	100
	Peak	Ultimate
ϕ Angle of Friction (degrees):	34	33
c Cohesive Strength (psf):	270	160

Test Type: Peak and Ulitimate
Shear Rate (in/min): 0.007

* Test Method: ASTM D-3080

DIRECT SHEAR TEST

Beaumont High School

Beaumont, California

Earth Systems Pacific

3/20/2020 | 300414-003

Appendix E Traffic and Access Analysis

Appendices

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TRAFFIC & ACCESS ANALYSIS

FOR THE PROPOSED

BEAUMONT HIGH SCHOOL EXPANSION

Prepared for

BEAUMONT UNIFIED SCHOOL DISTRICT
&
PLACEWORKS

Prepared by

GARLAND ASSOCIATES
16787 Beach Boulevard, Suite 234
Huntington Beach, CA 92647
714-330-8984

JUNE 2020

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I.
INTRODUCTION AND PROJECT DESCRIPTION

This report summarizes the results of a traffic and access analysis that was conducted for a proposed expansion of Beaumont High School in Beaumont. The high school campus is bounded by Brookside Avenue on the south, Beaumont Avenue on the east, and Cherry Valley Boulevard on the north. The school's sports complex/stadium and the Beaumont Unified School District's administration center are located immediately west of the high school campus. The site plan for the expanded school is provided on Figure 1 in the Appendix.

The existing high school has an enrollment capacity of 2,990 students and the proposed expansion project would increase the capacity to 5,244 students, which equates to an increase of 2,254 students at the high school. The project would include the construction of new and expanded parking lots and a reconfiguration of the internal circulation roads. Vehicular access to the school would continue to be provided by two existing driveways: one on Cherry Valley Boulevard on the north end of the campus and one on Brookside Avenue on the south end of the campus, both of which are located west of Beaumont Avenue. In addition, a new driveway would be provided on Cherry Valley Boulevard west of the school's existing driveway near the northwest corner of the school site.

An analysis has been conducted to evaluate the traffic impacts of the proposed expansion project and to assess the proposed access system relative to visibility and vehicle queuing (stacking). The methodology for the traffic study, in general, was to 1) establish the existing baseline traffic conditions on the streets that provide access to the school site, 2) project the future baseline traffic conditions for the anticipated opening of the expanded school, 3) estimate the levels of additional traffic that would be generated by the expanded school, 4) conduct a comparative analysis of traffic conditions with and without the proposed expansion project, 5) evaluate the adequacy of the proposed access system, and 6) identify the mitigation measures required to alleviate the significant traffic impacts associated with the project. The analysis addresses the morning peak hour and the afternoon peak hour for school traffic.

The traffic analysis addresses the impacts at four intersections in the immediate vicinity of the school site, which includes the main ingress/egress driveways on Cherry Valley Boulevard and Brookside Avenue. The study area intersections, the type of traffic control at each intersection, and the public agency with jurisdictional responsibility for each intersection are listed in Table 1.

TABLE 1
STUDY AREA INTERSECTIONS

Intersection	*Traffic Control*	*Jurisdiction*
Beaumont Avenue/Cherry Valley Blvd	Traffic Signal	City of Beaumont/Riverside County
Beaumont Avenue/Brookside Avenue	Traffic Signal	City of Beaumont/Riverside County
Cherry Valley Blvd/School's North Driveway	Traffic Signal	City of Beaumont/Riverside County
Brookside Avenue/School's South Driveway	3-Way Stop Signs	City of Beaumont

The traffic impact analysis is based on an evaluation of the levels of service at the affected study area intersections. Level of service (LOS) is an industry standard by which the operating conditions of a roadway segment or an intersection are measured. LOS is defined on a scale of A through F with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS A is characterized as having free flowing traffic conditions with no restrictions on maneuvering or operation speeds, where traffic volumes are low and travel speeds are high. LOS F is characterized as having forced flow with many stoppages and low operating speeds. According to City of Beaumont standards, LOS A through D represents acceptable conditions, while LOS E and F represent congested, over-capacity conditions. According to the Riverside County Congestion Management Program, LOS A through E represents acceptable conditions while LOS F represents unacceptable conditions. The levels of service at the study area intersections were determined by using the Highway Capacity Manual methodology, which is consistent with the guidelines for traffic impact studies from the Riverside County Congestion Management Program.

II.
EXISTING AND FUTURE BASELINE TRAFFIC CONDITIONS

The roadway network in the project vicinity, the existing and future baseline traffic volumes, and the levels of service at the affected study area intersections are described below.

Street Network

The streets that provide access to the project site include Beaumont Avenue, Brookside Avenue, and Cherry Valley Boulevard. The following paragraphs provide a brief description of the characteristics of these streets. Figure 2 in the Appendix shows the study area streets, the type of traffic control at each intersection, the lane configuration at each intersection, the number of lanes on each street segment, and the posted speed limits on each street.

Beaumont Avenue

Beaumont Avenue is a two lane north-south street that abuts the east side of the school campus. It has two lanes in the vicinity of the school and widens to four lanes south of the study area at Oak Valley Parkway. Beaumont Avenue has an interchange with Interstate 10 approximately three miles south of the school site. The speed limit on Beaumont Avenue ranges from 35 to 50 miles per hour.

Brookside Avenue

Brookside Avenue is a two lane east-west street that abuts the south side of the school campus. The school's existing south access driveway is located on the north side of Brookside Avenue west of Beaumont Avenue. The speed limit on Brookside Avenue is 40 miles per hour.

Cherry Valley Boulevard

Cherry Valley Boulevard is a two lane east-west street that abuts the north side of the school campus. The school's existing north access driveway is located on the south side of Cherry Valley Boulevard west of Beaumont Avenue. The speed limit on Cherry Valley Boulevard is 45 miles per hour west of Beaumont Avenue and 40 miles per hour east of Beaumont Avenue.

Existing Traffic Volumes

Manual traffic counts were taken at the four study area intersections during the morning and afternoon peak periods in May 2020. However, since the school was operating remotely and the overall traffic volumes were lower than normal because of the COVID-19 pandemic, previous traffic reports were researched to document historic traffic volumes at the study area intersections. The reports that were sourced include "Traffic & Parking Impact Analysis for the Proposed Beaumont High School Expansion & Sports Complex" (Beaumont Unified School District, January 2010), "City of Beaumont General Plan Traffic Study" (Urban Crossroads, December 2004), "Noble Creek Vistas Specific Plan Consolidated EIR" (Applied Planning, May 2004), "Oak Valley & SCPGA Golf Course Specific Plan/EIR" (LSA Associates, August 2001), and "Sunny-Cal Specific Plan Traffic Impact Analysis" (Kunzman Associates February 2005). The traffic projections from these reports were quantified, including the "with project" traffic for each study, and the highest traffic counts were identified for each turning movement at each intersection. Then those values were

expanded by a growth factor of 10 percent to estimate the existing traffic volumes at each intersection for normal non-pandemic conditions.

The existing peak hour traffic volumes at each intersection are shown on Figure 3 in the Appendix. The figure shows the morning and afternoon peak hour traffic volumes and turning movements. The morning peak hour represents the time when the street network's commuter traffic and the school's arrival traffic coincide, which typically occurs between 7:00 and 8:00 AM. The afternoon peak hour represents the school's dismissal time, which typically occurs between 2:30 and 3:30 PM.

Existing Intersection Levels of Service

To quantify the existing baseline traffic conditions, the four study area intersections were analyzed to determine their operating conditions during the morning and afternoon peak periods. Based on the peak hour traffic volumes, the turning movement counts, and the existing number of lanes at each intersection, the average vehicle delay values and corresponding levels of service have been determined at each intersection, as summarized in Table 2.

TABLE 2
EXISTING INTERSECTION LEVELS OF SERVICE

Intersection	*Delay Value (seconds/vehicle) & Level of Service*	
	AM Peak Hour	*PM Peak Hour*
SIGNALIZED INTERSECTIONS		
Beaumont Ave/Cherry Valley Blvd	21.7 – C	17.3 – B
Beaumont Ave/Brookside Ave	40.2 – D	23.8 – C
Cherry Valley Blvd/School's North Driveway	18.4 – B	16.7 – B
INTERSECTION WITH STOP SIGNS		
Brookside Ave/School's South Driveway	21.5 – C	13.3 – B

The levels of service shown in Table 2 are based on the average vehicle delay values that were calculated for each intersection using the Highway Capacity Software. The relationship between the average delay values and levels of service is shown in Table 3.

TABLE 3
RELATIONSHIP BETWEEN DELAY VALUES & LEVELS OF SERVICE

Level of Service	*Delay Value (seconds) Signalized Intersections*	*Delay Value (seconds) Unsignalized Intersections*
A	0.0 to 10.0	0.0 to 10.0
B	> 10.0 to 20.0	> 10.0 to 15.0
C	> 20.0 to 35.0	> 15.0 to 25.0
D	> 35.0 to 55.0	> 25.0 to 35.0
E	> 55.0 to 80.0	> 35.0 to 50.0
F	> 80.0	> 50.0

As shown in Table 2, all four of the study area intersections currently operate at acceptable levels of service (LOS A through D) during the peak periods.

Future Baseline Traffic Conditions

As the proposed project is expected to be completed and occupied in the year 2022, the existing traffic volumes were expanded by a growth factor of 1.06 to account for general regional growth and the cumulative impacts of traffic associated with other development projects in the area. The projected future baseline traffic volumes without the project are shown on Figure 4 in the Appendix for the morning and afternoon peak hours.

Based on the projected peak hour traffic volumes, the turning movement counts, and the existing lane configuration, the future baseline levels of service were calculated for each study area intersection, as summarized in Table 4. For the target year of 2022, all four of the study area intersections are projected to operate at acceptable levels of service (LOS A through D) during the peak periods.

TABLE 4
YEAR 2022 INTERSECTION LEVELS OF SERVICE WITHOUT PROJECT

Intersection	*Delay Value (seconds/vehicle) & Level of Service*	
	AM Peak Hour	*PM Peak Hour*
SIGNALIZED INTERSECTIIONS		
Beaumont Ave/Cherry Valley Blvd	23.1 – C	18.1 – B
Beaumont Ave/Brookside Ave	49.6 – D	25.7 – C
Cherry Valley Blvd/School's North Driveway	19.0 – B	17.1 – B
INTERSECTIONS WITH STOP SIGNS		
Brookside Ave/School's South Driveway	26.2 – D	14.5 – B

III.
TRAFFIC IMPACT ANALYSIS

This section summarizes the analysis of the project's impacts on study area traffic conditions. First is a discussion of project generated traffic volumes. This is followed by an analysis of the impacts of the proposed school expansion on traffic volumes and intersection levels of service.

Standards of Significance

According to the City of Beaumont standards, an intersection would be significantly impacted if the project would result in a change in the level of service from an acceptable LOS A, B, C, or D to an unacceptable LOS E or F. The impacts would not be significant at locations that are projected to operate at LOS A, B, C, or D after project completion. According to the "Riverside County Congestion Management Program" (Riverside County Transportation Commission, December 2019), the level of service standard is LOS E and an intersection would be significantly impacted if the project would cause the intersection to operate at LOS F.

Project Generated Traffic

The volumes of traffic that would be generated by the school expansion were determined to estimate the impacts of the project on the study area streets and intersections. The trip generation rates and the anticipated volumes of traffic that would be generated by the expanded school are shown in Table 5. The table shows the traffic volumes for the existing 2,990-student school, for the expanded 5,244-student school, and the net increase in traffic associated with the additional 2,254 students.

TABLE 5
PROJECT GENERATED TRAFFIC

Land Use	*AM Peak Hour*			*PM Peak Hour*			*Daily Traffic*
	Total	*In*	*Out*	*Total*	*In*	*Out*	
TRIP GENERATION RATES							
High School (trips per student)	0.55	68%	32%	0.33	32%	68%	2.03
GENERATED TRAFFIC VOLUMES							
Existing High School (2,990 students)	1,644	1,118	526	987	316	671	6,070
Expanded School (5,244 students)	2,884	1,961	923	1,731	554	1,177	10,650
Net Increase (2,254 students)	1,240	843	397	744	238	506	4,580

The trip generation rates shown in Table 5 are from the Institute of Transportation Engineers *Trip Generation Manual* (10th Edition, 2017). The trip rates represent the high school land use category (trips per student). Although the trip generation rates and traffic volumes shown in the table are based on the number of students, the data represent the total number of vehicle trips generated at the school, including staff/faculty vehicles, drop-off/pick-up activities, visitors, and deliveries.

Table 5 indicates that the expanded school would generate an additional 1,240 vehicle trips during the morning peak hour (843 inbound and 397 outbound), 744 trips during the afternoon peak hour at school dismissal time (238 inbound and 506 outbound), and 4,580 trips per day.

To quantify the increase in traffic at each intersection resulting from the proposed school expansion, the project generated traffic volumes shown in Table 5 were geographically distributed onto the street network for the traffic impact analysis. The volumes of traffic that would be generated by the proposed school expansion are shown on Figure 5 for the morning and afternoon peak hours. The assumed directional distribution percentages for the additional school traffic that are shown on Figure 5 are based on the layout of the street network and the anticipated residential locations of the additional students. This information was provided by District staff and is based on the locations of the planned and proposed residential developments within the District boundaries.

Projected Traffic Volumes

For purposes of evaluating the impacts of the proposed school expansion, the traffic analysis considers two baseline scenarios. One is the project's impacts on existing conditions and the other is the project's impacts on the projected year 2022 conditions. To quantify the impacts on existing conditions, the project generated traffic volumes shown on Figure 5 were added to the existing traffic volumes. The resulting "existing plus project" traffic volumes are shown on Figure 6.

The total volumes of traffic projected for the year 2022 traffic conditions for the "with project" scenario were determined by adding the project generated traffic to the future baseline traffic volumes. The "future with project" traffic volumes are shown on Figure 7.

Intersection Impact Analysis

An analysis of traffic impacts was conducted by quantifying the before-and-after traffic volumes, then determining the average delay values and levels of service at the study area intersections for the "without project" and "with project" scenarios. Two scenarios were used as the baseline conditions for the intersection impact analysis: existing year 2020 conditions and the projected year 2022 conditions. The year 2022 was used as the target year for future conditions as that is the first year that the expanded high school would be operational. The impact analysis, therefore, addresses the following four scenarios.

- Existing Traffic Conditions
- Existing plus Project Traffic Conditions
- Year 2022 without Project
- Year 2022 with Project.

The before-and-after delay values and levels of service at each of the study area intersections are summarized in Table 6 for the existing conditions baseline scenario. The table shows the existing traffic conditions, the traffic conditions with the addition of the school-generated traffic, and the increase in delay values associated with the project. The final column in the table indicates if the intersection would be significantly impacted by the school traffic according to the significance criteria outlined above.

TABLE 6
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
EXISTING CONDITIONS AS BASELINE

Intersection	*Delay Value (seconds/vehicle) & Level of Service*		*Increase In Delay (sec)*	*Significant Impact*
	Existing Conditions	*Existing Plus Project*		
SIGNALIZED INTERSECTIONS				
Beaumont Avenue/Cherry Valley Blvd				
AM Peak Hour	21.7 – C	28.0 – C	6.3	No
PM Peak Hour	17.3 – B	19.0 – B	1.7	No
Beaumont Avenue/Brookside Avenue				
AM Peak Hour	40.2 – D	57.6 – E	17.4	Yes
With Mitigation (Right Turn Overlap)	-	46.5 – D	6.3	No
PM Peak Hour	23.8 – C	28.0 – C	4.2	No
Cherry Valley Blvd/School's North Driveway				
AM Peak Hour	18.4 – B	27.2 – C	8.8	No
PM Peak Hour	16.7 – B	20.8 – C	4.1	No
UNSIGNALIZED INTERSECTION				
Brookside Ave/School's South Driveway				
AM Peak Hour	21.5 – C	26.8 – D	5.3	No
PM Peak Hour	13.3 – B	14.5 – B	1.2	No

The intersection of Beaumont Avenue and Cherry Valley Boulevard, for example, currently operates with an average delay value of 21.7 seconds and LOS C for existing conditions and would operate with an average delay value of 28.0 seconds and LOS C for the "existing plus project" scenario. The additional traffic generated by the expanded school would increase the average delay at the intersection by 6.3 seconds and the intersection would not be significantly impacted based on the criteria outlined previously because the intersection would continue to operate at an acceptable LOS C.

Table 6 indicates that the additional traffic generated by the proposed school expansion would result in a significant impact at one of the four study area intersections; i.e., the intersection of Beaumont Avenue at Brookside Avenue during the AM peak hour. This intersection would be significantly impacted because it is projected to operate at an unacceptable LOS E with the additional school-generated traffic. The other intersections would not be significantly impacted according to the City of Beaumont and the Riverside County guidelines.

The significant impact at the Beaumont Avenue/Brookside Avenue intersection can be mitigated by installing a right turn arrow for the eastbound-to-southbound movement and modifying the operation of the traffic signal so that this new right turn arrow is displayed simultaneously with the northbound-to-westbound left turn arrow. The implementation of this "overlap phase" would improve the level of service to an acceptable LOS D, which would mitigate the significant traffic impact.

It should be noted that the level of service analysis for the intersection of Cherry Valley Boulevard and the school's north driveway is based on the assumption that a new driveway would be provided on Cherry Valley Boulevard at the northwest corner of the school site. This driveway would be an "inbound only" driveway and would only accommodate right turns into the school site from eastbound Cherry Valley Boulevard. For the traffic impact analysis it was assumed that 50 percent of the traffic entering the school site from eastbound Cherry Valley Boulevard would use the new driveway and that 50 percent of the traffic would use the existing signalized entrance at the north driveway. A discussion of the need for this driveway is provided in a subsequent section.

The comparative delay values and levels of service for the year 2022 analysis scenario are shown in Table 7.

TABLE 7
PROJECT IMPACT ON INTERSECTION LEVELS OF SERVICE
YEAR 2022 AS BASELINE

Intersection	*Delay Value (seconds/vehicle) & Level of Service*		*Increase In Delay (sec)*	*Significant Impact*
	Year 2022 Without Project	*Year 2022 With Project*		
SIGNALIZED INTERSECTIONS				
Beaumont Avenue/Cherry Valley Blvd				
AM Peak Hour	23.1 – C	30.3 – C	7.2	No
PM Peak Hour	18.1 – B	20.0 – B	1.9	No
Beaumont Avenue/Brookside Avenue				
AM Peak Hour	49.6 – D	71.1 – E	21.5	Yes
With Mitigation (Right Turn Overlap)	-	54.0 – D	4.4	No
PM Peak Hour	25.7 – C	30.7 – C	5.0	No
Cherry Valley Blvd/School's North Driveway				
AM Peak Hour	19.0 – B	29.1 – C	10.1	No
PM Peak Hour	17.1 – B	21.4 – C	4.3	No
UNSIGNALIZED INTERSECTION				
Brookside Ave/School's South Driveway				
AM Peak Hour	26.2 – D	33.7 – D	7.5	No
PM Peak Hour	14.5 – B	16.1 – C	1.6	No

Table 7 indicates that the additional traffic generated by the proposed school expansion would result in a significant impact at one of the four study area intersections for the year 2022 scenario; i.e., the intersection of Beaumont Avenue at Brookside Avenue during the AM peak hour. This intersection would be significantly impacted because it is projected to operate at an unacceptable LOS E with the additional school-generated traffic. The other intersections would not be significantly impacted according to the City of Beaumont and the Riverside County guidelines.

The significant impact at the Beaumont Avenue/Brookside Avenue intersection can be mitigated by installing a right turn arrow for the eastbound-to-southbound movement and modifying the operation of the traffic signal so that this new right turn arrow is displayed simultaneously with the northbound-to-westbound left turn arrow. The implementation of this "overlap phase" would

improve the level of service to an acceptable LOS D, which would mitigate the significant traffic impact.

Analysis of Proposed Driveway on Cherry Valley Boulevard

As shown on the site plan (Figure 1 in the Appendix), the school expansion project includes the installation of a new driveway on Cherry Valley Boulevard at the northwest corner of the school site. This driveway is located approximately 200 feet west of the school's existing driveway on Cherry Valley Boulevard. It would be designated as an "inbound only" driveway and would only accommodate right turns into the school site from eastbound Cherry Valley Boulevard.

The site plan indicates that the new driveway would lead directly into the school's student parking lot. The student lot could also be accessed via the main signalized driveway. With the installation of the new driveway, inbound motorists would have two options for accessing the school site from Cherry Valley Boulevard: the existing signalized driveway at the school's main entrance and the new ingress driveway at the northwest corner of the school site.

The second driveway is necessary because the traffic projections shown on Figure 7 indicate that 824 vehicles would be entering the school site from eastbound Cherry Valley Boulevard during the morning peak hour. In addition, 429 vehicles would be entering the school site by turning left from westbound Cherry Valley Boulevard. These levels of inbound traffic would create a bottleneck if only one entry driveway were to be provided. The inbound traffic volumes from eastbound Cherry Valley Boulevard are projected to increase substantially because 55 percent of the new students are anticipated to reside in the Calimesa area.

If the second driveway were not to be provided on Cherry Valley Boulevard and all of the traffic were to be concentrated at the existing driveway, the intersection of Cherry Valley Boulevard and the school's north driveway would operate at LOS E with an average delay of 57.7 seconds per vehicle. This would represent unacceptable traffic conditions according to the City of Beaumont's guidelines and the potential impacts would be alleviated by installing a new driveway at the northwest corner of the school site, as proposed.

While the new driveway would be an "inbound only" driveway, it is recommended that it would only accommodate inbound traffic from eastbound Cherry Valley Boulevard. Left turns into the driveway should be prohibited because left turning vehicles at this location would create safety and operational problems by conflicting with the heavy eastbound traffic volumes. In addition, westbound Cherry Valley Boulevard has only one travel lane at this location, so vehicles waiting to turn left into the driveway would block the flow of westbound traffic. It is recommended, therefore, that a "No Left Turn" sign be installed on Cherry Valley Boulevard to prohibit left turns into the new driveway.

Non-motorized Transportation and Transit

The proposed school expansion would generate an increased demand for non-motorized transportation as some of the students and staff would travel to and from the school as pedestrians or on bicycles. The streets in the immediate vicinity of the school have sidewalks or trails along the side of the street adjacent to the school site. The three signalized intersections in the study area are equipped with painted crosswalks and pedestrian crossing signals and the intersection of Brookside

Avenue and the school's south driveway, which is a three-way stop, has painted crosswalks on Brookside Avenue and across the driveway. These pedestrian amenities will accommodate and enhance pedestrian circulation and safety in the school area.

Bike lanes are currently in place on Beaumont Avenue and Cherry Valley Boulevard in the project area and the school has bike racks on the campus for use by students and staff. With regard to public transit, Beaumont Transit Services operates Route 3/4 on Beaumont Avenue and Cherry Valley Boulevard adjacent to the school site and a bus shelter is currently in place on the south side of Cherry Valley Boulevard east of the school's north driveway.

The proposed school expansion project would not adversely affect the performance or safety of any transit or non-motorized transportation facilities (pedestrians and bicycles) and would not conflict with any adopted plans, policies, or programs relative to these alternative transportation modes. The school is consistent with such plans and policies as sidewalks/walking trails are in place along the streets abutting the school site, bike lanes are provided on the streets adjacent to the school, bike racks are provided on site, and a bus route operates adjacent to the school site.

Traffic Hazards and Incompatible Uses

The increased levels of traffic that would be generated by the expanded school, the increased number of pedestrians and bicyclists, and the increased number of vehicular turning movements at the school entrances and at the nearby intersections would result in an increased number of traffic conflicts and a corresponding increase in the probability of an accident occurring. These impacts would not be significant, however, because the streets, intersections, and driveways are designed and will be designed to accommodate the anticipated levels of vehicular and pedestrian activity. There are no severe visibility constraints at the school's access driveways associated with curves or hills and the existing school has been in operation at this location for many years. The proposed school expansion would, therefore, be a compatible use in the area and would not substantially increase hazards due to any design features.

Emergency Access

The existing and proposed access and circulation features at the school, including the on-site roadways, parking lots, and fire lanes, would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. Site access would be provided via the driveways on Cherry Valley Boulevard and Brookside Avenue. On-site emergency access lanes would be provided for access to the school buildings and all access features will be subject to and must satisfy the design requirements of the District, the City of Beaumont, and the California Division of the State Architect. The project would not, therefore, result in inadequate emergency access.

Recommended Mitigation Measure and Access Improvements

The recommended mitigation measure and other access improvements are outlined below.

Mitigation Measure

- At the intersection of Beaumont Avenue and Brookside Avenue, install a right turn arrow for

the eastbound-to-southbound movement and modify the operation of the traffic signal so that this new right turn arrow is displayed simultaneously with the northbound-to-westbound left turn arrow to have an "overlap phase."

Access Improvements

- Provide a new driveway on the south side of Cherry Valley Boulevard at the northwest corner of the school site and designate it as an inbound-only driveway with only right-turn ingress from eastbound Cherry Valley Boulevard. This driveway is included on the current site plan for the school expansion project.

- Install a "No Left Turn" sign on Cherry Valley Boulevard at the new access driveway to prevent left turns into the driveway from westbound Cherry Valley Boulevard.

IV.
SUMMARY OF IMPACTS & FINDINGS

The key findings of the traffic impact analysis are presented below.

- The proposed expansion of the high school would generate an additional 1,240 vehicle trips during the morning peak hour (843 inbound and 397 outbound), 744 trips during the afternoon peak hour at school dismissal time (238 inbound and 506 outbound), and 4,580 trips per day.

- The traffic generated by the school expansion would result in a significant impact at the intersection of Beaumont Avenue at Brookside Avenue during the AM peak hour. This intersection would be significantly impacted because it is projected to operate at an unacceptable LOS E with the additional school-generated traffic. The other intersections would not be significantly impacted according to the City of Beaumont and the Riverside County guidelines.

- An analysis of the increased levels of traffic that would be generated by the expanded school indicates that a second driveway would be needed on Cherry Valley Boulevard. This finding is consistent with the current site plan, which indicates that an inbound-only driveway would be provided on Cherry Valley Boulevard at the northwest corner of the school site. If this driveway is not provided, the intersection of Cherry Valley Boulevard at the school's existing north driveway would be over-burdened and would operate at an unacceptable LOS

- The proposed school expansion project would not adversely affect the performance or safety of any transit or non-motorized transportation facilities (pedestrians and bicycles) and would not conflict with any adopted plans, policies, or programs relative to these alternative transportation modes.

- The school project would not substantially increase hazards due to a design feature or incompatible uses and would not result in inadequate emergency access.

- The recommended mitigation measure and other access improvements are outlined below.

  Mitigation Measure

  - At the intersection of Beaumont Avenue and Brookside Avenue, install a right turn arrow for the eastbound-to-southbound movement and modify the operation of the traffic signal so that this new right turn arrow is displayed simultaneously with the northbound-to-westbound left turn arrow to have an "overlap phase."

  Access Improvements

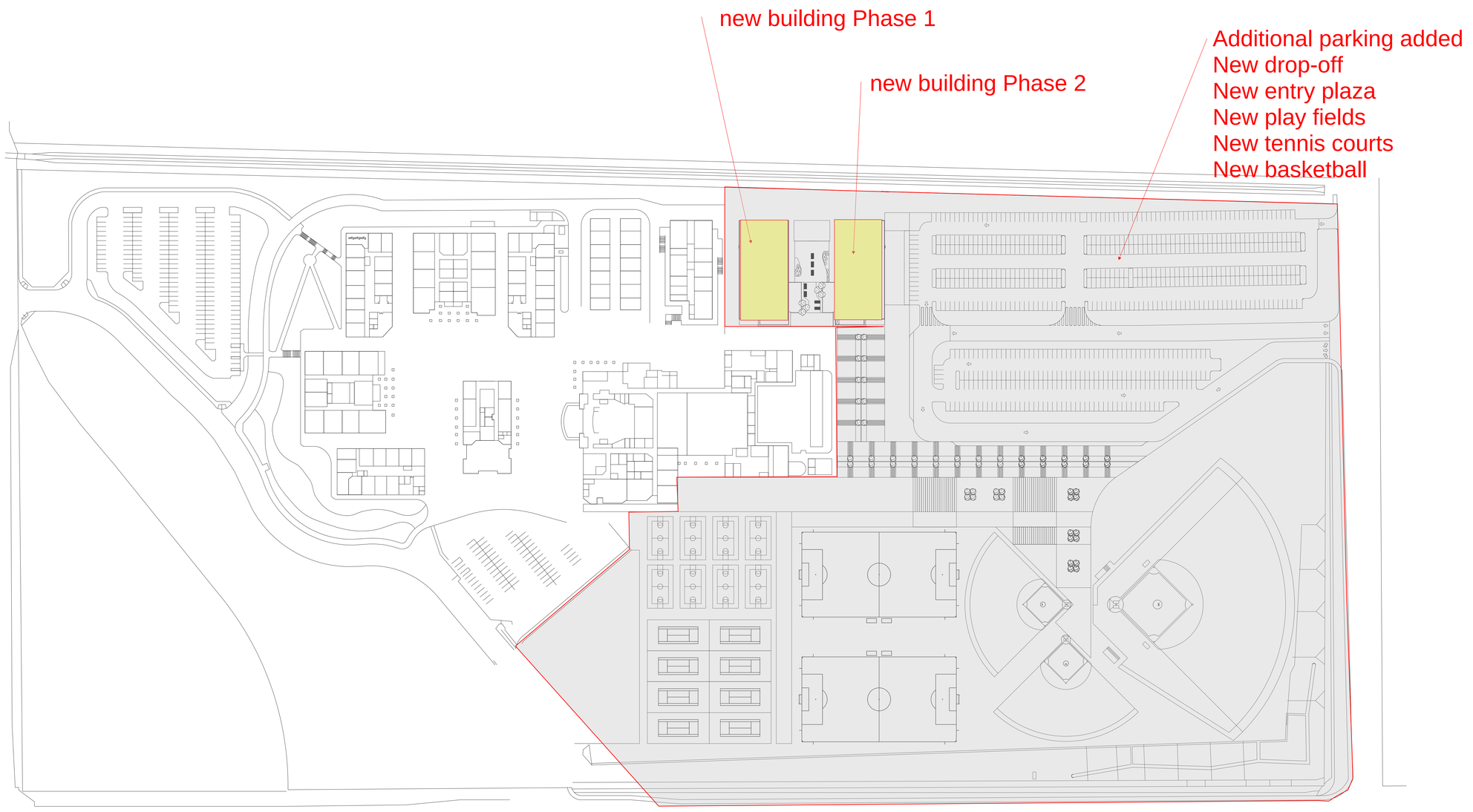
  - Provide a new driveway on the south side of Cherry Valley Boulevard at the northwest corner of the school site and designate it as an inbound-only driveway with only right-turn ingress from eastbound Cherry Valley Boulevard. This driveway is included on the current site plan for the school expansion project.

- Install a “No Left Turn” sign on Cherry Valley Boulevard at the new access driveway to prevent left turns into the driveway from westbound Cherry Valley Boulevard.

APPENDIX

APPENDIX A

FIGURES



1 / A1.0 ARCHITECTURAL SITE PLAN
SCALE: 1" = 80'-0"

FIGURE 1
SITE PLAN
BEAUMONT HIGH SCHOOL EXPANSION

DLR Group
© DLR Group

NOT FOR CONSTRUCTION

Consultant Logo

Project Logo

Project Name

Enter address here

Project Status
Issue Date
Revisions

Project Number

ARCHITECTURAL SITE PLAN

A1.0

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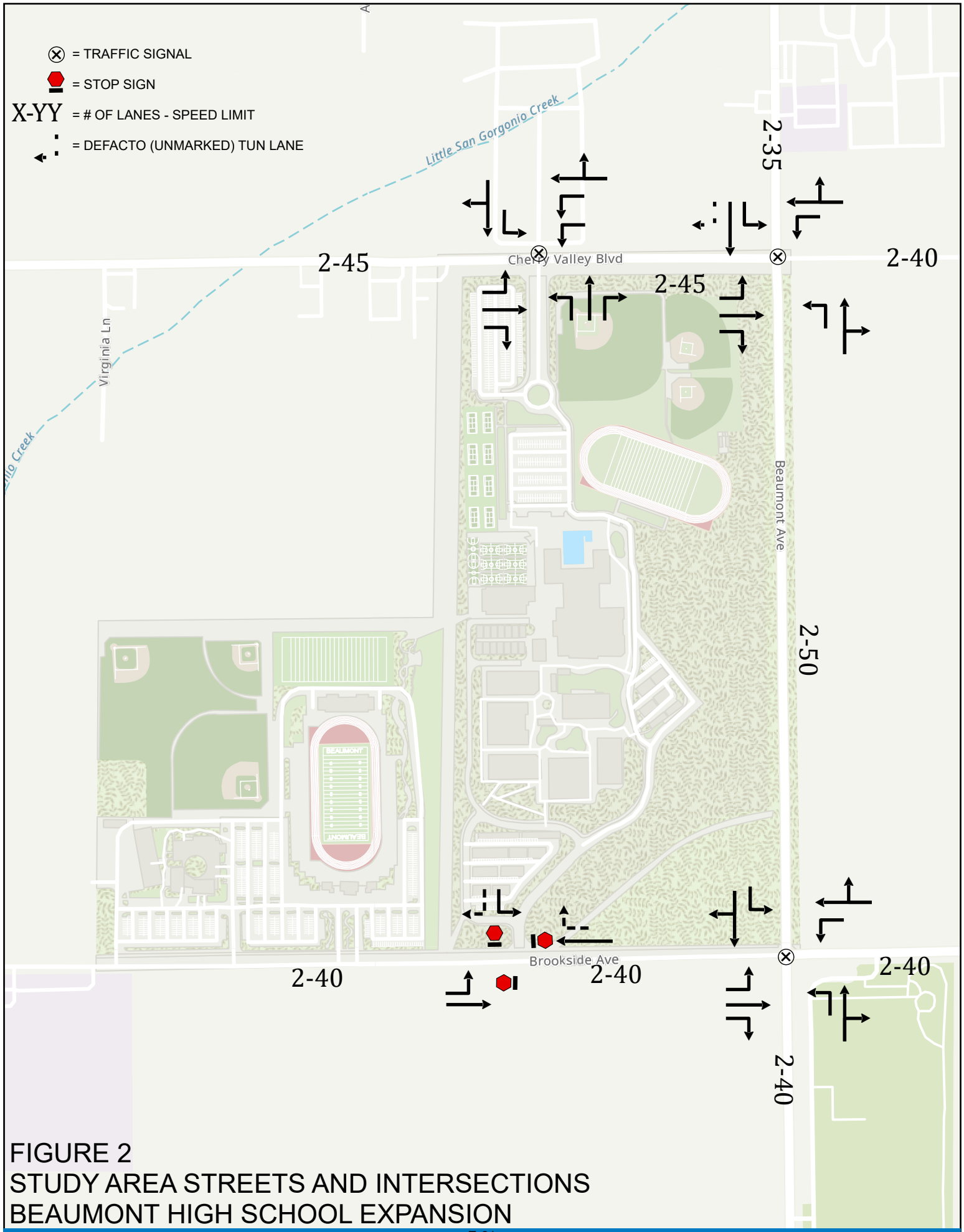


FIGURE 2
STUDY AREA STREETS AND INTERSECTIONS
BEAUMONT HIGH SCHOOL EXPANSION

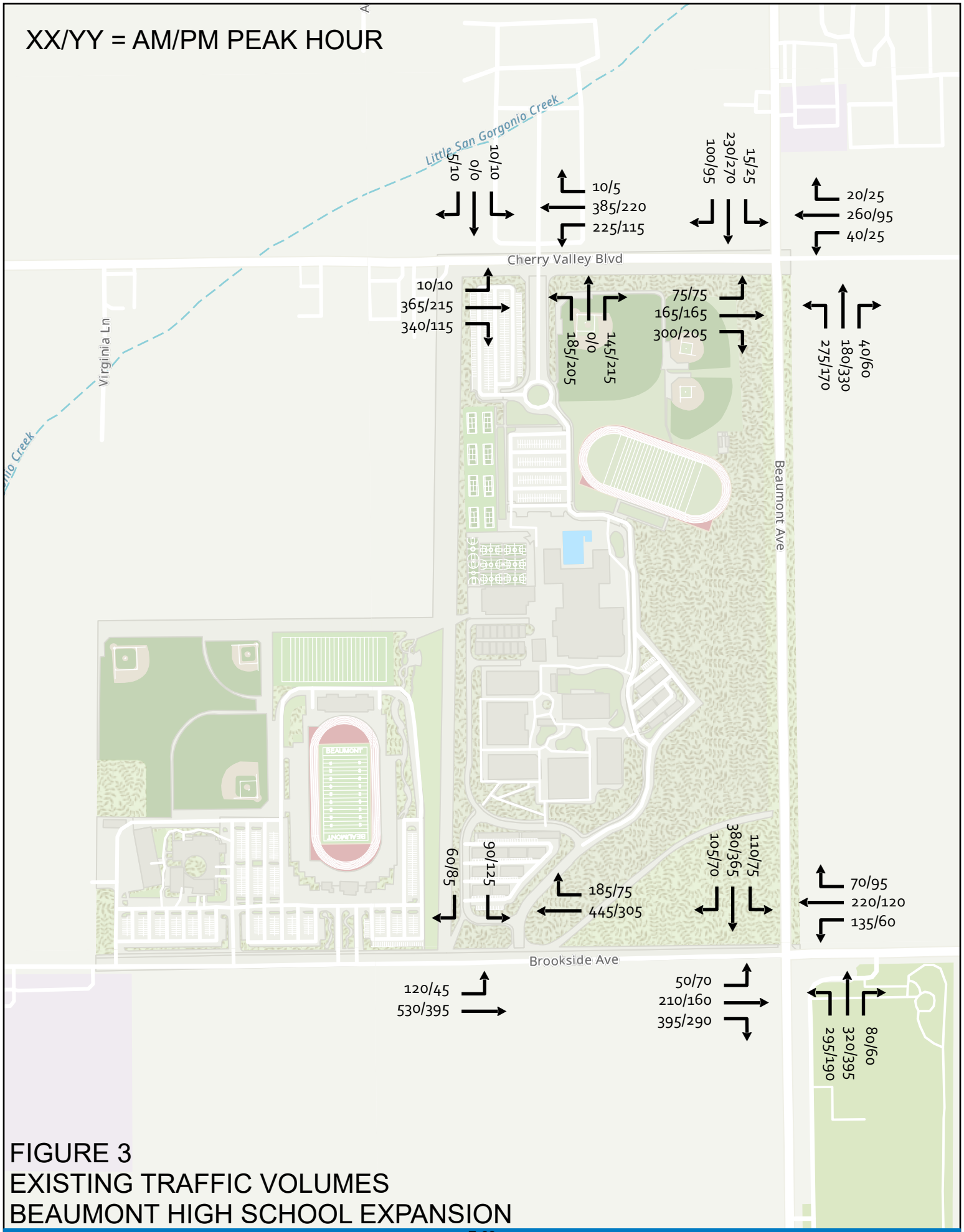


FIGURE 3
EXISTING TRAFFIC VOLUMES
BEAUMONT HIGH SCHOOL EXPANSION

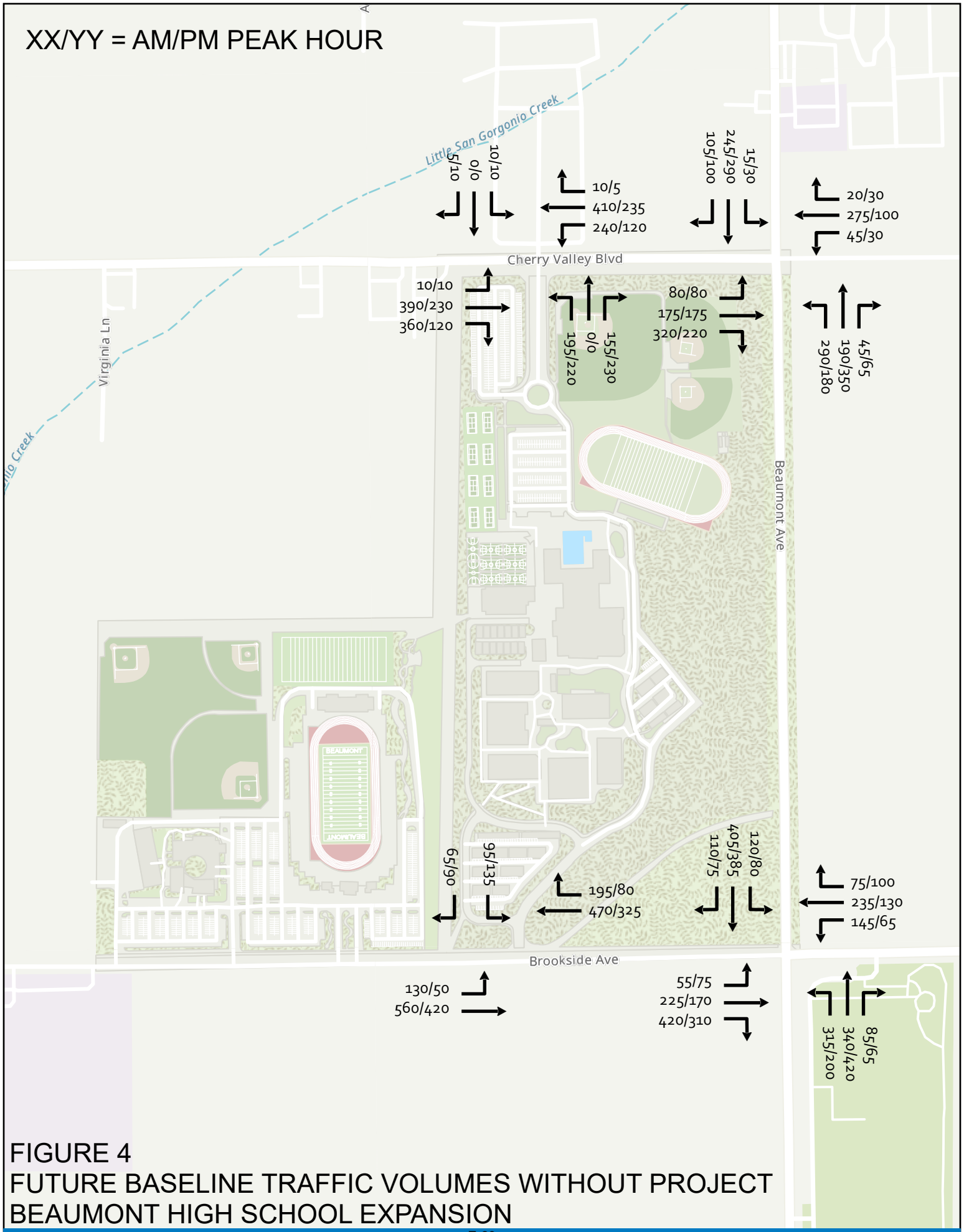


FIGURE 4
FUTURE BASELINE TRAFFIC VOLUMES WITHOUT PROJECT
BEAUMONT HIGH SCHOOL EXPANSION

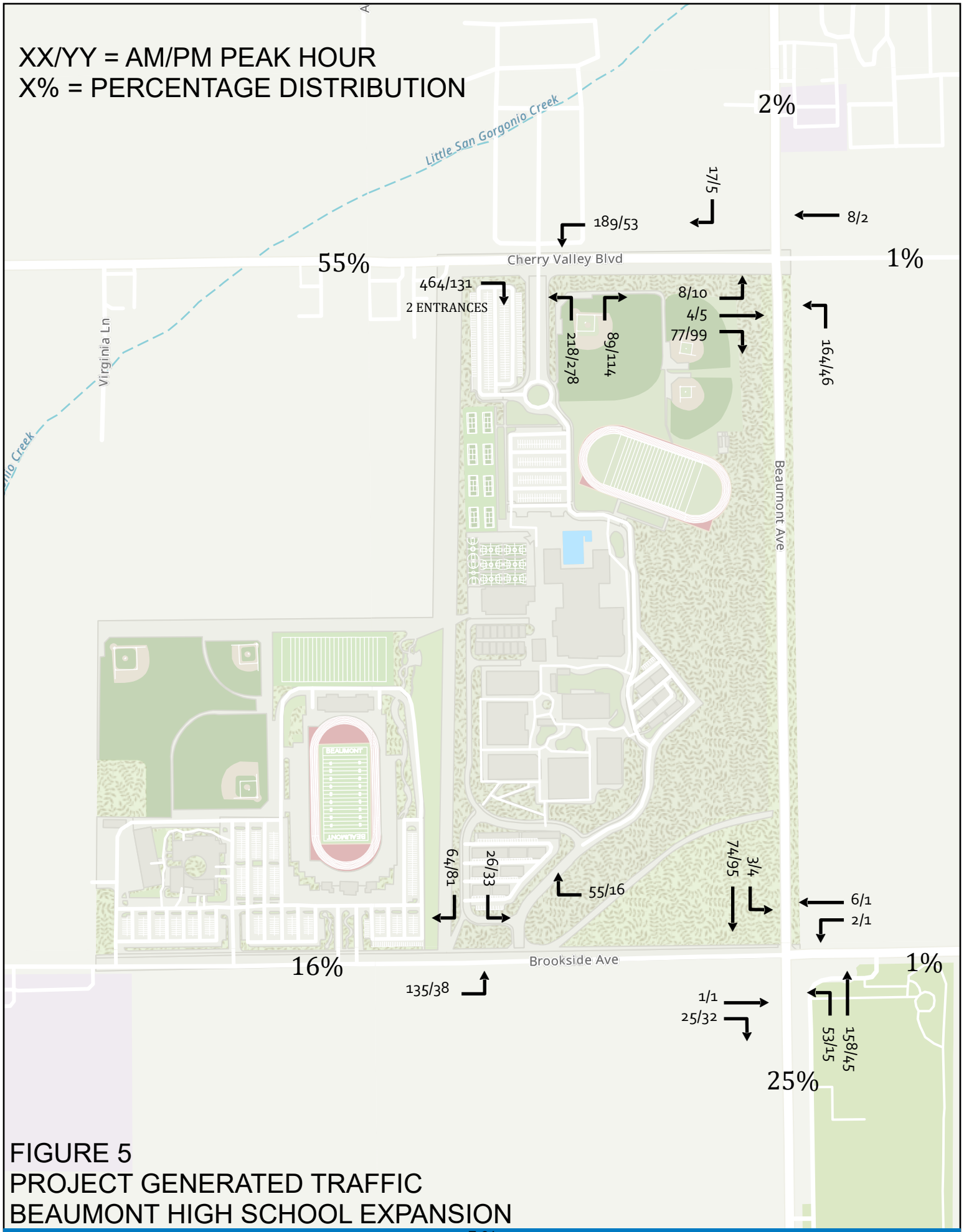


FIGURE 5
PROJECT GENERATED TRAFFIC
BEAUMONT HIGH SCHOOL EXPANSION

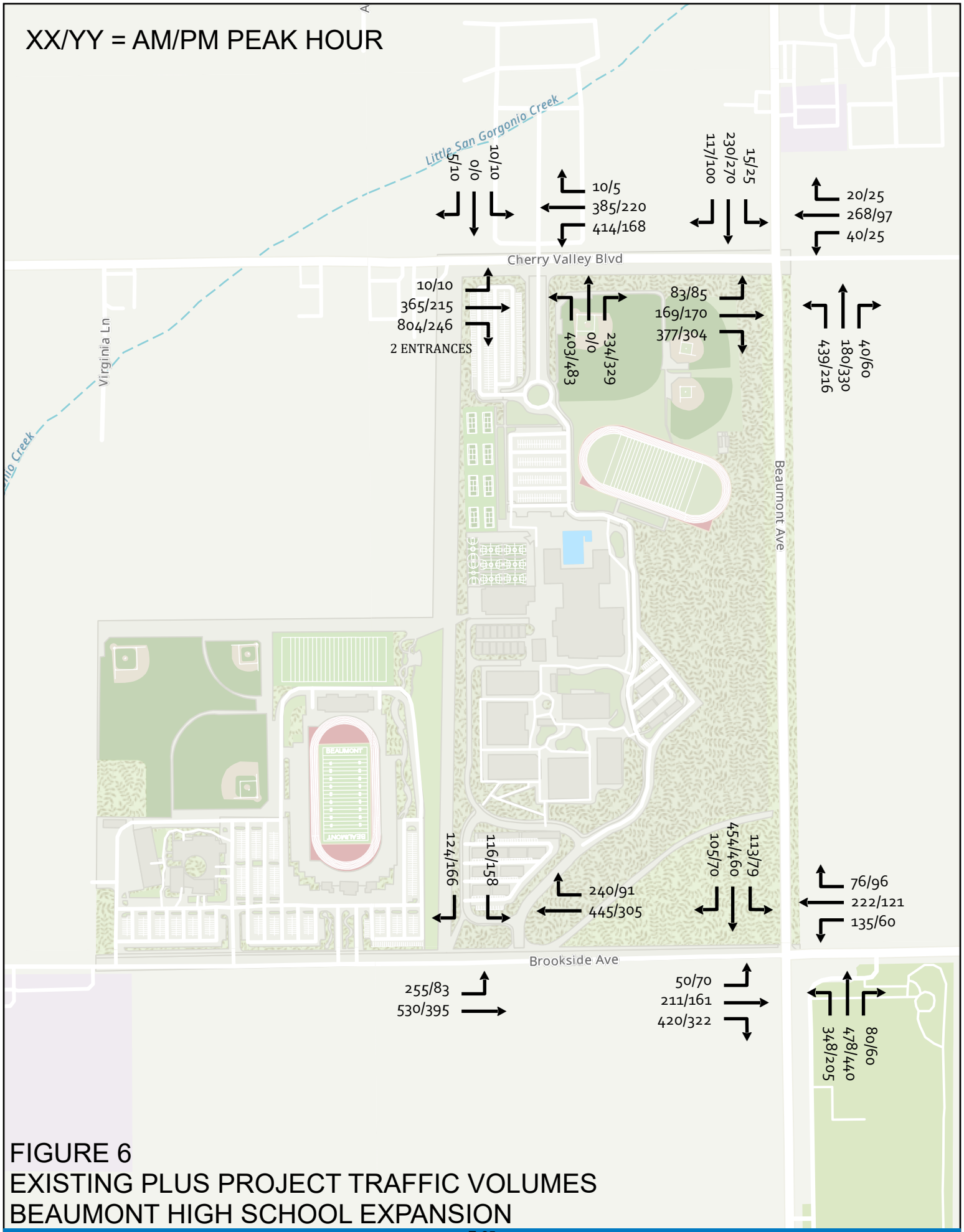


FIGURE 6
EXISTING PLUS PROJECT TRAFFIC VOLUMES
BEAUMONT HIGH SCHOOL EXPANSION

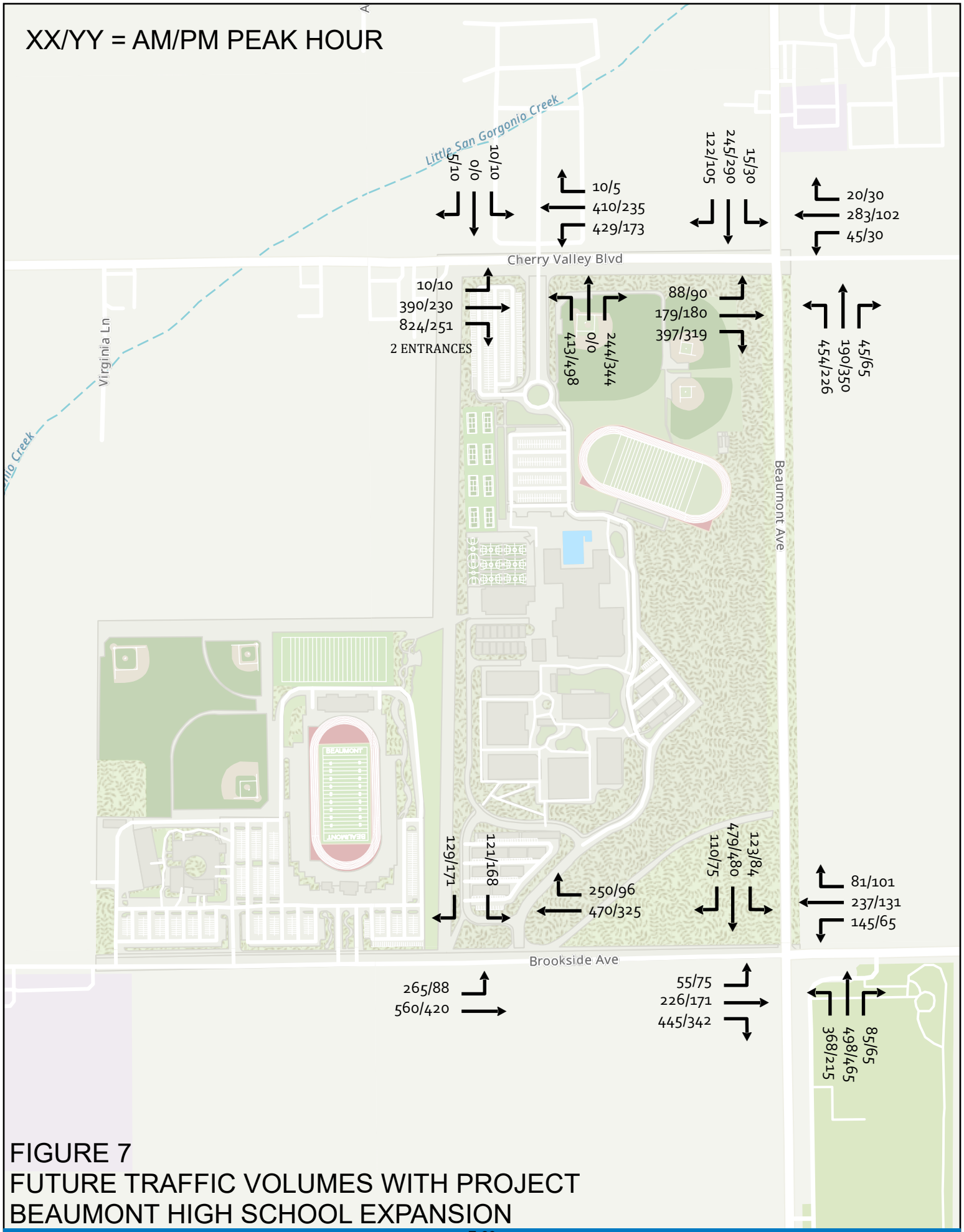


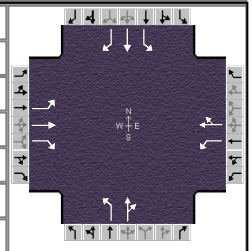
FIGURE 7
FUTURE TRAFFIC VOLUMES WITH PROJECT
BEAUMONT HIGH SCHOOL EXPANSION

APPENDIX B

LEVEL OF SERVICE CALCULATIONS

HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / Beaum	Analysis Year	2020 Existing	Analysis Period	1> 7:00
File Name	Beaumont Cherry AM 2020 Exist.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	75	165	300	40	260	20	275	180	40	15	230	100

Signal Information			
Cycle, s	58.2	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	2.6	1.1	12.3	1.2	5.6	10.4	1	2	3	4		
Yellow	4.0	0.0	4.0	4.0	4.0	4.0	5	6	7	8		
Red	1.0	0.0	1.0	1.0	1.0	1.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	3.0
Phase Duration, s	8.7	18.4	7.6	17.3	16.8	26.0	6.2	15.4
Change Period, $(Y+R_c)$, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.1	3.1	3.1	3.0	3.1	3.1	3.1
Queue Clearance Time (g_s), s	4.6	8.2	3.4	10.9	11.2	7.6	2.5	9.3
Green Extension Time (g_e), s	0.1	1.2	0.0	1.2	0.5	1.1	0.0	1.1
Phase Call Probability	0.73	1.00	0.51	1.00	0.99	1.00	0.23	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

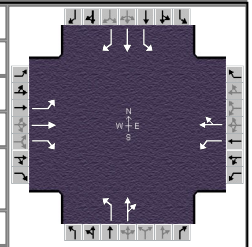
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	82	179	196	43	304		299	239		16	250	109
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1876		1810	1840		1810	1900	1610
Queue Service Time (g_s), s	2.6	4.7	6.2	1.4	8.9		9.2	5.6		0.5	7.3	3.5
Cycle Queue Clearance Time (g_c), s	2.6	4.7	6.2	1.4	8.9		9.2	5.6		0.5	7.3	3.5
Capacity *(c)*, veh/h	115	439	372	80	397		367	667		37	342	290
Volume-to-Capacity Ratio *(X)*	0.708	0.408	0.526	0.544	0.766		0.814	0.359		0.441	0.732	0.375
Available Capacity (c_a), veh/h	619	1948	1651	619	1924		1856	1258		928	1299	1101
Back of Queue *(Q)*, veh/ln (50th percentile)	1.1	1.8	2.0	0.6	3.6		3.5	1.8		0.2	3.0	1.2
Overflow Queue (Q_3), veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00
Uniform Delay (d_1), s/veh	26.9	19.1	19.7	27.4	21.7		22.3	13.7		28.3	22.7	21.1
Incremental Delay (d_2), s/veh	3.0	0.2	0.4	2.1	1.2		1.7	0.1		3.1	1.1	0.3
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay *(d)*, s/veh	29.8	19.3	20.1	29.5	22.9		23.9	13.8		31.4	23.8	21.4
Level of Service (LOS)	C	B	C	C	C		C	B		C	C	C
Approach Delay, s/veh / LOS	21.5	C		23.7	C		19.4	B		23.4	C	
Intersection Delay, s/veh / LOS	21.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.4	B	2.3	B	2.6	B
Bicycle LOS Score / LOS	1.2	A	1.1	A	1.4	A	1.1	A

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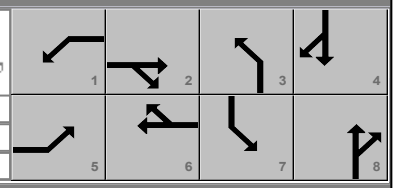
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / Beaum	Analysis Year	2020 Existing plus Project	Analysis Period	1> 7:00
File Name	Beaumont Cherry AM 2020 Exist wProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	83	169	377	40	268	20	439	180	40	15	230	117

Signal Information					EB			WB			NB		
Cycle, s	76.6	Reference Phase	2										
Offset, s	0	Reference Point	End	Green	3.1	2.0		15.9	1.5		16.1	13.0	
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	0.0		4.0	4.0		4.0	4.0	
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	0.0		1.0	1.0		1.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	3.0
Phase Duration, s	10.1	23.0	8.1	20.9	27.6	39.1	6.5	18.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.1	3.1	3.1	3.0	3.1	3.1	3.1
Queue Clearance Time *(g_s)*, s	5.8	14.4	3.8	14.3	21.5	8.4	2.7	11.7
Green Extension Time *(g_e)*, s	0.1	1.4	0.0	1.4	0.9	1.1	0.0	1.1
Phase Call Probability	0.86	1.00	0.61	1.00	1.00	1.00	0.30	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

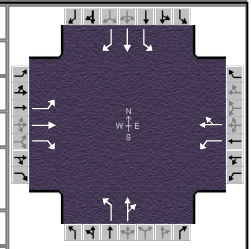
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	90	184	279	43	313		477	239		16	250	127
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1877		1810	1840		1810	1900	1610
Queue Service Time *(g_s)*, s	3.8	6.3	12.4	1.8	12.3		19.5	6.4		0.7	9.7	5.5
Cycle Queue Clearance Time *(g_c)*, s	3.8	6.3	12.4	1.8	12.3		19.5	6.4		0.7	9.7	5.5
Capacity *(c)*, veh/h	121	447	379	72	391		536	822		36	323	274
Volume-to-Capacity Ratio *(X)*	0.743	0.411	0.738	0.600	0.802		0.890	0.291		0.458	0.774	0.465
Available Capacity *(c_a)*, veh/h	468	1474	1249	468	1456		1404	951		702	982	833
Back of Queue *(Q)*, veh/ln (50th percentile)	1.7	2.6	4.5	0.8	5.3		7.7	2.2		0.3	4.4	2.1
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00
Uniform Delay *(d_1)*, s/veh	35.4	25.0	27.4	36.5	29.1		26.0	13.6		37.5	30.7	28.9
Incremental Delay *(d_2)*, s/veh	3.3	0.2	1.1	2.9	1.5		2.1	0.1		3.4	1.5	0.5
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay *(d)*, s/veh	38.8	25.3	28.4	39.5	30.6		28.1	13.7		40.9	32.2	29.4
Level of Service (LOS)	D	C	C	D	C		C	B		D	C	C
Approach Delay, s/veh / LOS	29.1	C		31.7	C		23.3	C		31.7	C	
Intersection Delay, s/veh / LOS	28.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.4	B	2.3	B	2.6	B
Bicycle LOS Score / LOS	1.4	A	1.1	A	1.7	A	1.1	A

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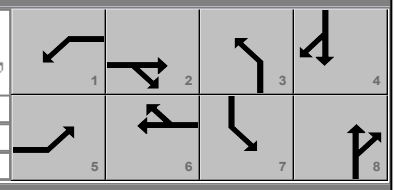
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / Beaum	Analysis Year	Future without Project	Analysis Period	1> 7:00
File Name	Beaumont Cherry AM Future NoProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	80	175	320	45	275	20	290	190	45	15	245	105

Signal Information												
Cycle, s	62.2	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	2.9	1.1	13.6	1.3	6.8	11.6		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	4.0	4.0		
				Red	1.0	0.0	1.0	1.0	1.0	1.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	3.0
Phase Duration, s	9.0	19.7	7.9	18.6	18.1	28.4	6.3	16.6
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.1	3.1	3.1	3.0	3.1	3.1	3.1
Queue Clearance Time *(g_s)*, s	5.0	9.5	3.7	12.1	12.4	8.3	2.6	10.3
Green Extension Time *(g_e)*, s	0.1	1.3	0.0	1.3	0.5	1.1	0.0	1.1
Phase Call Probability	0.78	1.00	0.57	1.00	1.00	1.00	0.25	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

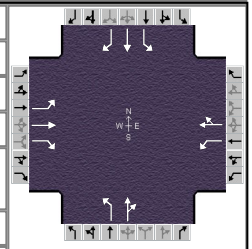
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	87	190	217	49	321		315	255		16	266	114
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1877		1810	1837		1810	1900	1610
Queue Service Time *(g_s)*, s	3.0	5.3	7.5	1.7	10.1		10.4	6.3		0.6	8.3	3.9
Cycle Queue Clearance Time *(g_c)*, s	3.0	5.3	7.5	1.7	10.1		10.4	6.3		0.6	8.3	3.9
Capacity *(c)*, veh/h	117	450	381	84	411		382	693		37	355	300
Volume-to-Capacity Ratio *(X)*	0.741	0.423	0.570	0.580	0.781		0.826	0.369		0.444	0.751	0.380
Available Capacity *(c_a)*, veh/h	577	1818	1541	577	1796		1732	1172		866	1212	1027
Back of Queue *(Q)*, veh/ln (50th percentile)	1.3	2.1	2.5	0.7	4.1		4.0	2.1		0.3	3.5	1.4
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00
Uniform Delay *(d_1)*, s/veh	28.8	20.3	21.1	29.3	23.1		23.6	14.1		30.4	24.1	22.3
Incremental Delay *(d_2)*, s/veh	3.4	0.2	0.5	2.3	1.2		1.8	0.1		3.1	1.2	0.3
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay *(d)*, s/veh	32.2	20.5	21.6	31.6	24.3		25.4	14.2		33.5	25.3	22.6
Level of Service (LOS)	C	C	C	C	C		C	B		C	C	C
Approach Delay, s/veh / LOS	23.1	C		25.3	C		20.4	C		24.9	C	
Intersection Delay, s/veh / LOS	23.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.4	B	2.3	B	2.6	B
Bicycle LOS Score / LOS	1.3	A	1.1	A	1.4	A	1.1	A

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HCS 2010 Signalized Intersection Results Summary

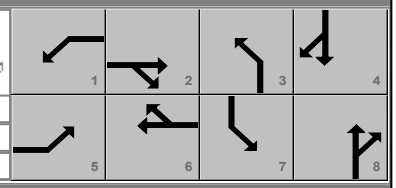
General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / Beaum	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Beaumont Cherry AM Future wProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	88	179	397	45	283	20	454	190	45	15	245	122

Signal Information			
Cycle, s	83.8	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.4	2.4	17.9	1.6	18.7	14.7	
Yellow	4.0	0.0	4.0	4.0	4.0	4.0	
Red	1.0	0.0	1.0	1.0	1.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	3.0
Phase Duration, s	10.9	25.3	8.4	22.9	30.3	43.4	6.6	19.7
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.1	3.1	3.1	3.0	3.1	3.1	3.1
Queue Clearance Time *(g_s)*, s	6.4	16.7	4.3	16.1	24.1	9.4	2.8	13.4
Green Extension Time *(g_e)*, s	0.1	1.6	0.0	1.6	0.9	1.2	0.0	1.2
Phase Call Probability	0.89	1.00	0.68	1.00	1.00	1.00	0.32	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

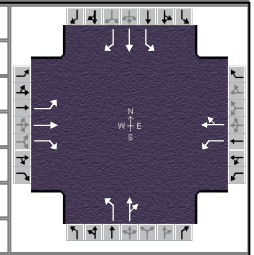
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	96	195	301	49	329		493	255		16	266	133
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1878		1810	1837		1810	1900	1610
Queue Service Time *(g_s)*, s	4.4	7.3	14.7	2.3	14.1		22.1	7.4		0.8	11.4	6.3
Cycle Queue Clearance Time *(g_c)*, s	4.4	7.3	14.7	2.3	14.1		22.1	7.4		0.8	11.4	6.3
Capacity *(c)*, veh/h	128	463	392	74	402		548	844		35	334	283
Volume-to-Capacity Ratio *(X)*	0.749	0.420	0.767	0.658	0.819		0.900	0.303		0.466	0.797	0.468
Available Capacity *(c_a)*, veh/h	428	1348	1142	428	1332		1284	869		642	899	761
Back of Queue *(Q)*, veh/ln (50th percentile)	2.0	3.1	5.4	1.0	6.2		8.9	2.7		0.4	5.2	2.4
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00
Uniform Delay *(d_1)*, s/veh	38.6	26.9	29.8	40.0	31.7		28.3	14.4		41.0	33.4	31.3
Incremental Delay *(d_2)*, s/veh	3.3	0.2	1.2	3.7	1.6		2.3	0.1		3.6	1.7	0.4
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay *(d)*, s/veh	41.8	27.2	30.9	43.6	33.3		30.5	14.4		44.6	35.1	31.7
Level of Service (LOS)	D	C	C	D	C		C	B		D	D	C
Approach Delay, s/veh / LOS	31.5	C		34.6	C		25.0	C		34.4	C	
Intersection Delay, s/veh / LOS	30.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.4	B	2.3	B	2.6	B
Bicycle LOS Score / LOS	1.5	A	1.1	A	1.7	A	1.2	A

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HCS 2010 Signalized Intersection Results Summary

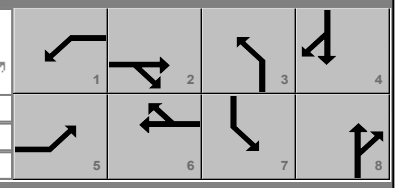
General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / Beaum	Analysis Year	2020 Existing	Analysis Period	1> 7:00
File Name	Beaumont Cherry PM 2020 Exist.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	75	165	205	25	95	25	170	330	60	25	270	95

Signal Information			
Cycle, s	45.2	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	1.5	1.8	5.8	1.5	4.7	10.0						
Yellow	4.0	0.0	4.0	4.0	0.0	4.0						
Red	1.0	0.0	1.0	1.0	0.0	1.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	3.0
Phase Duration, s	8.2	12.6	6.5	10.8	11.1	19.7	6.5	15.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.1	3.1	3.1	3.0	3.0	3.1	3.0
Queue Clearance Time *(g_s)*, s	4.0	5.9	2.7	5.0	6.5	11.1	2.7	8.5
Green Extension Time *(g_e)*, s	0.1	0.8	0.0	0.8	0.3	1.5	0.0	1.5
Phase Call Probability	0.64	1.00	0.29	1.00	0.90	1.00	0.29	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

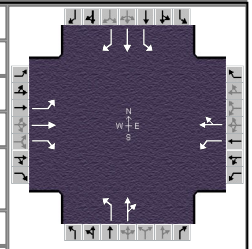
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	82	179	136	27	130		185	424		27	293	103
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1831		1810	1849		1810	1900	1610
Queue Service Time *(g_s)*, s	2.0	3.9	3.5	0.7	3.0		4.5	9.1		0.7	6.5	2.4
Cycle Queue Clearance Time *(g_c)*, s	2.0	3.9	3.5	0.7	3.0		4.5	9.1		0.7	6.5	2.4
Capacity *(c)*, veh/h	130	320	271	59	237		247	602		59	421	357
Volume-to-Capacity Ratio *(X)*	0.629	0.560	0.501	0.462	0.550		0.748	0.704		0.462	0.697	0.289
Available Capacity *(c_a)*, veh/h	798	2513	2130	798	2422		2393	1630		1197	1675	1420
Back of Queue *(Q)*, veh/ln (50th percentile)	0.8	1.4	1.1	0.3	1.1		1.6	2.7		0.3	2.4	0.8
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00
Uniform Delay *(d_1)*, s/veh	20.5	17.3	17.1	21.6	18.5		18.8	13.4		21.6	16.3	14.7
Incremental Delay *(d_2)*, s/veh	1.9	0.6	0.5	2.1	0.7		1.7	0.6		2.1	0.8	0.2
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay *(d)*, s/veh	22.3	17.9	17.7	23.6	19.3		20.5	14.0		23.6	17.0	14.9
Level of Service (LOS)	C	B	B	C	B		C	B		C	B	B
Approach Delay, s/veh / LOS	18.7	B		20.0	C		16.0	B		16.9	B	
Intersection Delay, s/veh / LOS	17.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.4	B	2.3	B	2.5	B
Bicycle LOS Score / LOS	1.1	A	0.7	A	1.5	A	1.2	A

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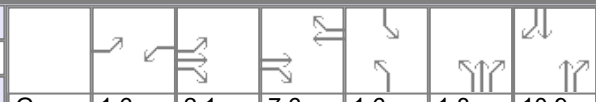
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / Beaum	Analysis Year	2020 Existing plus Project	Analysis Period	1> 7:00
File Name	Beaumont Cherry PM 2020 Exist wProj.xus				
Project Description	Beaumont High School Expansion				

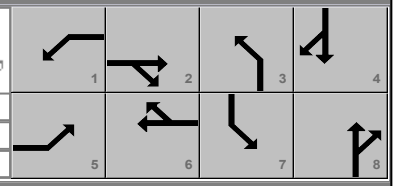


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	85	170	304	25	97	25	216	330	60	25	270	100

Signal Information			
Cycle, s	50.5	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	1.6	2.1	7.6	1.6	1.8	10.9	
Yellow	4.0	0.0	4.0	4.0	4.0	4.0	
Red	1.0	0.0	1.0	1.0	1.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	3.0
Phase Duration, s	8.7	14.6	6.6	12.6	13.4	22.7	6.6	15.9
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.1	3.1	3.1	3.0	3.0	3.1	3.0
Queue Clearance Time *(g_s)*, s	4.5	8.6	2.7	5.4	8.3	11.8	2.7	9.3
Green Extension Time *(g_e)*, s	0.1	1.0	0.0	1.0	0.4	1.5	0.0	1.5
Phase Call Probability	0.73	1.00	0.32	1.00	0.96	1.00	0.32	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

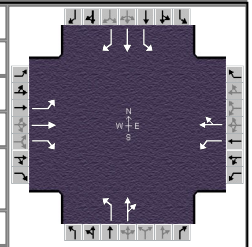
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	92	185	222	27	133		235	424		27	293	109
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1832		1810	1849		1810	1900	1610
Queue Service Time *(g_s)*, s	2.5	4.4	6.6	0.7	3.4		6.3	9.8		0.7	7.3	2.9
Cycle Queue Clearance Time *(g_c)*, s	2.5	4.4	6.6	0.7	3.4		6.3	9.8		0.7	7.3	2.9
Capacity *(c)*, veh/h	131	363	307	58	275		304	649		58	409	347
Volume-to-Capacity Ratio *(X)*	0.703	0.510	0.722	0.469	0.482		0.773	0.653		0.469	0.717	0.313
Available Capacity *(c_a)*, veh/h	713	2245	1903	713	2165		2138	1456		1069	1497	1268
Back of Queue *(Q)*, veh/ln (50th percentile)	1.0	1.6	2.1	0.3	1.3		2.3	3.0		0.3	2.9	0.9
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00
Uniform Delay *(d_1)*, s/veh	23.0	18.4	19.3	24.2	19.8		20.2	13.9		24.2	18.5	16.8
Incremental Delay *(d_2)*, s/veh	2.5	0.4	1.2	2.2	0.5		1.6	0.4		2.2	0.9	0.2
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay *(d)*, s/veh	25.6	18.8	20.5	26.3	20.3		21.8	14.3		26.3	19.4	16.9
Level of Service (LOS)	C	B	C	C	C		C	B		C	B	B
Approach Delay, s/veh / LOS	20.8	C		21.3	C		17.0	B		19.2	B	
Intersection Delay, s/veh / LOS	19.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.4	B	2.3	B	2.6	B
Bicycle LOS Score / LOS	1.3	A	0.8	A	1.6	A	1.2	A

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HCS 2010 Signalized Intersection Results Summary

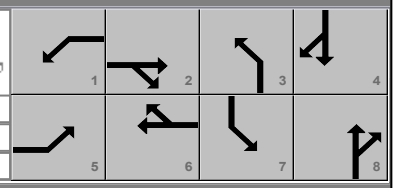
General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / Beaum	Analysis Year	Future without Project	Analysis Period	1> 7:00
File Name	Beaumont Cherry PM Future NoProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	80	175	220	30	100	30	180	350	65	30	290	100

Signal Information			
Cycle, s	47.5	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	1.8	1.7	6.3	1.8	0.0	11.0	
Yellow	4.0	0.0	4.0	4.0	4.0	4.0	
Red	1.0	0.0	1.0	1.0	1.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	3.0
Phase Duration, s	8.4	13.0	6.8	11.3	11.8	21.0	6.8	16.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.1	3.1	3.1	3.0	3.0	3.1	3.0
Queue Clearance Time *(g_s)*, s	4.2	6.4	2.8	5.5	7.0	12.2	2.8	9.3
Green Extension Time *(g_e)*, s	0.1	0.8	0.0	0.8	0.3	1.6	0.0	1.6
Phase Call Probability	0.68	1.00	0.35	1.00	0.93	1.00	0.35	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

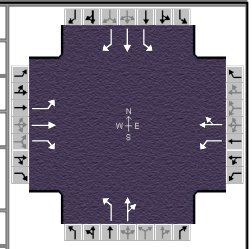
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	87	190	141	33	141		196	451		33	315	109
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1824		1810	1848		1810	1900	1610
Queue Service Time *(g_s)*, s	2.2	4.4	3.8	0.8	3.5		5.0	10.2		0.8	7.3	2.7
Cycle Queue Clearance Time *(g_c)*, s	2.2	4.4	3.8	0.8	3.5		5.0	10.2		0.8	7.3	2.7
Capacity *(c)*, veh/h	131	321	272	68	244		260	623		68	439	372
Volume-to-Capacity Ratio *(X)*	0.662	0.593	0.520	0.482	0.579		0.754	0.724		0.481	0.717	0.292
Available Capacity *(c_a)*, veh/h	758	2389	2024	758	2294		2275	1549		1138	1593	1350
Back of Queue *(Q)*, veh/ln (50th percentile)	0.9	1.6	1.2	0.3	1.3		1.8	3.1		0.4	2.8	0.8
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00
Uniform Delay *(d_1)*, s/veh	21.6	18.3	18.1	22.5	19.4		19.6	13.9		22.5	16.9	15.1
Incremental Delay *(d_2)*, s/veh	2.1	0.7	0.6	2.0	0.8		1.7	0.6		2.0	0.8	0.2
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay *(d)*, s/veh	23.7	19.0	18.6	24.5	20.2		21.3	14.5		24.5	17.7	15.3
Level of Service (LOS)	C	B	B	C	C		C	B		C	B	B
Approach Delay, s/veh / LOS	19.8	B		21.0	C		16.5	B		17.6	B	
Intersection Delay, s/veh / LOS	18.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.4	B	2.3	B	2.5	B
Bicycle LOS Score / LOS	1.2	A	0.8	A	1.6	A	1.2	A

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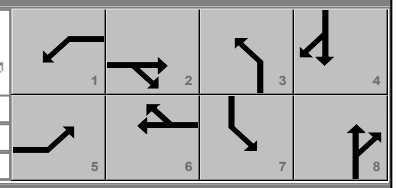
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / Beaum	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Beaumont Cherry PM Future wProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	90	180	319	30	102	30	226	350	65	30	290	105

Signal Information												
Cycle, s	53.4	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	1.9	1.9	8.3	1.9	2.3	12.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	4.0	4.0		
				Red	1.0	0.0	1.0	1.0	1.0	1.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	3.0
Phase Duration, s	8.9	15.2	6.9	13.3	14.2	24.3	6.9	17.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.1	3.1	3.1	3.0	3.0	3.1	3.0
Queue Clearance Time *(g_s)*, s	4.8	9.1	2.9	5.9	9.0	13.1	2.9	10.3
Green Extension Time *(g_e)*, s	0.1	1.0	0.0	1.0	0.4	1.6	0.0	1.6
Phase Call Probability	0.77	1.00	0.38	1.00	0.97	1.00	0.38	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

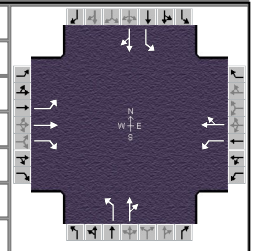
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	98	196	227	33	143		246	451		33	315	114
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1825		1810	1848		1810	1900	1610
Queue Service Time *(g_s)*, s	2.8	5.0	7.1	0.9	3.9		7.0	11.1		0.9	8.3	3.2
Cycle Queue Clearance Time *(g_c)*, s	2.8	5.0	7.1	0.9	3.9		7.0	11.1		0.9	8.3	3.2
Capacity *(c)*, veh/h	132	365	310	66	285		314	669		66	428	362
Volume-to-Capacity Ratio *(X)*	0.743	0.535	0.734	0.493	0.503		0.783	0.675		0.492	0.737	0.315
Available Capacity *(c_a)*, veh/h	674	2124	1800	674	2041		2023	1377		1012	1416	1200
Back of Queue *(Q)*, veh/ln (50th percentile)	1.2	1.9	2.3	0.4	1.5		2.6	3.5		0.4	3.3	1.1
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00
Uniform Delay *(d_1)*, s/veh	24.4	19.5	20.4	25.4	20.7		21.2	14.5		25.4	19.3	17.3
Incremental Delay *(d_2)*, s/veh	3.1	0.5	1.3	2.1	0.5		1.6	0.4		2.1	0.9	0.2
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Control Delay *(d)*, s/veh	27.5	20.0	21.7	27.5	21.3		22.8	14.9		27.5	20.3	17.5
Level of Service (LOS)	C	B	C	C	C		C	B		C	C	B
Approach Delay, s/veh / LOS	22.1	C		22.4	C		17.7	B		20.1	C	
Intersection Delay, s/veh / LOS	20.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.4	B	2.3	B	2.6	B
Bicycle LOS Score / LOS	1.3	A	0.8	A	1.6	A	1.2	A

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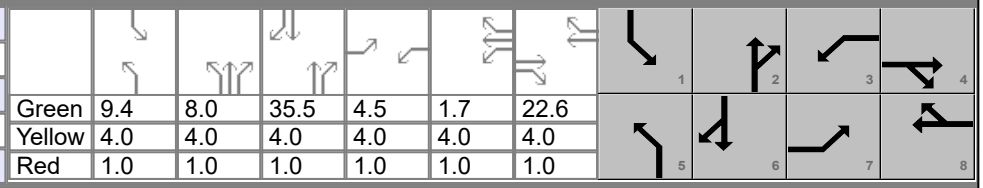
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Beaumont Ave / Brookside	Analysis Year	2020 Existing	Analysis Period	1> 7:00
File Name	Beaumont Brookside AM 2020 Exist.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	50	210	395	135	220	70	295	320	80	110	380	105

Signal Information			
Cycle, s	111.7	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	9.4	8.0	35.5	4.5	1.7	22.6
Yellow	4.0	4.0	4.0	4.0	4.0	4.0
Red	1.0	1.0	1.0	1.0	1.0	1.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	9.5	27.6	16.2	34.3	27.4	53.5	14.4	40.5
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0
Queue Clearance Time *(g_s)*, s	5.4	20.7	11.0	19.4	21.4	21.8	9.3	33.2
Green Extension Time *(g_e)*, s	0.1	1.6	0.2	1.6	0.6	1.8	0.1	1.8
Phase Call Probability	0.82	1.00	0.99	1.00	1.00	1.00	0.98	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

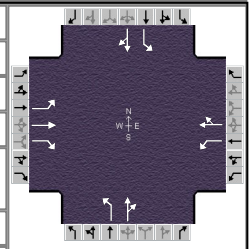
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	54	228	277	147	315		321	435		120	527	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1821		1810	1834		1810	1829	
Queue Service Time *(g_s)*, s	3.4	12.3	18.7	9.0	17.4		19.4	19.8		7.3	31.2	
Cycle Queue Clearance Time *(g_c)*, s	3.4	12.3	18.7	9.0	17.4		19.4	19.8		7.3	31.2	
Capacity *(c)*, veh/h	74	385	326	182	479		363	798		152	583	
Volume-to-Capacity Ratio *(X)*	0.739	0.593	0.849	0.804	0.658		0.883	0.545		0.787	0.905	
Available Capacity *(c_a)*, veh/h	481	673	570	481	645		961	1136		320	1133	
Back of Queue *(Q)*, veh/ln (50th percentile)	1.6	5.7	7.5	4.1	7.6		8.8	8.2		3.3	13.4	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay *(d_1)*, s/veh	53.6	40.8	43.4	49.7	37.1		43.9	23.6		50.7	36.8	
Incremental Delay *(d_2)*, s/veh	5.3	0.5	2.4	3.1	0.6		2.8	0.2		3.4	2.2	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay *(d)*, s/veh	58.9	41.3	45.8	52.8	37.7		46.7	23.8		54.1	39.1	
Level of Service (LOS)	E	D	D	D	D		D	C		D	D	
Approach Delay, s/veh / LOS	45.2	D		42.5	D		33.5	C		41.9	D	
Intersection Delay, s/veh / LOS	40.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.3	B	2.6	B
Bicycle LOS Score / LOS	1.4	A	1.2	A	1.7	A	1.6	A

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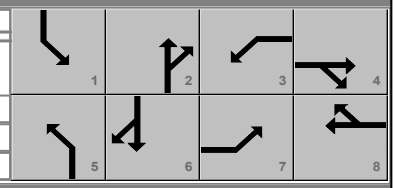
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Beaumont Ave / Brookside	Analysis Year	2020 Existing plus Project	Analysis Period	1> 7:00
File Name	Beaumont Brookside AM 2020 Exist wProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	50	211	420	135	222	76	384	478	80	113	454	105

Signal Information													
Cycle, s	152.3	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	12.4	20.3	53.1	6.0	3.5	26.9			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	4.0	4.0			
				Red	1.0	1.0	1.0	1.0	1.0	1.0			



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	11.0	31.9	19.6	40.5	42.8	83.4	17.4	58.1
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0
Queue Clearance Time *(gs)*, s	6.6	25.2	14.3	27.6	36.6	38.2	12.3	51.4
Green Extension Time *(ge)*, s	0.1	1.4	0.2	1.4	0.8	2.4	0.1	1.2
Phase Call Probability	0.90	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Max Out Probability	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.01

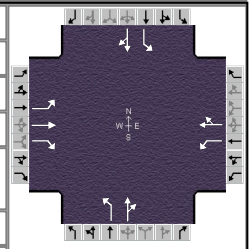
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	54	229	250	147	324		417	607		123	608	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1817		1810	1852		1810	1838	
Queue Service Time *(gs)*, s	4.6	17.4	23.2	12.3	25.6		34.6	36.2		10.3	49.4	
Cycle Queue Clearance Time *(gc)*, s	4.6	17.4	23.2	12.3	25.6		34.6	36.2		10.3	49.4	
Capacity *(c)*, veh/h	72	336	285	173	423		449	955		148	641	
Volume-to-Capacity Ratio *(X)*	0.756	0.682	0.877	0.847	0.765		0.929	0.635		0.832	0.948	
Available Capacity *(ca)*, veh/h	353	495	419	353	473		707	955		236	838	
Back of Queue *(Q)*, veh/ln (50th percentile)	2.2	8.4	10.2	5.8	12.2		16.8	15.9		4.9	24.5	
Overflow Queue *(Q3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay *(d1)*, s/veh	73.0	59.2	61.6	68.3	55.0		56.4	26.8		69.5	48.6	
Incremental Delay *(d2)*, s/veh	5.9	0.9	9.9	4.3	5.5		9.9	1.1		6.6	15.3	
Initial Queue Delay *(d3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay *(d)*, s/veh	78.9	60.1	71.4	72.7	60.5		66.3	27.9		76.1	63.9	
Level of Service (LOS)	E	E	E	E	E		E	C		E	E	
Approach Delay, s/veh / LOS	67.3	E		64.3	E		43.6	D		66.0	E	
Intersection Delay, s/veh / LOS	57.6						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.3	B	2.7	B
Bicycle LOS Score / LOS	1.4	A	1.3	A	2.2	B	1.7	A

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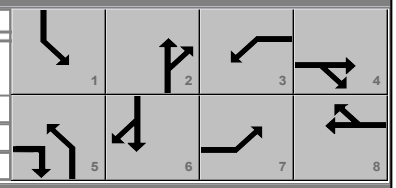
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Beaumont Ave / Brookside	Analysis Year	2020 Existing plus Project	Analysis Period	1> 7:00
File Name	Beaumont Brookside AM 2020 Exist wProj wMit.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	50	211	420	135	222	76	384	478	80	113	454	105

Signal Information					EB			WB			NB		
Cycle, s	133.3	Reference Phase	2										
Offset, s	0	Reference Point	End	Green	11.1	17.2		47.5	5.3	2.7	19.5		
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	4.0		4.0	4.0	4.0	4.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0		1.0	1.0	1.0	1.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	10.3	24.5	18.0	32.1	38.3	74.7	16.1	52.5
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0
Queue Clearance Time *(g_s)*, s	6.0	17.7	12.7	25.2	32.2	33.1	11.0	44.7
Green Extension Time *(g_e)*, s	0.1	1.5	0.2	1.4	0.8	2.4	0.1	2.4
Phase Call Probability	0.87	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Max Out Probability	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00

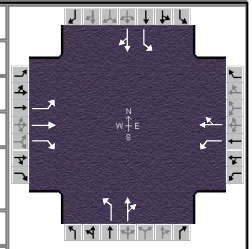
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	54	229	250	147	324		417	607		123	608	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1817		1810	1852		1810	1838	
Queue Service Time *(g_s)*, s	4.0	15.7	14.9	10.7	23.2		30.2	31.1		9.0	42.7	
Cycle Queue Clearance Time *(g_c)*, s	4.0	15.7	14.9	10.7	23.2		30.2	31.1		9.0	42.7	
Capacity *(c)*, veh/h	73	278	639	177	370		453	970		151	656	
Volume-to-Capacity Ratio *(X)*	0.749	0.825	0.391	0.830	0.875		0.921	0.625		0.815	0.927	
Available Capacity *(c_a)*, veh/h	404	566	883	404	541		808	970		269	958	
Back of Queue *(Q)*, veh/ln (50th percentile)	1.9	7.6	5.7	5.0	11.2		13.9	13.3		4.2	20.0	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay *(d_1)*, s/veh	63.8	55.7	28.9	59.5	51.8		49.0	22.6		60.6	41.5	
Incremental Delay *(d_2)*, s/veh	5.6	2.4	0.1	3.8	7.8		4.5	1.0		4.0	9.0	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay *(d)*, s/veh	69.5	58.1	29.1	63.3	59.6		53.6	23.6		64.6	50.5	
Level of Service (LOS)	E	E	C	E	E		D	C		E	D	
Approach Delay, s/veh / LOS	45.6	D		60.8	E		35.8	D		52.9	D	
Intersection Delay, s/veh / LOS	46.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.3	B	2.7	B
Bicycle LOS Score / LOS	1.4	A	1.3	A	2.2	B	1.7	A

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HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Beaumont Ave / Brookside	Analysis Year	Future Without Project	Analysis Period	1> 7:00
File Name	Beaumont Brookside AM Future NoProj.xus				
Project Description	Beaumont High School Expansion				

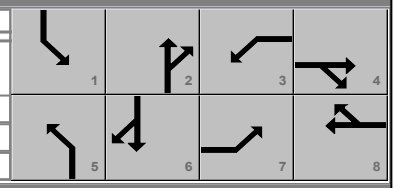


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	55	225	420	145	235	75	315	340	85	120	405	110

Signal Information			
Cycle, s	133.7	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	11.7	11.2	44.2	5.9	3.0	27.7						
Yellow	4.0	4.0	4.0	4.0	4.0	4.0						
Red	1.0	1.0	1.0	1.0	1.0	1.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	10.9	32.7	18.9	40.7	32.9	65.4	16.7	49.2
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0
Queue Clearance Time *(g_s)*, s	6.4	25.8	13.5	24.5	26.9	26.9	11.6	41.8
Green Extension Time *(g_e)*, s	0.1	1.6	0.2	1.6	0.6	2.0	0.1	2.0
Phase Call Probability	0.89	1.00	1.00	1.00	1.00	1.00	0.99	1.00
Max Out Probability	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00

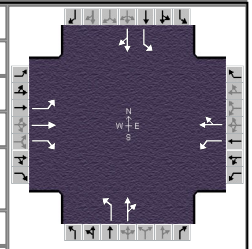
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	60	245	293	158	337		342	462		130	560	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1821		1810	1834		1810	1830	
Queue Service Time *(g_s)*, s	4.4	15.8	23.8	11.5	22.5		24.9	24.9		9.6	39.8	
Cycle Queue Clearance Time *(g_c)*, s	4.4	15.8	23.8	11.5	22.5		24.9	24.9		9.6	39.8	
Capacity *(c)*, veh/h	80	395	334	188	487		378	830		159	606	
Volume-to-Capacity Ratio *(X)*	0.751	0.620	0.878	0.838	0.691		0.906	0.557		0.821	0.923	
Available Capacity *(c_a)*, veh/h	402	563	477	402	540		804	951		268	949	
Back of Queue *(Q)*, veh/ln (50th percentile)	2.1	7.5	10.4	5.4	10.3		11.5	10.7		4.5	18.4	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay *(d_1)*, s/veh	63.8	48.6	51.8	59.4	44.4		52.1	27.1		60.5	43.5	
Incremental Delay *(d_2)*, s/veh	5.2	0.6	9.6	3.8	2.5		3.4	0.2		4.0	7.3	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay *(d)*, s/veh	69.0	49.2	61.4	63.1	46.9		55.5	27.3		64.5	50.7	
Level of Service (LOS)	E	D	E	E	D		E	C		E	D	
Approach Delay, s/veh / LOS	57.2	E		52.1	D		39.3	D		53.3	D	
Intersection Delay, s/veh / LOS	49.6						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.3	B	2.7	B
Bicycle LOS Score / LOS	1.5	A	1.3	A	1.8	A	1.6	A

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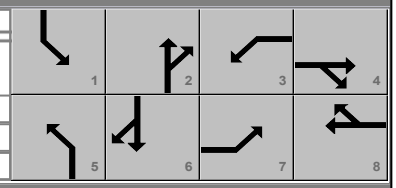
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Beaumont Ave / Brookside	Analysis Year	Future With Project	Analysis Period	1> 7:00
File Name	Beaumont Brookside AM Future wProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	55	226	445	145	237	81	368	498	85	123	479	110

Signal Information													
Cycle, s	177.6	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	15.1	21.5	64.1	7.5	5.1	34.2			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	4.0	4.0			
				Red	1.0	1.0	1.0	1.0	1.0	1.0			



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	12.5	39.2	22.6	49.3	46.6	95.6	20.1	69.1
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0
Queue Clearance Time *(gs)*, s	7.8	33.3	17.3	33.4	40.7	47.4	15.0	62.9
Green Extension Time *(ge)*, s	0.1	0.7	0.2	1.2	0.7	2.6	0.1	0.9
Phase Call Probability	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.25	0.00	0.26	0.00	0.01	0.08	0.33

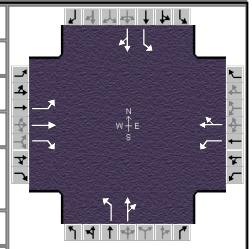
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	60	246	288	158	346		400	634		134	640	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1817		1810	1851		1810	1838	
Queue Service Time *(gs)*, s	5.8	21.4	31.3	15.3	31.4		38.7	45.4		13.0	60.9	
Cycle Queue Clearance Time *(gc)*, s	5.8	21.4	31.3	15.3	31.4		38.7	45.4		13.0	60.9	
Capacity *(c)*, veh/h	77	367	311	179	453		425	945		154	664	
Volume-to-Capacity Ratio *(X)*	0.778	0.670	0.927	0.879	0.762		0.942	0.671		0.866	0.964	
Available Capacity *(ca)*, veh/h	305	426	361	305	453		609	945		203	722	
Back of Queue *(Q)*, veh/ln (50th percentile)	2.9	10.5	15.1	7.5	15.3		19.6	20.5		6.9	31.7	
Overflow Queue *(Q3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay *(d1)*, s/veh	84.5	66.7	70.7	79.2	62.0		67.0	32.5		80.5	55.8	
Incremental Delay *(d2)*, s/veh	6.2	2.2	25.9	7.2	6.7		15.8	1.5		20.9	23.6	
Initial Queue Delay *(d3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay *(d)*, s/veh	90.7	68.9	96.6	86.5	68.7		82.9	34.0		101.4	79.4	
Level of Service (LOS)	F	E	F	F	E		F	C		F	E	
Approach Delay, s/veh / LOS	84.5	F		74.3	E		52.9	D		83.2	F	
Intersection Delay, s/veh / LOS	71.1						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.3	B	2.7	B
Bicycle LOS Score / LOS	1.5	A	1.3	A	2.2	B	1.8	A

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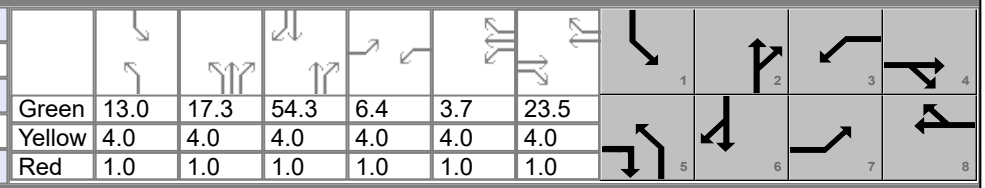
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Beaumont Ave / Brookside	Analysis Year	Future With Project	Analysis Period	1> 7:00
File Name	Beaumont Brookside AM Future wProj wMit.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	55	226	445	145	237	81	368	498	85	123	479	110

Signal Information													
Cycle, s	148.2	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	13.0	17.3	54.3	6.4	3.7	23.5			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	4.0	4.0			
				Red	1.0	1.0	1.0	1.0	1.0	1.0			



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	11.4	28.5	20.1	37.2	40.3	81.6	18.0	59.3
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0
Queue Clearance Time *(gs)*, s	6.9	21.6	14.8	29.5	34.3	39.5	12.9	52.5
Green Extension Time *(ge)*, s	0.1	1.7	0.2	1.5	0.7	2.6	0.1	1.3
Phase Call Probability	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.00	0.00	0.06	0.00	0.00	0.01	0.02

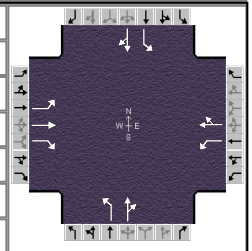
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	60	246	288	158	346		400	634		134	640	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1817		1810	1851		1810	1838	
Queue Service Time *(gs)*, s	4.9	18.7	19.6	12.8	27.5		32.3	37.5		10.9	50.5	
Cycle Queue Clearance Time *(gc)*, s	4.9	18.7	19.6	12.8	27.5		32.3	37.5		10.9	50.5	
Capacity *(c)*, veh/h	79	301	640	185	394		432	958		159	674	
Volume-to-Capacity Ratio *(X)*	0.759	0.816	0.450	0.853	0.876		0.926	0.662		0.839	0.950	
Available Capacity *(ca)*, veh/h	363	509	816	363	487		727	958		242	862	
Back of Queue *(Q)*, veh/ln (50th percentile)	2.4	9.1	7.6	6.1	13.8		15.4	16.4		5.3	25.0	
Overflow Queue *(Q3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay *(d1)*, s/veh	70.7	60.7	33.0	65.9	56.5		55.6	26.4		67.1	46.0	
Incremental Delay *(d2)*, s/veh	5.5	2.1	0.2	4.2	12.4		7.4	1.4		9.2	15.7	
Initial Queue Delay *(d3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay *(d)*, s/veh	76.2	62.8	33.2	70.2	68.9		62.9	27.8		76.2	61.6	
Level of Service (LOS)	E	E	C	E	E		E	C		E	E	
Approach Delay, s/veh / LOS	49.8	D		69.3	E		41.4	D		64.2	E	
Intersection Delay, s/veh / LOS	54.0						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.3	B	2.7	B
Bicycle LOS Score / LOS	1.5	A	1.3	A	2.2	B	1.8	A

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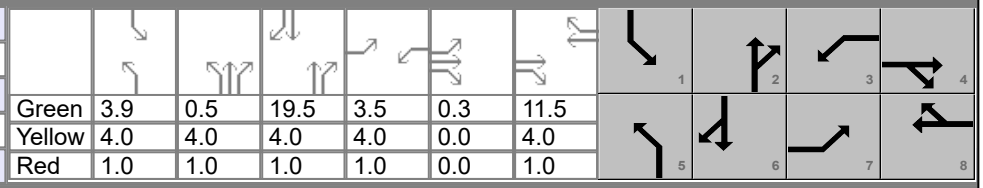
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Beaumont Ave / Brookside	Analysis Year	2020 Existing	Analysis Period	1> 7:00
File Name	Beaumont Brookside PM 2020 Exist.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	70	160	290	60	120	95	190	395	60	75	365	70

Signal Information			
Cycle, s	64.1	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	3.9	0.5	19.5	3.5	0.3	11.5
Yellow	4.0	4.0	4.0	4.0	0.0	4.0
Red	1.0	1.0	1.0	1.0	0.0	1.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	8.8	16.7	8.5	16.5	14.4	30.0	8.9	24.5
Change Period, $(Y+R_c)$, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0
Queue Clearance Time (g_s), s	4.7	10.2	4.3	10.1	9.1	16.3	4.9	17.4
Green Extension Time (g_e), s	0.1	1.2	0.1	1.2	0.4	1.8	0.1	1.8
Phase Call Probability	0.74	1.00	0.69	1.00	0.98	1.00	0.77	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

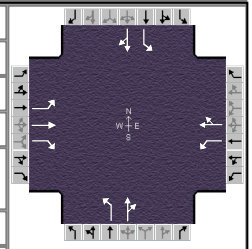
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	76	174	217	65	234		207	495		82	473	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1760		1810	1856		1810	1847	
Queue Service Time (g_s), s	2.7	5.3	8.2	2.3	8.1		7.1	14.3		2.9	15.4	
Cycle Queue Clearance Time (g_c), s	2.7	5.3	8.2	2.3	8.1		7.1	14.3		2.9	15.4	
Capacity *(c)*, veh/h	106	349	296	98	316		266	726		111	564	
Volume-to-Capacity Ratio *(X)*	0.715	0.498	0.735	0.662	0.740		0.777	0.681		0.738	0.839	
Available Capacity (c_a), veh/h	840	1176	997	840	1090		1681	2011		560	2001	
Back of Queue *(Q)*, veh/ln (50th percentile)	1.2	2.2	2.9	1.0	3.2		2.9	5.2		1.2	5.7	
Overflow Queue (Q_3), veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay (d_1), s/veh	29.9	23.7	24.9	30.0	25.1		26.5	16.3		29.8	21.0	
Incremental Delay (d_2), s/veh	3.3	0.4	1.3	2.8	1.3		1.9	0.4		3.6	1.3	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay *(d)*, s/veh	33.2	24.1	26.2	32.8	26.4		28.4	16.8		33.4	22.3	
Level of Service (LOS)	C	C	C	C	C		C	B		C	C	
Approach Delay, s/veh / LOS	26.6	C		27.8	C		20.2	C		23.9	C	
Intersection Delay, s/veh / LOS	23.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.3	B	2.5	B
Bicycle LOS Score / LOS	1.3	A	1.0	A	1.6	A	1.4	A

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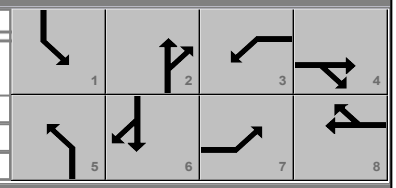
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Beaumont Ave / Brookside	Analysis Year	2020 Existing plus Project	Analysis Period	1> 7:00
File Name	Beaumont Brookside PM 2020 Exist wProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	70	161	322	60	121	96	205	440	60	79	460	70

Signal Information													
Cycle, s	79.4	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On										
Force Mode	Fixed	Simult. Gap N/S	On										
				Green	5.1	2.0	28.0	3.9	0.6	14.9			
				Yellow	4.0	4.0	4.0	4.0	0.0	4.0			
				Red	1.0	1.0	1.0	1.0	0.0	1.0			



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	9.5	20.5	8.9	19.9	17.1	39.9	10.1	33.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.2	3.1	3.2	3.1	3.0	3.0	3.0
Queue Clearance Time *(g_s)*, s	5.3	14.0	4.9	12.1	11.6	20.5	5.7	25.4
Green Extension Time *(g_e)*, s	0.1	1.3	0.1	1.3	0.4	2.2	0.1	2.2
Phase Call Probability	0.82	1.00	0.77	1.00	0.99	1.00	0.85	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

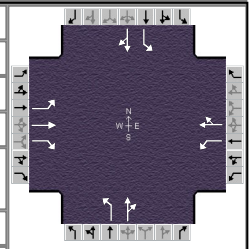
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	76	175	252	65	236		223	543		86	576	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1760		1810	1860		1810	1856	
Queue Service Time *(g_s)*, s	3.3	6.6	12.0	2.9	10.1		9.6	18.5		3.7	23.4	
Cycle Queue Clearance Time *(g_c)*, s	3.3	6.6	12.0	2.9	10.1		9.6	18.5		3.7	23.4	
Capacity *(c)*, veh/h	104	372	316	89	330		276	821		116	655	
Volume-to-Capacity Ratio *(X)*	0.733	0.470	0.799	0.732	0.714		0.807	0.662		0.738	0.879	
Available Capacity *(c_a)*, veh/h	676	946	802	676	876		1352	1621		451	1617	
Back of Queue *(Q)*, veh/ln (50th percentile)	1.5	2.8	4.5	1.3	4.1		4.1	7.1		1.6	9.2	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay *(d_1)*, s/veh	37.2	28.6	30.8	37.7	30.6		32.9	17.7		36.9	24.4	
Incremental Delay *(d_2)*, s/veh	3.7	0.3	1.8	4.3	1.1		2.1	0.3		3.4	1.6	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay *(d)*, s/veh	40.9	28.9	32.6	42.0	31.7		35.0	18.0		40.3	25.9	
Level of Service (LOS)	D	C	C	D	C		D	B		D	C	
Approach Delay, s/veh / LOS	32.6	C		33.9	C		23.0	C		27.8	C	
Intersection Delay, s/veh / LOS	28.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.3	B	2.6	B
Bicycle LOS Score / LOS	1.3	A	1.0	A	1.8	A	1.6	A

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HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Beaumont Ave / Brookside	Analysis Year	Future Without Project	Analysis Period	1> 7:00
File Name	Beaumont Brookside PM Future NoProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	75	170	310	65	130	100	200	420	65	80	385	75

Signal Information			
Cycle, s	70.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	4.5	1.1	22.2	3.8	0.5	13.0	1	2	3	4		
Yellow	4.0	4.0	4.0	4.0	0.0	4.0	5	6	7	8		
Red	1.0	1.0	1.0	1.0	0.0	1.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	9.3	18.4	8.8	18.0	15.6	33.2	9.5	27.2
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0
Queue Clearance Time *(g_s)*, s	5.1	11.4	4.7	11.5	10.2	18.7	5.3	19.9
Green Extension Time *(g_e)*, s	0.1	1.3	0.1	1.3	0.4	1.9	0.1	1.9
Phase Call Probability	0.80	1.00	0.75	1.00	0.99	1.00	0.82	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

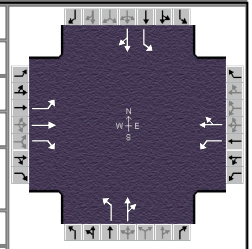
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	82	185	228	71	250		217	527		87	500	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1762		1810	1855		1810	1846	
Queue Service Time *(g_s)*, s	3.1	6.1	9.4	2.7	9.5		8.2	16.7		3.3	17.9	
Cycle Queue Clearance Time *(g_c)*, s	3.1	6.1	9.4	2.7	9.5		8.2	16.7		3.3	17.9	
Capacity *(c)*, veh/h	111	367	311	98	328		275	750		118	587	
Volume-to-Capacity Ratio *(X)*	0.733	0.504	0.734	0.720	0.763		0.791	0.702		0.737	0.852	
Available Capacity *(c_a)*, veh/h	768	1075	911	768	997		1536	1837		512	1828	
Back of Queue *(Q)*, veh/ln (50th percentile)	1.4	2.6	3.4	1.2	3.8		3.4	6.2		1.4	6.8	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay *(d_1)*, s/veh	32.6	25.5	26.8	32.9	27.3		28.9	17.5		32.5	22.6	
Incremental Delay *(d_2)*, s/veh	3.5	0.4	1.3	3.7	1.4		1.9	0.5		3.3	1.4	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay *(d)*, s/veh	36.1	25.9	28.1	36.6	28.7		30.8	18.0		35.8	24.0	
Level of Service (LOS)	D	C	C	D	C		C	B		D	C	
Approach Delay, s/veh / LOS	28.6	C		30.4	C		21.7	C		25.7	C	
Intersection Delay, s/veh / LOS	25.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.3	B	2.6	B
Bicycle LOS Score / LOS	1.3	A	1.0	A	1.7	A	1.5	A

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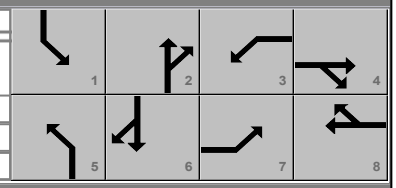
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Beaumont Ave / Brookside	Analysis Year	Future With Project	Analysis Period	1> 7:00
File Name	Beaumont Brookside PM Future wProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	75	171	342	65	131	101	215	465	65	84	480	75

Signal Information					EB			WB			NB		
Cycle, s	87.9	Reference Phase	2										
Offset, s	0	Reference Point	End	Green	5.9	2.8		32.0	4.6	0.7	16.8		
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	4.0		4.0	4.0	0.0	4.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0		1.0	1.0	0.0	1.0		



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	3.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	10.3	22.5	9.6	21.8	18.7	44.8	10.9	37.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.1	3.2	3.1	3.2	3.1	3.0	3.0	3.0
Queue Clearance Time *(g_s)*, s	5.9	15.9	5.4	14.0	13.1	23.8	6.4	29.2
Green Extension Time *(g_e)*, s	0.1	1.4	0.1	1.4	0.4	2.3	0.1	2.3
Phase Call Probability	0.87	1.00	0.83	1.00	1.00	1.00	0.90	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

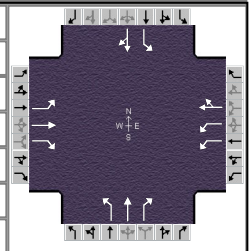
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate *(v)*, veh/h	82	186	263	71	252		234	576		91	603	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1810	1762		1810	1859		1810	1855	
Queue Service Time *(g_s)*, s	3.9	7.7	13.9	3.4	12.0		11.1	21.8		4.4	27.2	
Cycle Queue Clearance Time *(g_c)*, s	3.9	7.7	13.9	3.4	12.0		11.1	21.8		4.4	27.2	
Capacity *(c)*, veh/h	111	380	322	96	338		284	844		123	677	
Volume-to-Capacity Ratio *(X)*	0.736	0.489	0.817	0.734	0.746		0.824	0.682		0.744	0.890	
Available Capacity *(c_a)*, veh/h	610	855	724	610	793		1221	1463		407	1460	
Back of Queue *(Q)*, veh/ln (50th percentile)	1.8	3.4	5.3	1.6	5.0		4.9	8.6		2.0	10.9	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	
Uniform Delay *(d_1)*, s/veh	41.0	31.5	34.0	41.5	33.9		36.3	19.2		40.7	26.5	
Incremental Delay *(d_2)*, s/veh	3.5	0.4	2.0	4.0	1.2		2.3	0.4		3.3	1.7	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Control Delay *(d)*, s/veh	44.6	31.9	36.0	45.5	35.1		38.6	19.6		44.0	28.2	
Level of Service (LOS)	D	C	D	D	D		D	B		D	C	
Approach Delay, s/veh / LOS	35.9	D		37.4	D		25.1	C		30.3	C	
Intersection Delay, s/veh / LOS	30.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.3	B	2.3	B	2.3	B	2.6	B
Bicycle LOS Score / LOS	1.4	A	1.0	A	1.8	A	1.6	A

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HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / North D	Analysis Year	2020 Existing	Analysis Period	1> 7:00
File Name	Cherry NDriveway AM 2020 Exist.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	10	365	340	225	385	10	185	0	145	10	0	5

Signal Information			
Cycle, s	52.2	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

							1	2	3	4		
Green	0.7	0.0	14.2	0.7	1.9	4.6	5	6	7	8		
Yellow	4.0	4.0	4.0	4.0	4.0	4.0						
Red	1.0	1.0	1.0	1.0	1.0	1.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	5.7	19.2	10.8	24.2	12.6	16.5	5.7	9.6
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.0	3.0	3.0	3.3	3.5	3.3	3.5
Queue Clearance Time *(g_s)*, s	2.3	12.1	5.5	11.7	7.6	6.4	2.3	2.2
Green Extension Time *(g_e)*, s	0.0	2.1	0.4	2.1	0.4	0.4	0.0	0.4
Phase Call Probability	0.15	1.00	0.97	1.00	0.95	0.99	0.15	0.92
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

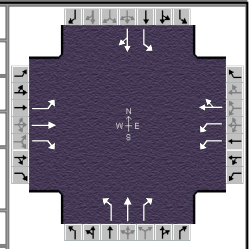
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	11	397	272	245	429		201	0	158	11	5	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1757	1891		1810	1900	1610	1810	1610	
Queue Service Time *(g_s)*, s	0.3	10.1	7.7	3.5	9.7		5.6	0.0	4.4	0.3	0.2	
Cycle Queue Clearance Time *(g_c)*, s	0.3	10.1	7.7	3.5	9.7		5.6	0.0	4.4	0.3	0.2	
Capacity *(c)*, veh/h	26	517	438	390	698		265	419	355	26	142	
Volume-to-Capacity Ratio *(X)*	0.423	0.767	0.620	0.626	0.615		0.760	0.000	0.444	0.423	0.038	
Available Capacity *(c_a)*, veh/h	692	2542	2154	1343	2531		1383	1453	1231	692	1231	
Back of Queue *(Q)*, veh/ln (50th percentile)	0.1	3.6	2.4	1.3	3.2		2.3	0.0	1.5	0.2	0.1	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay *(d_1)*, s/veh	25.6	17.5	16.7	22.2	13.5		21.5	0.0	17.6	25.6	21.8	
Incremental Delay *(d_2)*, s/veh	4.1	0.9	0.5	0.6	0.3		1.7	0.0	0.3	4.1	0.0	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay *(d)*, s/veh	29.6	18.4	17.2	22.8	13.8		23.2	0.0	18.0	29.6	21.9	
Level of Service (LOS)	C	B	B	C	B		C		B	C	C	
Approach Delay, s/veh / LOS	18.1	B		17.1	B		20.9	C		27.0	C	
Intersection Delay, s/veh / LOS	18.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.3	B	2.4	B	2.6	B
Bicycle LOS Score / LOS	1.6	A	1.6	A	1.1	A	0.5	A

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HCS 2010 Signalized Intersection Results Summary

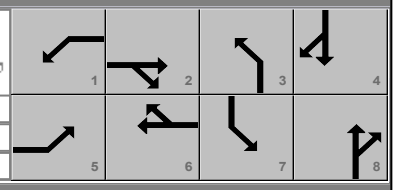
General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / North I	Analysis Year	2020 Existing plus Project	Analysis Period	1> 7:00
File Name	Cherry NDriveway AM 2020 Exist wProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	10	365	402	414	385	10	403	0	234	10	0	5

Signal Information			
Cycle, s	78.7	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	1.1	6.5	19.7	1.1	15.4	5.0						
Yellow	4.0	4.0	4.0	4.0	4.0	4.0						
Red	1.0	1.0	1.0	1.0	1.0	1.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	6.1	24.7	17.6	36.2	26.4	30.4	6.1	10.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.0	3.0	3.0	3.3	3.5	3.3	3.5
Queue Clearance Time *(g_s)*, s	2.5	17.6	11.8	16.0	20.4	12.1	2.5	2.3
Green Extension Time *(g_e)*, s	0.0	1.9	0.7	1.9	0.9	0.6	0.0	0.6
Phase Call Probability	0.21	1.00	1.00	1.00	1.00	1.00	0.21	1.00
Max Out Probability	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00

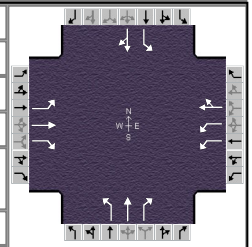
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	11	397	220	450	429		438	0	254	11	5	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1757	1891		1810	1900	1610	1810	1610	
Queue Service Time *(g_s)*, s	0.5	15.6	9.4	9.8	14.0		18.4	0.0	10.1	0.5	0.3	
Cycle Queue Clearance Time *(g_c)*, s	0.5	15.6	9.4	9.8	14.0		18.4	0.0	10.1	0.5	0.3	
Capacity *(c)*, veh/h	25	477	404	563	751		494	613	519	25	102	
Volume-to-Capacity Ratio *(X)*	0.439	0.833	0.544	0.800	0.571		0.886	0.000	0.490	0.439	0.053	
Available Capacity *(c_a)*, veh/h	458	1682	1425	889	1674		915	961	814	458	814	
Back of Queue *(Q)*, veh/ln (50th percentile)	0.2	6.7	3.3	3.9	5.4		8.0	0.0	3.7	0.2	0.1	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay *(d_1)*, s/veh	38.7	28.1	25.7	32.0	18.6		27.6	0.0	21.6	38.7	34.8	
Incremental Delay *(d_2)*, s/veh	4.5	1.5	0.4	1.2	0.3		2.2	0.0	0.3	4.5	0.1	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay *(d)*, s/veh	43.2	29.5	26.1	33.1	18.8		29.8	0.0	21.8	43.2	34.9	
Level of Service (LOS)	D	C	C	C	B		C		C	D	C	
Approach Delay, s/veh / LOS	28.6	C		26.2	C		26.8	C		40.4	D	
Intersection Delay, s/veh / LOS	27.2						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.3	B	2.4	B	2.7	B
Bicycle LOS Score / LOS	1.5	A	1.9	A	1.6	A	0.5	A

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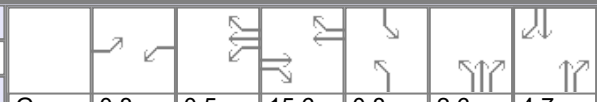
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / North I	Analysis Year	Future without Project	Analysis Period	1> 7:00
File Name	Cherry NDriveway AM Future NoProj.xus				
Project Description	Beaumont High School Expansion				

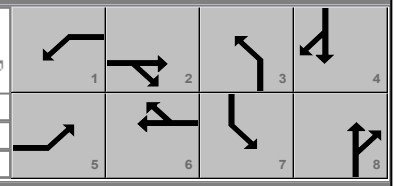


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	10	390	360	240	410	10	195	0	155	10	0	5

Signal Information			
Cycle, s	55.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	0.8	0.5	15.6	0.8	2.6	4.7						
Yellow	4.0	4.0	4.0	4.0	4.0	4.0						
Red	1.0	1.0	1.0	1.0	1.0	1.0						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	5.8	20.6	11.3	26.1	13.3	17.3	5.8	9.7
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.0	3.0	3.0	3.3	3.5	3.3	3.5
Queue Clearance Time *(g_s)*, s	2.3	13.3	5.9	12.8	8.2	7.0	2.3	2.2
Green Extension Time *(g_e)*, s	0.0	2.2	0.5	2.2	0.4	0.4	0.0	0.4
Phase Call Probability	0.15	1.00	0.98	1.00	0.96	1.00	0.15	0.94
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

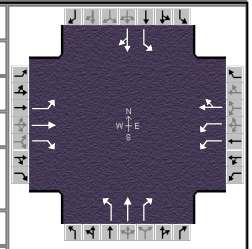
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	11	424	283	261	457		212	0	168	11	5	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1757	1892		1810	1900	1610	1810	1610	
Queue Service Time *(g_s)*, s	0.3	11.3	8.4	3.9	10.8		6.2	0.0	5.0	0.3	0.2	
Cycle Queue Clearance Time *(g_c)*, s	0.3	11.3	8.4	3.9	10.8		6.2	0.0	5.0	0.3	0.2	
Capacity *(c)*, veh/h	26	541	458	404	729		276	425	360	26	138	
Volume-to-Capacity Ratio *(X)*	0.425	0.784	0.617	0.646	0.626		0.769	0.000	0.468	0.425	0.039	
Available Capacity *(c_a)*, veh/h	656	2412	2044	1275	2402		1313	1378	1168	656	1168	
Back of Queue *(Q)*, veh/ln (50th percentile)	0.2	4.2	2.6	1.4	3.6		2.6	0.0	1.8	0.2	0.1	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay *(d_1)*, s/veh	27.0	18.2	17.1	23.3	13.7		22.4	0.0	18.6	27.0	23.1	
Incremental Delay *(d_2)*, s/veh	4.1	1.0	0.5	0.6	0.3		1.7	0.0	0.4	4.1	0.0	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay *(d)*, s/veh	31.1	19.1	17.6	24.0	14.1		24.2	0.0	18.9	31.1	23.2	
Level of Service (LOS)	C	B	B	C	B		C		B	C	C	
Approach Delay, s/veh / LOS	18.7	B		17.7	B		21.8	C		28.4	C	
Intersection Delay, s/veh / LOS	19.0						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.3	B	2.4	B	2.6	B
Bicycle LOS Score / LOS	1.7	A	1.7	A	1.1	A	0.5	A

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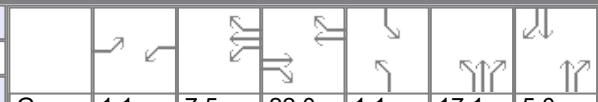
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / North I	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Cherry NDriveway AM Future wProj.xus				
Project Description	Beaumont High School Expansion				

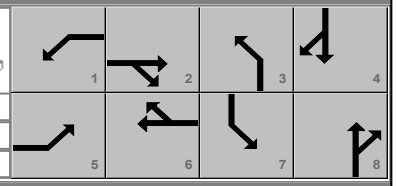


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	10	390	412	429	410	10	413	0	244	10	0	5

Signal Information			
Cycle, s	83.8	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	1.1	7.5	22.0	1.1	17.1	5.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0
Red	1.0	1.0	1.0	1.0	1.0	1.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	6.1	27.0	18.6	39.5	28.2	32.1	6.1	10.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.0	3.0	3.0	3.3	3.5	3.3	3.5
Queue Clearance Time *(g_s)*, s	2.5	19.8	12.8	17.7	22.1	13.2	2.5	2.3
Green Extension Time *(g_e)*, s	0.0	2.1	0.7	2.1	0.9	0.7	0.0	0.7
Phase Call Probability	0.22	1.00	1.00	1.00	1.00	1.00	0.22	1.00
Max Out Probability	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00

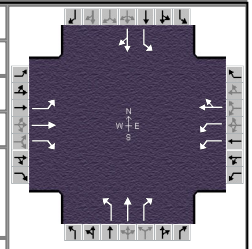
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	11	424	230	466	457		449	0	265	11	5	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1757	1892		1810	1900	1610	1810	1610	
Queue Service Time *(g_s)*, s	0.5	17.8	10.4	10.8	15.7		20.1	0.0	11.2	0.5	0.3	
Cycle Queue Clearance Time *(g_c)*, s	0.5	17.8	10.4	10.8	15.7		20.1	0.0	11.2	0.5	0.3	
Capacity *(c)*, veh/h	25	501	424	571	780		502	614	520	25	95	
Volume-to-Capacity Ratio *(X)*	0.442	0.847	0.543	0.816	0.585		0.895	0.000	0.510	0.442	0.057	
Available Capacity *(c_a)*, veh/h	429	1578	1338	834	1572		859	902	764	429	764	
Back of Queue *(Q)*, veh/ln (50th percentile)	0.2	7.7	3.7	4.5	6.2		9.0	0.0	4.2	0.3	0.1	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay *(d_1)*, s/veh	41.2	29.4	26.7	34.1	19.2		29.3	0.0	23.1	41.2	37.4	
Incremental Delay *(d_2)*, s/veh	4.6	1.6	0.4	2.6	0.3		3.5	0.0	0.3	4.6	0.1	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay *(d)*, s/veh	45.8	31.0	27.1	36.6	19.4		32.7	0.0	23.4	45.8	37.5	
Level of Service (LOS)	D	C	C	D	B		C		C	D	D	
Approach Delay, s/veh / LOS	29.9	C		28.1	C		29.3	C		43.1	D	
Intersection Delay, s/veh / LOS	29.1						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.3	B	2.4	B	2.7	B
Bicycle LOS Score / LOS	1.6	A	2.0	B	1.7	A	0.5	A

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HCS 2010 Signalized Intersection Results Summary

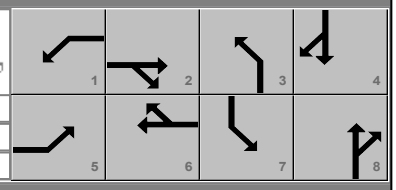
General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	AM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / North I	Analysis Year	Future with Project One Driveway	Analysis Period	1> 7:00
File Name	Cherry NDriveway AM Future wProj 1DW.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	10	390	824	429	410	10	413	0	244	10	0	5

Signal Information			
Cycle, s	146.3	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	1.8	13.2	63.9	1.8	31.3	4.3	
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	
Red	1.0	1.0	1.0	1.0	1.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	6.8	68.9	25.0	87.1	43.1	45.6	6.8	9.3
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	3.0	3.1	3.0	3.1	3.3	3.5	3.3	3.5
Queue Clearance Time (g_s), s	2.9	62.0	21.3	22.4	37.7	22.9	2.9	2.5
Green Extension Time (g_e), s	0.0	1.8	0.0	3.5	0.3	0.6	0.0	0.0
Phase Call Probability	0.36	1.00	1.00	1.00	1.00	1.00	0.36	1.00
Max Out Probability	0.00	0.37	1.00	0.00	1.00	0.00	0.00	0.00

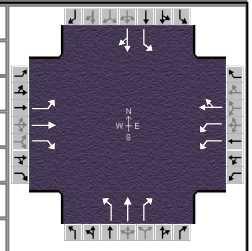
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	11	424	678	466	457		449	0	265	11	5	
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1610	1757	1892		1810	1900	1610	1810	1610	
Queue Service Time (g_s), s	0.9	23.7	60.0	19.3	20.4		35.7	0.0	20.9	0.9	0.5	
Cycle Queue Clearance Time (g_c), s	0.9	23.7	60.0	19.3	20.4		35.7	0.0	20.9	0.9	0.5	
Capacity (*c*), veh/h	22	830	703	480	1062		471	528	447	22	48	
Volume-to-Capacity Ratio (*X*)	0.491	0.511	0.964	0.972	0.430		0.953	0.000	0.593	0.491	0.114	
Available Capacity (c_a), veh/h	247	908	770	480	1062		494	528	447	247	440	
Back of Queue (*Q*), veh/ln (50th percentile)	0.4	10.6	27.1	10.7	8.6		20.0	0.0	8.7	0.4	0.2	
Overflow Queue (Q_3), veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Queue Storage Ratio (*RQ*) (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	71.9	29.9	40.1	62.9	18.6		53.3	0.0	45.7	71.9	69.2	
Incremental Delay (d_2), s/veh	6.1	0.2	22.5	33.5	0.1		27.8	0.0	1.5	6.1	0.4	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh	78.0	30.1	62.6	96.4	18.7		81.1	0.0	47.2	78.0	69.6	
Level of Service (LOS)	E	C	E	F	B		F		D	E	E	
Approach Delay, s/veh / LOS	50.4	D		58.0	E		68.5	E		75.2	E	
Intersection Delay, s/veh / LOS	57.7						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.3	B	2.5	B	2.8	C
Bicycle LOS Score / LOS	2.3	B	2.0	B	1.7	A	0.5	A

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HCS 2010 Signalized Intersection Results Summary

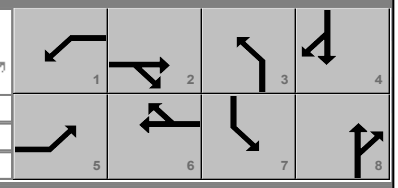
General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / North I	Analysis Year	2020 Existing	Analysis Period	1> 7:00
File Name	Cherry NDriveway PM 2020 Exist.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	10	215	115	115	220	5	205	0	215	10	0	10

Signal Information			
Cycle, s	43.8	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	0.6	3.3	8.0	0.6	1.5	4.8
Yellow	4.0	0.0	4.0	4.0	4.0	4.0
Red	1.0	0.0	1.0	1.0	1.0	1.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	5.6	13.0	8.9	16.3	12.1	16.3	5.6	9.8
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.0	3.0	3.0	3.3	3.5	3.3	3.5
Queue Clearance Time *(g_s)*, s	2.3	7.0	3.5	6.8	7.2	7.5	2.3	2.3
Green Extension Time *(g_e)*, s	0.0	0.9	0.2	0.9	0.5	0.6	0.0	0.6
Phase Call Probability	0.12	1.00	0.78	1.00	0.93	1.00	0.12	0.96
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

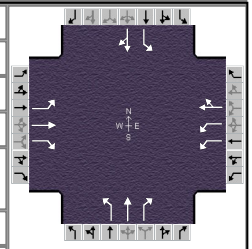
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	11	234	71	125	245		223	0	234	11	11	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1757	1892		1810	1900	1610	1810	1610	
Queue Service Time *(g_s)*, s	0.3	5.0	1.6	1.5	4.8		5.2	0.0	5.5	0.3	0.3	
Cycle Queue Clearance Time *(g_c)*, s	0.3	5.0	1.6	1.5	4.8		5.2	0.0	5.5	0.3	0.3	
Capacity *(c)*, veh/h	26	346	293	315	487		295	490	415	26	176	
Volume-to-Capacity Ratio *(X)*	0.420	0.675	0.241	0.397	0.502		0.755	0.000	0.563	0.420	0.062	
Available Capacity *(c_a)*, veh/h	825	3032	2570	1602	3020		1650	1733	1468	825	1468	
Back of Queue *(Q)*, veh/ln (50th percentile)	0.1	1.8	0.5	0.5	1.6		2.0	0.0	1.8	0.1	0.1	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay *(d_1)*, s/veh	21.4	16.7	15.3	18.8	13.9		17.5	0.0	14.1	21.4	17.5	
Incremental Delay *(d_2)*, s/veh	4.0	0.9	0.2	0.3	0.3		1.5	0.0	0.4	4.0	0.1	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay *(d)*, s/veh	25.4	17.6	15.5	19.2	14.2		19.0	0.0	14.6	25.4	17.6	
Level of Service (LOS)	C	B	B	B	B		B		B	C	B	
Approach Delay, s/veh / LOS	17.4	B		15.9	B		16.7	B		21.5	C	
Intersection Delay, s/veh / LOS	16.7						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.3	B	2.4	B	2.5	B
Bicycle LOS Score / LOS	1.0	A	1.1	A	1.2	A	0.5	A

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HCS 2010 Signalized Intersection Results Summary

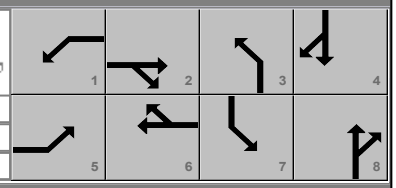
General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / North I	Analysis Year	2020 Existing plus Project	Analysis Period	1> 7:00
File Name	Cherry NDriveway PM 2020 Exist wProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	10	215	123	168	220	5	483	0	329	10	0	10

Signal Information			
Cycle, s	59.7	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	0.8	4.3	9.9	0.8	13.8	5.0
Yellow	4.0	0.0	4.0	4.0	4.0	4.0
Red	1.0	0.0	1.0	1.0	1.0	1.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	5.8	14.9	10.1	19.2	24.7	28.8	5.8	10.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.0	3.0	3.0	3.3	3.5	3.3	3.5
Queue Clearance Time *(g_s)*, s	2.4	9.0	5.0	8.8	18.4	12.3	2.4	2.4
Green Extension Time *(g_e)*, s	0.0	0.9	0.3	0.9	1.2	0.9	0.0	0.9
Phase Call Probability	0.17	1.00	0.95	1.00	1.00	1.00	0.17	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

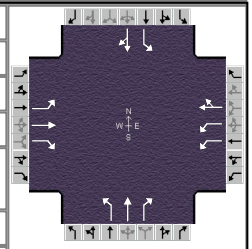
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	11	234	68	183	245		525	0	358	11	11	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1757	1892		1810	1900	1610	1810	1610	
Queue Service Time *(g_s)*, s	0.4	7.0	2.2	3.0	6.8		16.4	0.0	10.3	0.4	0.4	
Cycle Queue Clearance Time *(g_c)*, s	0.4	7.0	2.2	3.0	6.8		16.4	0.0	10.3	0.4	0.4	
Capacity *(c)*, veh/h	25	317	269	300	451		597	759	643	25	134	
Volume-to-Capacity Ratio *(X)*	0.428	0.736	0.255	0.608	0.542		0.879	0.000	0.556	0.428	0.081	
Available Capacity *(c_a)*, veh/h	605	2222	1883	1174	2213		1209	1270	1076	605	1076	
Back of Queue *(Q)*, veh/ln (50th percentile)	0.2	2.9	0.7	1.2	2.6		6.6	0.0	3.4	0.2	0.1	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay *(d_1)*, s/veh	29.3	23.7	21.7	26.4	19.9		18.9	0.0	13.9	29.3	25.3	
Incremental Delay *(d_2)*, s/veh	4.2	1.3	0.2	0.7	0.4		1.7	0.0	0.3	4.2	0.1	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay *(d)*, s/veh	33.5	24.9	21.9	27.1	20.3		20.6	0.0	14.2	33.5	25.4	
Level of Service (LOS)	C	C	C	C	C		C		B	C	C	
Approach Delay, s/veh / LOS	24.6	C		23.2	C		18.0	B		29.4	C	
Intersection Delay, s/veh / LOS	20.8						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.3	B	2.4	B	2.5	B
Bicycle LOS Score / LOS	1.0	A	1.2	A	1.9	A	0.5	A

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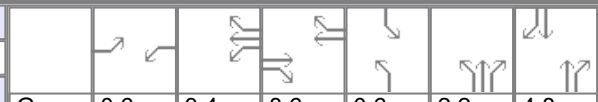
HCS 2010 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / North I	Analysis Year	Future without Project	Analysis Period	1> 7:00
File Name	Cherry NDriveway PM Future NoProj.xus				
Project Description	Beaumont High School Expansion				

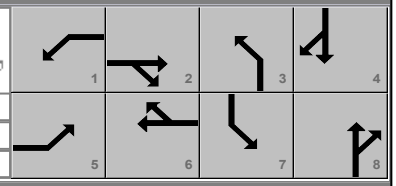


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	10	230	120	120	235	5	220	0	230	10	0	10

Signal Information			
Cycle, s	45.3	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	0.6	3.4	8.6	0.6	2.2	4.8
Yellow	4.0	0.0	4.0	4.0	4.0	4.0
Red	1.0	0.0	1.0	1.0	1.0	1.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	5.6	13.6	9.0	16.9	12.8	17.0	5.6	9.8
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.0	3.0	3.0	3.3	3.5	3.3	3.5
Queue Clearance Time *(g_s)*, s	2.3	7.6	3.6	7.3	7.7	8.1	2.3	2.3
Green Extension Time *(g_e)*, s	0.0	1.0	0.2	1.0	0.5	0.6	0.0	0.6
Phase Call Probability	0.13	1.00	0.81	1.00	0.95	1.00	0.13	0.97
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

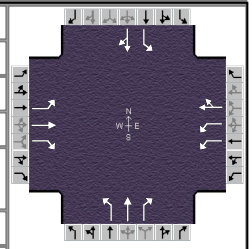
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	11	250	65	130	261		239	0	250	11	11	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1757	1893		1810	1900	1610	1810	1610	
Queue Service Time *(g_s)*, s	0.3	5.6	1.6	1.6	5.3		5.7	0.0	6.1	0.3	0.3	
Cycle Queue Clearance Time *(g_c)*, s	0.3	5.6	1.6	1.6	5.3		5.7	0.0	6.1	0.3	0.3	
Capacity *(c)*, veh/h	26	360	305	314	500		313	505	428	26	172	
Volume-to-Capacity Ratio *(X)*	0.420	0.695	0.214	0.415	0.521		0.763	0.000	0.584	0.420	0.063	
Available Capacity *(c_a)*, veh/h	799	2935	2487	1551	2924		1597	1677	1421	799	1421	
Back of Queue *(Q)*, veh/ln (50th percentile)	0.1	2.0	0.5	0.5	1.8		2.3	0.0	2.0	0.1	0.1	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay *(d_1)*, s/veh	22.2	17.2	15.5	19.5	14.2		17.9	0.0	14.5	22.2	18.2	
Incremental Delay *(d_2)*, s/veh	4.0	0.9	0.1	0.3	0.3		1.5	0.0	0.5	4.0	0.1	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay *(d)*, s/veh	26.1	18.1	15.7	19.8	14.5		19.3	0.0	14.9	26.1	18.3	
Level of Service (LOS)	C	B	B	B	B		B		B	C	B	
Approach Delay, s/veh / LOS	17.8	B		16.3	B		17.1	B		22.2	C	
Intersection Delay, s/veh / LOS	17.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.3	B	2.4	B	2.5	B
Bicycle LOS Score / LOS	1.0	A	1.1	A	1.3	A	0.5	A

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HCS 2010 Signalized Intersection Results Summary

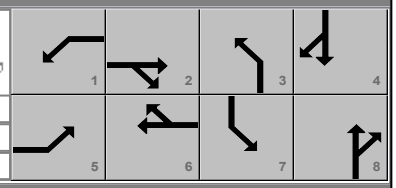
General Information				Intersection Information	
Agency	Beaumont Unified School District			Duration, h	0.25
Analyst	R Garland	Analysis Date	6/7/2020	Area Type	Other
Jurisdiction	City of Beaumont	Time Period	PM Peak Hour	PHF	0.92
Intersection	Cherry Valley Blvd / North I	Analysis Year	Future with Project	Analysis Period	1> 7:00
File Name	Cherry NDriveway PM Future wProj.xus				
Project Description	Beaumont High School Expansion				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	10	230	126	173	235	5	498	0	344	10	0	10

Signal Information			
Cycle, s	62.1	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	0.9	4.5	10.8	0.9	15.1	5.0
Yellow	4.0	0.0	4.0	4.0	4.0	4.0
Red	1.0	0.0	1.0	1.0	1.0	1.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	3	8	7	4
Case Number	2.0	3.0	2.0	4.0	2.0	3.0	2.0	4.0
Phase Duration, s	5.9	15.8	10.4	20.3	25.9	30.1	5.9	10.0
Change Period, *(Y+Rc)*, s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway *(MAH)*, s	3.0	3.0	3.0	3.0	3.3	3.5	3.3	3.5
Queue Clearance Time *(g_s)*, s	2.4	9.8	5.2	9.5	19.6	13.2	2.4	2.4
Green Extension Time *(g_e)*, s	0.0	1.0	0.3	1.0	1.2	1.0	0.0	1.0
Phase Call Probability	0.17	1.00	0.96	1.00	1.00	1.00	0.17	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	3	8	18	7	4	14
Adjusted Flow Rate *(v)*, veh/h	11	250	72	188	261		541	0	374	11	11	
Adjusted Saturation Flow Rate *(s)*, veh/h/ln	1810	1900	1610	1757	1893		1810	1900	1610	1810	1610	
Queue Service Time *(g_s)*, s	0.4	7.8	2.4	3.2	7.5		17.6	0.0	11.2	0.4	0.4	
Cycle Queue Clearance Time *(g_c)*, s	0.4	7.8	2.4	3.2	7.5		17.6	0.0	11.2	0.4	0.4	
Capacity *(c)*, veh/h	25	332	281	304	468		611	767	650	25	129	
Volume-to-Capacity Ratio *(X)*	0.430	0.754	0.255	0.619	0.558		0.886	0.000	0.575	0.430	0.084	
Available Capacity *(c_a)*, veh/h	581	2136	1810	1129	2128		1162	1220	1034	581	1034	
Back of Queue *(Q)*, veh/ln (50th percentile)	0.2	3.2	0.8	1.2	2.9		7.1	0.0	3.8	0.2	0.1	
Overflow Queue *(Q_3)*, veh/ln	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Queue Storage Ratio *(RQ)* (50th percentile)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay *(d_1)*, s/veh	30.5	24.4	22.2	27.5	20.5		19.5	0.0	14.4	30.5	26.5	
Incremental Delay *(d_2)*, s/veh	4.2	1.3	0.2	0.8	0.4		1.8	0.0	0.3	4.2	0.1	
Initial Queue Delay *(d_3)*, s/veh	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay *(d)*, s/veh	34.7	25.7	22.4	28.2	20.9		21.3	0.0	14.7	34.7	26.6	
Level of Service (LOS)	C	C	C	C	C		C		B	C	C	
Approach Delay, s/veh / LOS	25.3	C		23.9	C		18.6	B		30.7	C	
Intersection Delay, s/veh / LOS	21.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.8	C	2.3	B	2.4	B	2.5	B
Bicycle LOS Score / LOS	1.0	A	1.2	A	2.0	A	0.5	A

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*R Garland*
Agency/Co.	*Beaumont Unified School Distr*
Date Performed	*6/7/2020*
Analysis Time Period	*AM Peak Hour*

Site Information

Intersection	*Brookside Ave / S Driveway*
Jurisdiction	*City of Beaumont*
Analysis Year	*2020 Existing*

Project ID *Beaumont High School Expansion*

East/West Street: *Brookside Avenue* | North/South Street: *South Driveway*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*120*	*530*	*0*	*0*	*445*	*185*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*0*	*0*	*0*	*90*	*0*	*60*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*L*	*T*	*T*	*R*			*L*	*R*
PHF	*1.00*	*1.00*	*1.00*	*1.00*			*1.00*	*1.00*
Flow Rate (veh/h)	*120*	*530*	*445*	*185*			*90*	60
% Heavy Vehicles	*0*	*0*	*0*	*0*			*0*	*0*
No. Lanes	*2*		*2*		*0*		*2*	
Geometry Group	*5*		*5*				*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*1.0*	*0.0*	*0.0*	*0.0*			*1.0*	*0.0*
Prop. Right-Turns	*0.0*	*0.0*	*0.0*	*1.0*			*0.0*	*1.0*
Prop. Heavy Vehicle	*0.0*	*0.0*	*0.0*	*0.0*			*0.0*	*0.0*
hLT-adj	*0.5*	*0.5*	*0.5*	*0.5*			*0.2*	*0.2*
hRT-adj	*-0.7*	*-0.7*	*-0.7*	*-0.7*			*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*	*1.7*	*1.7*			*1.7*	*1.7*
hadj, computed	*0.5*	*0.0*	*0.0*	*-0.7*			*0.2*	*-0.6*

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*	*3.20*	*3.20*			*3.20*	*3.20*
x, initial	*0.11*	*0.47*	*0.40*	*0.16*			*0.08*	*0.05*
hd, final value (s)	*6.22*	*5.72*	*5.76*	*5.06*			*6.77*	*5.96*
x, final value	*0.21*	*0.84*	*0.71*	*0.26*			*0.17*	*0.10*
Move-up time, m (s)	*2.3*		*2.3*				*2.0*	
Service Time, t_s (s)	*3.9*	*3.4*	*3.5*	*2.8*			*4.8*	*4.0*

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*370*	*626*	*618*	*435*			*340*	*310*
Delay (s/veh)	*10.54*	*31.37*	*21.45*	*9.53*			*11.15*	*9.62*
LOS	*B*	*D*	*C*	*A*			*B*	*A*
Approach: Delay (s/veh)	*27.52*		*17.95*				*10.54*	
LOS	*D*		*C*				*B*	
Intersection Delay (s/veh)	*21.52*							
Intersection LOS	*C*							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*R Garland*
Agency/Co.	*Beaumont Unified School Distr*
Date Performed	*6/7/2020*
Analysis Time Period	*AM Peak Hour*

Site Information

Intersection	*Brookside Ave / S Driveway*
Jurisdiction	*City of Beaumont*
Analysis Year	*2020 Existing plus Project*

Project ID *Beaumont High School Expansion*

East/West Street: *Brookside Avenue* | North/South Street: *South Driveway*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*255*	*530*	*0*	*0*	*445*	*240*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*0*	*0*	*0*	*116*	*0*	*124*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*L*	*T*	*T*	*R*			*L*	*R*
PHF	*1.00*	*1.00*	*1.00*	*1.00*			*1.00*	*1.00*
Flow Rate (veh/h)	*255*	*530*	*445*	*240*			*116*	124
% Heavy Vehicles	*0*	*0*	*0*	*0*			*0*	*0*
No. Lanes	*2*		*2*		*0*		*2*	
Geometry Group	*5*		*5*				*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*1.0*	*0.0*	*0.0*	*0.0*			*1.0*	*0.0*
Prop. Right-Turns	*0.0*	*0.0*	*0.0*	*1.0*			*0.0*	*1.0*
Prop. Heavy Vehicle	*0.0*	*0.0*	*0.0*	*0.0*			*0.0*	*0.0*
hLT-adj	*0.5*	*0.5*	*0.5*	*0.5*			*0.2*	*0.2*
hRT-adj	*-0.7*	*-0.7*	*-0.7*	*-0.7*			*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*	*1.7*	*1.7*			*1.7*	*1.7*
hadj, computed	*0.5*	*0.0*	*0.0*	*-0.7*			*0.2*	*-0.6*

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*	*3.20*	*3.20*			*3.20*	*3.20*
x, initial	*0.23*	*0.47*	*0.40*	*0.21*			*0.10*	*0.11*
hd, final value (s)	*6.73*	*6.22*	*6.41*	*5.70*			*7.00*	*6.19*
x, final value	*0.48*	*0.92*	*0.79*	*0.38*			*0.23*	*0.21*
Move-up time, m (s)	*2.3*		*2.3*				*2.0*	
Service Time, t_s (s)	*4.4*	*3.9*	*4.1*	*3.4*			*5.0*	*4.2*

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*505*	*577*	*557*	*490*			*366*	*374*
Delay (s/veh)	*15.41*	*44.15*	*29.19*	*11.84*			*12.03*	*10.86*
LOS	*C*	*E*	*D*	*B*			*B*	*B*
Approach: Delay (s/veh)	*34.82*		*23.11*				*11.43*	
LOS	*D*		*C*				*B*	
Intersection Delay (s/veh)	*26.84*							
Intersection LOS	*D*							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*R Garland*
Agency/Co.	*Beaumont Unified School Distr*
Date Performed	*6/7/2020*
Analysis Time Period	*AM Peak Hour*

Site Information

Intersection	*Brookside Ave / S Driveway*
Jurisdiction	*City of Beaumont*
Analysis Year	*Future without Project*

Project ID *Beaumont High School Expansion*

East/West Street: *Brookside Avenue* | North/South Street: *South Driveway*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*130*	*560*	*0*	*0*	*470*	*195*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*0*	*0*	*0*	*95*	*0*	*65*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*L*	*T*	*T*	*R*			*L*	*R*
PHF	*1.00*	*1.00*	*1.00*	*1.00*			*1.00*	*1.00*
Flow Rate (veh/h)	*130*	*560*	*470*	*195*			*95*	65
% Heavy Vehicles	*0*	*0*	*0*	*0*			*0*	*0*
No. Lanes	*2*		*2*		*0*		*2*	
Geometry Group	*5*		*5*				*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*1.0*	*0.0*	*0.0*	*0.0*			*1.0*	*0.0*
Prop. Right-Turns	*0.0*	*0.0*	*0.0*	*1.0*			*0.0*	*1.0*
Prop. Heavy Vehicle	*0.0*	*0.0*	*0.0*	*0.0*			*0.0*	*0.0*
hLT-adj	*0.5*	*0.5*	*0.5*	*0.5*			*0.2*	*0.2*
hRT-adj	*-0.7*	*-0.7*	*-0.7*	*-0.7*			*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*	*1.7*	*1.7*			*1.7*	*1.7*
hadj, computed	*0.5*	*0.0*	*0.0*	*-0.7*			*0.2*	*-0.6*

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*	*3.20*	*3.20*			*3.20*	*3.20*
x, initial	*0.12*	*0.50*	*0.42*	*0.17*			*0.08*	*0.06*
hd, final value (s)	*6.33*	*5.83*	*5.88*	*5.18*			*6.91*	*6.10*
x, final value	*0.23*	*0.91*	*0.77*	*0.28*			*0.18*	*0.11*
Move-up time, m (s)	*2.3*		*2.3*				*2.0*	
Service Time, t_s (s)	*4.0*	*3.5*	*3.6*	*2.9*			*4.9*	*4.1*

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*380*	*616*	*606*	*445*			*345*	*315*
Delay (s/veh)	*10.90*	*40.56*	*25.38*	*9.88*			*11.45*	*9.86*
LOS	*B*	*E*	*D*	*A*			*B*	*A*
Approach: Delay (s/veh)	*34.97*		*20.84*				*10.80*	
LOS	*D*		*C*				*B*	
Intersection Delay (s/veh)	*26.21*							
Intersection LOS	*D*							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*R Garland*
Agency/Co.	*Beaumont Unified School Distr*
Date Performed	*6/7/2020*
Analysis Time Period	*AM Peak Hour*

Site Information

Intersection	*Brookside Ave / S Driveway*
Jurisdiction	*City of Beaumont*
Analysis Year	*Future with Project*

Project ID *Beaumont High School Expansion*

East/West Street: *Brookside Avenue* North/South Street: *South Driveway*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*265*	*560*	*0*	*0*	*470*	*250*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*0*	*0*	*0*	*121*	*0*	*129*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*L*	*T*	*T*	*R*			*L*	*R*
PHF	*1.00*	*1.00*	*1.00*	*1.00*			*1.00*	*1.00*
Flow Rate (veh/h)	*265*	*560*	*470*	*250*			*121*	129
% Heavy Vehicles	*0*	*0*	*0*	*0*			*0*	*0*
No. Lanes	*2*		*2*		*0*		*2*	
Geometry Group	*5*		*5*				*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*1.0*	*0.0*	*0.0*	*0.0*			*1.0*	*0.0*
Prop. Right-Turns	*0.0*	*0.0*	*0.0*	*1.0*			*0.0*	*1.0*
Prop. Heavy Vehicle	*0.0*	*0.0*	*0.0*	*0.0*			*0.0*	*0.0*
hLT-adj	*0.5*	*0.5*	*0.5*	*0.5*			*0.2*	*0.2*
hRT-adj	*-0.7*	*-0.7*	*-0.7*	*-0.7*			*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*	*1.7*	*1.7*			*1.7*	*1.7*
hadj, computed	*0.5*	*0.0*	*0.0*	*-0.7*			*0.2*	*-0.6*

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*	*3.20*	*3.20*			*3.20*	*3.20*
x, initial	*0.24*	*0.50*	*0.42*	*0.22*			*0.11*	*0.11*
hd, final value (s)	*6.85*	*6.34*	*6.54*	*5.83*			*7.11*	*6.30*
x, final value	*0.50*	*0.99*	*0.85*	*0.40*			*0.24*	*0.23*
Move-up time, m (s)	*2.3*		*2.3*				*2.0*	
Service Time, t_s (s)	*4.6*	*4.0*	*4.2*	*3.5*			*5.1*	*4.3*

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*515*	*568*	*548*	*500*			*371*	*379*
Delay (s/veh)	*16.32*	*59.24*	*36.21*	*12.43*			*12.33*	*11.12*
LOS	*C*	*F*	*E*	*B*			*B*	*B*
Approach: Delay (s/veh)	*45.45*		*27.95*				*11.71*	
LOS	*E*		*D*				*B*	
Intersection Delay (s/veh)	*33.73*							
Intersection LOS	*D*							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*R Garland*
Agency/Co.	*Beaumont Unified School Distr*
Date Performed	*6/7/2020*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Brookside Ave / S Driveway*
Jurisdiction	*City of Beaumont*
Analysis Year	*2020 Existing*

Project ID *Beaumont High School Expansion*

East/West Street: *Brookside Avenue* North/South Street: *South Driveway*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*45*	*395*	*0*	*0*	*305*	*75*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*0*	*0*	*0*	*125*	*0*	*85*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*L*	*T*	*T*	*R*			*L*	*R*
PHF	*1.00*	*1.00*	*1.00*	*1.00*			*1.00*	*1.00*
Flow Rate (veh/h)	*45*	*395*	*305*	*75*			*125*	*85*
% Heavy Vehicles	*0*	*0*	*0*	*0*			*0*	*0*
No. Lanes	*2*		*2*		*0*		*2*	
Geometry Group	*5*		*5*				*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*1.0*	*0.0*	*0.0*	*0.0*			*1.0*	*0.0*
Prop. Right-Turns	*0.0*	*0.0*	*0.0*	*1.0*			*0.0*	*1.0*
Prop. Heavy Vehicle	*0.0*	*0.0*	*0.0*	*0.0*			*0.0*	*0.0*
hLT-adj	*0.5*	*0.5*	*0.5*	*0.5*			*0.2*	*0.2*
hRT-adj	*-0.7*	*-0.7*	*-0.7*	*-0.7*			*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*	*1.7*	*1.7*			*1.7*	*1.7*
hadj, computed	*0.5*	*0.0*	*0.0*	*-0.7*			*0.2*	*-0.6*

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*	*3.20*	*3.20*			*3.20*	*3.20*
x, initial	*0.04*	*0.35*	*0.27*	*0.07*			*0.11*	*0.08*
hd, final value (s)	*6.05*	*5.54*	*5.62*	*4.91*			*6.04*	*5.24*
x, final value	*0.08*	*0.61*	*0.48*	*0.10*			*0.21*	*0.12*
Move-up time, m (s)	*2.3*		*2.3*				*2.0*	
Service Time, t_s (s)	*3.7*	*3.2*	*3.3*	*2.6*			*4.0*	*3.2*

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*295*	*638*	*555*	*325*			*375*	*335*
Delay (s/veh)	*9.24*	*16.46*	*13.31*	*8.17*			*10.64*	*8.98*
LOS	*A*	*C*	*B*	*A*			*B*	*A*
Approach: Delay (s/veh)	*15.72*		*12.30*				*9.97*	
LOS	*C*		*B*				*A*	
Intersection Delay (s/veh)	*13.28*							
Intersection LOS	*B*							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*R Garland*
Agency/Co.	*Beaumont Unified School Distr*
Date Performed	*6/7/2020*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Brookside Ave / S Driveway*
Jurisdiction	*City of Beaumont*
Analysis Year	*2020 Existing plus Project*

Project ID *Beaumont High School Expansion*

East/West Street: *Brookside Avenue* | North/South Street: *South Driveway*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*83*	*395*	*0*	*0*	*305*	*91*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*0*	*0*	*0*	*158*	*0*	*166*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*L*	*T*	*T*	*R*			*L*	*R*
PHF	*1.00*	*1.00*	*1.00*	*1.00*			*1.00*	*1.00*
Flow Rate (veh/h)	*83*	*395*	*305*	*91*			*158*	166
% Heavy Vehicles	*0*	*0*	*0*	*0*			*0*	*0*
No. Lanes	*2*		*2*		*0*		*2*	
Geometry Group	*5*		*5*				*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*1.0*	*0.0*	*0.0*	*0.0*			*1.0*	*0.0*
Prop. Right-Turns	*0.0*	*0.0*	*0.0*	*1.0*			*0.0*	*1.0*
Prop. Heavy Vehicle	*0.0*	*0.0*	*0.0*	*0.0*			*0.0*	*0.0*
hLT-adj	*0.5*	*0.5*	*0.5*	*0.5*			*0.2*	*0.2*
hRT-adj	*-0.7*	*-0.7*	*-0.7*	*-0.7*			*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*	*1.7*	*1.7*			*1.7*	*1.7*
hadj, computed	*0.5*	*0.0*	*0.0*	*-0.7*			*0.2*	*-0.6*

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*	*3.20*	*3.20*			*3.20*	*3.20*
x, initial	*0.07*	*0.35*	*0.27*	*0.08*			*0.14*	*0.15*
hd, final value (s)	*6.47*	*5.97*	*6.09*	*5.38*			*6.23*	*5.43*
x, final value	*0.15*	*0.65*	*0.52*	*0.14*			*0.27*	*0.25*
Move-up time, m (s)	*2.3*		*2.3*				*2.0*	
Service Time, t_s (s)	*4.2*	*3.7*	*3.8*	*3.1*			*4.2*	*3.4*

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*333*	*593*	*555*	*341*			*408*	*416*
Delay (s/veh)	*10.30*	*19.25*	*15.09*	*8.92*			*11.56*	*10.23*
LOS	*B*	*C*	*C*	*A*			*B*	*B*
Approach: Delay (s/veh)	*17.69*		*13.67*				*10.87*	
LOS	*C*		*B*				*B*	
Intersection Delay (s/veh)	*14.52*							
Intersection LOS	*B*							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*R Garland*
Agency/Co.	*Beaumont Unified School Distr*
Date Performed	*6/7/2020*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Brookside Ave / S Driveway*
Jurisdiction	*City of Beaumont*
Analysis Year	*Future without Project*

Project ID *Beaumont High School Expansion*

East/West Street: *Brookside Avenue* | North/South Street: *South Driveway*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*50*	*420*	*0*	*0*	*325*	*80*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*0*	*0*	*0*	*135*	*0*	*90*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*L*	*T*	*T*	*R*			*L*	*R*
PHF	*1.00*	*1.00*	*1.00*	*1.00*			*1.00*	*1.00*
Flow Rate (veh/h)	*50*	*420*	*325*	*80*			*135*	90
% Heavy Vehicles	*0*	*0*	*0*	*0*			*0*	*0*
No. Lanes	*2*		*2*		*0*		*2*	
Geometry Group	*5*		*5*				*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*1.0*	*0.0*	*0.0*	*0.0*			*1.0*	*0.0*
Prop. Right-Turns	*0.0*	*0.0*	*0.0*	*1.0*			*0.0*	*1.0*
Prop. Heavy Vehicle	*0.0*	*0.0*	*0.0*	*0.0*			*0.0*	*0.0*
hLT-adj	*0.5*	*0.5*	*0.5*	*0.5*			*0.2*	*0.2*
hRT-adj	*-0.7*	*-0.7*	*-0.7*	*-0.7*			*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*	*1.7*	*1.7*			*1.7*	*1.7*
hadj, computed	*0.5*	*0.0*	*0.0*	*-0.7*			*0.2*	*-0.6*

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*	*3.20*	*3.20*			*3.20*	*3.20*
x, initial	*0.04*	*0.37*	*0.29*	*0.07*			*0.12*	*0.08*
hd, final value (s)	*6.15*	*5.65*	*5.73*	*5.02*			*6.18*	*5.38*
x, final value	*0.09*	*0.66*	*0.52*	*0.11*			*0.23*	*0.13*
Move-up time, m (s)	*2.3*		*2.3*				*2.0*	
Service Time, t_s (s)	*3.9*	*3.3*	*3.4*	*2.7*			*4.2*	*3.4*

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*300*	*627*	*575*	*330*			*385*	*340*
Delay (s/veh)	*9.43*	*18.57*	*14.41*	*8.35*			*11.04*	*9.22*
LOS	*A*	*C*	*B*	*A*			*B*	*A*
Approach: Delay (s/veh)	*17.60*		*13.21*				*10.31*	
LOS	*C*		*B*				*B*	
Intersection Delay (s/veh)	*14.49*							
Intersection LOS	*B*							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*R Garland*
Agency/Co.	*Beaumont Unified School Distr*
Date Performed	*6/7/2020*
Analysis Time Period	*PM Peak Hour*

Site Information

Intersection	*Brookside Ave / S Driveway*
Jurisdiction	*City of Beaumont*
Analysis Year	*Future with Project*

Project ID *Beaumont High School Expansion*

East/West Street: *Brookside Avenue* | North/South Street: *South Driveway*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*88*	*420*	*0*	*0*	*325*	*96*
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	*0*	*0*	*0*	*168*	*0*	*171*
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	*L*	*T*	*T*	*R*			*L*	*R*
PHF	*1.00*	*1.00*	*1.00*	*1.00*			*1.00*	*1.00*
Flow Rate (veh/h)	*88*	*420*	*325*	*96*			*168*	171
% Heavy Vehicles	*0*	*0*	*0*	*0*			*0*	*0*
No. Lanes	*2*		*2*		*0*		*2*	
Geometry Group	*5*		*5*				*1*	
Duration, T	*0.25*							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	*1.0*	*0.0*	*0.0*	*0.0*			*1.0*	*0.0*
Prop. Right-Turns	*0.0*	*0.0*	*0.0*	*1.0*			*0.0*	*1.0*
Prop. Heavy Vehicle	*0.0*	*0.0*	*0.0*	*0.0*			*0.0*	*0.0*
hLT-adj	*0.5*	*0.5*	*0.5*	*0.5*			*0.2*	*0.2*
hRT-adj	*-0.7*	*-0.7*	*-0.7*	*-0.7*			*-0.6*	*-0.6*
hHV-adj	*1.7*	*1.7*	*1.7*	*1.7*			*1.7*	*1.7*
hadj, computed	*0.5*	*0.0*	*0.0*	*-0.7*			*0.2*	*-0.6*

Departure Headway and Service Time

hd, initial value (s)	*3.20*	*3.20*	*3.20*	*3.20*			*3.20*	*3.20*
x, initial	*0.08*	*0.37*	*0.29*	*0.09*			*0.15*	*0.15*
hd, final value (s)	*6.59*	*6.08*	*6.21*	*5.50*			*6.37*	*5.56*
x, final value	*0.16*	*0.71*	*0.56*	*0.15*			*0.30*	*0.26*
Move-up time, m (s)	*2.3*		*2.3*				*2.0*	
Service Time, t_s (s)	*4.3*	*3.8*	*3.9*	*3.2*			*4.4*	*3.6*

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	*338*	*583*	*565*	*346*			*418*	*421*
Delay (s/veh)	*10.55*	*22.24*	*16.56*	*9.15*			*12.04*	*10.55*
LOS	*B*	*C*	*C*	*A*			*B*	*B*
Approach: Delay (s/veh)	*20.21*		*14.87*				*11.29*	
LOS	*C*		*B*				*B*	
Intersection Delay (s/veh)	*16.05*							
Intersection LOS	*C*							

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