SAN BERNARDINO COUNTY
INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

This form and the descriptive information in the application package constitute the contents of Initial Study pursuant to County Guidelines under Ordinance 3040 and Section 15063 of the State CEQA Guidelines.

PROJECT LABEL:

APNs: 0257-101-01

Applicant: Anda C. Alvillar, Project Manager
Black Gold Engineering
Chandi Group, USA
42270 Spectrum Street
Indio, California 92203-9513

Location 10951 Cedar Avenue, Bloomington, San Bernardino County, California 92316

Project No: 2019-00079

Rep 5th Supervisorial District

Proposal: Conditional Use Permit including a General Plan Amendment and Tentative Parcel Map to divide the parcel into 6 commercial lots. The project includes the development of the following three buildings: 9,900 square foot (sf) convenience store with eight multi-product fuel dispensers (mpd) and seven diesel bays; 3,000 sf fast-food restaurant with drive through; and 2,800 sf fast-food restaurant with drive through. Parking includes 143 spaces for cars and 33 for trucks.

USGS Quad: USGS 7.5 Minute Fontana, California

T, R, Section: Section 27, Township 1 South, Range 5 West

Community Plan: Bloomington Community Plan

LUZD: Bloomington Community Plan/Regional Industrial

Overlays:

PROJECT CONTACT INFORMATION:

Lead agency: County of San Bernardino
Land Use Services Department
385 N. Arrowhead Avenue, 1st Floor
San Bernardino, CA 92415-0182

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Project Sponsor Anda C. Alvillar, Project Manager
Black Gold Engineering
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PROJECT DESCRIPTION AND LOCATION:

Project Description

The project consists of the following components:

1. A Conditional Use Permit (CUP) to construct and operate a commercial center to include 9,900 square foot (sf) convenience store with eight multi-product fuel dispensers (mpd) and seven diesel bays; 3,000 sf fast-food restaurant with drive through; and 2,800 sf fast-food restaurant with drive through. Parking includes 143 spaces for cars and 33 for trucks. Figure 3 shows the site plan for the proposed project.
2. A General Plan Amendment (GPA) to change the land use/zoning of the 8.9 acre parcel from Bloomington/Single Residential-one acre minimum with Additional Agriculture (BL/RS-1/AA) to Bloomington/ General Commercial (BL/CG). This parcel has been identified as one to be changed to (CG) with the adoption of the Countywide Plan (CWP) update, which is scheduled for Board of Supervisors hearing on October 27, 2020. Should the Board approve the CWP, this GPA would not be necessary.
3. A Tentative Parcel Map (TPM) to divide the parcel into 6 commercial lots. Figure 4 shows the TPM for the proposed project
    - Lot 1: 9,900 sf. Convenience Store and 8 pump Fuel Station – 1.47 acres
    - Lot 2: 3,000 sf. Quick Serve Drive-thru Restaurant – 0.80 acres
    - Lot 3: 2,800 sf. Quick Serve Drive-thru Restaurant – 1.03 acres
    - Lot 4: No Development - 0.83 acres
    - Lot 5: No Development – 0.57 acres
    - Lot 6: Truck fuel canopy with 6 pumps, truck scale and fuel tanks – 3.74 acres

Location

The approximately 8.9-acre project site is located in the southeast corner of Santa Ana Avenue and Cedar Avenue in the community of Bloomington within unincorporated San Bernardino County, California. The project site is located within the City of Rialto Sphere of Influence and the Bloomington Community Plan approximately 0.8 mile south of Interstate 10 (I-10), 5.5 miles west of Interstate 215 (I-215), and approximately 3.5 miles north of State Route 60 (SR-60). The Assessor Parcel Number for the project site is 0257-101-01. Figure 1 shows the location of the site in the region, and Figure 2 shows the project site in its neighborhood context. Photographs of the site are also included below.

The project site is approximately 2.3 miles southeast of the Kaiser Permanente Fontana Medical Center, 3.4 miles north of the Santa Ana River, 4.5 miles north of the Flabob Airport, 6.7 miles northwest of the University of California, Riverside, and 6.5 miles north of downtown Riverside. Access to the project site is provided from Cedar Avenue and Santa Ana Avenue. Regional access to the project site would be provided via the Cedar Avenue exit from I-10, or south from the City of Riverside via Cedar Avenue.

Surrounding Land Uses and Setting

Existing Land Use and Land Use Zoning Districts		
Location	**Existing Land Use**	**Land Use Zoning District**
Project Site	Gas station, convenience store, restaurant	Bloomington/Single Residential - 1 acre minimum lot size - additional Agriculture (BL/RS-1-AA).
North	Single-family Residences/Vacant land	Bloomington/Multiple Residential (BL/RM), Bloomington/Neighborhood Commercial (BL/CN)
South	Vacant	Bloomington/Single Residential - 1 acre minimum lot size - additional Agriculture (BL/RS-1-AA).
East	Vacant	Bloomington/Single Residential - 1 acre minimum lot size - additional Agriculture (BL/RS-1-AA).
West	Vacant	Bloomington/General Commercial-Sign Control primary (BL/CG-SCp)

Project Site Location, Existing Site Land Uses and Conditions

The approximately 8.9-acre project site is located in the southeast corner of Santa Ana Avenue and Cedar Avenue in the community of Bloomington within unincorporated San Bernardino County, California. The project site is located within the City of Rialto Sphere of Influence and the Bloomington Community Plan approximately 0.8 mile south of Interstate 10 (I-10), 5.5 miles west of Interstate 215 (I-215), and approximately 3.5 miles north of State Route 60 (SR-60).

The site is currently zoned Bloomington/Single Residential - 1 acre minimum lot size - additional Agriculture (BL/RS-1-AA). Which would require the application of a General Plan Amendment to change the zone to General Commercial in order for the proposed project to be an allowed use. Currently the Draft Countywide Plan which is in review has identified this parcel as one to be rezoned to General Commercial to be consistent with the surrounding development along Cedar Avenue. Should the Countywide Plan be approved as proposed, the General Plan Amendment requirement for this project would not be necessary.

The project site is currently vacant land surrounded on the east and south boundaries by vacant land. A mobile home park exists to the north across Santa Ana Avenue, and there is commercial development across Cedar Avenue to the west.

ADDITIONAL APPROVAL REQUIRED BY OTHER PUBLIC AGENCIES

Federal: None
State of California: California Department of Fish and Wildlife
County of San Bernardino: Land Use Services Department-Building and Safety, Public Health-Environmental Health Services, Special Districts, and Public Works
Regional: South Coast Air Quality Management District, California Regional Water Quality Control Board, Santa Ana Region – Santa Ana Region
Local: City of Rialto

Site Photographs

Photo 1: View of non-native grassland from the eastern site boundary, facing southwest.

Photo 2: View from western site boundary, facing northeast.

Photo 3: View along the eastern site boundary, facing southwest.

Source: Bloomington Gas Station Project Biotic Resources Report, Rocks Biological Consulting, January 2020

Figure 1 Regional Location Map

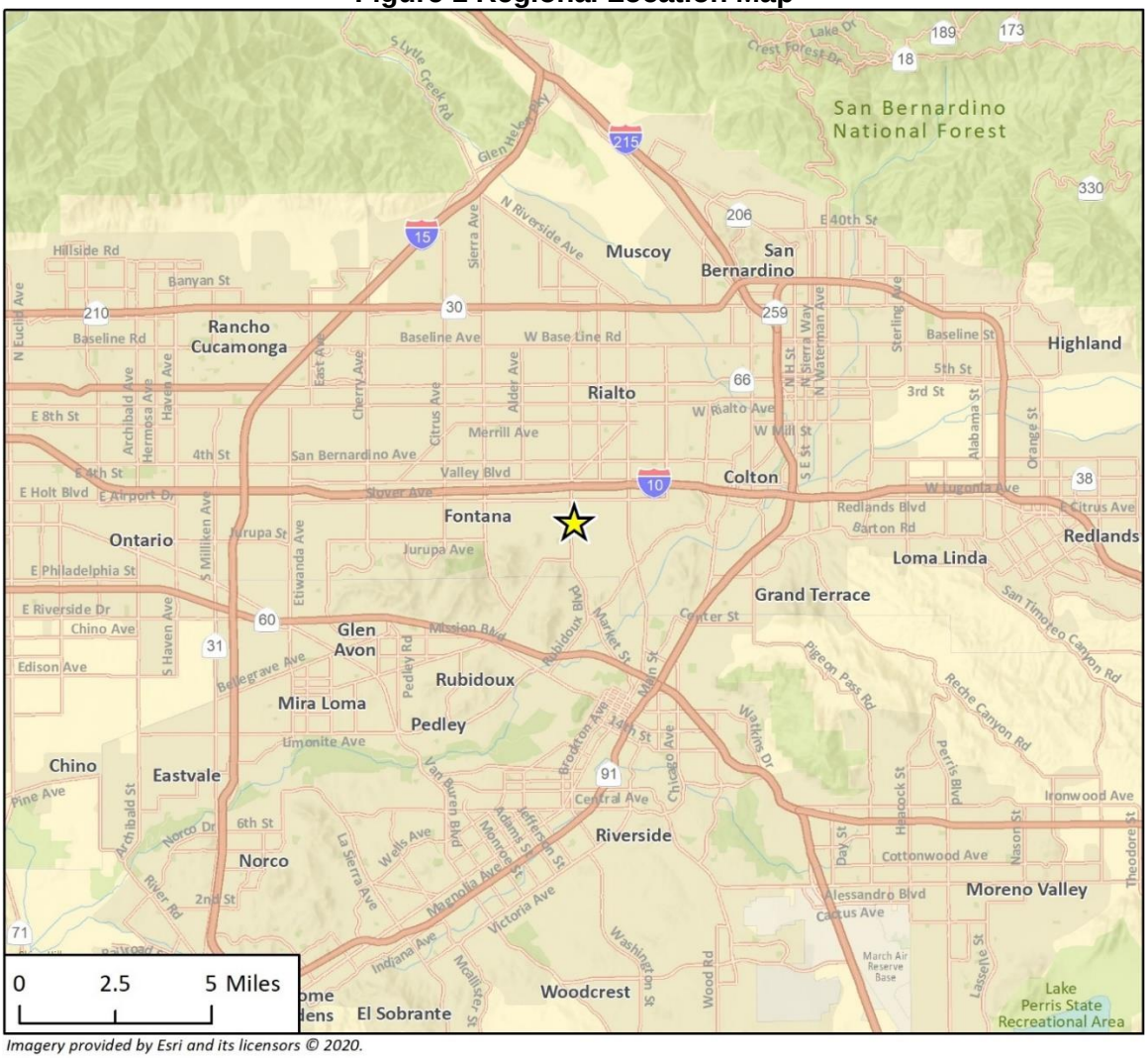


Figure 2 Project Vicinity Map

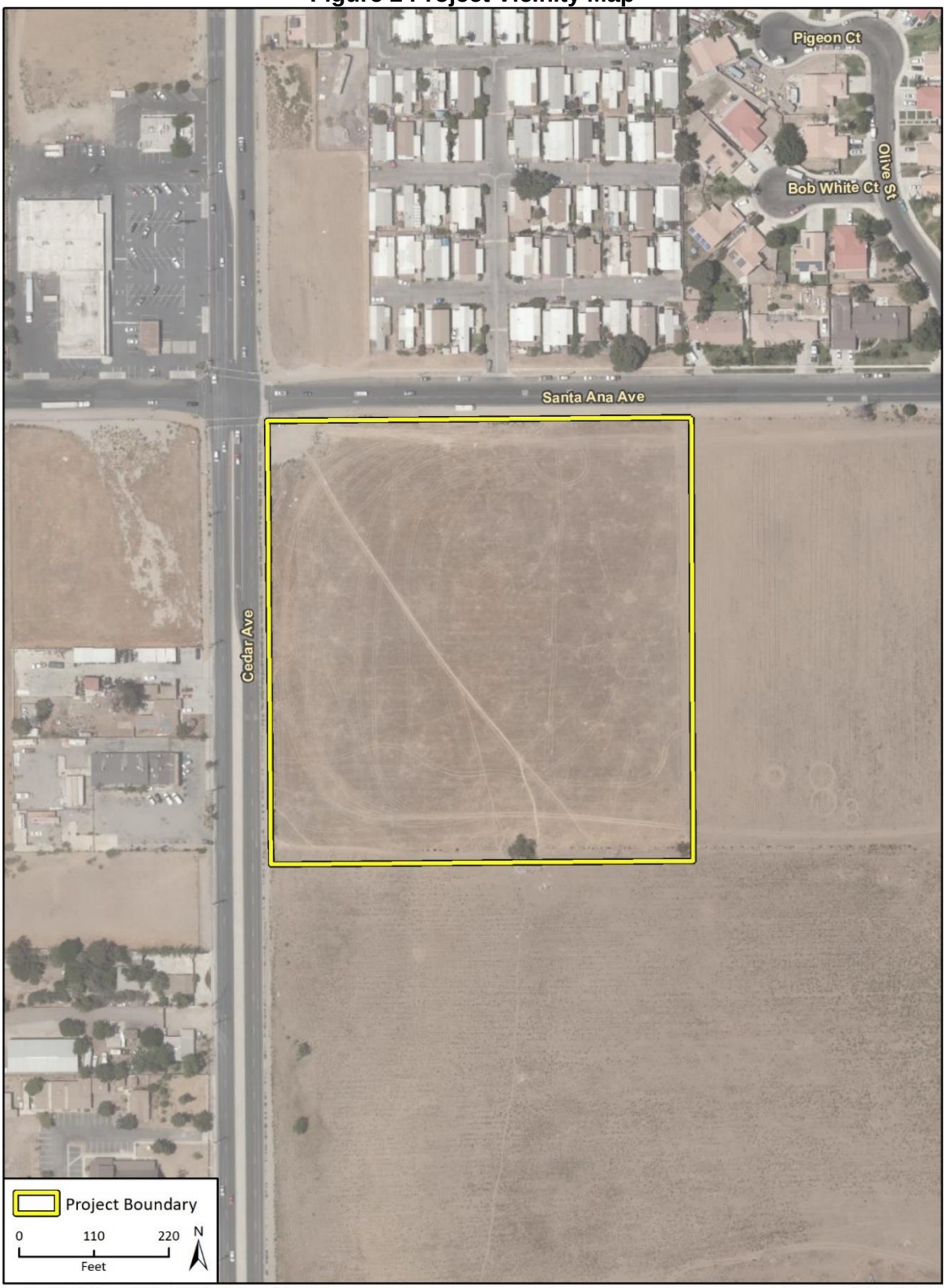
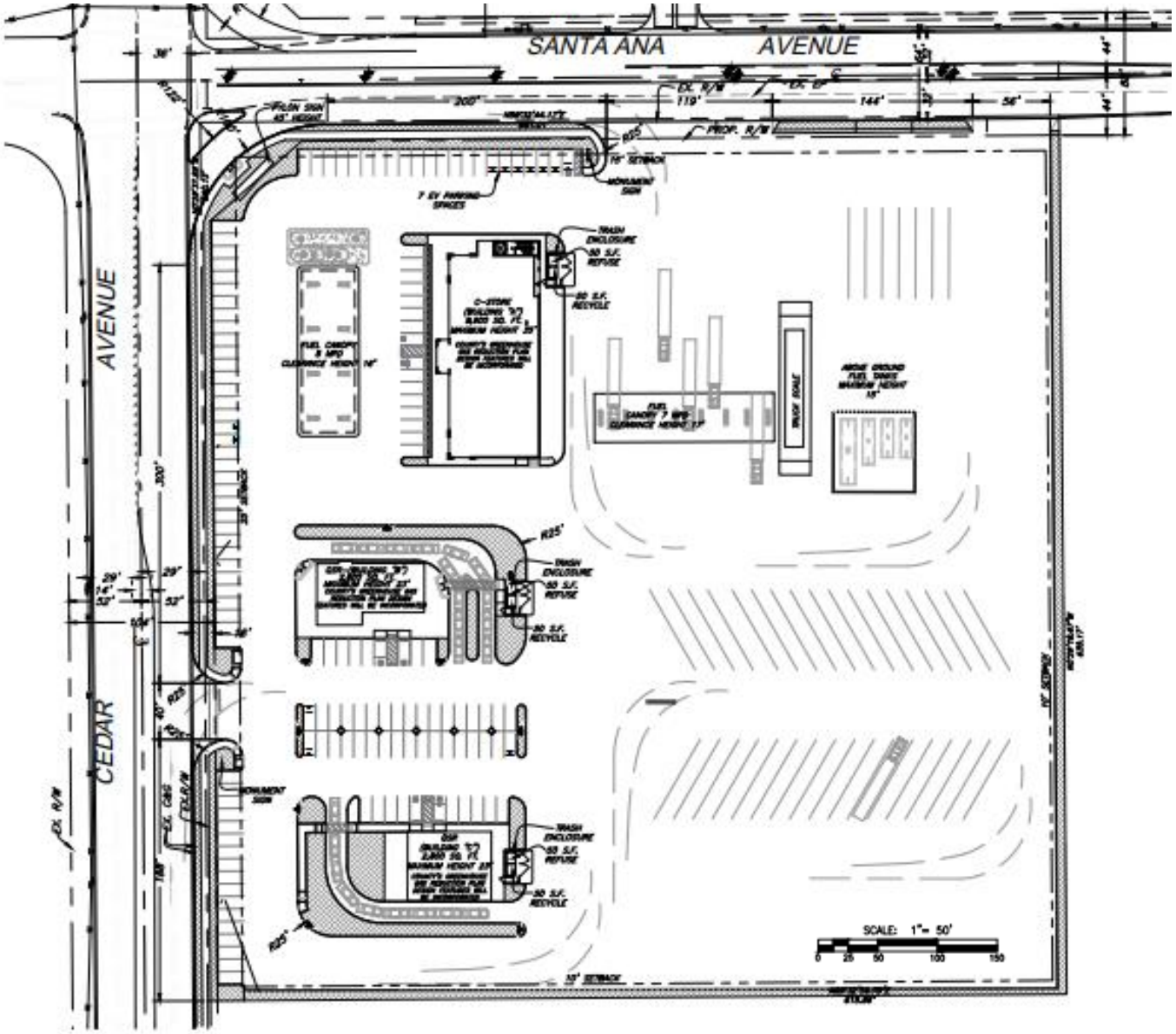


Figure 3 Site Plan



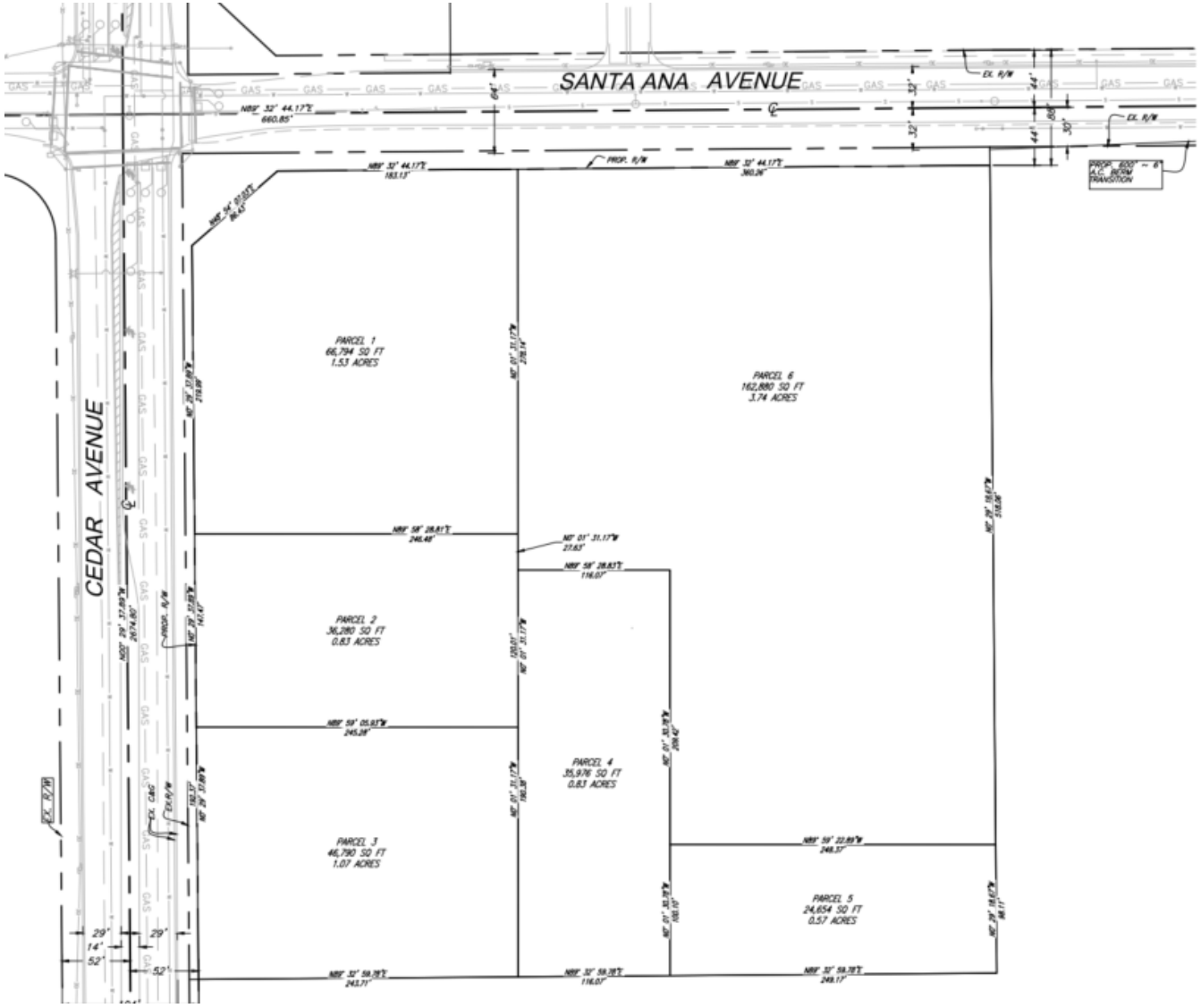


Figure 4 Tentative Parcel Map

CONSULTATION WITH CALIFORNIA NATIVE AMERICAN TRIBES

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentially, etc.?

Assembly Bill (AB) 52 took effect on July 1, 2015. AB 52 requires a lead agency to make best efforts to avoid, preserve, and protect tribal cultural resources.

Prior to the release of the CEQA document for a project, AB 52 requires the lead agency to initiate consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested the lead agency, in writing, to be informed by the lead agency through formal notification of proposed project in the geographic area that is traditionally and through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

Tribal consultation request letters were sent on February 11, 2020 to eight (8) tribes that have been identified as having ancestral territory in the Project area, or that have specifically requested notification of all projects in development in the County. Those tribes include the San Manuel Band of Mission Indians (SBMI), Morongo Band of Mission Indians, Gabrieleno Band of Mission Indians, San Gabriel Band of Mission Indians, Fort Mojave Indian Tribe, Colorado River Indian Tribe (CRIT), Soboba Band of Luiseno Indians, and Twenty-Nine Palms Band of Mission Indians.

Response letters/emails were received from two (2) of the tribes including SBMI, Gabrieleno-Kizh Nation. The Gabrieleno was the only tribe to request formal consultation. Consultation took place on July 7, 2020. Concerns for disturbance of culturally significant finds were elevated as the area has been identified as a heavily occupied by the tribe. However, it was discovered that the site contained several feet of fill material that was not native to the site. Depth of grading as well as the origin of the fill materials were raised as concerns. Consultation has been completed with the receipt of requested mitigation and monitoring measures included herein. Notification of a potential General Plan Amendment for the parcel was also sent to the Native American Heritage Commission (NAHC) as required by SB 18.

The San Manuel tribe did not request formal consultation but sent correspondence stating that the Project exists within Serrano ancestral territory and therefore, is of interest to the tribe. However, due to the disturbed nature of the location, they did not have any concerns with the project's implementation as planned.

PaleoWest Archaeology contacted the NAHC, as part of the Cultural Resource Assessment, on January 10, 2020, for a review of the SLF. The objective of the SLF search was to determine if the NAHC had any knowledge of Native American cultural resources (e.g., traditional use or gathering area, place of religious or sacred activity, etc.) within the immediate vicinity of the project area. The NAHC responded on January 24, 2020, stating that the SLF was completed with negative results; however, the NAHC requested that 22 individuals representing 18 Native American tribal groups be contacted to elicit information regarding cultural resource issues related to the proposed project. PaleoWest sent outreach letters to the 18 recommended tribal groups on January 27, 2020.

- Agua Caliente Band of Cahuilla Indians

- Augustine Band of Cahuilla Mission Indians
- Cabazon Band of Mission Indian
- Cahuilla Band of Indians
- Gabrieleno Band of Mission Indians - Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino /Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Los Coyotes Band of Cahuilla and Cupeño Indians
- Morongo Band of Mission Indians
- Ramona Band of Cahuilla
- San Fernando Band of Mission Indians
- San Manuel Band of Mission Indians
- Santa Rosa Band of Cahuilla Indians
- Serrano Nation of Mission Indians
- Soboba Band of Luiseno Indians
- Torres-Martinez Desert Cahuilla Indians

The Gabrieleno/Tongva San Gabriel Band of Mission Indians and the Serrano Nation of Mission Indians requested to be notified if any cultural resources are encountered during construction. The Gabrielino Tongva Indians of California Tribal Council requested to be notified if any cultural resources or human remains are encountered during construction regardless of the designated Most Likely Descendant (MLD). Specifically, the tribe requested that the following language be included in the report; "In the event that cultural resources (artifacts or artifacts pertaining to the Tongva people) are impacted or encountered, the Gabrielino Indians of California would like to be notified. In the event that human remains are impacted or encountered and identified by the Coroner as indigenous ancestors, the Gabrielino Indians of California would like to be notified, regardless of the designated MLD, by email and phone." The Agua Caliente Band of Cahuilla Indians, Cabazon Band of Mission Indians, Santa Rosa Band of Cahuilla Indians all indicated the project area is not within their tribe's Traditional Use Area and deferred to local tribes in the area of the project. The San Fernando Band of Mission Indians and Soboba Band of Luiseno Indians specifically deferred to the San Manuel Band of Mission Indians and the Torres Martinez Desert Cahuilla Indians deferred to the Soboba Band of Luiseno Indians.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

EVALUATION FORMAT

This Initial Study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based on its effect on 20 major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant	No Impact

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

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

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

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below will be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and 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	☒	Mandatory Findings of Significance

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

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

ADeLucaJr — 9/22/2020

Signature: (prepared by Name, Planner) — Date

9-22-2020

Signature:(Name, Supervising Planner) — Date

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
I.	***AESTHETICS*** – Except as provided in Public Resources Code Section 21099, would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b)	Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d)	Create a new source of substantial light or glare, which will adversely affect day or nighttime views in the area?	☐	☐	☒	☐

SUBSTANTIATION: *(Check ☐ if project is located within the view-shed of any Scenic Route listed in the General Plan):*

San Bernardino General Plan, 2007*; *Submitted Project Materials

a) The project is located at the southeast corner of Cedar Avenue and Santa Ana Avenue. Looking north and northeast across the site, the San Bernardino Mountains are visible in the background and form a prominent, distinctive feature that visually orients residents and visitors to the regional setting. The project proposal consists of a convenient store, fuel stations, diesel bays, and two restaurants. Monument signs would be placed on Cedar Avenue and Santa Fe Avenue. The project area is surrounded by residential uses to the north, vacant land to the south and east, commercial uses to the west, and is located within the boundaries of the Bloomington Community Plan.

No roadways within the Bloomington Community Plan area are eligible for designation as a scenic route under the California Scenic Highway Program as identified by the California Department of Transportation (Caltrans) (2019) and no surrounding roadways are identified as a scenic highway/route on the San Bernardino General Plan. The Bloomington Community Plan identifies Cedar Avenue from Bloomington Avenue to the Riverside County line, which the site is within, as a designated Scenic Route and states that “steps have been taken to ensure that these corridors are protected from the aggressive development of intrusive land uses such as advertising infrastructure

(billboards, etc.) and roadway services (convenience stores, gas stations, etc.)" (City of Bloomington 2007). Any proposed development along a designated scenic route is required to meet specific standards regarding sign placements and dimensions, utility placement, architectural design, grading and landscaping characteristics. The project site is located on Cedar Avenue and would introduce roadway services along this scenic route.

Similar development to the project along the Scenic Route includes convenience stores approximately 0.1 mile west and 0.5 mile north, and a gas station approximately one mile north. There are also numerous commercial and industrial uses along Cedar Avenue that have similar aesthetics to the proposed project. This includes Bloomington Tire and a Mexican restaurant across Cedar Avenue; a Dollar Tree, Mexican restaurant, smog center, and recycling center across the Cedar Avenue and Santa Ana Avenue intersection; and a large warehouse and transportation facility south on Cedar Avenue. The project would not adversely impact the existing visual character of the area, would be consistent with surrounding uses, and is not identified as a scenic route/highway on the County of San Bernardino General Plan. Project design would be approved by the San Bernardino County Planning Department and would be consistent with the design standards required by the Bloomington Community Plan. In addition, the project would achieve Goal BL/LU 3 of the Bloomington Community Plan, which states that commercial and industrial development within the plan be compatible with surrounding uses and meet the needs of local residents. Therefore, because the proposed project would be similar to other uses in the area, it would have a less than significant impact.

Less Than Significant Impact

b) Project construction would not damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings. In addition, the project site is not located in or adjacent to a designated state scenic highway (Caltrans 2019). Therefore, no impact associated with a state scenic highway would occur.

No Impact

c) The project site is located on an undeveloped vacant parcel in an urbanized area and is currently zoned Bloomington/Single Residential one-acre minimum/Additional Agriculture (BL/RS-1-AA) per the County of San Bernardino Development Code, which allows for single residential and limited agriculture uses. The project proposal includes a General Plan Amendment to change the zoning to General Commercial, which would then be consistent with the proposed commercial and retail uses. However, the proposed Countywide Plan which is under review and scheduled for public hearing on September 17, 2020, has identified this parcel as one to be changed to General Commercial upon approval, in which case a General Plan Amendment would not be necessary. In addition, a Conditional Use Permit has been submitted which would allow for the proposed uses.

As described in Section I.a, the project site exists on a Scenic Route designated by the Bloomington Community Plan, which restricts development by requiring specific standards regarding sign placements and dimensions, utility placement, architectural design, grading and landscaping characteristics. Cedar Avenue is not identified as a scenic highway/route on the County of San Bernardino General Plan.

Similar development to the project along the Scenic Route includes convenience stores approximately 0.1 mile west and 0.5 mile north, and a gas station approximately one

mile north. There are also numerous commercial and industrial uses along Cedar Avenue that have similar aesthetics to the proposed project. This includes Bloomington Tire and a Mexican restaurant across Cedar Avenue; a Dollar Tree, Mexican restaurant, smog center, and recycling center across the Cedar Avenue and Santa Ana Avenue intersection; and a large warehouse and transportation facility south on Cedar Avenue. The project would not adversely impact the existing visual character of the area, would be consistent with surrounding uses, and is not identified as a scenic route/highway on the County of San Bernardino General Plan. Project design would be approved by the San Bernardino County Planning Department and would be consistent with the design standards required by the Bloomington Community Plan. In addition, the project would achieve Goal BL/LU 3 of the Bloomington Community Plan, which states that commercial and industrial development within the plan be compatible with surrounding uses and meet the needs of local residents. Therefore, because the proposed project would be similar to other uses in the area, it would have a less than significant impact

Less Than Significant Impact

d) The project is subject to Chapter 83.07, Glare and Outdoor Lighting, of the County Development Code which regulates outdoor lighting practices and systems to ensure light pollution, glare, light trespass, and degradation of the nighttime visual environment are minimized. Chapter 83.07 requires that lighting of commercial and industrial uses be fully shielded to preclude light pollution and trespass. Required shielding, which would be detailed during the building permit and inspection phase of the development, would ensure the project does not create a new source of substantial light or glare.

The project site is surrounded by similar development, which emits daytime and nighttime light in the area. Project lighting would be similar to that of surrounding development and implementation of the project would not significantly increase the ambient lighting in the project vicinity. Therefore, the project would have a less than significant impact with respect to light and glare.

Less Than Significant Impact

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

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
II.	**AGRICULTURE AND FORESTRY RESOURCES** - In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				

a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

SUBSTANTIATION: *(Check ☐ if project is located in the Important Farmlands Overlay):*

San Bernardino County General Plan, 2007*; *California Department of Conservation Farmland Mapping and Monitoring Program; Submitted Project Materials

a) The project site does not currently have agricultural use or activity. The project site and immediate surrounding areas are built up urban land and not designated Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance, according to the Department of Conservation (DOC) Farmland Mapping and Monitoring Program (DOC 2020). No impact would occur.

No Impact

b) The project site is zoned Bloomington/Single Residential - 1 acre minimum lot size - additional Agriculture (BL/RS-1-AA). RS-1, which allows limited agricultural uses. The project site does not currently have any agricultural use or activity, and is not designated Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. The project would not be located in an area with a Williamson Act contract (DOC 2020). The area surrounding the project site is not used for agriculture, and recent developments patterns have resulted in removal of agriculture development for commercial and industrial uses. The project's proposed commercial zoning would allow for the project site to be developed in a similar fashion to other properties in the area. No impact would occur.

No Impact

c-d) The project site is in an urbanized area in Bloomington. Neither the project site nor surrounding parcels are zoned for forest land, timberland, or timberland production. It would not result in the loss of forest land or conversion of forest land to non-forest land. No impact would occur.

No Impact

e) The project site is in an urbanized area in Bloomington that is not currently used for agriculture or forest land. It would not result in the loss of forest land or farmland, or conversion of forest land or farmland, to non-forest land or non-farmland. No impact would occur.

No Impact

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

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

SUBSTANTIATION: *(Discuss conformity with the Mojave Desert Air Quality Management Plan, if applicable):*

San Bernardino County General Plan, 2007*; *Submitted Project Materials; Appendix A – Air Quality, Greenhouse Gas Emissions and Health Risk Assessment Impact Analysis for the Bloomington Commercial Center Project, Rincon Consultants, Inc. 2020

Air Quality Standards and Attainment

The project site is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAB includes Orange

County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The regional climate in the SCAB is semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity.

Air pollutant emissions in the SCAB are generated by both stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

The Clean Air Act (CAA) is the comprehensive federal law that regulates air emissions from stationary and mobile sources. Among other things, this law authorizes the U.S. Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants (USEPA 2017). Under the federal CAA, the USEPA establishes health-based air quality standards that all states must achieve. The California CAA also establishes requirements for cities and counties to meet. SCAQMD was created by the state legislature to facilitate compliance with the federal CAA and to implement the state air quality program (SCAQMD 2019).

As the local air quality management agency, the SCAQMD is required to monitor air pollutant levels to meet state and federal air quality standards and, if they are not met, to develop strategies to meet the standards. If the SCAQMD standards for pollutant levels are met or exceeded, the SCAB is classified as being in “attainment” of those levels. If the standards for pollutant levels are not met, the SCAB is classified as being in “nonattainment.” At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as “unclassifiable.”

The SCAB is in attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual $PM_{2.5}$standards. The 1-hour ozone standard is measured by the average number of days per year with maximum hourly concentrations of pollutants during the most recent three-year period. The 8-hour ozone standard is measured by the 3-year average of the 4th highest daily concentrations (SCAQMD 2019).

Ambient air monitoring stations throughout the country measure air concentrations of particulate matter (PM), with most monitoring for two size ranges: “fine particles” with aerodynamic diameters less than or equal to 2.5 microns (µm) ($PM_{2.5}$) and suspended PM 10 microns or less (PM_{10}). PM_{10} includes both fine particles ($PM_{2.5}$) and “coarse particles,” with aerodynamic diameters greater than 2.5 µm and less than or equal to 10 µm. The chemical makeup of particles varies across the U.S. For example, fine particles in the eastern half of the U.S. contain more sulfates than those in the West, while fine particles in southern California contain more nitrates than those in other areas of the U.S. (USEPA 2009).

The SCAB is a non-attainment area for the federal standards for ozone and suspended particulate matter $PM_{2.5}$ as well as the state standards for ozone, PM10, and $PM_{2.5}$. Areas of the SCAB located in Los Angeles County are also in nonattainment for lead. The SCAB is

designated "unclassifiable" or in attainment for all other federal and state standards. Characteristics of ozone and PM are described in Table 1. Suspended PM is particularly associated with risks to the health of infants and children (USEPA 2004).

Table 1 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM_{10})	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).a
Suspended particulate matter ($PM_{2.5}$)	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.

Source: USEPA 2018a and 2004

Air Quality Management

Under state law, air districts are required to prepare a plan for air quality improvement to address pollutants for which the district is in nonattainment status. The Final 2016 Air Quality Management Plan (AQMP) was adopted on March 3, 2017 and includes the integrated strategies and measures needed to meet the NAAQS. It incorporates new scientific data and notable regulatory actions that have occurred since adoption of the previous AQMP in 2012, including the approval of a new federal 8-hour ozone standard of 0.070 ppm that was finalized in 2015. The Final 2016 AQMP addresses state and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and meteorological air quality models. In addition, the 2016 AQMP incorporates the Southern California Association of Government's (SCAG) projections for socio-economic data (e.g., population, housing, employment by industry) and transportation activities from the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS). Final 2016 AQMP builds upon the approaches taken in the 2012 AQMP for the attainment of federal PM and ozone standards and addresses the reductions that must be achieved for attainment status. In addition, the AQMP provides strategies and measures to reach attainment with the thresholds for 8-hour and 1-hour ozone and $PM_{2.5}$.

Air Emission Thresholds

Emissions for construction and operation of the project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. The analysis reflects the construction and operation of the project as described in the Project Description. CalEEMod defaults for construction length were adjusted to match the project's estimated construction length of 13 months. CalEEMod defaults for construction equipment were used. Specific model inputs and methodology are provided in Appendix A. CalEEMod, version 2016.3.2, incorporates CARB's 2014 Emission Factor Model (EMFAC) (EMFAC2014). However, the currently approved EMFAC model is EMFAC2017, version 1.03, (EMFAC2017). Therefore, to present the most accurate emission estimate for this analysis operational mobile sources were calculated outside CalEEMod using EMFAC2017 and the VMT calculated in CalEEMod. Results of the EMFAC2017 emission calculations are included in Appendix A.

It was assumed the proposed project would comply with applicable regulatory standards, including SCAQMD Rule 403 (Fugitive Dust), which requires twice daily watering, a 12 percent unpaved road moisture content, and a speed limit of 15 miles per hour (mph) on unpaved roads.

Criteria Pollutant Emission Thresholds

The SCAQMD recommends quantitative regional significance thresholds for temporary construction activities and long-term project operation in the SCAB, shown in Table 2.

Table 2 SCAQMD Regional Significance Thresholds

Construction Thresholds	Operational Thresholds
75 pounds per day of ROG	55 pounds per day of ROG
100 pounds per day of NOX	55 pounds per day of NOX
550 pounds per day of CO	550 pounds per day of CO
150 pounds per day of SOX	150 pounds per day of SOX
150 pounds per day of PM_{10}	150 pounds per day of PM_{10}
55 pounds per day of $PM_{2.5}$	55 pounds per day of $PM_{2.5}$

ROG=reactive organic gas, NOx= nitrogen oxide, CO= carbon monoxide, SOx=sulphur oxides, PM_{10}=particulate matter 10 microns or less, $PM_{2.5}$=particulate matter 2.5 microns or less

Source: SCAQMD 2015

Localized Significance Thresholds

In addition to the above regional thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the CEQA Air Quality Handbook (1993). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO_X, CO, PM_{10}, and $PM_{2.5}$. LSTs represent the maximum emissions from a project that would not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size. LSTs have been developed for emissions from construction areas up to five acres in size. However, LSTs only apply to emissions fixed stationary locations and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008). As such, LSTs are typically applied

only to construction emissions because the majority of operational emissions are associated with project-generated vehicle trips.

Table 3 SCAQMD LSTs for Construction (SRA 10)

Pollutant	Allowable Emissions for a 2.79-acre Site in SRA 34 for a Receptor 82 Feet Away (lbs/day)
Gradual conversion of NO_X to NO_2	172
CO	1,064
PM_{10}	8
$PM_{2.5}$	5

Source: SCAQMD 2009

Toxic Air Contaminants Thresholds

SCAQMD has developed health risk thresholds to evaluate potential impacts associated with emissions of toxic air contaminants (TACs). A project would have a potentially significant impact if it would result in:

- A maximum incremental cancer risk of 10 in one million or greater;
- A cancer burden greater than 0.5 excess cancer cases (in areas exposed to one in one million cancer risk or greater); or
- A chronic or acute hazard index of 1.0 or greater.

To provide a perspective on risk, the American Cancer Society (2018) reports that in the United States, men have about a 40 in 100 chance (0.40 probability) and women about a 38 in 100 chance (0.38) of developing cancer during a lifetime. Based on this background cancer risk level in the general population, application of a 10 in one million excess risk limit means that the contribution from a toxic hazard should not cause the resultant cancer risk for the exposed population to exceed 0.40001 for men or 0.38001 for women.

a) Consistency with the AQMP assumptions is determined by performing an analysis of the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to ensure that the analyses conducted from the proposed project are based on the same forecasts as the AQMP. The AQMP is developed through use of the planning forecasts provided in the RTP/SCS and FTIP. The RTP/SCS is a major planning document for the regional transportation and land use network within Southern California. The RTP/SCS is a long-range plan that is required by federal and state requirements placed on SCAG and is updated every four years. The FTIP provides long-range planning for future transportation improvement projects that are constructed with state and/or federal funds in Southern California. Local governments are required to use these plans as the basis of their plans for the purpose of consistency with applicable regional plans under CEQA. For this project, the Bloomington Community Plan prepared by the County of San Bernardino defies the assumptions that are represented in the AQMP.

The proposed project is currently designated as Single-Family Residential 9RS-1) in the Community Plan and is zoned Single Family-Residential (RS-1-AA). The proposed project would require a Community Plan Amendment and zone change to Commercial. Although the proposed project is currently inconsistent with the General Plan land use designation and zoning of the project site, the proposed project would be consistent with the adjacent commercial land uses to the west and would be in compliance with the Land Use Element goals and policies. Therefore, due to the proposed project's nominal size and consistency with the surrounding neighborhood, the proposed project would not result in an inconsistency with the current land use designations with respect to the regional forecasts utilized by the AQMPs. Furthermore, the proposed project consists of a commercial development in an area of Southern California that has a shortage of employment opportunity. As such, the proposed project is not anticipated to exceed the AQMP assumptions for the project site. Impacts would be less than significant.

Less Than Significant Impact

b) **Construction**

Regional

Table 4 summarizes the estimated maximum daily emissions (lbs) of pollutants associated with construction of the project for regional criterial pollutants. As shown below, VOC, NO_X, CO, SO_2, PM_{10}, and $PM_{2.5}$ emissions would not exceed SCAQMD regional thresholds.

Table 4 Project Construction Regional Criteria Pollutant Emissions

	Maximum Emissions (lbs/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Site Preparation						
Onsite	3.89	40.50	21.15	0.04	10.17	6.37
Offsite	0.11	0.64	0.85	0.00	0.24	0.07
Total	4.00	41.13	22.01	0.04	10.42	6.42
Grading						
Onsite	2.29	24.74	15.86	0.03	4.11	2.58
Offsite	0.09	0.63	0.73	0.00	0.21	0.06
Total	2.38	25.36	16.59	0.03	4.32	2.46
Building, Construction, Paving, and Architectural Coatings						
Onsite	13.19	29.96	32.97	0.05	1.61	1.50
Offsite	0.29	1.41	2.32	0.01	0.67	0.18
Total	13.48	31.38	35.29	0.05	2.28	1.69

Maximum Daily Construction Emissions	**13.48**	**41.13**	**35.29**	**0.05**	**10.42**	**6.42**
SCAQMD Regional Thresholds	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**N/A**	**No**	**No**

Notes: Emissions modeling was completed using CalEEMod. Some numbers may not add up due to rounding. Maximum on-site emissions are the highest emissions that would occur on the project site from on-site sources such as heavy construction equipment and architectural coatings and excludes off-site emissions from sources such as construction worker vehicle trips and haul truck trips.
Source: Appendix A

Table 4 summarizes the estimated maximum daily emissions (lbs) of pollutants associated with construction of the project for regional criterial pollutants. As shown below, VOC, NO_X, CO, SO2, PM_{10}, and $PM_{2.5}$emissions would not exceed SCAQMD regional thresholds.

Local

Table 5 summarizes the estimated maximum daily emissions (lbs) of pollutants associated with construction of the project for localized criterial pollutants. As shown below, NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions would not exceed SCAQMD localized thresholds.

Table 5 Project Construction Local Criteria Pollutant Emissions

Onsite Pollutant Emissions (lbs/day)				
	NOx	**CO**	**PM_{10}**	**$PM_{2.5}$**
Site Preparation	40.50	21.15	10.17	6.35
Grading	24.74	15.86	4.11	2.58
Building, Construction, Paving, and Architectural Coatings	29.96	32.97	1.61	1.50
Maximum Daily Construction Emissions	**40.50**	**32.97**	**10.17**	**6.35**
SCAQMD LSTs	270	1,746	14	8
Threshold Exceeded?	**No**	**No**	**No**	**No**

Notes: Emissions modeling was completed using CalEEMod. Some numbers may not add up due to rounding. Maximum on-site emissions are the highest emissions that would occur on the project site from on-site sources such as heavy construction equipment and architectural coatings and excludes off-site emissions from sources such as construction worker vehicle trips and haul truck trips.
Source: Appendix A

Operational

Table 6 and Table 7 summarizes the project's regional and local operational emissions by emission source (area, energy, and mobile). As shown below, the emissions generated by operation of the proposed project would not exceed SCAQMD regional thresholds or LSTs for criteria pollutants. Therefore, impacts would be less than significant.

Table 6 Regional Project Operational Emissions

Emission Source	Maximum Daily Emissions (lbs/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	0.43	0.00	0.02	0.00	0.00	0.00
Energy	0.05	0.45	0.38	0.00	0.03	0.03
Mobile	7.54	5.99	46.79	0.08	1.09	0.48
Gasoline Storage and Dispensing	12.53	0.00	0.00	0.00	0.00	0.00
Project Emissions	20.97	6.84	47.58	0.08	1.12	0.51
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: Some project emissions may not add up precisely to the numbers indicated due to rounding.
Source: Appendix A

Table 7 Local Project Operational Emissions

Emission Source	Maximum Daily Emissions (lbs/day)			
	NOx	CO	PM_{10}	$PM_{2.5}$
Area	0.00	0.00	0.00	0.00
Energy	0.45	0.38	0.03	0.03
Onsite Vehicle Emissions	1.58	1.52	0.25	0.07
Project Emissions	**2.03**	**1.92**	**0.28**	**0.10**
SCAQMD Local Operational Thresholds	270	1,746	4	2
Threshold Exceeded?	**No**	**No**	**No**	**No**

Notes: Some project emissions may not add up precisely to the numbers indicated due to rounding.
Source: Appendix A

Less Than Significant Impact

c) **Construction Toxic Air Contaminant Emissions**

The greatest potential for TAC emissions during construction would be related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during site preparation, grading, and building construction. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of "individual cancer risk". "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 70-year lifetime will contract cancer, based on the use of standard risk-assessment methodology. The most current cancer risk assessment methodology recommends analyzing a 30-year exposure period for the nearby sensitive receptors (Office of Environmental Health Hazard Assessment [OEHHA] 2015).

Given the relatively limited number of heavy duty construction equipment, the varying distances that construction equipment would operate to the nearby sensitive receptors, and

the short-term construction schedule, the proposed project would not result in a long-term (i.e., 30 or 70 years) substantial source of TAC emissions and corresponding individual cancer risk. In addition, California Code of Regulations Title 13, Article 4.8, Chapter 9, Section 2449 regulates emissions from off-road diesel equipment in California. This regulation limits idling of equipment to no more than five minutes, requires equipment operators to label each piece of equipment and provide annual reports to the California Air Resources Board (CARB) of their fleet's usage and emissions. This regulation also requires systematic upgrading of the emission Tier level of each fleet, and currently no commercial operator is allowed to purchase Tier 0 or Tier 1 equipment. As of January 2019, 25 percent or more of all contractors' equipment fleets must be Tier 2 or higher. Therefore, no significant short-term TAC impacts would occur during construction of the proposed project. As such, construction would not expose sensitive receptors to substantial pollutant concentrations, and this impact would be less than significant.

Operational Carbon Monoxide Hotspots

A CO hotspot is a localized concentration of CO that is above a CO ambient air quality standard. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal one-hour standard of 35.0 parts per million (ppm) or the federal and state eight-hour standard of 9.0 ppm (CARB 2016).

The SCAB is in conformance with state and federal CO standards, and most air quality monitoring stations no longer report CO levels. No stations within the vicinity of the project site have monitored CO since 2012. In 2012, the Fontana – Arrow Highway station detected an 8-hour average CO concentration of 1.76 ppm, which is substantially below the state and federal standards (CARB 2020). The proposed project would result in CO emissions of 62 pounds per day, well below the 550 pounds per day threshold. Based on the low background level of CO in the project area, improving vehicle emissions standards for new cars in accordance with state and federal regulations, and the project's low level of operational CO emissions, the project would not create new hotspots or contribute substantially to existing hotspots, and impacts would be less than significant.

Operational Toxic Air Contaminant Emissions

The proposed project would include a gasoline dispensing facility with eight gasoline fueling positions located on the northwest corner of the project site. The proposed gasoline dispensing facility is anticipated to have a maximum throughput of 2.5 million gallons of gasoline per year. Additionally, the project would include a truck stop, including a seven-position diesel fueling canopy on the northeastern portion of the site. CARB identifies both gasoline dispensing facilities and truck stops as potential sources of TACs (CARB 2005). Health risk impacts associated with each of these project components is described below.

Gasoline Dispensing Facility

Health risk associated with the proposed gasoline dispensing facility was evaluated using SCAQMD's RiskTool (V1.103). The nearest sensitive receptors, mobile homes located north of the project site across Santa Ana Avenue, are located approximately 60 meters (197 feet) from the proposed gasoline storage tanks on the northwest corner of the project site. The RiskTool found that the proposed gasoline dispensing facility would result in a cancer risk of approximately 2.56 in one million at the nearest residence. This falls below SCAQMD's health risk criteria of 10 in one million. Furthermore, the project would be subject to SCAQMD

Rule 461, requiring CARB-certified vapor recovery systems for fuel tank loading and dispensing units. Therefore, TAC emissions and associated health risk from the proposed gasoline dispensing facility would result in a less than significant impact.

Truck Stop

The project would involve construction and operation of a truck stop, which would generate diesel emissions from truck traffic. DPM is a TAC, as diesel exhaust particulates are readily respirable and have hundreds of chemicals adsorbed onto their surfaces. The potential TAC impacts to nearby sensitive receptors have been analyzed through emissions calculations and air dispersion modeling included in Appendix A, and health risk calculations prepared by Rincon Consultants in accordance with the OEHHA *Guidance Manual for Preparation of Health Risk Assessments* (OEHHA 2015) and USEPA *Guidelines for Carcinogenic Risk Assessment* (USEPA 2005).

Emissions from truck travel along Santa Ana Avenue and Cedar Avenue, as well as on-site truck circulation and idling, we considered for the health risk analysis. Truck travel and truck idling emission rates were obtained from the EMFAC2017 model Version 1.0.3, the latest emissions inventory model released by CARB that calculates motor vehicle emissions from vehicles operating on roads in California. EMFAC2017 was run for calendar years 2021 through 2050. Emissions calculations were based on total on-site truck activity of 3,190 four-axle truck trips, 644 three-axle truck trips, and 157 two-axle truck trips per day, as indicated in the project-specific traffic study (Appendix G). The emissions factors assume travel speeds of 40 miles per hour (mph) on Santa Ana Avenue and Cedar Avenue, 10 mph on-site, and up to 15 minutes of on-site idling per truck.

To determine ground-level concentrations of DPM at nearby sensitive receptors, air dispersion modeling was conducted using the Lakes AMS/EPA Regulatory Model (AERMOD) View Version 9.9.0. Dispersion modeling was conducted in accordance with SCAQMD guidance, using regulatory default options, urban modeling option based on the SCAQMD-recommended San Bernardino County population, topographic data from the U.S. Geological Survey Fontana Quadrangle Digital Elevation Model, and meteorological data from SCAQMD's Fontana monitoring station. Receptors were sited at 11 representative nearby homes on all sides of the project site, including the mobile homes immediately north of the project site across Santa Ana Avenue. Table 8 summarizes ground-level concentrations of DPM at each of the 11 receptor locations based on the air dispersion modeling outputs.

Table 8 Annual TAC Concentrations at Nearby Sensitive Receptors

Receptor	Description	Annual PM_{10} Concentration ($\mu g/m^3$)			30-Year Weighted Average Concentration
		2021-2023	2024-2038	2039-2050	
1	MH to north (740 feet)	0.0358	0.0124	0.0008	0.0101
2	MH to north (90 feet)	0.0560	0.0200	0.0009	0.0160
3	MH to north (90 feet)	0.0608	0.0215	0.0011	0.0173
4	SFH to northeast (110 feet)	0.0537	0.0194	0.0013	0.0156
5	SFH to east (730 feet)	0.0192	0.0073	0.0009	0.0059
6	SFH to east (750 feet)	0.0089	0.0032	0.0008	0.0028

7	SFH to southeast (890 feet)	0.0057	0.0020	0.0008	0.0019
8	SFH to south (1,020 feet)	0.0271	0.0096	0.0007	0.0078
9	SFH to southwest (230 feet)	0.0285	0.0103	0.0006	0.0082
10	SFH to west (580 feet)	0.0202	0.0073	0.0007	0.0060
11	MFH to northwest (575 feet)	0.0149	0.0054	0.0001	0.0042

MH = mobile home, SFH = single-family home, MFH = multi-family home, µg/m^3 = micrograms per cubic meter, PM_{10} = particulate matter less than 10 microns in diameter (used as proxy for diesel particulate matter)

Note: 30-year weighted average are the average annual PM_{10} ground-level concentration at each receptor when accounting for annual concentrations during each time frame.

Source: Appendix A

Potential risk values associated with construction emissions were quantified based on USEPA's *Guidelines for Carcinogen Risk Assessment* (USEPA 2005) and OEHHA's *Risk Assessment Guidelines* (OEHHA 2015). Risk calculations were based on the 30-year weighted average ground-level concentrations modeled by AERMOD at off-site receptors, presented in Table 8.

Consistent with SCAQMD recommendations, fraction-of-time-at-home adjustments were applied for the over 16 years age class. USEPA recommends the use of age-dependent-adjustment factors for TACs which act through a mutagenic mode of action, as cancer risks from such compounds would be expected to be higher from early-life exposure than from similar exposure later in life. Application of these age-sensitivity factors to non-mutagenic carcinogens is not recommended by USEPA, as the data for non-mutagenic carcinogens are considered to be too limited and the modes of action too diverse to use this as a category for which a general default adjustment factor approach can be applied. To date, USEPA reports that whole diesel engine exhaust has not been shown to elicit a mutagenic mode of action. Therefore, consistent with USEPA guidance on risk analysis, "a linear low-dose extrapolation approach" was applied for DPM in the quantification of cancer risk (USEPA 2005). It is the USEPA's "long-standing science policy position" that this approach "provides adequate public health conservatism in the absence of chemical-specific data indicating differential early-life sensitivity or when the mode of action is not mutagenic" (USEPA 2005).

Based on the ground-level concentrations of DPM modeled in AERMOD, DPM inhalation dose estimates were estimated using the following equation (OEHHA 2015):

$$Dose_{air} = C_{air} \times \{BR/BW\} \times A \times EF \times 10^{-6}$$

Where:

$Dose_{air}$ = dose through inhalation (mg/kg/day)
C_{air} = concentration of DPM in air (µg/m^3), as modeled in AERMOD
{BR/BW} = daily breathing rate normalized to body weight (L/kg body weight per day)
A = inhalation absorption factor (unitless)
EF = exposure frequency (days/365 days)
10^{-6} = micrograms to milligrams conversion

Inhalation cancer risk estimates for the identified age groups were estimated based on the following equation (OEHHA 2015):

$$Risk_{inh} = Dose_{air} \times CPF \times ED/AT \times FAH$$

Where:

$Risk_{inh}$ = inhalation cancer risk
$Dose_{air}$ = dose through inhalation (mg/kg/day)
CPF = cancer potency factor ($mg/kg/day^{-1}$)
ED = exposure duration for age group (years)
AT = averaging time (70 years)
FAH = fraction of time at home (1 for age groups <16; 0.73 for age groups >16)

Table 9 summarizes cancer and non-carcinogenic (chronic) health risk associated with operation of the proposed truck stop at off-site receptors. As shown in Table 9, the maximally exposed individual receptor would be exposed to a 30-year cancer risk of approximately 4.21 in one million and a non-carcinogenic chronic hazard index of 0.004. Both of these values remain below the SCAQMD health risk criteria of 10 in one million cancer risk and chronic hazard index of 1.0. DPM is not associated with acute health risks (OEHHA 2019); therefore, acute risk was not evaluated.

Table 9 Health Risk Associated with Truck Stop at Nearby Sensitive Receptors

Receptor	Description	30-Year Cancer Risk[1]	Exceeds Threshold?[2]	Chronic Hazard Index[3]	Exceeds Threshold?[4]
1	MH to north (740 feet)	2.46	No	0.002	No
2	MH to north (90 feet)	3.89	No	0.003	No
3	**MH to north (90 feet)**	**4.21**	**No**	**0.004**	**No**
4	SFH to northeast (110 feet)	3.79	No	0.003	No
5	SFH to east (730 feet)	1.44	No	0.001	No
6	SFH to east (750 feet)	0.68	No	<0.001	No
7	SFH to southeast (890 feet)	0.46	No	<0.001	No
8	SFH to south (1,020 feet)	1.90	No	0.002	No
9	SFH to southwest (230 feet)	1.99	No	0.002	No
10	SFH to west (580 feet)	1.46	No	0.001	No
11	MFH to northwest (575 feet)	1.02	No	<0.001	No

MH = mobile home, SFH = single-family home, MFH = multi-family home, µg/m^3 = micrograms per cubic meter, PM_{10} = particulate matter less than 10 microns in diameter (used as proxy for diesel particulate matter).

[1] 30-year cancer risk expressed in risk per one million.

[2] Per South Coast Air Quality Management District health risk criteria, cancer risk threshold is 10 in one million or greater.

[3] Non-carcinogenic chronic health hazard is expressed as a unitless index.

[4] Per South Coast Air Quality Management District health risk criteria, non-cancer chronic health risk threshold is a hazard index of 1.0 or greater.

Non-Cancer Risks

In addition to the cancer risk from exposure to TAC emissions there is also the potential TAC exposure may result in adverse health impacts from acute and chronic illnesses, which are detailed below.

Chronic Health Impacts

Chronic health effects are characterized by prolonged or repeated exposure to a TAC over many days, months, or years. Symptoms from chronic health impacts may not be immediately apparent and are often irreversible. The chronic hazard index is based on the most impacted sensitive receptor from the proposed project and is calculated from the annual average concentrations of PM10. The relationship for non-cancer chronic health effects is given by the equation:

$$HI_{DPM} = C_{DPM} / REL_{DPM}$$

Where,

HI_{DPM}=Hazard Index; an expression of the potential for non-cancer health effects.
C_{DPM}=Annual average diesel particulate matter concentration in $\mu g/m^3$.
REL_{DPM}=Reference Exposure Level (REL) for diesel particulate matter; the diesel particulate matter concentration at which no adverse health effects are anticipated.

The REL_{DPM} is 5 µg/m^3. The Office of Environmental Health Hazard Assessment as protective for the respiratory system has established this concentration. The AERMOD model found that the highest annual off-site concentration is 0.0608 µg/m^3 for DPM chronic non-cancer risk emissions. The resulting Hazard Index is:

$$HI_{DPM} = 0.0173/5 = 0.00346$$

The criterion for significance is a Chronic Hazard Index increase of 1.0 or greater. Therefore, the on-going operations of the proposed project would result in a less than significant impact due to the non-cancer chronic health risk from TAC emissions created by the proposed project.

Based on the analysis above, operation of the proposed truck stop would not result in off-site health risks in excess of SCAQMD health risk criteria. This impact would be less than significant.

Less Than Significant Impact

d) For construction activities, odors would be temporary in nature and are subject to SCAQMD Rule 402, Nuisance, which states that "a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property" (SCAQMD 2019). Construction activities would be temporary and transitory and associated odors would cease upon construction completion. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be less than significant.

Common sources of operational odor complaints include sewage treatment plants, landfills, recycling facilities, and agricultural uses. The proposed project would not include these uses. The proposed project would consist of the development of a gas station. Potential sources that may emit odors during the on-going operations of the proposed project would primarily occur from odor emissions from gas dispensing activities and from the trash storage areas. Pursuant to SCAQMD Rule 461 the proposed gas station would be required to utilize gas dispensing equipment that minimizes vapor and liquid leaks and requires that the equipment be maintained at proper working order, which would minimize odor impacts occurring from the gasoline and diesel dispensing facilities. Pursuant to City regulations, permanent trash enclosures that protect trash bins from rain as well as limit air circulation would be required for the trash storage areas. Through compliance with SCAQMD's Rule 461 and City trash storage regulations, no significant impact related to odors would occur during the on-going operations of the proposed project.

Less Than Significant Impact

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

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
IV.	**BIOLOGICAL RESOURCES -** Would the project:				
a)	Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐

c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	☐	☐	☐	☒

SUBSTANTIATION: *(Check if project is located in the Biological Resources Overlay or contains habitat for any species listed in the California Natural Diversity Database ☐):*

San Bernardino County General Plan, 2007*; *Submitted Project Materials; Appendix B – Rocks Biological Consulting - Bloomington Has Station Project Biotic Resources Report

A biological resource assessment was completed on January 27, 2020 by Rocks Biological Consulting (RBC) to determine impacts to biological resources associated with the development of the project. The Biotic Resources Report is included in Appendix B. The report provides an analysis of impacts on biological resources associated with the proposed project in the context of County and Use regulations, CEQA, and state and federal regulations, such as the federal Endangered Species Act, Clean Water Act (CWA), and the California Fish and Game Code (CFGC).

The following tasks were performed during this assessment:

- General biological surveys
- Vegetation mapping
- Habitat assessments for special-status species, including Delhi Sands flower-loving fly and burrowing owl
- An assessment for areas anticipated to be jurisdictional under the Corps pursuant to Section 404 of the CWA, under the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act; Water Code Section 13000 et seq.), and under California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the CFGC

The following sources were reviewed to determine the impacts to biological resources from project implementations:

- CDFW's California Natural Diversity Database (CNDDB) (CDFW 2019) and the database of threatened/endangered USFWS species for a one-mile radius around the project site (U.S. Fish and Wildlife Service [USFWS] 2019),
- California Native Plant Society (CNPS) Electronic Inventory (CNPS 2019) for the nine USGS 7.5' quadrangles surrounding the project site for the elevation range of 800 to 1,200 feet amsl.
- Natural Resources Conservation Service (NRCS; USDA 2019) for the soils present on the project site
- County of San Bernardino's Biotic Resources Overlay Map (County of San Bernardino 2012) for biotic resources overlay zones within the project site and any County-mapped biological resources with potential to occur on site.

The potential for special-status species to occur within the project site was refined by considering the habitat affinities of each species, the results of field habitat assessments, vegetation mapping, and knowledge of local biological resources.

The site has a very low potential to support the USFWS federally endangered Delhi Sands flower loving fly (*Raphiomidas terminatus abdominalis*), and a high potential to support the CDFW Species of Special Concern burrowing owl (*Athene cunicularia*). The site does not appear to support waters of the U.S./State, jurisdictional by the U.S. Army Corps of Engineers (Corps) and RWQCB, or streambed and associated riparian/wetland habitat jurisdictional by CDFW.

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a) The CNDDB results included historical occurrences of three special-status plant species within one mile of the project site. The CNPS electronic inventory nine quadrangle search results included an additional 46 CRPR plant species. The potential for special-status plant species to occur within the project site was refined by considering the habitat affinities of each species, the results of field habitat assessments, vegetation mapping, and knowledge of local biological resources.

There are two special-status plant species with moderate or high potential to occur on the project site: paniculate tarplant (*Deinandra paniculata*, CRPR 4.2); and smooth tarplant (*Centromadia pungens ssp. laevis*, CRPR 1B.1). The general biological survey was performed outside the survey window for these species. However, given the relatively small size of the project site and high level of site disturbance, extensive populations of special-status plant species are not anticipated to occur on-site. If present, impacts to these species would be relatively small and would occur in an area surrounded by development. Therefore, impacts would be less than significant.

The project site has a high potential to support burrowing owl, a CDFW Species of Special Concern. Burrowing owl surveys in accordance with the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012) would be necessary to determine presence or absence of burrowing owl on the site, potential effects of the proposed project on burrowing owl, and to avoid take in accordance with CFGC Sections 86, 3503, and 3503.5. Therefore, impacts to burrowing owl would be potentially significant. However, through compliance with the recommended burrowing owl surveys and project specific

mitigation measure (BIO-1), impacts to burrowing owls would be reduced to less than significant.

California glossy snake and California horned lark are CDFW Species of Special Concern have a moderate potential to occur on site. However, given the size of the project site and high level of site disturbance, extensive populations of California glossy snake or California horned lark are not anticipated to occur on-site. Furthermore, compliance with nesting bird regulations would avoid direct take of California horned lark. Therefore, impacts to California glossy snake and California horned lark would be less than significant.

The project site has the potential to impact active bird nests if vegetation is removed or ground disturbing activities occur during the nesting season (February 1 to August 31). Impacts on nesting birds are prohibited by the Migratory Bird Treaty Act (MBTA) and CFGC. Therefore, impacts to nesting birds would be potentially significant. With implementation of the project-specific mitigation measure that would avoid project impacts on nesting birds (BIO-2), impacts on nesting birds would be less than significant.

Mitigation Measures

BIO-1 Burrowing Owl Surveys

A qualified biologist(s) shall conduct a pre-construction presence/absence survey for burrowing owls at 14 days prior to ground disturbing activities and within 24 hours immediately before ground disturbing activities. If burrowing owls are documented on site, then a plan for avoidance or passive exclusion shall be made in coordination with CDFW. If the survey is negative, the project may proceed without further restrictions related to burrowing owls.

BIO-2 Nesting Bird Surveys

Where feasible, vegetation clearing and ground disturbing activities shall be conducted outside of the nesting season (February 1 to August 31). If ground disturbing activities are scheduled outside of the nesting season, a nesting bird survey will not be required. If construction activities occur during the nesting season, a qualified biologist shall conduct a nesting bird survey within seven days prior to any disturbance of the site, including tree and shrub removal, disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests depending on the level of activity within the buffer and species observed, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Raptor species shall have an avoidance buffer of 500 feet and other bird species shall have an avoidance buffer of 300 feet. These buffers may be reduced in consultation with the CDFW. If active nests are not identified, vegetation clearing, and ground disturbing activities may commence.

Less than Significant Impact with Mitigation

b) The entire project site is a disturbed field that is frequently subject to human activity. No areas with depressions, drainage patterns, defined channels, and/or wetland vegetation were observed during the project site visit (RBC 2020). As such, no potential federal-, or state-jurisdictional aquatic resources are expected to occur on-site. Therefore, the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. Impacts would be less than significant.

Less than Significant Impact

c) The project would not impact riparian areas or vernal pools as such features do not occur on-site (RBC 2020). No impacts would occur.

No Impact

d) The project site is located in a developed urban area and surrounded by urbanized uses on all sides including commercial and residential development and heavily travelled paved roadways. The project would not impact riparian areas, vernal pools or jurisdictional aquatic resources that would contribute to wildlife corridors or movement as such features do not occur on-site (RBC 2020). The project site is constrained by surrounding residential and commercial development and public infrastructure and has little to no value as a low-quality migration corridor or overland dispersal habitat for wildlife. Therefore, the project would not interfere with the movement of any native wildlife species. Impacts would be less than significant.

Less Than Significant Impact

e) Chapter 88.01 of the County of San Bernardino Development code provides regulations for the management of plant resources in the unincorporated areas of the County. This chapter protects from the indiscriminate removal of native trees and plants. There is one eucalyptus tree on the project site, which is not a native and protected species. Due to the suitable sandy soils and non-native grassland habitat that occurs throughout the project site, paniculate tarplant and smooth tarplant have a moderate potential to occur on-site. However, neither species was observed during the general biological survey (RBC 2020). Therefore, no conflict with local policies or ordinances protecting biological resources would occur. Impacts would be less than significant.

Less Than Significant Impact

f) No adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans apply to the project site. No impact would occur.

No Impact

Therefore, no significant impacts are identified or anticipated with implementation of Mitigation Measures MM BIO-1 and BIO-2.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
V.	**CULTURAL RESOURCES** - Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to Section15064.5?	☐	☐	☐	☒
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section15064.5?	☐	☒	☐	☐

c)	Disturb any human remains, including those outside of formal cemeteries?	☐	☒	☐	☐

SUBSTANTIATION: (Check if the project is located in the Cultural ☐ or Paleontologic ☐ Resources overlays or cite results of cultural resource review):

San Bernardino County General Plan, 2007; Cultural Historical Resources Information System (CHRIS), South Central Coast Information Center; Submitted Project Materials; Appendix C – Cultural Resource Investigation in Support of the Bloomington Gas Station Project, Paleo West Archaeology, February 2020

CEQA requires a lead agency to determine whether a project may have a significant impact on historical resources (Public Resources Code [PRC], Section 21084.1). The significance of cultural resources and impacts to those resources is determined by whether or not those resources can increase our collective knowledge of the past. The primary determining factors are site content and degree of preservation. State CEQA Guidelines Section 15064.5 states the term "historical resources" shall include the following:

1. A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in, the California Register of Historical Resources PRC Section 5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et. seq.).
2. A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in an historical resource survey meeting the requirements of PRC Section 5024.1(g), shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing in the California Register of Historical Resources [CRHR] (PRC Section 5024.1, Title 14 CCR, Section 4852) as follows:
    - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
    - Is associated with the lives of persons important in our past
    - Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
    - Has yielded, or may be likely to yield, information important in prehistory or history (State CEQA Guidelines Section 15064.5)

Properties listed on the National Register of Historic Properties are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

Pursuant to PRC Section 21084.1, a project that may cause a substantial adverse change in the significance of a historical resource may have a significant impact on the environment. A "substantial adverse change" in the significance of a historical resource is defined as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." State CEQA Guidelines Section 15064.5(b) states the significance of an historical resource is "materially impaired" when a project does any of the following:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the CRHR
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources or its identification in an historical resources survey, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b]).

PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type
3. Is directly associated with a scientifically-recognized important prehistoric or historic event or person

a) A cultural resources records search and literature review was conducted on January 14, 2020, at the South Central Coastal Information Center of the California Historical Resource Information System housed at California State University, Fullerton. According to the Cultural Resources Assessment produced by Paleo West Archaeology, the records search indicated that 23 previous studies have been conducted within one mile of the project area. The records search indicated that 56 cultural resources have

been previously documented within one mile of the project area; however, none of these resources were identified within or immediately adjacent to the project area.

Historical maps consulted include Southern California Sheet 1, CA (1904) 60-minute, Fontana, CA (1943) and San Bernardino, CA (1954) 15-minute, and Fontana (1953, 1967, and 1973) 7.5-minute USGS quadrangles. Historical aerials from NETROnline dated 1938, 1948, 1959, 1968, 1980, 1994, and 2010 were also reviewed. None of the historical topographic quadrangles or aerial images show any historical structures or buildings within the project area.

The project site is not located in a historic district and does not contain any listed or eligible structures. The project site is undeveloped. As such, the project would not result in a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. No impact would occur.

No Impact

b) In addition to the resources discussed above, additional sources consulted during the cultural resource literature review and records search include the National Register of Historic Places, the Office of Historic Preservation Archaeological Determinations of Eligibility, and the Office of Historic Preservation Directory of Properties in the Historic Property Data File (Paleo West 2020). There are no listed archaeological resources recorded within the Project area or within one mile of the project area.

A pedestrian cultural resource survey was conducted of the proposed project area on January 15, 2020 (Paleo West 2020). The project site is a disturbed vacant lot with ruderal grasses. No prehistoric or historic-period archaeological resources were identified as a result of the survey. Although the project site does not lie in a highly sensitive area for archaeological resources, the project would involve some grading and site disturbance and there remains the potential to encounter unanticipated archaeological resources during ground-disturbing activities associated with project construction. Construction activities may result in the destruction, damage, or loss of undiscovered scientifically-important archaeological resources. Consequently, impacts to archaeological resources would be potentially significant. Implementation of Mitigation Measure MM CR-1 during project construction would reduce potential impacts to archaeological resources to a less-than-significant level by providing direction on how to properly address an unanticipated discovery of archaeological resources should one occur during construction. In addition, Mitigation Measure MM TCR-1, as discussed in Section 18, Tribal Cultural Resources, would apply and would reduce potential impacts to archaeological resources by requiring Native American monitoring/consulting and establishing protocols in the event of an unanticipated discovery of tribal cultural resources.

Mitigation Measure

CR-1 Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources (CRHR) eligibility. If the discovery proves to be

significant under CEQA and cannot be avoided by the project, additional work such as data recovery excavation and Native American consultation and archaeological monitoring may be warranted to mitigate any significant impacts to cultural resources.

Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

Less Than Significant Impact with Mitigation Incorporated.

c) No known human remains have been documented on the project site or the immediate vicinity. While the project site is unlikely to contain human remains, the potential for the recovery of human remains during ground-disturbing activities is always a possibility. Therefore, impacts would be potentially significant. Mitigation Measure MM TCR-2 as discussed in Section 18, *Tribal Cultural Resources*, would apply and would reduce potential impacts by requiring protocols in the event that human remains or funerary objects are found during ground-disturbing activities. Therefore, impacts to human remains would be less than significant with mitigation.

Mitigation Measure

CR-2 Unanticipated Discovery of Human Remains

If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

Less Than Significant Impact with Mitigation Incorporated

Therefore, no significant impacts are identified or anticipated with implementation of Mitigation Measures MM CR-1 and MM CR-2, MM TCR-1, MM TCR-2 and MM TCR-3.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
VI.	**ENERGY** – Would the project:				
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

SUBSTANTIATION: San Bernardino County General Plan, 2007; Submitted Materials

Electricity and Natural Gas

In 2017, California used 292,039 gigawatt-hours (GWh) of electricity, of which 29 percent were from renewable resources (CEC 2018c). California also consumed approximately 12,500 million U.S. therms (MMthm) of natural gas in 2017 (CEC 2017b). The project site would be provided electricity by Southern California Edison (SCE) and natural gas by Southern California Gas Company (SCG). Table 10 and Table 11 show the electricity and natural gas consumption by sector and total for SCE and SCG. In 2017, SCE provided approximately 28.9 percent of the total electricity used in California. SCG also provided in 2017 approximately 41.1 percent of the total natural gas usage in California.

Table 10 Electricity Consumption in the SCE Service Area in 2017

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Streetlight	Total Usage
2,975.4	31,925.3	4,283.3	13,094	2,410.6	28,975.0	627.9	84,291.6

All usage expressed in GWh
Source: CEC 2017b

Table 11 Natural Gas Consumption in SCG Service Area in 2017

Agriculture and Water Pump	Commercial Building	Commercial Other	Industry	Mining and Construction	Residential	Total Usage
69.4	895.9	72.1	1,716.6	229.7	2,158.1	5,141.8

All usage expressed in MMThm
Source: CEC 2017b

Petroleum

In 2016, approximately 40 percent of the state's energy consumption was used for transportation activities (EIA 2018). Californians presently consume over 19 billion gallons of motor vehicle fuels per year (CEC 2018d). Though California's population and economy are expected to grow, gasoline demand is projected to decline from roughly 15.8 billion gallons in 2017 to between 12.3 billion and 12.7 billion gallons in 2030, a 20 percent to 22 percent reduction. This decline comes in response to both increasing vehicle electrification and higher fuel economy for new gasoline vehicles (CEC 2018d).

a) **Construction Energy Demand**

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The project would require demolition, site preparation, and grading, including hauling material off-site; pavement and asphalt installation; building construction; architectural coating; and landscaping and hardscaping.

The total consumption of gasoline and diesel fuel during project construction was estimated using the assumptions and factors from CalEEMod used to estimate construction air emissions. Table 12 presents the estimated construction phase energy consumption, indicating that

construction equipment, vendor trips, and worker trips would consume over 53,000 gallons of fuel over the project construction period.

Table 12 Estimated Fuel Consumption during Construction

Fuel Type	Gallons of Fuel	MMBtu[4]
Diesel Fuel (Construction Equipment)[1]	40,313.5	5,138.5
Diesel Fuel (Hauling & Vendor Trips)[2]	7,874.2	1,003.7
Other Petroleum Fuel (Worker Trips)[3]	4,918.4	540.0
Total	**53,106.1**	**6,682.2**

[1] Fuel demand rate for construction equipment is derived from the total hours of operation, the equipment's horse power, the equipment's load factor, and the equipment's fuel usage per horse power per hour of operation, which are provided in CalEEMod outputs (see Appendix A), and from compression-ignition engine brake-specific fuel consumptions factors for engines between 0 to 100 horsepower and greater than 100 horsepower (USEPA 2018). Fuel consumed for all construction equipment is assumed to be diesel fuel.
[2] Fuel demand rate for hauling and vendor trips (cut material imports) is derived from hauling and vendor trip number, hauling and vendor trip length, and hauling and vendor vehicle class from "Trips and VMT" Table contained in Section 3.0, *Construction Detail*, of the CalEEMod results (see Appendix A). The fuel economy for hauling and vendor trip vehicles is derived from the United States Department of Transportation (U.S. DOT 2018). Fuel consumed for all hauling trucks is assumed to be diesel fuel.
[3] The fuel economy for worker trip vehicles is derived from the U.S. Department of Transportation National Transportation Statistics (24 mpg) (U.S. DOT 2018). Fuel consumed for all worker trips is assumed to be gasoline fuel.
[4] CaRFG CA-GREET 2.0 fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for worker trips specified above (CARB 2015). Low-sulfur Diesel CA-GREET 2.0 fuel specification of 127,464 Btu/gallon used to identify conversion rate for fuel energy consumption for construction equipment specified above (Schremp 2017). Notes: Totals may not add up due to rounding.
Source: Appendix A

The construction energy estimates represent a conservative estimate because the construction equipment used in each phase of construction was assumed to be operating every day of construction. Construction equipment would be maintained to applicable standards, and construction activity and associated fuel consumption and energy use would be temporary and typical for construction sites. It is also reasonable to assume that contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during construction to reduce construction costs. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and the construction-phase impact related to energy consumption would be less than significant.

Operational Energy Demand

Operation of the project would increase area energy demand from greater electricity, natural gas, and gasoline consumption at a site with no previous development or uses. Natural gas and electricity would be used for heating and cooling systems, lighting, appliances, water use, and the overall operation of the project buildings. Gasoline consumption would be attributed to the trips generated from project residences. The estimated number of average daily trips associated with the project from CalEEMod is used to determine the energy consumption associated with fuel use from the operation of the project. The majority of the fuel consumption would be from motor vehicles traveling to and from the project site. According to the CalEEMod calculations, the project would result in approximately 3,468,845 annual VMT (Rincon Consultants, Inc. 2020). Table 13 shows the estimated total annual fuel consumption of the project using the estimated VMT with the assumed vehicle fleet mix obtained from CalEEMod (Appendix A). One gallon of

gasoline is equivalent to approximately 109,786 Btu (CARB 2015), while one gallon of diesel is equivalent to approximately 127,460 Btu (Schremp 2017).

Table 13 Estimated Project Annual Transportation Energy Consumption

Vehicle Type[1]	Percent of Vehicle Trips[2]	Annual Vehicle Miles Traveled[3]	Average Fuel Economy (miles/gallon)[4]	Total Annual Fuel Consumption (gallons)	Total Fuel Consumption (MBtu)[5]
Passenger Cars	55.0	1,907,698	24	79,487.4	8,726.6
Light/Medium Trucks	36.6	1,166,326	17.4	67,030.3	8,478.7
Heavy Trucks/Other	10.8	374,007	7.4	50,541.5	6,442.2
Motorcycles	0.6	20,813	43.9	474.1	52.0
Total	**100.0**	3,468,845	–	–	23,699.5

Notes: Totals may not add up due to rounding.
[1] Vehicle classes provided in CalEEMod do not correspond exactly to vehicle classes in DOT fuel consumption data, except for motorcycles. Therefore, it was assumed that passenger cars correspond to the light-duty, short-base vehicle class, light/medium trucks correspond to the light-duty long-base vehicle class, and heavy trucks/other correspond to the single unit, 2-axle 6-tire or more class.
[2] Percent of vehicle trips from Table 4.4 “Fleet Mix” in Air Quality and Greenhouse Gas Impact Study (Appendix A).
[3] Mitigated annual VMT found in Table 4.2 “Trip Summary Information” in Air Quality and Greenhouse Gas Impact Study (Appendix A).
[4] Average Fuel Economy: U.S. Department of Energy, 2019.
[5] CaRFG fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for passenger cars and motorcycles (CARB 2015). Low-sulfur Diesel CA-GREET 2.0 fuel specification of 127,464 Btu/gallon used to identify conversion rate for fuel energy consumption for light/medium trucks and heavy trucks/other (Shremp 2017).

Operation of the proposed project would consume approximately 407.5 MWh (or 0.4 GWh) of electricity per year. As previously mentioned, the project would be served by SCE, which provided more than 84,000 GWh of electricity in 2017. The project would consume a less than 0.0001 percent of SCE’s annual electricity demand. Additionally, SCE has not provided any indication that it cannot serve the project. Therefore, SCE would have sufficient supplies for the project and would not place a significant demand on the electrical supply. Estimated natural gas consumption for the project would be approximately 90,779.5 kBTU (or 0.009 MMthm) per year.

The project’s natural gas demand would be served by SCG, which provided 5,142 MMthm per year in 2017. The project would consume a less than 0.0001 percent of SCG’s natural gas demand. SCG has not provided any indication that it cannot serve the project. Therefore, SCG would have sufficient supplies for the project.

The project would also comply with all standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California’s Green Building Standards Code (CALGreen; California Code of Regulations, Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2019 Building

Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the California Energy Commission (CEC). As the name implies, these standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. The standards are updated every three years and each iteration is more energy efficient than the previous standards. For example, according to the CEC, non-residential buildings would use about 30 percent less energy compared to 2016 standards (CEC 2018b). Furthermore, the project would further reduce its use of nonrenewable energy resources as the electricity generated by renewable resources provided by SCE continues to increase to comply with state requirements through Senate Bill (SB) 100 (SB 100), which requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

In conclusion, construction of the project would be temporary and typical of similar projects and would not result in wasteful use energy. Operation of the project would increase the use of electricity on-site. However, the increase would be in conformance with the latest version of CALGreen and Building Energy Efficiency Standards. In addition, SCE and SCG have sufficient supplies to serve the project. Therefore, project operation would not result in wasteful or unnecessary energy consumption. This impact would be less than significant.

Less Than Significant Impact

b) The Renewable Energy and Conservation Element of the County of San Bernardino General Plan provides a road map for the County to achieve its energy goals. Table 14 provides an evaluation of project consistency with applicable goals and policies of the Renewable Energy and Conservation Element. As shown in Table 14, the project would comply with the applicable goals and policies of the Renewable Energy Conservation Element.

Table 14 Project Consistency with the Renewable Energy and Conservation Plan

Goals and Policies	Project Consistency Analysis
RE Goal 1: The County will pursue energy efficiency tools and conservation practices that optimize the benefits of renewable energy. **RE Policy 1.2:** Optimize energy efficiency in the built environment.	**Consistent.** The proposed project would comply with the CALGreen Nonresidential Mandatory Measure 5.106.5.2, Designated Parking for Clean Air Vehicles, and CALGreen Nonresidential Mandatory Measure 5.106.5.3, Electric Vehicle (EV) Charging. These measures require the property owner/developer to incorporate spaces for clean air vehicles and stalls for EV charging.
RE Goal 1: The County will pursue energy efficiency tools and conservation practices that optimize the benefits of renewable energy. **RE Policy 1.2.6:** Encourage new development to comply with the optional energy efficiency measures of the CALGreen Code.	**Consistent.** The proposed project would support sustainable energy production through utilization of SCE electricity. The project would support sustainable energy consumption by complying with CALGreen standards. Additional measures would include, but not be limited to, foil on roof decking, semi-truck hooks ups to prevent idling, and use of concrete paving instead of asphalt.

RE Goal 2: The County will be home to diverse and innovative renewable energy systems that provide reliable and affordable energy to our unique Valley, Mountain, and Desert regions. **RE Policy 2.4.2:** Educate developers about the County's RE goals and policies and encourage the inclusion of renewable energy facilities for onsite use in new developments.	**Consistent.** Although the proposed project would not be an electricity provider, the project would utilize electricity onsite from SCE which would be subject to SB 100. SB 100 requires 44 percent of the energy mix to be renewable energy by 2024, 52 percent by 2027, 60 percent by 2030, and 100 percent by 2045. In 2017, 29 percent of SCE's electricity came from renewable resources. By 2030, SCE plans to achieve 80 percent carbon free energy. As the project would utilize electricity from SCE, the project would be consistent with RE Goal 2.

Source: County of San Bernardino, County of San Bernardino General Plan Renewable Energy and Conservation Element, adopted August 8, 2017 and amended February 2019

State and local plans for renewable energy and energy efficiency include the PUC Energy Efficiency Strategic Plan, the 2019 California Title 24 Building Energy Efficiency Standards, and the 2016 CALGreen standards. The property owner/developer would comply with the Title 24 and CALGreen standards, which would ensure the project incorporates energy efficient windows, insulation, lighting, ventilation systems, as well as water efficient fixtures and electric vehicle charging infrastructure. The property owner/developer would recycle and/or salvage a minimum of 65 percent of the nonhazardous construction and demolition waste per the 2019 CALGreen standards. Adherence to the CPUC's energy requirements would ensure conformance with the State's goal of promoting energy and lighting efficiency. Therefore, impacts associated with conflicts to renewable energy or energy efficiency plans would be less than significant.

Less Than Significant Impact

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

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
VII. GEOLOGY AND SOILS - Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map Issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐

	iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
	iv. Landslides?	☐	☐	☐	☒
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

SUBSTANTIATION: *(Check ☐ if project is located in the Geologic Hazards Overlay District):* ***San Bernardino County General Plan, 2007; Submitted Project Materials***

San Bernardino County General Plan, 2007; Submitted Project Materials; Appendix D – Geotechnical Investigation for the Proposed Mixed-Use Development at Cedar Avenue & Santa Ana Avenue, Sladden Engineering, September 2019

a.i-iv) i) The project site and general San Bernardino County area are susceptible to strong ground motions due to earthquakes and numerous faults capable of producing significant ground motions. The proposed project would be designed per the 2019 CBC design guidelines to resist structural collapse and structural damage and thereby provide reasonable protection from serious injury, catastrophic property damage and loss of life.

Based on fault maps from the California Department of Conservation (DOC), the project site is not located in or adjacent to an Alquist-Priolo Fault Zone, and there are no known active or potentially active faults trending toward or through the site (DOC 2020).

Given the above considerations, the possibility of significant fault rupture on the project site is low and potential impacts associated with the rupture of a known earthquake fault would be less than significant.

Less Than Significant Impact

ii) As stated above, the project site and general San Bernardino County area are susceptible to strong ground motions due to earthquakes due to numerous faults capable of producing significant ground motions. According to the Geotechnical Report prepared by Sladden Engineering, the site could be subjected to ground motions on the order of 0.54g. The proposed project would be designed to resist structural collapse and thereby provide reasonable protection from serious injury, catastrophic property damage and loss of life. The proposed project would be designed in accordance with the requirements of the 2019 edition of the CBC. The CBC provides procedures for earthquake resistant structural design that include considerations for on-site soil conditions, occupancy, and the configuration of the structure including the structural system and height.

Given the above considerations, potential risks of loss, injury, or death due to seismic ground shaking would be low. Impacts would be less than significant.

Less Than Significant Impact

ii) Liquefaction is a phenomenon where loose, saturated, non-cohesive soils such as silts, sands, and gravels undergo a sudden loss of strength during earthquake shaking. These soils may acquire a high degree of mobility and lead to structurally damaging deformations. Liquefaction typically occurs in areas where groundwater is less than 30 feet from the surface and where the soils are composed of poorly consolidated fine- to medium-grained sand. In addition to the necessary soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to initiate liquefaction.

According to the County's Geologic Hazards Overlay Map, the project site is not located in an area of potential liquefaction (County of San Bernardino 2007). The condition of liquefaction has two principal effects. One is the consolidation of loose sediments with resultant settlement of the ground surface. The other is lateral sliding. Significant permanent lateral movement generally occurs only when there is significant differential loading, such as fill or natural ground slopes, in susceptible materials. No such loading conditions exist on the site (Sladden Engineering 2019). The potential for liquefaction or seismically induced dynamic settlement is very low in the areas proposed for development at the project site (Sladden Engineering 2019). Therefore, potential impacts would be less than significant.

Less Than Significant Impact

iv) In San Bernardino County, the San Gabriel, San Bernardino, Little San Bernardino and Pinto Mountains comprise a portion of the Transverse Ranges. They are characterized by steep slopes, sharp narrow ridges, steep-walled incised canyons, valleys, and major faults. This setting can produce numerous landslides and mudslides, especially when combined with other adverse geologic conditions and heavy precipitation. Steepness of slope and the nature of the bedrock, soil, and precipitation combine to determine County landslide locations. However, the project site is not located near or in the vicinity of any of the areas the County's General Plan designates as having geological hazards, such as landslides (County of San Bernardino 2007). The project site is in an existing developed neighborhood with relatively flat conditions on and surrounding the project site. Therefore, no impacts associated with landslides would occur.

No Impact

b) The proposed project would not result in substantial erosion or loss of topsoil because of the County's drainage and water quality standards, as well as best management practices (BMPs) that would be implemented as part of the proposed project. Erosion control plans would be required as a part of the project specific drainage plan and would be reviewed and approved by the County. In addition, the SCAQMD and Santa Ana RWQCB regulate erosion and loss of topsoil. SCAQMD Rule 403 for control of fugitive dust would reduce the potential for soil erosion due to wind during construction. The RWQCB State's General Construction Permit and County Public Works Department would require compliance with storm water runoff for the proposed project, therefore reducing impacts associated with water erosion and loss of topsoil.

Because the project would disturb more than one acre of land, it would be subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) (Construction General Permit) adopted by the SWRCB. Compliance with the permit requires the project applicant to file a Notice of Intent with the SWRCB. Permit conditions require preparation of a project-specific Stormwater Pollution Prevention Plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary. Impacts to topsoil would be less than significant.

Less Than Significant Impact

c) Lateral spreading is the horizontal movement or spreading of soil toward an open face. Lateral spreading may occur when soils liquefy during an earthquake event, and the liquefied soils with overlying soils move laterally to unconfined spaces. Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is caused by a variety of activities, which include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydro-compaction. The project site is not located in an area of subsidence or collapse (Sladden Engineering 2019). Additionally, the project would not include activities known to cause subsidence, such as groundwater and oil or natural gas extraction. As discussed above, potential impacts associated with landslides and liquefaction would be less than significant due to the adherence to applicable policies and regulations. The project would comply with CBC requirements, including foundation and structural design standards, thus further limiting impacts related to unstable soils. Therefore, impacts would be less than significant.

Less Than Significant Impact

d) Expansive soils are soils that shrink or swell as water content changes. Highly expansive soils, specifically those with high clay content, can cause damage to structures and roadways. The near-surface soils generally consist of silty sands and gravelly sands. However, there is low expansive potential on site (Sladden Engineering 2019).

Additionally, the project would implement all structural and foundation design requirements of the CBC and all recommendations made by the site-specific geotechnical report, including stripping old fill, over-excavation, and re-compaction. Given that the soils on the site are not generally prone to high expansion and the project would implement foundation and structural design measures required by the CBC and site-specific geotechnical report, this impact would be less than significant.

Less Than Significant Impact

e) The project would be connected to the City's existing sewer system for wastewater disposal and would not require a septic system. Therefore, the project would not result in impacts associated with soils that are incapable of supporting septic tanks and alternative wastewater disposal systems.

No Impact

f) The paleontological sensitivities of the geologic units underlying the project site were evaluated to determine if activity conducted under the proposed project could result in significant impacts to paleontological resources. The analysis was based on the results of an online paleontological locality search and review of existing information in the scientific literature concerning known fossils within geologic units mapped within the project site. Fossil collections records from the Paleobiology Database and University of California Museum of Paleontology (UCMP) online database were reviewed for known fossil localities in San Bernardino County (Paleobiology Database 2020; UCMP 2020). Based on the available information contained within existing scientific literature and the UCMP database, paleontological sensitivities were assigned to the geologic units underlying the project site. The potential for impacts to scientifically important paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. The Society of Vertebrate Paleontology (SVP) has developed a system for assessing paleontological sensitivity and describes sedimentary rock units as having high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources (SVP 2010). This system is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present.

The project site is situated in San Bernardino Valley within the northern Peninsular Ranges geomorphic province, one of 11 major provinces in the state (California Geological Survey [CGS] 2002). These provinces are "naturally defined geologic regions that display a distinct landscape or landform" (CGS 2002). The Peninsular Ranges trend northwest-southeast and extend 900 miles from the Los Angeles Basin to the tip of Baja California in Mexico. The province varies from 30 to 100 miles wide and is bounded on the east by the Colorado Desert and on the west by the coastal plain and the Gulf of California (Norris and Webb 1990).

As depicted in Figure 5, the surface geology of the project site is mapped as Quaternary young (late Holocene) alluvial-fan deposits, Unit 5 (Qyf5), Quaternary old (late to middle Pleistocene) alluvial-deposits, Unit 3 (Qof3) (Morton and Miller 2006). Quaternary young (late Holocene) alluvial-fan deposits, mapped within the western project site, consist of slightly dissected, unconsolidated to slightly consolidated coarse-grained sand to bouldery deposits derived from the San Bernardino Mountains. Quaternary old (late to middle Pleistocene) alluvial-fan deposits, mapped within the eastern project site,

consists of moderately dissected interstratified sand and gravel (Morton and Miller 2006).

A review of the museum records maintained in the UCMP online collections database identified two vertebrate fossil localities (V676 and V791); which yielded specimens of coyote (*Canis latrans*), bighorn sheep (*Ovis canadensis*), camel (*Camelops*), horse (*Equus*), mammoth (*Mammuthus*), elephant (*Elephas*), bat (*Pseudorhinolophus*), and pelican (*Pelecanus erythrorhynchos*); from early Holocene to late Pleistocene alluvial deposits in unspecified locations within San Bernardino County (UCMP 2020).

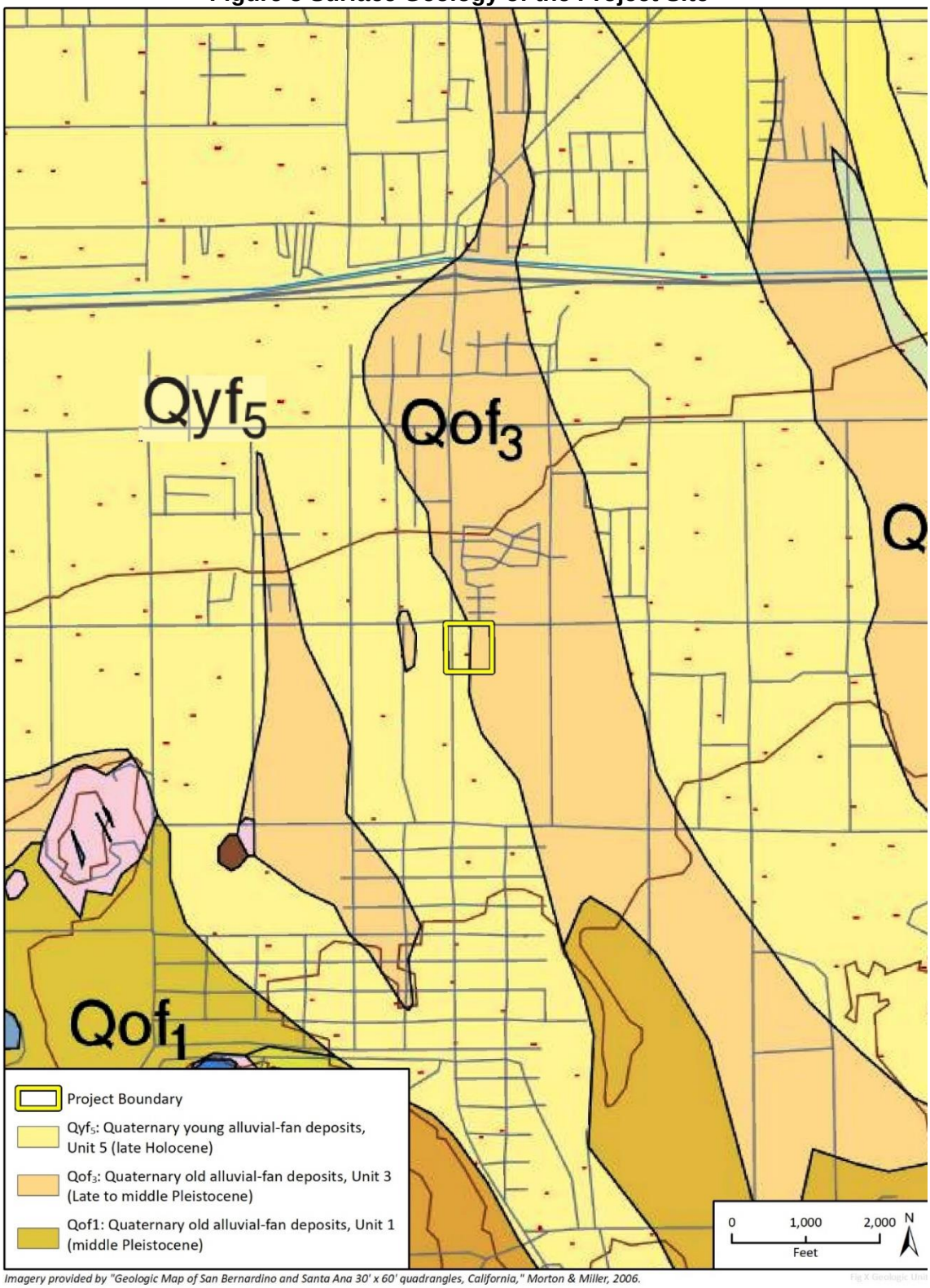
Late Holocene sedimentary deposits within the project site (e.g., Qyf5) are typically too young (i.e., less than 5,000 years old) to preserve paleontological resources and are herein determined to have a low paleontological sensitivity, at the surface and shallow depths.

However, exposures of older alluvial deposits within the project site, and the stratigraphic setting in the vicinity are indicative that Pleistocene (e.g., Qof3-) units underlie the late Holocene units mapped at the surface, at unknown, but potentially shallow depths (Morton and Miller 2006). The mapped contact between geologic units is general considered a “hypothesis” and in most circumstances has not been field verified or mapped based on direct observations at any one specific site. Therefore, the specific boundary between young Holocene and Pleistocene units is unlikely to occur at exactly the location depicted on the geologic map within the project site. Furthermore, accurately assessing the stratigraphic boundaries between late Holocene units (i.e., Qyf5) and Pleistocene (e.g., Qof3) units is generally not possible without site-specific geochronologic data, some form of radiometric dating, or fossil analysis. The depths at which these units become old enough to yield fossils is highly variable, but generally does not occur at depths of less than five feet based on the proximity of geologic units with high paleontological sensitivity (i.e., Qof3 and Qof1) mapped near project areas underlain by late Holocene alluvial fan deposits (Qyf5) (Morton and Miller 2006). Refer to Figure 6 for the paleontological sensitivity of the project site.

Quaternary old (early Holocene to Pleistocene) alluvial sediments have a well-documented record of abundant and diverse vertebrate fauna throughout California. Localities have produced fossil specimens of mammoth (*Mammuthus columbi*), horse (*Equus*), camel (*Camelops*), and bison (*Bison*), as well as various birds, rodents, and reptiles (Agenbroad 2003; Jefferson 1985, 2010; Merriam 1911; Paleobiology Database 2020; Savage 1954; UCMP 2020). Therefore, Quaternary old (late to middle Pleistocene) alluvial fan deposits, Unit 3 (Qof3) are assigned a high paleontological sensitivity.

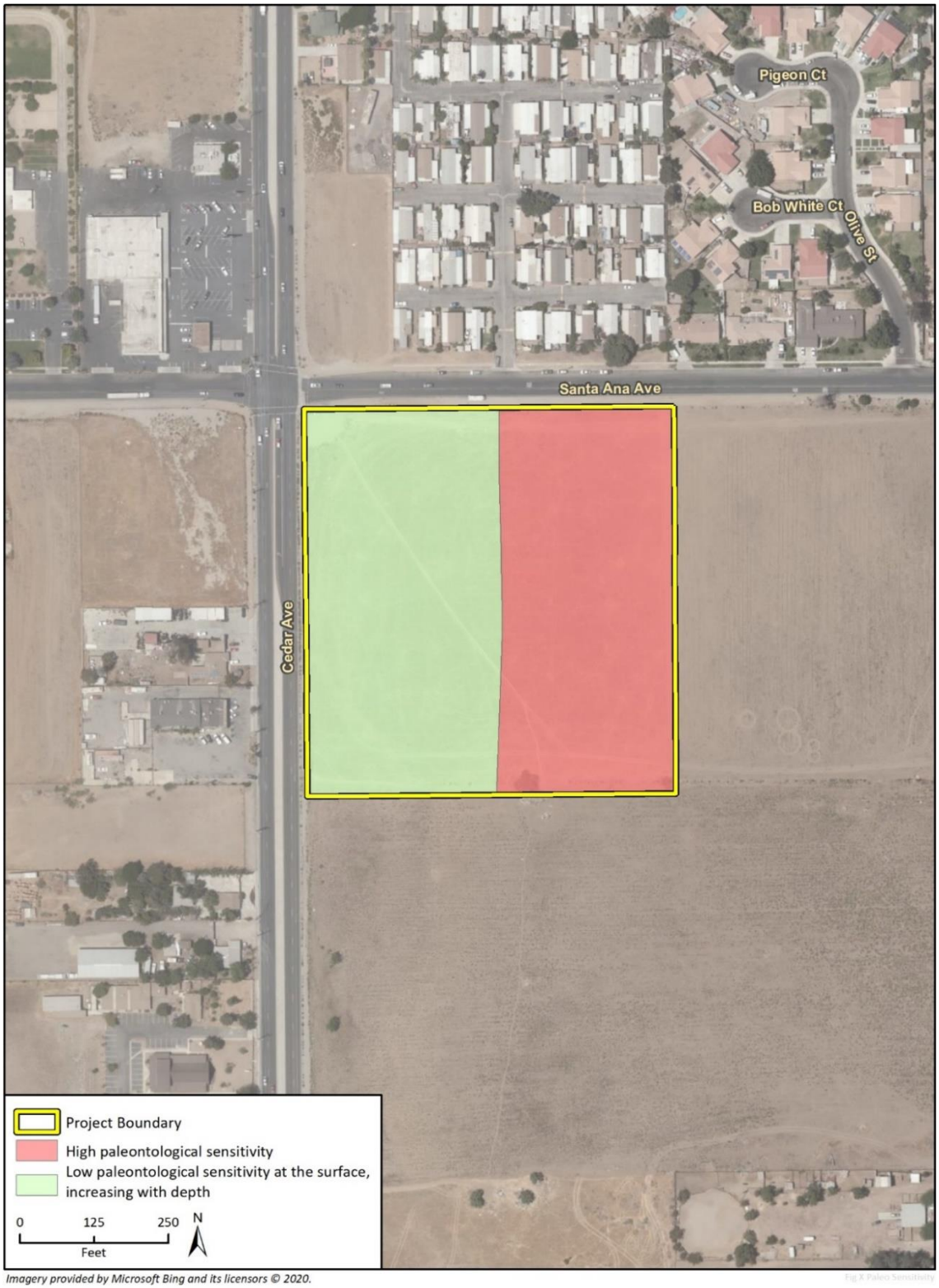
The project site is in an urban area and has been previously developed. Based on the findings of the geotechnical analysis, the project site is underlain by artificial fill associated with prior development to depths of approximately three feet below ground surface (Sladden Engineering 2019). However, project ground disturbance associated with the storm water system is proposed to reach depths of up to 10 feet below ground surface, whereas excavations related to the proposed storage gas tank may reach depths of approximately 14 feet below ground surface. These extensive excavations would extend below the boundary between artificial fill and native (i.e., previously undisturbed) sediments within the project site (Sladden Engineering 2019).

Figure 5 Surface Geology of the Project Site



Imagery provided by "Geologic Map of San Bernardino and Santa Ana 30' x 60' quadrangles, California," Morton & Miller, 2006.

Figure 6 Paleontological Sensitivity of Mapped Geologic Units of the Project Site



If native/intact sediments of geologic units with a high paleontological sensitivity (i.e., Qof3 or Qyf5 at depths below five feet, shown in Figure 5 and Figure 6) at the surface and shallow subsurface are disturbed, impacts to paleontological resources could occur. Because the exact location of the surface contact between the two units cannot be confirmed without field verification of subsurface geologic conditions, high sensitivity geologic units may be present at the surface throughout the project site. Construction activities may result in the destruction, damage, or loss of undiscovered paleontological resources. However, implementation of Mitigation Measure MM GEO-1 during project construction would reduce potential impacts related to paleontological resources to a less than significant level by providing for the recovery, identification, and curation of previously unrecovered fossils. Impacts would be less than significant with mitigation.

Mitigation Measure

Implementation of the following measure would reduce potential impacts to paleontological resources to a less than significant level.

GEO-1 Paleontological Resources Monitoring

Prior to the commencement of project construction, a qualified paleontological monitor (i.e., a paleontologist who meets the SVP [2010] standards as a Paleontological Resource Monitor) shall be retained to conduct paleontological monitoring during ground-disturbing activities (including, but not limited to site preparation, grading, excavation, and trenching) of all intact deposits (i.e. all disturbance of bedrock below the level of artificial fill). Monitoring shall be supervised by a Qualified Paleontologist (i.e., a paleontologist who meets the SVP [2010] standards as a Qualified Professional Paleontologist).

Full-time monitoring shall be conducted for all ground disturbance exceeding three feet, including excavations associated with the storm water system and storage gas tank. These project activities have a high potential of disturbing native, previously undisturbed geologic units including Quaternary old (late to middle Pleistocene) alluvial fan deposits, Unit 3 (Qof3), which have a high paleontological sensitivity. If the paleontological monitor determines that all or parts of the site are likely comprised of late Holocene alluvial fan deposits (Qyf5), monitoring can be discontinued in some or all of the project site; however, if Quaternary old alluvial deposits (Qof3) are observed at the surface or at depth, then full-time monitoring shall be continued until the full depth of excavation has been reached. Ground-disturbing activities that impact previously disturbed sediments (artificial fill) or surface soil do not require paleontological monitoring.

The duration and timing of the monitoring shall be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time or part-time monitoring is no longer warranted, he or she may recommend reducing monitoring to periodic spot-checking or may recommend that monitoring cease entirely. Monitoring shall be reinstated if any new ground disturbances of previously undisturbed areas are required, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time.

If a paleontological resource is discovered, the monitor shall have the authority to temporarily divert construction equipment around the find until it is assessed for scientific significance and collected. Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent

paleontological collection (such as the Natural History Museum of Los Angeles County [NHMLAC] or UCMP). Curation fees are the responsibility of the project owner.

A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to the County. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

Less Than Significant Impact with Mitigation Incorporated

Therefore, no significant adverse impacts are identified or anticipated with the implementation of Mitigation Measure MM GEO-1.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
VIII.	**GREENHOUSE GAS EMISSIONS –** Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b)	Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☐

SUBSTANTIATION:
San Bernardino County General Plan, 2007; Submitted Project Materials; Appendix A – Air Quality, Greenhouse Gas Emissions and Health Risk Assessment Impact Analysis for the Bloomington Commercial Center Project, Rincon Consultants, Inc. 2020

Climate Change Background

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHGs). GHGs contribute to the "greenhouse effect," which is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect

by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature.

GHGs occur naturally and from human activities. Human activities that produce GHGs are the burning of fossil fuels (coal, oil and natural gas for heating and electricity, gasoline and diesel for transportation); methane from landfill wastes and raising livestock; deforestation activities; and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Emissions of GHGs affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way in which the Earth absorbs gases from the atmosphere. Potential impacts of global climate change in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years.

Regulatory Framework

California Assembly Bill 32 and California Senate Bill 32

The principal state plan and policy is Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, and the follow up, SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030.

California Senate Bill 375

California SB 375, signed in August 2008, directs each of the State's 18 major Metropolitan Planning Organizations (MPOs) to prepare a Sustainable Communities Strategy (SCS) that contains a growth strategy to meet GHG emission reduction targets. The SCS is included in the Regional Transportation Strategy (RTP). The SCAG RTP/SCS includes a commitment to reduce emissions from transportation sources by promoting compact and infill development to comply with SB 375.

County of San Bernardino Greenhouse Gas Emissions Reduction Plan

The County of San Bernardino Greenhouse Gas Emission Plan (GHG Plan), updated in 2015, requires the reduction of 159,423 metric tons of CO_2 equivalent emissions ($MTCO_2e$) per year from new development by 2020 as compared to the unmitigated conditions. The Greenhouse Gas Emissions Development Review Process (GHG Review Process), prepared for the County of San Bernardino in March 2015, provides project level direction on how the County plans to achieve the reduction in GHG emissions.

Methodology

GHG emissions associated with the project were estimated using CalEEMod, version 2016.3.2, as described under Section III, *Air Quality*. Complete CalEEMod results and assumptions can be viewed in Appendix A. Pursuant to SCAQMD guidance, total construction GHG emissions resulting from the project are amortized over 30 years and added to operational GHG emissions.

Significance Thresholds

The GHG Review Processes determined that projects that do not exceed 3,000 $MTCO_2e$ per year will be consistent with the GHG Plan and determined to have

a less than significant individual and cumulative impact for GHG emissions. For projects that exceed 3,000 $MTCO_2e$ per year of GHG emissions the applicant may choose to either: utilize the Screening Tables, which consist of a list of mitigation measures, rated for their effectiveness and provide mitigation to reach 100 points; or provide a detailed GHG analysis that quantifies project design features or mitigation measures in order to reduce GHG emissions by 31 percent or more over year 2020 unmitigated GHG emissions levels.

a) The proposed project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, waste disposal, water usage, and construction equipment. A summary of the results is shown below in Table 15. As shown in the table, the project would generate 3,002.79 $MTCO_2e$ per year, which would exceed the County's bright line screening threshold of 3,000 $MTCO_2e$ per year. Impacts would be potentially significant.

Table 15 Project GHG Emissions

	GHG Emissions (MT/year)			
Emission Source	**CO_2**	**CH_4**	**N2O**	**CO_2e**
Area[1]	<1	<1	<1	<1
Energy[2]	182.95	0.01	<1	183.80
Mobile[3]	2,760.37	0.30	<1	2,767.94
Solid Waste[4]	10.62	0.63	<1	26.31
Water and Wastewater[4]	8.78	0.07	<1	11.05
Construction[5]	13.61	<1	<1	13.69
Total GHG Emissions	**2,976.33**	**1.01**	<1	**3,002.79**
County GHG Emissions Reduction Plan Screening Threshold				3,000
Threshold Exceeded?				**Yes**

Source: Appendix A

[1] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscaping equipment.

[2] Energy usage consists of GHG emissions from electricity and natural gas usage.

[3] Mobile sources consist of GHG emissions from vehicles.

[4] Waste includes the CO2and CH4 emissions created from the solid waste placed in landfills.

[5] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.

[6] Construction emissions amortized over 30 years as recommended in the SCAQMD GHG Working Group on November 19, 2009.

Mitigation Measure

GHG-1 GHG Emissions Screening Tables

Prior to the approval of grading permits, the project applicant shall demonstrate that it would implement a minimum of 100 points of GHG reduction measures listed in the County's GHG Emissions Screening Tables. Per County standards, projects that exceed 3,000 MT CO_2e and implement a minimum of 100 points would be consistent with the County's GHG Plan and would therefore result in a less than significant impact.

Less Than Significant Impact with Mitigation

b) The applicable plan for the proposed project is the County GHG Plan. In addition, the GHG Review Processes provides direction for conformity of new development projects to the GHG Plan. The GHG Review Processes determined that projects that do not exceed 3,000 $MTCO_2e$ per year would be consistent with the GHG Plan and would have a less than significant individual and cumulative impact for GHG emissions. For projects that exceed 3,000 $MTCO_2e$ per year of GHG emissions, the GHG Review Processes has determined that implementation of 100 or greater points associated with mitigation measures listed on its Screen Tables, would adequately reduce the proposed project's GHG emissions, when considered with other future development and existing development to allow the County to meet its 2020 target GHG reductions and support reductions in GHG emissions beyond 2020.

As shown above, the proposed project would create 3,002.79 $MTCO_2e$ per year, which would exceed the 3,000 $MTCO_2e$ per year screening threshold provided in the GHG Review Processes. Therefore, at these emissions, the project would conflict with the County GHG Plan and result in potentially significant impacts. This would be mitigated through Mitigation Measure MM GHG-1, which requires the project applicant to commit to 100 points of GHG emissions reduction measures that are listed in the Screening Tables. Therefore, impacts would be less than significant with mitigation.

Less Than Significant Impact with Mitigation

Therefore, no significant adverse impacts are identified with implementation of Mitigation Measure MM GHG-1.

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

	a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

SUBSTANTIATION:

San Bernardino County General Plan, 2007; Submitted Project Materials

Regulatory Framework

The transport, use, and storage of hazardous materials is regulated by federal, state, local laws and regulatory agencies.

Federal Regulations

The 1975 Hazardous Materials Transportation Act (HMTA) is the principal federal law in the United States regulating the transportation of hazardous materials. It is in the Secretary of Transportation's authority to designate material or a group or class of material as hazardous when they meet the definition of hazardous material under the HMTA. A hazardous material is any particular quantity or form of a material that may pose an unreasonable risk to health and safety or property during transportation in commerce, which includes materials that are explosive, radioactive, infectious, flammable, toxic, oxidizing, or corrosive. The law establishes minimum standards of regulation for the transport of hazardous materials by air, ship, rail, and motor vehicle. The HMTA is implemented through various agencies based on the mode of transportation and the type of hazardous material being transported (U.S. Government Publishing Office 2011).

The 1976 Resource Conservation and Recovery Act (RCRA) gives USEPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. USEPA-administered permits are required for generators and transportation, storage and disposal facilities. Compliance monitoring involves reviewing a facility's compliance with the requirements of its permit and with the regulations applicable to the facility type. Management of used motor oil and oil filters, which may be generated from use of construction vehicles, is regulated by storage standards established by the RCRA. USEPA and its regulatory partners conduct inspections of recycled used oil facilities to assure compliance with applicable regulations (USEPA 2018).

State Regulations

The California Fire Code, CCR, Title 24 requirements prescribe safe accommodations for materials associated with the construction of new buildings that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Hazardous materials are required to be stored in designated areas designed to prevent accidental release to the environment [California Building Standards Commission (CBSC) 2016].

Under CCR, Title 22, hazardous wastes must be disposed of only at State-permitted treatment, storage, or disposal facilities and cannot be disposed of in the regular trash, onto the surface of the ground, or into the storm drain. In addition, they may not be dumped into the sewer system without an industrial waste discharge pretreatment permit from the local sewer agency for that specific waste, and properly treated first before discharge. Hazardous wastes must be transported only by California Registered Hazardous Waste Transporters. These transporters must be registered by the California Department of Toxic Substances Control (DTSC) and California Highway Patrol (DTSC 2019).

Pursuant to the Emergency Services Act, California developed an Emergency Response Plan to coordinate emergency services provided by federal, State, and local governmental agencies and private persons. Response to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (Cal OES). Cal OES coordinates the responses of other agencies, including the USEPA, California Highway Patrol (CHP), CDFW, the RWQCBs, the local air pollution control districts, and local agencies (Cal OES 2019).

The State of California Division of Occupational Safety and Health, better known as Cal/OSHA, has regulations concerning the use of hazardous materials, including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs (California Department of Industrial Relations 2019).

Local Regulations

The Certified Unified Program Agency (CUPA) is an agency certified by the DTSC to regulate hazardous waste generators and onsite treatment programs; aboveground and underground storage tank programs; Hazardous Materials Management, Business Plans, and Inventory Statements; and the Risk Management and Prevention Program. The San Bernardino County Fire Department (SBCFD), Hazardous Materials Division (HHMD) is the CUPA responsible for administering hazardous materials programs in San Bernardino County.

a) Construction of the proposed project would entail routine transport of potentially hazardous materials, including gasoline, oil solvents, cleaners, paint, and soil to and from the project site. Proper BMPs, preparation of a SWPPP, and hazardous material handling protocols would be required to ensure safe storage, handling, transport, use, and disposal of all hazard materials during the construction phase of the proposed project. Construction would also be required to adhere to any local standards set forth by the County, as well as state and federal health and safety requirements that are intended to

minimize hazardous materials risks to the public, such as California OSHA requirements, the Hazardous Waste Control Act, the California Accidental Release Prevention program, and the California Health and Safety Code.

Operation of the proposed project would involve typical activities associated with gas stations, convenience stores, and restaurants. The CUPA would review the project to ensure the fuel dispensing system is designed in accordance with federal and SWRCB standards for leak detection. The transport of fuel and tank filling operations would be conducted in compliance with applicable regulatory requirements. Additional hazardous materials could include private use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances. These substances are required to comply with guidelines to minimize health risk to the public associated with hazardous materials. Therefore, potential impacts associated with the routine transport, use or disposal of hazardous materials would be less than significant.

Less Than Significant Impact

b) **Construction**

Accidental conditions during construction of the project could occur as a result of any of the following: direct dermal contact with hazardous materials; incidental ingestion of hazardous materials, or inhalation of airborne dust released from dried hazardous materials. The transportation of hazardous materials could result in accidental spills, leaks, toxic releases, fire, or explosion.

Compliance with federal, state, and local laws, regulations, and Cal/OSHA training programs would minimize or avoid potential impacts associated with the routine transport, use, or disposal of hazardous materials during construction. Appropriate documentation for all hazardous waste that is transported, stored, or used in connection with specific project-site activities would be provided as required for compliance with existing hazardous materials regulations codified in the CCR.

Construction activities on the project site would be required to comply with federal and state laws to eliminate or reduce the consequence of hazardous materials accidents. For example, employees who would work around hazardous materials would be required to wear appropriate protective equipment, and safety equipment is routinely available in all areas where hazardous materials are used. Adherence to the federal, state, and local regulations governing the transportation, use, and disposal of hazardous waste would reduce impacts associated with reasonably foreseeable upset and accident conditions during construction to less than significant.

Operation

Maintenance and upkeep of facilities on-site, including cleaning of fueling areas, parking areas, and restaurant areas, would occasionally require the use of various solvents, cleaners, paints, oils/fuels, and pesticides/herbicides Accidents may occur during the transport, storage, use, or disposal of hazardous materials, including spills or leaks. Adherence to County of San Bernardino and SBCFD HHMD plans and regulations would reduce the potential for contamination from hazardous materials through proper cleanup, disposal, and remediation.

Therefore, impacts due to reasonably foreseeable upset and accident conditions during operation of the project would be less than significant.

Less Than Significant Impact

c) The nearest school to the project site is the Village Christian School located approximately 0.7-mile northeast at 8930 Village Avenue. As described under Section IX.a and b, project would comply with applicable regulatory requirements for hazardous materials. Therefore, the project would not emit hazardous emissions or create significant hazards from hazardous materials within one-quarter mile of an existing or proposed school, and no impacts would occur.

No Impact

d) Government Code Section 65962.5 requires the California Environmental Protection Agency to develop an updated Cortese List, which includes information on hazardous material sites collected from the DTSC, SWRCB, and the USEPA. The analysis for this section included a review of the following resources on August 12, 2020 to provide hazardous material release information:

- SWRCB GeoTracker database (SWRCB 2015)
- DTSC EnviroStor database (DTSC 2019)
- USEPA Superfund Enterprise Management System (SEMS) (USEPA 2019)

Based on review of these databases, it was determined the project site is not included on existing lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The GeoTracker database identified the following one Leaking Underground Storage Tank (LUST) Cleanup Sites within 0.25 mile of the project site:

- Cedar and Santa Ana Station (T0607100468): Located at 10898 Cedar Avenue, approximately 100 feet northwest across the intersection of Cedar Avenue and Santa Ana Avenue, the site is a LUST Cleanup Site, listed for potential gasoline contamination of the soil. The site's cleanup status is listed as "completed – case closed" as of April 30, 1998. The site currently operates as a gas station.

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The listed site within 0.25 mile of the project site has a completed cleanup status and, therefore, would not impact the project site. No impact would occur.

No Impact

e) The nearest airport to the project site is Flabob Airport, located approximately 4.5 miles to the south of the project in Riverside County. San Bernardino County has 15 airport land use plans and maintains airport safety review areas for geographical regions that are in a potential airport hazard area. The project site is not located within any airport land use plan and is not located within an airport safety review area. Therefore, no impacts associated with a safety hazard or excessive noise from aircraft for people residing or working in the project area would occur.

No Impact

f) Specifications for the proposed improvements would be subject to County requirements, including Chapter 83.09 – Infrastructure Improvement Standards, and Chapter 83.12 – Road System Design Standards to ensure that adequate dimensions for emergency vehicles are met. The proposed access to the project site would be required to meet

standards that allow emergency response vehicles, such as firetrucks, to service the entire development. Fire plan check would be required through the County's fire department to ensure adequate service is provided. Additionally, the project would be subject to review and compliance with the County's Building Code to ensure structural integrity of all proposed buildings. The project would not compromise the County's Emergency Management Plan because it would be developed in conformance with the required standards set forth by the County's Zoning Ordinance. These standards ensure project elements such as access, structural integrity, and clearances around structures are met so that they do not impact emergency response.

No roads would be permanently closed as a result of the construction or operation of the project and no structures would be developed that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No structures would be developed that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. If there are temporary lane closures during project construction (potentially on Cedar Avenue or Santa Ana Avenue), construction activities would avoid interference with an emergency plan through the use of traffic control measures to maintain traffic flow and access and/or road detours. Due to the temporary nature of project construction and the use of traffic control measures to avoid interference with an emergency plan, potential impacts from project construction would be less than significant.

In addition, as discussed in Section XVII, *Transportation*, the project would not have a significant impact on area intersections that would be used for emergency access or evacuation. As such, implementation operation of the project would not interfere with existing emergency evacuation plans or emergency response plans in the area. Therefore, the operation of the project would not result impacts to emergency response or evacuation plans.

No Impact

g) A combination of climate, topography, vegetation, and development patterns creates high fire hazard risks throughout the County, especially in the many areas of wildland/urban intermix located in foothills and mountainous areas countywide. As development encroaches upon wildland areas, the potential for disastrous loss of watershed, structures, and life (human and wildlife) increases. Establishment of a coordinated program to condition development in some of these areas has been adopted through the Fire Safety Overlay provisions of the County Development Code. Continuous evaluation and application of Hazard Overlays and accompanying policies and standards for adequate services, facilities, mapping, and developmental regulation are required as pressure for development increases countywide. Included in developmental regulation are requirements for minimum road widths (to provide adequate access for both fire-fighting equipment and evacuating residents) and clearance around structures to prevent the rapid spread of fire from one structure to another. The project site is not located within the designated Fire Safety Overlay and is not located in an area where wildland and urban areas intermix. The project site is in a developed portion of the Bloomington community area, and is surrounded by existing development, including railroad infrastructure to the north and west, with the I-10 to the north beyond the railroad. Additionally, while the project site is located within a Local Responsibility Area, it is not designated within a High Fire Hazard Severity Zone (County of San Bernardino 2010).

The proposed project would be subject to the standards and requirements set forth in the California Fire Code and CBC. Therefore, no impacts associated with the exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires would occur.

The project would not create a significant risk of loss, injury, or death involving wildfires, and this impact would be less than significant. For more discussion of potential impacts related to wildfire, please refer to Section XX, *Wildfire*.

No Impact

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

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
X.	**HYDROLOGY AND WATER QUALITY -** Would the project:				
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
	ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or offsite;	☐	☐	☒	☐
	iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of runoff; or	☐	☐	☒	☐
	iv. impede or redirect flood flows?	☐	☐	☒	☐
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒

e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

SUBSTANTIATION:

***San Bernardino County General Plan, 2007; Submitted Project Materials;* Appendix E – Hydrology Study for TMP 20192, Black Gold Engineering, March 2020**

a) The proposed project would not violate any water quality standards or waste discharge requirements because a final Water Quality Management Plan (WQMP) would be required to be prepared and approved by the County as a part of the grading and building permit processes. The WQMP details how the proposed project would comply with the requirements of the County's Municipal Stormwater Management Program and NPDES Permit for the County. Non-structural and structural source control BMPs would be required to be incorporated into the proposed project. Applicable BMPs include, but are not limited to, activity restrictions, compliance with the County's water quality ordinance, litter debris control program, and compliance with all other applicable NPDES permit requirements. The project developer would be required to prepare a SWPPP for construction activity associated with the proposed project. The SWPPP shall be maintained at the construction site for the entire duration of construction. The objectives of the SWPPP are to identify pollutant sources that may affect the quality of storm water discharge and to implement BMPs to reduce pollutants in storm water discharges during construction and post construction in compliance with NPDES. Projects that comply with NPDES standards would result in a less than significant impact.

Because the project would result in disturbance of more than one-acre, on-site construction activities would be subject to the NPDES Construction General Permit, as described in Section VII, *Geology and Soils*. For all covered projects, the NPDES construction permit requires visual monitoring of stormwater and non-stormwater discharges, sampling, analysis, and monitoring of non-visible pollutants, and compliance with all applicable water quality standards established for receiving waters potentially affected by construction discharges. Additionally, construction site operators would be responsible for preparing and implementing a SWPPP that outlines project-specific BMPs to control erosion, sediment release, and otherwise reduce the potential for discharge of pollutants in stormwater. Typical BMPs include use of temporary de-silting basins, construction vehicle maintenance in staging areas to avoid leaks or spills of fuels, motor oil, coolant, and other hazardous materials, and installation of silt fences and erosion control blankets.

Implementation of BMPs in addition to the preparation of a SWPPP and compliance of an NPDES Construction General Permit would result in less than significant impacts to surface or ground water quality.

Less Than Significant Impact

b) The project site is underlain by the 92-square mile Upper Santa Ana Valley Groundwater Basin, Riverside-Arlington Sub-basin (Groundwater Basin Number 8-2.03) (DWR 2004). The 1969 Western-San Bernardino Judgment (Western Municipal Water District [WMWD] of Riverside County et al. v. East San Bernardino County Water District et al., Case No. 78426) settled extraction rights throughout the Upper Santa Ana River

watershed to meet flow obligations to lower reaches of the river (RPU 2016). The judgment resulted in adjudication of a portion of the sub-basin (Riverside Sub-basin) where the project site is located. Under the Western-San Bernardino Judgment, safe yield from the Riverside South basin is set at 29,633 acre-feet per year. Sources of inflow to the Riverside South basin include deep percolation from precipitation and irrigation on agricultural and native lands, underflow from adjacent basins, and recharge from the Santa Ana River. The project does not propose any additions of wells. In addition, the project would be served by West Valley Water District (WVWD) whose supplies from the Riverside Arlington sub-basin are limited by the sub-basin's adjudication.

Given the above considerations, the project's impacts to its respective groundwater basin would be less than significant.

Less Than Significant Impact

c) The project would not alter the course of a stream or river on-site because the project site contains no water bodies. However, the project would alter site drainage through the addition of impervious surfaces, which can increase stormwater runoff volume and flow. The site has two main drainage areas. A portion of the site drains to the southwest down an existing slope and the remainder of the project site drains south (Sladden Engineering 2019). The existing drainage would be slightly altered to direct all drainage to Cedar Avenue which has been recently updated with improved curbs and gutters. Compliance with the County's Low Impact Development (LID) ordinance and the San Bernardino County MS4 permit requires capture and treatment of the 85th percentile, 24-hour storm event. As part of the project's final design review, the project would be required to submit a WQMP demonstrating adequate stormwater retention using infiltration basins, bio-retention areas, capture and controlled release tanks, or another BMP. Such BMPs would slow the velocity of water and allow sediment and debris to settle out of the water column, thereby minimizing the potential for downstream flooding, erosion/siltation, or exceedances of stormwater drainage system capacity.

According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map, the project site is located in Zone X, a designation that is used for areas where there is minimal flood hazard (FEMA 2020).

Given that the project would implement BMPs to capture and retain stormwater on-site, as described above for compliance with the County's LID ordinance and MS4 permit requirements, potential impacts related to the alteration of the site's drainage pattern would be less than significant.

Less Than Significant Impact

d) As discussed above, the project site is designated Zone X, indicating an area of minimal flood hazard (FEMA 2020). Given the topography of the project site, it is unlikely that inundation of the site would occur in response to a storm event. Regardless, neither construction nor operation of the project involves storage or processing of pollutants that could be released due to inundation from a flood hazard.

The project site is approximately 45 miles from the Pacific Ocean and not subject to tsunami, and the nearest inland surface water body that may be subject to seiche is Puddingstone Reservoir, approximately 14 miles to the southwest. According to the County's General Plan, the project site is not located in a dam inundation zone (County of San Bernardino 2007).

Therefore, the project is not located in a flood hazard, tsunami, or seiche zone where project inundation could result in the release of pollutants. No impact would occur.

No Impact

e) All individual projects implemented under the County's General Plan would comply with applicable federal, state, and local water quality regulations. Currently, the County of San Bernardino follows state standards for water quality and does not have their own specific standards. During construction, the proposed project would be required to obtain coverage under the state's General Permit for Construction Activities that is administered by the RWQCB. Storm water management measures would be required to be identified and implemented that would effectively control erosion and sedimentation and other construction-based pollutants during construction.

As described above, the project would implement on-site storage of stormwater runoff, as required pursuant to the County's LID ordinance, providing an opportunity for debris, sediment, and sediment-bound pollutants to settle out of the water column prior to discharge downstream. The requirements of the County's LID ordinance and the applicable MS4 permit are intended to protect water quality and support attainment of water quality standards in downstream receiving water bodies. The project does not involve use of septic systems, pet parks, agricultural land or other land uses commonly associated with high concentrations of nutrients, indicator bacteria, or chemical toxicity.

Neither construction nor operation of the proposed project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur.

No Impact

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

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XI.	**LAND USE AND PLANNING** - Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☒
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

SUBSTANTIATION:

San Bernardino County General Plan, 2007; Submitted Project Materials

a) The proposed project, located on the southeast corner of Cedar Avenue and Santa Ana Avenue, would be an infill development within an existing industrial and commercial area and would construct a convenient store, fuel stations, diesel bays, and two

restaurants on an undeveloped site. Surrounding uses include single-family residences and commercial uses to the north, vacant land to the south, vacant and industrial uses to the east, and industrial, commercial, and the Upland Indonesian SDA Church to the west.

The proposed project would not physically impede or divide existing communities, as it would be contained wholly on a private lot that is physically constrained by the existing roadway infrastructure to the north and west. Residential uses adjacent to- and in the vicinity of the proposed project would not be divided in that circulation from the proposed project would not impact existing roadways or create a physical barrier that would prohibit movement. The project site would maintain access to and from the existing public road. The project would not involve construction of freeways, walls, or other features that would divide an established community, and no impact would occur.

No Impact

b) The proposed project site is currently designated RS, Single Residential (RS-1) per County of San Bernardino General Plan and zoned Bloomington/Single Residential one-acre minimum/Additional Agriculture (BL/RS-1-AA) per the County of San Bernardino Development Code. A General Plan Amendment and Conditional Use Permit have been submitted with the County that would change the land use from residential to general commercial and would allow for the uses proposed by the project. In addition, the proposed project meets the development standards described in Section 82.05 of the County Development Code. Therefore, the proposed project would be consistent with the anticipated land use and zoning for the project site.

The development of a convenient store, fuel stations, diesel bays, and two restaurants would not conflict with any land use plan, policy or regulation adopted for the purpose or avoiding or mitigating an environmental effect. Therefore, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.

Less Than Significant Impact

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

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XII.	**MINERAL RESOURCES** - Would the project:				
a)	Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

SUBSTANTIATION: *(Check ☐ if project is located within the Mineral Resource Zone Overlay):*

San Bernardino County General Plan, 2007; Submitted Project Materials

a-b) The project site and vicinity is located in Mineral Resource Zone 3 (MRZ-3), which indicates that known or inferred mineral occurrences of undetermined mineral resource significance may be present (County of San Bernardino 2019). According to the California Geological Survey, the project site is not located within a sector designated by the State Mining and Geology Board as containing regionally significant PCC-grade aggregate resources (USGS 2020).

The project site currently consists of undeveloped and disturbed land. No portion of the project site or nearby vicinity is being used for extraction of mineral resources. The surrounding properties are developed consistent to the Bloomington Community Plan's land use designations of industrial and residential. Therefore, no impacts associated with the loss of availability of a locally important mineral resource recovery site as delineated on the General Plan, Bloomington Community Plan or other land use plan would occur.

No Impact

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

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

SUBSTANTIATION: *(Check if the project is located in the Noise Hazard Overlay District ☐ or is subject to severe noise levels according to the General Plan Noise Element ☐):*

San Bernardino County General Plan, 2007; Submitted Project Materials; Appendix F – Noise Impact Analysis for the Bloomington Commercial Center Project, Rincon Consultants, Inc. 2020

The following analysis is based on the Bloomington Commercial Center Noise and Vibration Study prepared for the project by Rincon Consultants, Inc. in September, 2020. The report is included in full as Appendix F.

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to frequencies around and below 100 Hertz (Kinsler, et. al. 1999). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Crocker 2007).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud ([10.5x the sound energy] Crocker 2007).

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line, the path the sound travels, site conditions, and obstructions). Noise levels from a point source typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance (e.g., construction, industrial machinery, ventilation units). Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site, such as a parking lot or smooth body of water, receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) result from simply the geometric spreading of the source. An additional ground attenuation value of 1.5 dBA per doubling of distance applies to a soft site (e.g., soft dirt, grass, or scattered bushes and trees) (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight provides at least a 5-dBA reduction in source noise

levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidelines indicate that modern building construction generally provides an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows.

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. L_{eq} is defined as the single steady A-weighted level equivalent to the same amount of energy as that contained in the actual fluctuating levels over time. Typically, L_{eq} is summed over a one-hour period. Lmax is the highest root mean squared (RMS) sound pressure level within the sampling period, and Lmin is the lowest RMS sound pressure level within the measuring period (Crocker 2007).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level (L_{dn}), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. It is also measured using CNEL, which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013). Noise levels described by L_{dn} and CNEL usually differ by about 1 dBA. The relationship between the peak-hour L_{eq} value and the L_{dn}/CNEL depends on the distribution of traffic during the day, evening, and night. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 dBA, while areas near arterial streets are in the 50 to 60-plus CNEL range. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (FHWA 2018).

Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (Federal Transit Administration [FTA] 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations diminish much more rapidly than low frequencies, so low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or

channeling effects that affect the propagation of vibration over long distances (Caltrans 2020). When a building is impacted by vibration, a ground-to-foundation coupling loss usually reduces the overall vibration level. However, under rare circumstances, the ground-to-foundation coupling may actually amplify the vibration level due to structural resonances of the floors and walls.

Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

Existing Noise Environment

To determine the existing noise levels, noise measurements have been taken in the vicinity of the project site. The field survey noted that noise within the proposed project area is generally characterized by vehicle traffic on Cedar Avenue, which is located adjacent to the west side of the project site and Santa Ana Avenue, which is located adjacent to the north side of the project site. The noise monitoring locations were selected in order to obtain noise levels at the nearest residential uses to the project site. Descriptions and results of the noise monitoring sites are provided below in Table 16. The noise monitoring data printouts are included in the full noise report in Appendix F.

Table 16 Existing (Ambient) Noise Level Measurements

Site No.	Site Description	Average (dBA L_{eq}) Daytime	Nighttime	1-hr Average (dBA L_{eq}/Time) Maximum		Average (dBA CNEL)
1	Located north of project site, near southwest corner of mobile home park, approximately 60 feet north of Santa Ana Avenue centerline.	66.2	59.3	54.6 1:31 a.m.	70.6 7:26 p.m.	68.8
2	Located northeast of project site, on west property line of home at 18824 Santa Ana Avenue, approximately 55 feet north of Santa Ana Avenue centerline.	63.3	56.5	51.2 1:17 a.m.	64.6 1:32 p.m.	65.6
3	Located southwest of the project site, north of home at 11034 Cedar Avenue, approximately 60 feet west of Cedar Avenue centerline.	72.4	66.9	63.3 12:56 a.m.	73.5 4:00 p.m.	75.5

Daytime defined as 8:00 a.m. to 10:00 p.m. (Section 83.01.080 of the Municipal Code)
Nighttime define as 10:01 p.m. to 8:01 a.m. (Section 83.01.080 of the Municipal Code)
Source: Appendix F

Regulatory Framework

Federal Regulations

Although the proposed project is not under the jurisdiction of the FTA, the FTA is the only agency that provides guidance on construction noise and recommends developing construction noise criteria on a project-specific basis that utilizes local noise ordinances if possible. However, local noise ordinances usually relate to nuisance and hours of allowed activity and sometimes specify limits in terms of maximum levels but are generally not practical for assessing the noise impacts of a construction project. Project construction noise criteria should take into account the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land uses. The FTA standards are based on extensive studies by the FTA and other governmental agencies on the human effects and reaction to noise and a summary of the FTA findings for a detailed construction noise assessment are provided in Table 17.

Table 17 FTA Construction Noise Criteria

Land Use	Day (dBA L_{eq})	Night (dBA L_{eq})	30-day Average (dBA L_{dn})
Residential	80	70	75
Commercial	85	85	80
Industrial	90	90	85

Federal Transit Administration, 2018.

County of San Bernardino General Plan

The following applicable goals and policies to the proposed project are from the Noise Element of the General Plan.

Goal N1: The County will abate and avoid excessive noise exposures through noise mitigation measures incorporated into the design of new noise-generating and new noise-sensitive land uses, while protecting areas within the County where the present noise environment is within acceptable limits.

Policies:

N1.1: Designate areas within San Bernardino County as “Noise impacted” if exposed to existing or projected future exterior noise levels from mobile or stationary sources exceeding the standards listed in Chapter 83.01 of the Development Code.

N1.3: When industrial, commercial, or other land uses, including locally regulated noise sources, are proposed from areas containing noise-sensitive land uses, noise levels generated by the proposed use will not exceed the performance standards within outdoor activity areas. If outdoor activities areas have not yet been determined, noise levels shall not exceed the performance standards listed in Chapter 83.01 of the Development Code at the boundary of areas planned or zoned for residential or other noise-sensitive land uses.

N1.5: Limit truck traffic in residential and commercial areas to designated truck routes; limit construction, delivery, and through-truck traffic to designated routes; and distribute maps of approved truck routes to County traffic officers.

N1.6: Enforce the hourly noise-level performance standards for stationary and other locally regulated sources, such as industrial, recreational, and contraction activities as well as mechanical and electrical equipment.

N1.7: Prevent incompatible land uses, by reason or excessive noise levels, from occurring in the future.

County of San Bernardino Code of Ordinances

Section 81.010.080 establishes standards concerning acceptable noise levels for both noise-sensitive land uses and for noise-generating land uses.

(a) Noise Measurement. Noise shall be measured:

a. At the property line of the nearest site that is occupied by, and/or zoned or designated to allow the development of noise sensitive land uses;

b. With a sound level meter that meets the standard of the American National Standards Institute (ANSI Section S14-1979, Type 1 or Type 2);

c. Using the "A" weighted sound pressure level scale in decibels (ref. Pressure = 20 micronewton per meter squared). The unit of measure shall be designated as dB(A).

(b) Noise Impacted Areas. Areas within the County shall be designed as "noise-impacted" if exposed to existing or projected future exterior noise levels from mobile or stationary sources exceeding the standards listed in Subdivision (d) (Noise Standards for Stationary Noise Sources) and Subdivision (e) (Noise Standards for Adjacent Mobile Noise Sources), below. New development of residential or other noise-sensitive land uses shall not be allowed in noise-impacted areas unless effective mitigation measures are incorporated into the project design to reduce noise levels to these standards. Noise-sensitive land uses shall include residential uses, schools, hospitals, nursing homes, religious institutions, libraries, and similar uses.

(c) Noise Standards for Stationary Noise Sources

a. Noise Standards. Table 18 describes the noise standard for emanations from a stationary noise source, as it affects adjacent properties.

Table 18 Community Noise Exposure

Affected Land Uses (Receiving Noise)	7 a.m. - 10 p.m. L_{eq}	10 p.m. - 7 p.m. L_{eq}
Residential	55 dBA	45 dBA
Professional Services	55 dBA	55 dBA
Other Commercial	60 dBA	60 dBA
Industrial	70 dBA	70 dBA

Source: County of San Bernardino, 2020

Note:
a.No person shall operate or cause to be operated a source of sound at a location or allow the creation of noise on property owned, leased, occupied, or otherwise controlled by the person, which causes the noise level, when measured on another property, either incorporated or unincorporated, to exceed any one of the following:

i. The noise standard for the receiving land use for a cumulative period of more than 30 minutes in any hour.

ii. The noise standard plus five dBA for a cumulative period of more than 15 minutes in any hour.

iii. The noise standard plus ten dBA for a cumulative period of more than five minutes in any hour.
iv. The noise standard plus 15 dBA for a cumulative period of more than one minute in any hour.
v. The noise standard plus 20 dBA for any period of time.

(d) Noise standards for adjacent Mobile Noise Sources. Noise from mobile sources shall be mitigated for any new development to a level that shall not exceed the standards described in Table 19.

Table 19 County of San Bernardino Noise Standards for Mobile Noise Sources

Land Use		L_{dn} (or CNEL) dBA	
Categories	Uses	Interior	Exterior
Residential	Single and multi-family, duplex, mobile homes	45	60
Commercial	Hotel, motel, transient housing	45	60
	Commercial, retail, bank, restaurant	50	N/A
	Office building, research and development, professional offices	45	65
	Amphitheater, concert hall, auditorium, movie theater	45	65
Institutional/Public	Hospital, nursing home, school classroom, religious institution. Library	45	65
Open Space	Park	N/A	65

The indoor environment shall exclude bathrooms, kitchens, toilets, closets and corridors.
The outdoor environment shall be limited to: hospital office building patios, hotel and motel recreation areas, mobile home parks, multi-family private patios or balconies, park picnic areas, private yard of single-family dwellings, school playgrounds. An exterior noise level of up to 65 dBA (or CNEL) shall be allowed provided exterior noise levels have been substantially mitigated through a reasonable application of the best available noise reduction technology, and interior noise exposure does not exceed 45 dBA (or CNEL) with windows and doors closed. Requiring that windows and doors remain closed to achieve an acceptable interior noise level shall necessitate the use of air condition or mechanical ventilation.
Source: County of San Bernardino, 2020.

(a) Increases in Allowable Noise Levels. If the measured ambient levels exceed any of the first four noise limit categories in Subdivision (d)(2), the allowable noise exposure standard shall be increased to reflect the ambient noise level. If the ambient noise level exceeds the fifth noise limit category in Subdivision (d)(2), the maximum allowable noise levels under this category shall be increased to reflect the maximum ambient noise level.

(b) Reductions in Allowable Noise Levels. If the alleged offense consists entirely of impact noise or simple tone noise, each of the noise levels in Table 18 shall be reduced by five dBA.

(c) Exempt Noise. The following sources of noise shall be exempt from the regulations of this section:

a. Motor vehicles not under the control of the commercial or industrial use.

b. Emergency equipment, vehicles, and devices.

c. Temporary construction, maintenance, repairs, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal Holidays.

(d) Noise Standards for other Structures. All other structures shall sound attenuate against the combined input of all present and projected exterior noise to not exceed the criteria.

Table 20 County of San Bernardino Noise Standards for Mobile Noise Sources

Typical Uses	12-Hour Equivalent Sound Level (Interior) in dBA L_{dn}
Education, institutions, libraries, meeting facilities, etc.	45
General office, reception, etc.	50
Retail stores, restaurants, etc.	55
Other areas for manufacturing, assembly, testing, warehousing, etc.	65

Source: County of San Bernardino, 2020

In addition, the average of the maximum levels on the loudest intrusive sounds occurring during a 24-hour period shall not exceed an interior noise level 65 dBA.

Section 83.010.090, Vibration, of the County Code states that no ground vibration shall be allowed that can be felt without the aid of instruments at or beyond the lot line, nor shall any vibration be allowed which produces a particle velocity greater than or equal to two-tenths in/sec. measured at or beyond the lot line: Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays, is exempt from this limit.

a) **Construction-Related Noise**

The construction activities for the proposed project are anticipated to include site preparation and grading of the project site, building construction and application of architectural coatings to the proposed gas station, convenience market and two restaurants with drive-throughs, and paving of the proposed parking lot and driveways. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. Project construction would occur nearest to the single-family and mobile home residences to the north of the project site. Over the course of a typical construction day, construction equipment would be located as close as 100 feet to the nearest residential property line.

Section 83.01.080(g)(3) of the County's Municipal Code allows construction noise to exceed the County noise standards provided that construction activities occur between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays. However, the County construction noise standards do not provide any quantitative limits to the noise levels that may be created from construction activities and even with adherence to the County standards, construction noise levels may result in a significant substantial temporary noise increase to the nearby residents.

In order to determine if the proposed construction activities would create a significant substantial temporary noise increase, the FTA construction noise criteria thresholds have been utilized, which shows that a significant construction noise impact would occur if construction noise exceeds 80 dBA during the daytime at any of the nearby homes.

Construction noise impacts to the nearby sensitive receivers have been calculated through use of the Roadway Construction Noise Model (RCNM). At a distance of 100 feet, a dozer and an excavator would generate a noise level of 74.2 dBA L_{eq}. This would be well below the FTA daytime threshold of 80 dBA L_{eq} for an 8-hour period. Therefore, through adherence to the limitation of allowable construction times provided in Section 83.01.080(g)(3) of the Municipal Code, construction-related noise levels would not exceed noise standards and impacts would be less than significant.

Operational-Related Noise

Roadway Vehicular Noise

Vehicular noise is a combination of the noise produced by the engine, exhaust and tires. The level of traffic noise depends on three primary factors: the volume of traffic, the speed of traffic, and the number of trucks in the flow of traffic. The proposed project does not propose any uses that would require a substantial number of truck trips and the proposed project would not alter the speed limit on any existing roadway so the proposed project's potential offsite noise impacts have been focused on the noise impacts associated with the change of volume of traffic that would occur with development of the proposed project.

The General Plan Noise Element Goal N1 requires the avoidance of excessive noise exposure to noise sensitive land uses. However, the General Plan does not quantify what is a significant roadway noise increase. For traffic-related noise, impacts would be considered significant if project-generated traffic would result in exposure of sensitive receptors to an unacceptable increase in noise levels. For purposes of this analysis, a significant impact would occur if project related traffic increases the ambient noise environment of noise-sensitive locations by 3 dBA or more if the locations are subject to noise levels in excess of normally acceptable noise levels in Table IV-K-1 of the County General Plan Final Program Environmental Impact Report (County of San Bernardino 2007), or by 5 dBA or more if the land uses are exposed to conditionally acceptable or unacceptable noise levels.

The potential offsite traffic noise impacts created by the ongoing operations of the proposed project have been analyzed through utilization of the FHWA model. The project's potential offsite traffic noise impacts have been analyzed for the existing year, opening year 2021, and horizon year 2040 conditions.

Existing Conditions

The proposed project's potential offsite roadway noise impacts have been calculated through a comparison of the existing scenario to the existing with project scenario. Results of this comparison are shown in Table 21.

Table 21 Existing Conditions Project Traffic Noise Contributions

		dBA CNEL at Nearest Receptor			
Roadway	**Segment**	**Existing**	**Existing Plus Project**	**Project Contribution**	**Significant Impact?**
Linden Avenue	North of Santa Ana Avenue	53.7	53.9	0.2	No
Linden Avenue	South of Santa Ana Avenue	56.3	56.4	0.1	No

Cedar Avenue	North of Slover Avenue	66.0	66.7	0.7	No
Cedar Avenue	North of Santa Ana Avenue	64.7	65.6	0.9	No
Cedar Avenue	South of Project Driveway 1	65.0	65.6	0.6	No
Cedar Avenue	South of Jurupa Avenue	63.7	64.0	0.3	No
Larch Avenue	North of Santa Ana Avenue	57.7	57.9	0.2	No
Larch Avenue	South of Santa Ana Avenue	54.6	54.9	0.3	No
Slover Avenue	West of Cedar Avenue	63.9	64.3	0.4	No
Slover Avenue	East of Cedar Avenue	62.7	63.1	0.4	No
Santa Ana Avenue	West of Linden Avenue	56.9	58.0	1.1	No
Santa Ana Avenue	West of Cedar Avenue	57.6	58.7	1.1	No
Santa Ana Avenue	East of Cedar Avenue	56.2	60.2	4.0	No
Santa Ana Avenue	East of Larch Avenue	53.1	55.1	2.0	No
Jurupa Avenue	West of Cedar Avenue	59.4	60.1	0.7	No
Jurupa Avenue	East of Cedar Avenue	61.6	62.1	0.5	No

Distance to nearest residential use does not take into account existing noise barriers.

A significant impact would occur if project related traffic increases the ambient noise environment of noise-sensitive locations by 3 dBA or more if the locations are subject to noise levels in excess of normally acceptable noise levels in Table IV-K-1 of the County General Plan Final Program Environmental Impact Report (County of San Bernardino 2007), or by 5 dBA or more if the land uses are exposed to conditionally acceptable or unacceptable noise levels.

Source: Rincon Consultants, Inc. 2020

Table 21 shows that for the existing conditions, the proposed project's permanent noise increases to the nearby homes from the generation of additional vehicular traffic would not exceed noise thresholds. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels for existing conditions. Impacts would be less than significant.

Opening Year 2021 Conditions

The proposed project's potential offsite roadway noise impacts have been calculated through a comparison of the opening year 2021 scenario to the opening year 2021 with project scenario. The results of this comparison are shown in Table 22.

Table 22 Opening Year 2021 Conditions Project Traffic Noise Contributions

		dBA CNEL at Nearest Receptor			
Roadway	**Segment**	**Existing**	**Existing Plus Project**	**Project Contribution**	**Significant Impact?**
Linden Avenue	North of Santa Ana Avenue	56.0	56.1	0.1	No
Linden Avenue	South of Santa Ana Avenue	58.4	58.5	0.1	No
Cedar Avenue	North of Slover Avenue	69.5	69.9	0.4	No
Cedar Avenue	North of Santa Ana Avenue	68.2	68.6	0.4	No
Cedar Avenue	South of Project Driveway 1	68.2	68.5	0.3	No
Cedar Avenue	South of Jurupa Avenue	65.1	65.3	0.2	No
Larch Avenue	North of Santa Ana Avenue	57.8	58.0	0.2	No
Larch Avenue	South of Santa Ana Avenue	54.8	55.0	0.2	No
Slover Avenue	West of Cedar Avenue	65.4	65.7	0.3	No
Slover Avenue	East of Cedar Avenue	64.3	64.6	0.3	No
Santa Ana Avenue	West of Linden Avenue	57.2	58.3	1.1	No
Santa Ana Avenue	West of Cedar Avenue	57.8	58.9	1.1	No
Santa Ana Avenue	East of Cedar Avenue	57.6	60.8	3.2	No
Santa Ana Avenue	East of Larch Avenue	53.6	55.4	1.8	No

Jurupa Avenue	West of Cedar Avenue	59.0	59.7	0.7	No
Jurupa Avenue	East of Cedar Avenue	61.8	62.2	0.4	No

Distance to nearest residential use does not take into account existing noise barriers.
A significant impact would occur if project related traffic increases the ambient noise environment of noise-sensitive locations by 3 dBA or more if the locations are subject to noise levels in excess of normally acceptable noise levels in Table IV-K-1 of the County General Plan Final Program Environmental Impact Report (County 2007), or by 5 dBA or more if the land uses are exposed to conditionally acceptable or unacceptable noise levels.
Source: Rincon Consultants, Inc. 2020

Table 22 shows that for the opening year 2021 conditions, the proposed project's permanent noise increases to the nearby homes from the generation of additional vehicular traffic would not exceed noise thresholds. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels for the opening year 2021 conditions. Impacts would be less than significant.

Horizon Year 2040 Conditions

The proposed project's potential offsite roadway noise impacts have been calculated through a comparison of the horizon year 2040 scenario to the horizon year 2040 with project scenario. The results of this comparison are shown in Table 23.

Table 23 Horizon Year 2040 Conditions Project Traffic Noise Contributions

		dBA CNEL at Nearest Receptor			
Roadway	**Segment**	**Existing**	**Existing Plus Project**	**Project Contribution**	**Significant Impact?**
Linden Avenue	North of Santa Ana Avenue	57.5	57.6	0.1	No
Linden Avenue	South of Santa Ana Avenue	59.9	59.9	0.0	No
Cedar Avenue	North of Slover Avenue	71.4	71.7	0.3	No
Cedar Avenue	North of Santa Ana Avenue	69.8	70.1	0.3	No
Cedar Avenue	South of Project Driveway 1	69.8	70.0	0.2	No
Cedar Avenue	South of Jurupa Avenue	69.0	69.1	0.1	No
Larch Avenue	North of Santa Ana Avenue	59.3	59.4	0.1	No
Larch Avenue	South of Santa Ana Avenue	56.6	56.8	0.2	No

Slover Avenue	West of Cedar Avenue	70.4	70.5	0.1	No
Slover Avenue	East of Cedar Avenue	68.2	68.3	0.1	No
Santa Ana Avenue	West of Linden Avenue	60.8	61.3	0.5	No
Santa Ana Avenue	West of Cedar Avenue	61.0	61.6	0.6	No
Santa Ana Avenue	East of Cedar Avenue	62.3	63.7	2.4	No
Santa Ana Avenue	East of Larch Avenue	61.9	62.2	0.3	No
Jurupa Avenue	West of Cedar Avenue	65.2	65.4	0.2	No
Jurupa Avenue	East of Cedar Avenue	66.7	66.9	0.2	No

Distance to nearest residential use does not take into account existing noise barriers.
A significant impact would occur if project related traffic increases the ambient noise environment of noise-sensitive locations by 3 dBA or more if the locations are subject to noise levels in excess of normally acceptable noise levels in Table IV-K-1 of the County General Plan Final Program Environmental Impact Report (County of San Bernardino 2007), or by 5 dBA or more if the land uses are exposed to conditionally acceptable or unacceptable noise levels.
Source: Rincon Consultants, Inc. 2020

Table 23 shows that for the horizon year 2040 conditions, the proposed project's permanent noise increases to the nearby homes from the generation of additional vehicular traffic would not exceed noise thresholds. Therefore, the proposed project would not result in a substantial permanent increase in ambient noise levels for the horizon year 2040 conditions. Impacts would be less than significant.

On-site Noise Sources

Project operation may increase noise levels from rooftop mechanical equipment, parking lots, semi-trucks, gas station activities, and drive-through speakers. Section 83.01.080(c) of the County's Code limits the noise created from stationary sources on the project site at the nearby homes to 55 dBA between 7:00 a.m. to 10:00 p.m. and 45 dBA between 10:00 p.m. and 7:00 a.m. Section 83.01.080(d) of the County's Municipal Code limits the noise created from mobile noise sources, such as trucks to 60 dBA at the exterior of the nearest homes.

The nearest sensitive receptors to the project site are residents at the mobile home park that are located as near as 85 feet north of the project site. There are also single-family homes located as near as 125 feet to the northeast, and 220 feet to the southwest of the project site.

In order to determine the noise impacts from the operation of rooftop mechanical equipment, parking lots, semi-trucks, and drive-through speakers, reference noise measurements were taken of each noise source and are shown on Table 24. The noise levels from each source were calculated through use of standard geometric spreading of noise from a point source with a drop-off rate of 6 dB for each doubling of the distance between the source and receiver.

Table 24 Onsite Operational Noise Levels at the Nearby Sensitive Receptors

Noise Source	Operational Noise Levels (dBA L_{eq}) at: Mobile Homes to North	Single-Family Homes to Northeast	Single-Family Homes to Southwest	County Noise Standard (Day/Night)	Exceed Standard?
Rooftop Equipment	40	33	35	55/45	No/No
Parking Lot	35	33	30	60/60	No/No
Semi-Truck	59	57	49	60/60	No/No
Drive-Through Speaker	28	25	30	55/45	No/No
Gas Station	41	34	33	55/45	No/No

The noise levels were calculated through use of standard geometric spreading of noise from a point source with drop-off rate of 6 dB for each doubling of the distance between the source and receiver. Does not account for noise reduction features such as buildings and walls.
Reference noise measurements are from Appendix F, and include:

- Rooftop equipment is based on a reference noise measurement of 66.6 dBA at 10 feet.
- Parking lot is based on a reference noise measurement of 63.1 dBA at 5 feet.
- Semi-Truck is based on a reference noise measurement of 61.2 dBA at 10 feet.
- Drive-through speaker is based on a reference noise measurement of 61.2 dBA at 10 feet.
- Gas station is based on a reference noise measurement of 61.7 dBA at 25 feet.

Table 24 shows that the proposed project's on-site operational noise from the anticipated noise sources would not exceed the applicable noise standards for each stationary and mobile noise source. Therefore, operational onsite noise impacts would be less than significant.

Less Than Significant Impact

b) **Construction-Related Vibration Impacts**

The construction activities for the proposed project are anticipated to include site preparation and grading of the project site, building construction and application of architectural coatings to the proposed gas station, convenience market and two restaurants with drive-throughs, and paving of the proposed parking lot and driveways. Vibration impacts from construction activities associated with the proposed project would typically be created from the operation of heavy off-road equipment. The nearest offsite sensitive receivers are residents at the mobile home park located as near as 85 feet north of the project site.

Section 83.01.090 of the County's Municipal Code restricts the creation of vibration which produces a particle velocity greater than 0.2 inch-per-second PPV. The primary source of vibration during construction would be from the operation of a bulldozer. A large bulldozer would create a vibration level of 0.089 in/sec. PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest residences at 85 feet would be 0.023 in/sec. PPV. The vibration level at the nearest homes would be well below the County's 0.2 in/sec. PPV threshold. Impacts would be less than significant.

Operations-Related Vibration Impacts

The proposed project would consist of the development of a commercial center. The proposed project would result in the operation of trucks on the project site, which are a known source of vibration. Caltrans has done extensive research on vibration level created along freeways and State Routes; maximum vibration measurements of roads conducted by Caltrans are approximately 0.08 inches per second PPV at 15 feet from the center of the nearest lane (Caltrans 2020). Truck activities would occur onsite as near as 85 feet from the nearest residences. Based on typical propagation rates, the vibration level at the nearest homes would be 0.012 in/sec. PPV. Therefore, vibration created from operation of the proposed project would be well below the County's 0.2 in/sec. PPV threshold. Impacts would be less than significant.

Less Than Significant Impact

c) The proposed project would not expose people residing or working in the project area to excessive noise levels from aircraft. The nearest airport is Flabob Airport that is located approximately 4.5 miles south of the project site. The project site is located outside of the 60 dBA CNEL noise contours of Flabob Airport (Riverside County Airport Land Use Commission 2004). No impacts would occur from aircraft noise.

No Impact

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

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

SUBSTANTIATION:

San Bernardino County General Plan, 2007; Submitted Project Materials.

a) The proposed project would not induce substantial unplanned population growth, either directly or indirectly. The project does not propose new housing. The proposed project would generate new employment opportunities in the Bloomington area consistent with the development pattern in San Bernardino County. The proposed project is a convenience store and gas station and two drive through fast food restaurants. All of these uses are of typical use associated with County development. Development of the

project would not result in unplanned population growth because they would not create an extension of any public road or create road connectivity not previously available. In addition, the project would generate employment that would most likely be filled by existing residents in Bloomington. Therefore, impacts associated with substantial unplanned population growth would be less than significant.

Less than Significant Impact

b) The project site is currently undeveloped, with no existing residences. As noted under Section XIV.a, the project would construct a convenience store and gas station, and two drive through fast food restaurants. Therefore, the project would not necessitate the construction of replacement housing elsewhere. There would be no impact.

No Impact

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

Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?	☐	☐	☒	☐
Police Protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other Public Facilities?	☐	☐	☒	☐

SUBSTANTIATION:

San Bernardino County General Plan, 2007; Submitted Project Materials

a) Fire protection services are provided by the Central Valley Fire Protection District within the Bloomington Community planning area. The SBCFD provides administration and support for these fire districts and other services such as hazardous materials regulation, dispatch communication and disaster preparedness. The County Fire Department provides services through the Valley Division of the department. There are two fire stations located within the Bloomington plan area: Valley Division Station76 located at 10174 Magnolia, and Valley Division Station 77 located at 17459 Slover. Another agency that provides fire protection services and/or fire related information for the Bloomington Community Plan area is the California Department of Forestry and Fire Protection (CDF).

The project site is located nearest to SBCFD's station no. 77, approximately one mile north from the site. The proposed project would comply with the California Fire Code and CBC, including project features that aid in fire safety and support fire suppression activities, such as fire sprinklers, paved access, and required aisle widths. The proposed project would not result in the need to construct a new fire station or physically alter an existing station. Therefore, potential impacts associated with fire protection would be less than significant.

The San Bernardino County Sheriff's Department provides police protection services to San Bernardino County, including the Bloomington community area. The closest sheriff station to the project site is the Fontana Patrol Station located at 17005 Upland Avenue in the City of Fontana, approximately 3.8 miles north. The proposed project involves the construction of a commercial development and is not anticipated to generate significant police calls which would warrant construction of a new police station or expansion of an existing station. The Fontana Police Department is overseen by one police chief and three captains with their own respective divisions (City of Fontana 2020). Additionally, the police department has three separate operations divisions including volunteer groups to allow for quicker response times. Therefore, potential impacts associated with police protection would be less than significant.

The project site is in the Colton Joint Unified School District. The nearest schools are Crestmore Elementary School, located approximately 0.4 mile south, and Walter Zimmerman Elementary School, located approximately 0.35 mile west. However, the proposed project involves the construction of a commercial development and involves no residential dwelling units. The property owner/developer would be required to pay school impact fees as levied by the district, which would provide funding for school facilities. Since the proposed project does not propose new housing, any potential impacts would be considered incremental and can be offset through the payment of the appropriate development impact fees. The project would not result in substantial adverse physical impacts related to schools. Therefore, potential impacts associated with schools would be less than significant.

The Bloomington Park District manages parks within the community plan area. Local recreation facilities include Ayala Park, Kessler Park, and two smaller parks located on the southeast and southwest sides of Cedar Avenue and Valley Boulevard.

The nearest park to the project site is located at Sycamore Hills Park, located approximately 0.65 mile to the southwest. The proposed project does not involve the construction, expansion or direct need of/for park or other public facilities because the proposed project would not construct new residential dwelling units. Probable use of a government facility associated with the proposed project, such as a park, would be limited. Therefore, potential impacts associated with parks and other public facilities would be less than significant.

Less than Significant Impact

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

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XVI.	**RECREATION**				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☒	☐
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

SUBSTANTIATION:

San Bernardino County General Plan, 2007; Submitted Project Materials

a) The nearest recreational facilities are Kessler Park located approximately 0.5 mile to the southwest and Green Acres Park located approximately 1 mile to the south of the project site. The proposed project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated because the proposed project would not generate any new residential dwelling units. In addition, impacts from employees would be less than significant because the project proposes commercial uses, where people associated with the use would be expected to work at the project site. Probable use associated with the project would be limited in time to employee break periods, such as meals. Therefore, potential impacts associated with an increase use of neighborhood and regional parks would be less than significant.

Less than Significant Impact

b) The proposed project does not include recreational facilities or require the construction or expansion of recreation facilities. Therefore, no impacts associated with recreational facilities which may have an adverse physical effect on the environment would occur.

No Impact

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

	Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XVII.	**TRANSPORTATION** – Would the project:				
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐
b)	Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?	☐	☐	☐	☒
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d)	Result in inadequate emergency access?	☐	☐	☒	☐

SUBSTANTIATION:

San Bernardino County General Plan, 2007; Submitted Project Materials; Appendix G – Final Traffic Impact Study for the Bloomington Commercial Center, Minagar & Associates, Inc. June 2020

The following analysis is based on the Bloomington Commercial Center Final Traffic Impact Analysis (TIA) prepared for the project by Minagar & Associates Inc. Traffic analyses without and with the project were conducted for the "Operating Year" (2021) and "Horizon Year" (2040) conditions for fourteen intersections located in the unincorporated region of Bloomington and San Bernardino County. An additional three study locations are added for the three additional driveways introduced by the proposed project on Cedar Avenue and Santa Ana Avenue. The report is included in full as Appendix G.

a) **Trip Generation**

The site fits the criteria for a truck stop based on the Institute of Transportation Engineers (ITE). The ITE Trip Generation, 10th Edition defines a truck stop as a facility on or near major roadways providing refueling, food, and other services to motorists and truck drivers. Truck stops typically contain convenience stores, showers, restaurants, and on-site truck parking spaces. The project site would take access at one right-in-right-out driveway along Cedar Avenue and one right-in-left-out driveway along Santa Ana Avenue.

To determine the trips forecast to be generated by the proposed project, ITE Trip Generation Manual, 10th Edition rates were utilized in accordance with the San Bernardino County Guidelines. The trip rate was determined utilizing the independent variable of gross floor area for Truck Stops – Usage Code 950. When accounting for pass-by trips, the project would generate approximately 372 AM peak hour trips, 320 PM peak hour trips, and 6,410 daily trips (Minagar & Associates Inc 2020).

Trip Distribution

The Highway Capacity Manual (HCM) 6th Edition operation methodology for Signified and Unsignalized Intersections was used to determine the operating Levels of Service (LOS) of the study Intersections. The HCM methodology describes the operation of an interaction using a range of level of service from LOS A to LOS F. San Bernardino County considers LOS D or better to be acceptable intersection operation conditions during peak traffic periods in valley regions. Any intersection that is operating at LOS E or F is considered deficient for purposes of this analysis.

Opening Year (2021)

The results of the Opening Year (2021) intersection LOS analysis are shown in Table 25.

Table 25 Opening Year Intersection Level of Service

		Without Project AM Peak Hour		Without Project PM Peak Hour		With Project AM Peak Hour		With Project PM Peak Hour	
Intersection	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
Cedar Avenue/Valley Boulevard	Signalized	17.0	B	17.2	B	17.1	B	17.4	B
Cedar Avenue/I-10 WB	Signalized	96.7	F	28.6	C	97.5	F	29.2	C
Cedar Avenue/I-10 EB	Signalized	51.3	D	49.6	D	56.7	E	50.9	D
Cedar Avenue/Orange Street	Signalized	98.0	F	46.0	D	105.4	F	47.4	D
Linden Avenue/Slover Avenue	AWSC	101.5	F	46.2	E	107.3	F	50.9	F
Cedar Avenue/Slover Avenue	Signalized	239.5	F	129.7	F	256.4	F	135.3	F
Larch Avenue/Slover Avenue	Signalized	6.1	A	8.0	A	6.1	A	19.1	B
Linden Avenue/Santa Ana Avenue	AWSC	14.3	B	14.8	B	15.9	C	16.3	C
Cedar Avenue/Santa Ana Avenue	Signalized	77.5	D	94.4	F	102.9	F	118.0	F
Larch Avenue/Santa Ana Avenue	AWSC	12.0	B	11.3	B	13.2	B	12.0	B
Driveway 1/Cedar Avenue	--	--	--	--	--	17.3	B	14.3	B
Driveway 2/ Santa Ana Avenue	--	--	--	--	--	11.9	B	14.0	B
Jurupa Avenue/Linden Avenue	AWSC	13.2	B	11.9	B	14.1	B	12.4	B
Cedar Avenue/Jurupa Avenue	Signalized	39.8	D	41.2	D	40.0	D	42.1	D
Jurupa Avenue/Larch Avenue	AWSC	15.9	C	16.3	C	19.3	C	18.7	C
Cedar Avenue/El Rivino Road	Signalized	17.9	B	18.3	B	18.1	B	18.0	B

Source: Appendix G

As shown in Table 25, the following intersections operate at a deficient LOS in the Opening Year (2021) scenario with project trips:

- Cedar Avenue/I-10 Westbound Ramps
- Cedar Avenue/I-10 Eastbound Ramps
- Cedar Avenue/Orange Street
- Linden Avenue/Slover Avenue
- Cedar Avenue/Slover Avenue
- Cedar Avenue/Santa Ana Avenue

Horizon Year (2040)

The result of the Horizon Year (2040) intersection LOS analysis are shown in Table 26.

Table 26 Horizon Year Intersection Level of Service

		Without Project AM Peak Hour		Without Project PM Peak Hour		With Project AM Peak Hour		With Project PM Peak Hour	
Intersection	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
Cedar Avenue/ Valley Boulevard	Signalized	33.1	C	27.0	C	33.1	C	27.1	C
Cedar Avenue/I-10 WB	Signalized	148.8	F	42.3	D	147.7	F	41.2	D
Cedar Avenue/I-10 EB	Signalized	79.5	E	38.1	D	86.2	F	39.3	D
Cedar Avenue/ Orange Street	Signalized	69.6	E	83.3	F	83.6	F	83.7	F
Linden Avenue/ Slover Avenue	AWSC	118.0	F	164.3	F	124.7	F	172.9	F
Cedar Avenue/ Slover Avenue	Signalized	310.2	F	235.2	F	323.6	F	244.4	F
Larch Avenue/ Slover Avenue	Signalized	10.5	B	22.9	C	6.3	A	25.0	C
Linden Avenue/ Santa Ana Avenue	AWSC	20.2	C	68.2	F	23.6	C	80.1	F
Cedar Avenue/ Santa Ana Avenue	Signalized	101.0	F	264.1	F	135.9	F	358.7	F
Larch Avenue/ Santa Ana Avenue	AWSC	12.5	B	21.4	C	12.5	B	25.8	D
Driveway 1/Cedar Avenue	--	--	--	--	--	17.5	C	19.6	C
Driveway 2/ Santa Ana Avenue	--	--	--	--	--	12.9	B	18.2	C
Jurupa Avenue/ Linden Avenue	AWSC	14.0	B	23.5	C	14.5	C	26.0	D
Cedar Avenue/ Jurupa Avenue	Signalized	38.3	D	65.3	E	39.3	D	73.8	E
Jurupa Avenue/ Larch Avenue	AWSC	14.0	B	53.5	D	15.8	C	81.8	F
Cedar Avenue/ El Rivino Road	Signalized	26.8	C	57.0	D	27.5	C	58.8	E

Source: Appendix G

As shown in Table 26, the following intersections operate at a deficient LOS in the Horizon Year (2040) scenario with project trips:

The traffic study identified ten intersections performing below the County's acceptable Level for the Horizon Year (2040) with the project scenario. These intersections include:

- Cedar Avenue/I-10 Westbound Ramps
- Cedar Avenue/I-10 Eastbound Ramps
- Cedar Avenue/Orange Street
- Linden Avenue/Slover Avenue
- Cedar Avenue/Slover Avenue
- Linden Avenue/Santa Ana Avenue
- Cedar Avenue/Santa Ana Avenue
- Cedar Avenue/Jurupa Avenue
- Larch Avenue/Jurupa Avenue
- Cedar Avenue/El Rivino Road

Of these ten intersections, seven intersections met the County's thresholds of significance to require mitigation and improvement recommendations. This would be a potentially significant impact. These intersections include:

- Cedar Avenue/I-10 Eastbound Ramps
- Linden Avenue/Slover Avenue
- Cedar Avenue/Slover Avenue
- Cedar Avenue/Santa Ana Avenue
- Cedar Avenue/Jurupa Avenue
- Larch Avenue/Jurupa Avenue
- Cedar Avenue/El Rivino Road

Freeway Segments, Merging/Diverging, and Weaving

As mentioned in the TIA prepared for this project, an acceptable level of service is LOE E or above for the I-10 interchanges and freeway segments. Segments below this LOS may require deficiency planning. Existing freeway segment bidirectional volumes from the 2018 AADT Volume Data published by Caltrans was used for the analysis. In order to forecast the volumes to 2020, a 3.67 percent per annum growth rate was applied to the volume data based off historical Caltrans data over the last five years. For ramp influence areas, vehicles entering and exiting a ramp are based on peak hour turning movement counts from the 2016 and 2017 AADT Ramp Data published by Caltrans. The percentage of trucks at study area freeway segments is reflective of the historic truck volume percentages from Caltrans sources. For the project study area, trucks consist of 10.21 percent of the total peak hour volume. The resulting trucks were converted to passenger car equivalents (PCE) using a 2.0 PCE.

I-10 Freeway Segment LOS for the AM and PM peak hours were analyzed in the TIA for existing, opening and horizon years, both without and with the project. The non-peak hour directional flow of traffic is eastbound for the PM peak hour and westbound for the AM peak hour. For these non-peak hour directions, the freeway segment is found to operate at a deficient LOS for the existing, opening, and opening plus project years. All analyzed freeway segments operate at a deficient level services for horizon years.

Merging and diverging on these segments for these peak directions were found to operate at a deficient LOS for the existing and opening year. For the opening year plus project, only the Eastbound On/Off ramps for the AM peak hour operates at a sufficient LOS. All analyzed freeway segments operate at a deficient level services for horizon years.

The analyzed weaving segment between the I-10 interchange with Cedar Avenue and Riverside Avenue operates at a deficient level of service for the existing, opening, opening plus project, and horizon year with and without the project. For the segments failing to operate at a sufficient

LOS, mitigation measures have been included to reduce impacts to less than significant (Minagar & Associates, Inc 2020).

Mitigation Measures

TRA-1 Improvements at Impacted Intersections and Freeway Segments/Ramps

The following intersections segments shall be improved by the following:

- **Cedar Avenue/I-10 Eastbound Ramps:** Re-time the traffic signal timing splits
- **Linden Avenue/Slover Avenue:** Convert all-way stop controlled to a signalized intersection
- **Cedar Avenue/Slover Avenue:** Re-time the traffic signal timing splits
- **Cedar Avenue/Santa Ana Avenue:** Restripe eastbound and westbound geometrics to include one left-torn pocket and one shared thru-right lane
- **Cedar Avenue/Jurupa Avenue:** Re-time the traffic signal timing splits
- **Larch Avenue/Jurupa Avenue:** Restripe southbound geometries to include one left-turn pocket and one right-turn pocket
- **Cedar Avenue/El Rivino Road:** No direct mitigation is needed, as it is improved by mitigation of surround intersections

With the aforementioned improvements, the intersections would operate at an improved LOS as shown in Table 27.

Table 27 Mitigated Level of Service (Horizon Year 2040)

Intersection	Before Mitigation (without project) AM Peak Hour Delay (sec)	LOS	After Mitigation (with project) AM Peak Hour Delay (sec)	LOS	Before Mitigation (without Project) PM Peak Hour Delay (sec)	LOS	After Mitigation (with project) PM Peak Hour Delay (sec)	LOS
Cedar Avenue/I-10 Eastbound	79.5	E	46.5	D	38.1	D	51.5	D
Linden Avenue/ Slover Avenue	118.7	F	13.4	B	164.3	F	10.0	B
Cedar Avenue/ Slover Avenue	310.0	F	85.1	F	235.2	F	77.8	E
Cedar Avenue/ Santa Ana Avenue	101.0	F	33.4	C	264.1	F	85.7	F
Cedar Avenue/Jurupa Avenue	38.3		28.2	C	65.3	E	55.2	E
Larch Avenue/ Jurupa Avenue	14.0	B	14.1	B	53.5	F	44.6	E
Cedar Avenue/El Rivino	26.8	C	27.5	C	57.0	E	58.8	E

Source: Appendix G

For impacted freeway segments, the project shall widen the segments to the east and west of the Cedar Avenue interchange by one additional lane in each direction. Due to the neighboring

railroad tracks to the south and water channel to the north, land use right-of-way would need to be assessed for the viability of the widening. To improve the merging and diverging segments of the freeway ramps, the number of lanes at the terminus of the on ramps and the beginning of the off ramps shall be increased. Right-of-way assessments would be required to ensure the construction of ramps as feasible.

In order to contribute to these improvements, the project would pay a fair share percentage determined for each intersection based on the County's requirements. These fair share percentages are shown in Table 28. As the Cedar Avenue/I-10 Eastbound Ramps are included in the SBCTA Rialto Sphere Nexus Study DIF program, the project's would be required to pay its fair share contribution for these intersections.

Table 28 Project Fair Share Percentages

Intersection/Scenario Year	AM Fair Share Percentage (%)	PM Fair Share Percentage (%)
Cedar Avenue/I-10 Eastbound Ramps	Pay Development Impact Fee	
Linden Avenue/Slover Avenue	1.5	3.2
Cedar Avenue/Slover Avenue	11.3	6.6
Cedar Avenue/Santa Ana	25	14.4
Cedar Avenue/Jurupa Avenue	9.4	4.1
Larch Avenue/Jurupa Avenue	11.9	6.7
Cedar Avenue/El Rivino	5.6	3.6

Source: Appendix G

With implementation of Mitigation Measure MM TRA-1, the project would have a less than significant impact on the local traffic network.

Less Than Significant Impact with Mitigation Incorporated

b) CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Generally, VMT is the most appropriate measure of transportation impacts. VMT refers to the amount and distance of automobile travel attributable to a project. Specifically, the guidelines state that VMT exceeding an applicable threshold of significance may indicate a significant impact. Pursuant to Section 15064.3(c), the provisions of this section do not apply statewide until July 1, 2020, although a lead agency may elect to immediately apply the provisions of the updated guidelines.

The County has identified that vehicle LOS is still of value to the residents of San Bernardino County. The General Plan includes policies that address LOS and identify LOS standards for which County infrastructure strives to maintain. Therefore, County projects would also be required to complete a transportation impact study, in addition to VMT assessment, to demonstrate consistency with the General Plan. State CEQA Guidelines Section 15064.3 subdivision (b) has been included in the 2018 CEQA Guidelines as part of the implementation of SB 743 which requires local jurisdictions to use VMT instead of LOS methodologies for the purpose of determining the significance of traffic impacts under CEQA.

As the project is classified as an inter-regional serving "truck stop," which is not a final destination, there is not a pre-defined standard by Office of Planning and Research (OPR) for calculation VMT for this project. Additionally, pursuant to CEQA requirements of accounting for the full impact of VMT outcomes without truncation or discounting, it would not be feasible

to analyze the VMT of a truck stop, due to the high expected volume of inter-state trucks. Therefore, VMT analysis is irrelevant to the Traffic Impact Study completed for this project. San Bernardino County and other cities, which have approved VMT analysis also do not have standards set for the calculation of the VMT for truck stops and inter-city commuters and are also irrelevant to this study. Therefore, this project would not conflict with State CEQA Guidelines Section 15064.3, subdivision (b).

No Impact.

c) The proposed project consists of 13,000 sf of commercial buildings with 143 parking spots, 6 ADA parking spots, and 44 truck parking spots. The project site would take access at one right-in-right-out driveway along Cedar Avenue and two right-in-left-out driveways along Santa Ana Avenue. Design of driveways, circulation areas, and parking stalls for the proposed project would be based on the County Development Code, including Chapter 83.05 – *Dedication and Installations of Street and Trail Improvements* and Chapter 83.11 – *Parking and Loading Standards,* which sets the standard for such design. It is not anticipated that traffic hazards would increase as a result of the project, as the completion to the public right-of-way would be to current standards. Additionally, similar and compatible uses in the vicinity include the commercial use located directly west of the project site across Cedar Avenue. Therefore, potential impacts associated with a substantial increase in hazards due to a design feature or incompatible use would be less than significant.

Less Than Significant Impact

d) As described in Section IX.f, the proposed project would not result in adverse impacts to emergency access to the project site or within the surrounding area and specifications for the proposed improvements would be subject to County requirements, including Chapter 83.09 – *Infrastructure Improvement Standards*, and Chapter 83.12 – *Road System Design Standards* to ensure that adequate dimensions for emergency vehicles is met. The proposed access to the project site would be required to meet standards that allow emergency response vehicles, such as firetrucks, to service the entire development. Design of driveways, circulation areas, and parking stalls for the proposed project are based on the County Development Code, including Chapter 83.05 – Dedication and Installations of Street and Trail Improvements and Chapter 83.11 – Parking and Loading Standards, which sets the standard for such design. Additionally, there are two access points proposed for the project site, one located on Cedar Avenue and the other located on Santa Ana Avenue.

Site access for the project would be provided via Cedar Avenue and Santa Ana Avenue. As discussed under Section XVII.a, with mitigation/improvements incorporated on the seven specified intersection, the peak hour project trip generation would not degrade the LOS at any intersections in the vicinity of the project site that could impair emergency vehicle access. Project construction may require temporary changes to the on-site circulation network; however, construction would not require roadway closures that would impair emergency response or evacuation. Therefore, impacts would be less than significant.

Less Than Significant Impact

Therefore, no significant adverse impacts are identified with implementation of Mitigation Measure MM TRA-1.

Issues	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

SUBSTANTIATION:

San Bernardino County General Plan, 2007; Cultural Historical Resources Information System (CHRIS), South Central Coast Information Center; Submitted Project Materials; Appendix C – Cultural Resource Investigation in Support of the Bloomington Gas Station Project, Paleo West Archaeology, February 2020

On July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted, expanding CEQA by defining a new resource category, "tribal cultural resources." AB 52 states, "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC Section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision

(c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those having requested notice of projects proposed in the jurisdiction of the lead agency.

a-b) Tribal consultation request letters were sent on February 11, 2020 to eight (8) tribes that have been identified as having ancestral territory in the Project area, or that have specifically requested notification of all projects in development in the County. Those tribes include the San Manuel Band of Mission Indians (SBMI), Morongo Band of Mission Indians, Gabrieleno Band of Mission Indians, San Gabriel Band of Mission Indians, Fort Mojave Indian Tribe, Colorado River Indian Tribe (CRIT), Soboba Band of Luiseno Indians, and Twenty-Nine Palms Band of Mission Indians.

Response letters/emails were received from two (2) of the tribes including SBMI, Gabrieleno-Kizh Nation. The Gabrieleno was the only tribe to request formal consultation. Consultation took place on July 7, 2020. Concerns for disturbance of culturally significant finds were elevated as the area has been identified as a heavily occupied by the tribe. However, it was discovered that the site contained several feet of fill material that was not native to the site. Depth of grading as well as the origin of the fill materials were raised as concerns. Consultation has been completed with the receipt of requested mitigation and monitoring measures included herein. Notification of a potential General Plan Amendment for the parcel was also sent to the Native American Heritage Commission (NAHC) as required by SB 18.

The SBMI did not request formal consultation but sent correspondence stating that the Project exists within Serrano ancestral territory and therefore, is of interest to the tribe. However, due to the disturbed nature of the location, they did not have any concerns with the project's implementation as planned. As a result, SMBMI requested that recommended mitigation and monitoring measures be made a part of the project/permit/plan conditions. Therefore, Mitigation Measures MM TCR-1, MM TCR-2 and MM TCR-3 have been incorporated into this initial study to reduce impacts to less than significant with mitigation incorporated.

Mitigation Measures

TCR-1 Unanticipated Discovery of Tribal Cultural and Archaeological Resources

Upon discovery of any archaeological resources, construction activities shall be ceased in the immediate vicinity of the find until the find can be assessed. The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject

to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site. Typically, tribes request reburial or preservation for educational purposes. Work may continue on other parts of the project while evaluation and, if necessary, mitigation takes place (State CEQA Guidelines Section15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with State CEQA Guidelines Section 15064.5(f) for historical resources and PRC Section 21083.2(b) for unique archaeological resources.

Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project

TCR-2 Unanticipated Discovery of Human Remains and Associated Funerary Objects

Native American human remains are defined in PRC Section 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC Section 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) and PRC Section 5097.98 shall be followed. In the event that human remains are impacted or encountered and identified by the Coroner as indigenous ancestors, the Gabrieleno Indians of California shall be notified, regardless of the designated MLD.

TCR-3 Treatment Measures

If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.

Prior to the continuation of ground disturbing activities, the land owner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment

placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

Archaeological and Native American monitoring and excavation during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The Qualified Archaeologist shall ensure that all other personnel are appropriately trained and qualified.

With implementation of the above mitigation measures, impacts to tribal cultural resources would be less than significant.

Less Than Significant Impact with Mitigation Incorporated

No significant adverse impacts are identified or anticipated and with implementation of Mitigation Measures MM TCR-1, MM TCR-2 and MM TCR-3.

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XIX.	**UTILITIES AND SERVICE SYSTEMS -** Would the project:				
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the	☐	☐	☒	☐

	construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c)	Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

SUBSTANTIATION:

County of San Bernardino General Plan 2007; Submitted Project Materials

a) The proposed project would consist of new potable lateral extensions and sewer line extensions on site to serve the proposed project. New water and sewer extensions would be connected to the City's mainline under Santa Ana Avenue. As with water facilities, potable water and sewer line extensions on the project site would be installed during project construction. Bloomington water treatment facilities or distribution main line improvements would not be necessary to serve the project site.

Other utilities such as electrical power would be connected to existing infrastructure in the area, consistent with County and provider regulations. The project would involve an increase in electricity demand to serve the proposed project; however, this demand increase would not be a wasteful use of energy and would not require additional electricity substations or natural gas storage/transmission facilities.

The project would be required to comply with the applicable waste discharge prohibitions and water quality objectives established by the Santa Ana RWQCB. Treatment of wastewater generated by the project is anticipated to be routine and is not expected to exceed wastewater treatment requirements of the RWQCB. The project would also be required to satisfy the County and WVWD requirements related to the payment of fees and/or the provision of wastewater conveyance features, and installation and maintenance prior to the issuance of building permits.

Given the above considerations, utility infrastructure would not need to be relocated or constructed that would cause potentially significant environmental effects. Impacts would be less than significant.

Less Than Significant Impact

b) The proposed project does not propose the use of local groundwater supplies or the construction of any groundwater wells. Water would be provided by the WVWD. The proposed project is consistent with the assumptions made in the San Bernardino Valley Regional Urban Water Management Plan (RUWMP), as the Project site is consistent with the existing land use and zoning designations that are used to calculate population projections. The RUWMP concludes that the WVWD has sufficient water supplies available to serve planned land uses within its service area through at least 2040 (RUWMP 2018). Therefore, impacts to water supplies would be less than significant.

Less Than Significant Impact

c) The proposed project would consist of new potable lateral extensions and sewer line extensions on-site to serve the proposed project. New water and sewer extensions would be connected to the City's mainline under Santa Ana Avenue. As with water facilities, potable water and sewer line extensions would be installed during project construction. Table 29 summarizes the project share of available capacity for the treatment plant. As shown below, the project would generate less than one percent of available capacity. Impacts would be less than significant.

Table 29 Wastewater Treatment Plant Capacity

	Pomona Water Reclamation Plant
Average Daily Treatment[1]	7.3 MGD
Plant Capacity[2]	16 MGD
Available Capacity	8.7 MGD
Project Wastewater Generation[3]	0.0064 MGD
Percent of Available Capacity Used by Project	<0.1 percent

MGD = million gallons per day
[1] Based on average annual flow for Rialto Wastewater Treatment Plant (AECOM 2016).
[2] City of Rialto (2007). Plant Expansion Completed July 2020.
[3] Assumes total water demand is approximately equivalent to 120 percent of wastewater generation. Total water demand obtained from CalEEMod outputs (Appendix A).

Less Than Significant Impact

d-e) Construction and operation of the project would generate solid waste. According to the County of San Bernardino Countywide Integrate Waste Management Plan, the County owned system of municipal solid waste landfills includes a total of five landfills, which have capacity for well in excess of 15 years as required under PRC Section 41701

(CIWMP 2018). Additionally, there are currently a total of 17 materials recovery facilities, eight transfer stations, and seven CDI debris processing facilities. The nearest landfill to the project site is the Mid-Valley Landfill, located approximately 6.2 miles northwest at 2390 Alder Avenue in Rialto. The Mid Valley Landfill has a permitted throughput of 7,500 ton per day and a maximum capacity of 101,300,000 cubic yards with an anticipated closure date of 2045 (CalRecycle 2020).

The handling of all debris and waste generated during construction of the project would be subject to 2016 CALGreen requirements and the California Integrated Waste Management Act of 1989 (AB 939) requirements for salvaging, recycling, and reuse of materials from construction activity on the project site. In accordance with 2016 CALGreen requirements, the project would be required to achieve a minimum of 65 percent diversion rate for construction waste. According to the CalEEMod results for the project (Appendix A), the project would generate approximately 0.14 tons per day, which is a fraction of a percent of the local landfill's daily throughput. Because the project would be served by landfills with sufficient capacity and would comply with applicable regulations related to solid waste, impacts would be less than significant.

Less Than Significant Impact

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

	Issues	*Potentially Significant Impact*	*Less than Significant with Mitigation Incorporated*	*Less than Significant*	*No Impact*
XX.	**WILDFIRE:** If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water resources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

SUBSTANTIATION:

County of San Bernardino General Plan 2007; Submitted Project Materials

a) The project would not be located in or near a CAL FIRE recommended very high fire hazard severity zone (VHFHSZ) or state responsibility area (CalFire 2020). As discussed in Section XVII, *Transportation*, the project would not impede access to emergency services. The project would be designed, constructed, and operated pursuant to applicable standards outlined in the latest California Fire Code, and specifications for the proposed improvements would be subject to County requirements, including Chapter 83.09 – Infrastructure Improvement Standards, and Chapter 83.12 – Road System Design Standards to ensure that adequate dimensions for emergency vehicles is met.

While project construction may require temporary truck and equipment access and parking on and around the project site, construction would not require lane or roadway closures that would temporarily impair emergency response or evacuation. Therefore, there would be no impact.

No Impact

b) As discussed above, the project is not located in or near a designated VHFHSZ and would not be situated near steep slopes. The project would adhere to applicable standards outlined in the latest California Fire Code, and County regulations put forth out in their County Development Code. Therefore, the project would not exacerbate wildfire risks, and would not expose occupants to pollutant concentrations or the uncontrolled spread of wildfire. No impact would occur.

No Impact

c) As discussed above, the project is not located in or near a designated VHFHSZ. As discussed in Section XIX, *Utilities and Service Systems*, the project would not result in significant environmental effects associated with the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. The project would require installation of standard water and sewer laterals or appurtenances to serve the proposed buildings and landscaping. New or relocated utilities and systems associated with the project would comply with state and local fire codes to reduce the risk of fires, and none of these potential infrastructure improvements would exacerbate fire risk on-site. No impact would occur.

No Impact

d) As discussed above, the project is not located in or near a designated VHFHSZ. As discussed in Section VII, *Geology and Soils*, the project site is not located on an area of significant slopes. Additionally, the project site is not susceptible to landslides or downstream flooding. The project would be required to comply with the County's Development Code and the latest CBC requirements. In addition, the project would be required to implement all recommendations of the geotechnical report through the City's design review process. Implementation of the recommendations from the site-specific geotechnical analysis (Sladden Engineering 2019) in the design and construction of the project would reduce potential hazards from post-fire landslides or slope instability. This impact would be less than significant.

Less Than Significant Impact

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

a) While the project site generally does not contain suitable habitat for special status species, the possibility exists for construction activities to have direct or indirect impacts on such species which may temporarily occupy or traverse the project site. Furthermore, construction activities such as building demolition, vegetation removal, grading, or building construction, could result in direct impacts to special-status bat species or nesting migratory bird species. The Initial Study incorporates mitigation measures targeted at protecting biological resources. These measures include conducting presence/absence surveys for sensitive owl species prior to construction and pre-construction nesting bird surveys. Potential degradation of the quality of the environment would be reduced to below a level of significance through implementation of Mitigation Measures MM BIO-1 and MM BIO-2, as identified in Section IV, *Biological Resources*.

The project site is not located in a historic district and does not contain any historical resources. Although no archaeological resources were identified, there remains the potential to encounter unanticipated archaeological resources during ground-disturbing

activities associated with project construction. Implementation of Mitigation Measure MM CR-1 and MM CR-2, as identified in Section V, *Cultural Resources*, would reduce potential impacts to archaeological resources to a less-than-significant level by providing direction on how to properly address an unanticipated discovery of cultural and archaeological resources should one occur during construction. As discussed in Section XVIII, *Tribal Cultural Resources*, the project site could potentially contain unanticipated tribal cultural resources. Mitigation Measures MM TCR-1, MM TCR-2 and MM TCR-3 would reduce impacts to tribal cultural resources to a less than significant level. This impact would be less than significant with mitigation incorporated.

Less Than Significant Impact with Mitigation Incorporated

b) As described in the discussion of environmental checklist Sections I through XX, the project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated with respect to all environmental issue areas. As noted in Section III, *Air Quality*, the project would not result in a cumulatively considerable net increase of criteria pollutants, as project construction and operation would remain below SCAQMD daily thresholds. Impacts related to GHG emissions are cumulative in nature and, as discussed in Section VIII, *Greenhouse Gas Emissions*, the project would result in a less than significant impact with the implementation of Mitigation Measure MM GHG-1. As discussed in Section XVII, *Transportation,* the project would contribute to potentially significant traffic impacts at certain intersections and Mitigation Measure MM TRA-1 would bring these traffic impacts to below a significant level.

Resource issue areas that were determined to have no impact would not have potential to be cumulatively considerable, and the project would not contribute to cumulative impacts related to these issues.

Resource issue areas that are project-specific by nature, such as geology and hazards, would not have substantial contributions to the cumulative scenario, as impacts at one location do not add to impacts at other locations or create additive impacts. Furthermore, future projects in the vicinity of the project site would be required to undergo the appropriate level of environmental review and mitigate potential impacts, as necessary. This impact would be less than significant with mitigation incorporated.

Less Than Significant Impact with Mitigation Incorporated

c) In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As discussed in Section III, *Air Quality*, the project would result in less than significant impacts related to emissions of criteria pollutants, toxic air contaminants, or odors. As detailed in Section IX, *Hazards and Hazardous Materials,* the project would not result, either directly or indirectly, in significant adverse impacts related to hazardous materials. Commercial land uses, as proposed under the project, are not associated with substantial emissions of hazardous materials, and impacts related to other hazards, including wildfire or proximity to Flabob Airport, would be less than significant. As discussed in Section XIII, *Noise,* impacts would be less than significant. In addition, compliance with applicable rules and regulations and mitigation measures contained in this document would reduce potential impacts on human beings. Therefore, impacts would be less than significant.

Less Than Significant Impact

All potential impacts have been thoroughly evaluated and have been deemed to be neither individually significant nor cumulatively considerable in terms of any adverse effects upon the region, the local community or its inhabitants. At a minimum, the project would be required to meet the conditions of approval. It is anticipated that all such conditions of approval will further ensure that no potential for adverse impacts would occur.

Therefore, no significant adverse impacts are identified or anticipated and with implementation of Mitigation Measures MM BIO-1, MM BIO-2, MM CR-1 and MM CR-2, MM GHG-1. MM GEO-1, MM TRA-1 MM TCR-1, MM TCR-2 and MM TCR-3.

GENERAL REFERENCES

Agenbroad, L.D. 2003. New localities, chronology, and comparisons for the pygmy mammoth (Mammuthus exilis). In J. Reumer (ed.) Advances in Mammoth Research, Proceedings of the 2nd International Mammoth Conference, Rotterdam, the Netherlands. DEINSEA 9, p. 1-16.

American Cancer Society (ACS). 2018. Cancer Facts & Figures 2018. https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2018/cancer-facts-and-figures-2018.pdf.

California Air Resources Board (CARB). 2005. Air Quality and Land Use Handbook: A Community Health Perspective. https://ww3.arb.ca.gov/ch/handbook.pdf

_____. 2013. Mobile Source Emission Inventory – EMFAC2011 Frequently Asked Questions. January. Available at: https://www.arb.ca.gov/msei/emfac2011-faq.htm

_____. 2015. CA-Greet 2.0. September 29, 2015 https://www.arb.ca.gov/fuels/lcfs/ca-greet/ca-greet.htm. Accessed September 2018.

_____. 2016. Ambient Air Quality Standards. Last modified: May 4, 2016. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf

_____. 2017a. 2017 Amendments Health Risk Analysis.

_____. 2017b. 2017 Climate Change Scoping Plan. November.

_____. 2019a. iADAM Air Quality Data Statistics Top 4 Summary. https://www.arb.ca.gov/adam/topfour/topfour1.php California Air Resources Board (CARB). 2017. 2017 Amendments Health Risk Analysis.

_____. 2019b. Overview: Diesel Exhaust and Health. https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health

California Department of Fish and Wildlife (CDFW). 2019. California Department of Fish and Game
Natural Diversity Database – Electronic Format. Available at: https://www.wildlife.ca.gov/Data/CNDDB

California Department of Forestry and Fire Protection (CalFire). 2020. California Fire Hazard Severity Zone Viewer. Available at: https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414

California Department of Industrial Relations. 2019. Cal/OSHA. Available at: https://www.dir.ca.gov/dosh/

California Department of Resources Recycling and Recovery (CalRecycle). 2020. Mid-Valley Sanitary Landfill SWIS Facility Detail. Available at: https://www2.calrecycle.ca.gov/SWFacilities/Directory/36-AA-0055/Detail

California Department of Toxic Substances Control (DTSC). EnviroStor. Available at: https://www.envirostor.dtsc.ca.gov/public/

California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. (CT-HWANP-RT-13-069.25.2) September. Available at: http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf

_____. 2020. Transportation and Construction Vibration Guidance Manual. Available at: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf

California Energy Commission (CEC). 2017a. Electricity Consumption by Entity. Available at: http://ecdms.energy.ca.gov/elecbyutil.aspx.

_____. 2017b. Gas Consumption by Entity. http://ecdms.energy.ca.gov/gasbyutil.aspx.

California Energy Commission. 2018a. 2019 Building Energy Efficiency Standards. March. Available at: https://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf

_____. 2018b. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html

_____. 2018c. Total System Electric Generation. Available at: https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html.

_____. 2018d. Revised Transportation Energy Demand Forecast 2018-2030. Available at: https://efiling.energy.ca.gov/getdocument.aspx?tn=221893.

_____. 2019. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results. Available at: https://ww2.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html

California Native Plant Society (CNPS), Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Available at: http://www.rareplants.cnps.org

California Geological Survey (CGS). 2002. California Geomorphic Provinces, Note 36.

City of Bloomington. 2007. Bloomington Community Plan. http://www.sbcounty.gov/Uploads/lus/CommunityPlans/BloomingtonCP.pdf

Colton Joint Unified School District (CJUSD). 2020. District School Map. https://www.colton.k12.ca.us/domain/40

County of San Bernardino. 2007. Geologic Hazard Overlays. http://www.sbcounty.gov/Uploads/lus/GeoHazMaps/FH29C.pdf

_____. 2007. 2006 General Plan Program Final Environmental Impact Report and Appendices. http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FinalEIR2007.pdf

_____. 2010. San Bernardino County General Plan Hazard Map Overlay. http://www.sbcounty.gov/uploads/lus/hazmaps/fh29b_20100309.pdf

_____. 2012. Biotic Resources Overlay Map. Available at: http://www.sbcounty.gov/Uploads/lus/BioMaps/cnty_all_biotic_resources_map_final.pdf

_____. 2017a. County of San Bernardino General Plan Renewable Energy and Conservation Element. Available at: http://www.sbcounty.gov/uploads/LUS/Renewable/RECElementFINALADOPTEDVersion8817WEB.pdf____.2020. Earthquake Zones of Required Investigation. https://maps.conservation.ca.gov/cgs/EQZApp/app/

_____. 2017b. Valley Region Groundwater Basins Prioritization. http://www.sbcounty.gov/uploads/LAFCO//Downloads/Service_Review/GBP_Map.pdf

_____. 2018. San Bernardino Valley Countywide Integrated Waste Management Plan (CIWMP). http://cms.sbcounty.gov/Portals/50/solidwaste/SWAT/Engineering/SB-County-Final-Draft-Summary-Plan-SP-for-SWAT-07-2018r.pdf?ver=2018-07-10-135812-593

_____. 2019. San Bernardino County Community Plan EIR; Mineral Resources. http://countywideplan.com/wp-content/uploads/2019/06/Ch_05-11-MIN.pdf

_____. 2020. San Bernardino County, California Code of ordinances, January 28, 2020

Department of Conservation. 2020. Farmland Monitoring and Mapping Program. https://www.conservation.ca.gov/dlrp/fmmp/Pages/SanBernardino.aspx

Federal Emergency Management Agency (FEMA). 2020. FEMA Flood Map Service Center. https://msc.fema.gov/portal/search?AddressQuery=bloomington%20ca#searchresultsanchor

Federal Highway Administration (FHWA). 2006. FHWA Highway Construction Noise Handbook. (FHWAHEP-06-015; DOT-VNTSC-FHWA-06-02). Available at: http://www.fhwa.dot.gov/environment/construction_noise/handbook.

Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment. November. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Fontana, City of. 2020. Organizational Chart. https://www.fontana.org/112/Police-Department

Jefferson, G.T. 2010. A catalogue of late Quaternary vertebrates from California. Natural History Museum of Los Angeles County Technical Report 7, p. 5-172.

Lawrence E. Kinsler and R. Frey, Austin and B. Coppens, Alan and V. Sanders, James. Fundamentals of Acoustics, 4th Edition. ISBN 0-471-84789-5. Wiley-VCH, December 1999.

Malcolm J. Crocker (Editor). 2007. Handbook of Noise and Vibration Control Book, ISBN: 978-0-471-39599-7, Wiley-VCH, October.

Merriam, J.C. 1911. The Fauna of Rancho La Brea; Part I: Occurrence. Memoirs of the University of California, v. 1, no. 2, p. 197-213.

Morton, D.M., and Miller, F.K., 2006, Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California: U.S. Geological Survey, Open-File Report OF-2006-1217, scale 1:100,000.

Norris, R. M. and Webb, R. W. 1990. Geology of California. John Wiley and Sons, Inc. New York.

Office of Health Hazard Assessment (OEHHA). 2015. Guidance Manual for Preparation of Health Risk Assessments. https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

_____. 2019. Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values. Last updated: September 19, 2019. https://ww3.arb.ca.gov/toxics/healthval/contable.pdf.

Paleobiology Database. 2020. Online fossil locality database. Available online: https://www.paleobiodb.org/#/.

Paleo West Archaeology. 2020. Cultural Resource Investigation in Support of the Bloomington Gas Station Project.

Placeworks, Draft Environmental Impact Report San Bernardino Countywide Plan, June 2019.

Rincon Consultants, Inc. 2020. Air Quality and Greenhouse Gas Emissions Study.

Riverside County Airport Land Use Commission. 2004. Riverside County Airport Land Use Compatibility Plan. Available at: http://www.rcaluc.org/Plans/New-Compatibility-Plan

Savage, D.E., T. Downs, and O.J. Poe. 1954. Cenozoic land life of southern California in R.H. Jahns ed., Geology of Southern California. California Division of Mines and Geology, 170, Ch. III, p. 43-58.

Society of Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee.

South Coast Air Quality Management District (SCAQMD). 1993. CEQA Air Quality Handbook. April 1993.

_____. 2008. Final Localized Significance Threshold Methodology. July 2008. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf

_____. 2009. Appendix C – Mass Rate LST Look-up Tables. Last modified: October 21, 2009. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2

_____. 2015. SCAQMD Air Quality Significance Thresholds. Last modified: March 2015. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf

_____. 2017. Final 2016 Air Quality Management Plan (AQMP). March 3, 2017.

_____. 2019. Regulations. Available at http://www.aqmd.gov/home/rules-compliance/regulations.

State Water Resources Control Board (SWRCB). 2015. GeoTracker. Available at: https://geotracker.waterboards.ca.gov/

U.S. Department of Agriculture (USDA), Natural Resources Conservation Service. 2019. Natural Resources Conservation Service Web Soil Survey – Electronic Format. Available at: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

U.S. Environmental Protection Agency (USEPA). 2004. Air Quality Criteria for Particulate Matter, October 2004. Available at: file:///C:/Users/egreen/Downloads/VOL_I_FINAL_PM_AQCD_OCT2004.PDF

_____. 2005. Guidelines for Carcinogen Risk Assessment. March 2005. EPA/630/P-03/001F. https://www.epa.gov/sites/production/files/2013-09/documents/cancer_guidelines_final_3-25-05.pdf

_____. 2009. Integrated science assessment for particulate matter. EPA/600/R-08/139F. Research Triangle Park, NC. https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=216546.

_____. 2018. Health Effects of Ozone Pollution. Available at: https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution.

_____. 2019. Superfund Enterprise Management System (SEMS). Available at: https://www.epa.gov/enviro/sems-search

U.S. Geological Survey (USGS). 2020. Natural Aggregates and Statistics. https://www.usgs.gov/centers/nmic/natural-aggregates-statistics-and-information

University of California Museum of Paleontology (UCMP) Online Database. 2020. UCMP specimen search portal, http://ucmpdb.berkeley.edu/.

U.S. Fish and Wildlife Service (USFWS). 2019. Endangered Species Database. Available at: https://www.fws.gov/endangered

PROJECT-SPECIFIC REFERENCES

Appendix A – Bloomington Commercial Center Project Air Quality and Greenhouse Gas Emissions, Rincon Consultants, Inc., September 2020

Appendix B – Bloomington Gas Station Project Biotic Resources Report, Rocks Biological Consulting, January 2020

Appendix C – Cultural Resource Investigation in Support of the Bloomington Gas Station Project, Paleo West Archaeology, February 2020

Appendix D – Geotechnical Investigation for the Proposed Mixed-Use Development at Cedar Avenue & Santa Ana Avenue, Sladden Engineering, September 2019

Appendix E – Hydrology Study for TMP 20192, Black Gold Engineering, March 2020

Appendix F – Bloomington Commercial Center Project Noise and Vibration Study, Rincon Consultants, Inc., September 2020

Appendix G – Final Traffic Impact Study for the Bloomington Commercial Center, Minagar & Associates, Inc. June 2020