

# Lamont STEM Academy Project

## Initial Study – Mitigated Negative Declaration

*prepared by*

**Lamont Elementary School District**

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# Initial Study

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## 1. Project Title

Lamont STEM Academy Project, Central Kitchen, and Maintenance, Operation, and Transportation Facility

## 2. Lead Agency Name and Address

Lamont Elementary School District  
7915 Burgundy Avenue  
Lamont, California 93241

## 3. Contact Person and Phone Number

Eric Brock, Director of Maintenance, Operations, Transportation  
Lamont Elementary School District  
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Phone: 661-845-0751

## 4. Project Location

The project site is Kern County Assessor's Parcel Number (APN): 178-282-25 in Lamont, census-designated place in unincorporated Kern County. The project would be located on 19 acres of the 22-acre parcel. The site is regionally accessible from state routes 58, 184, and 223 and from Interstate 5.

## 5. Existing Site Characteristics

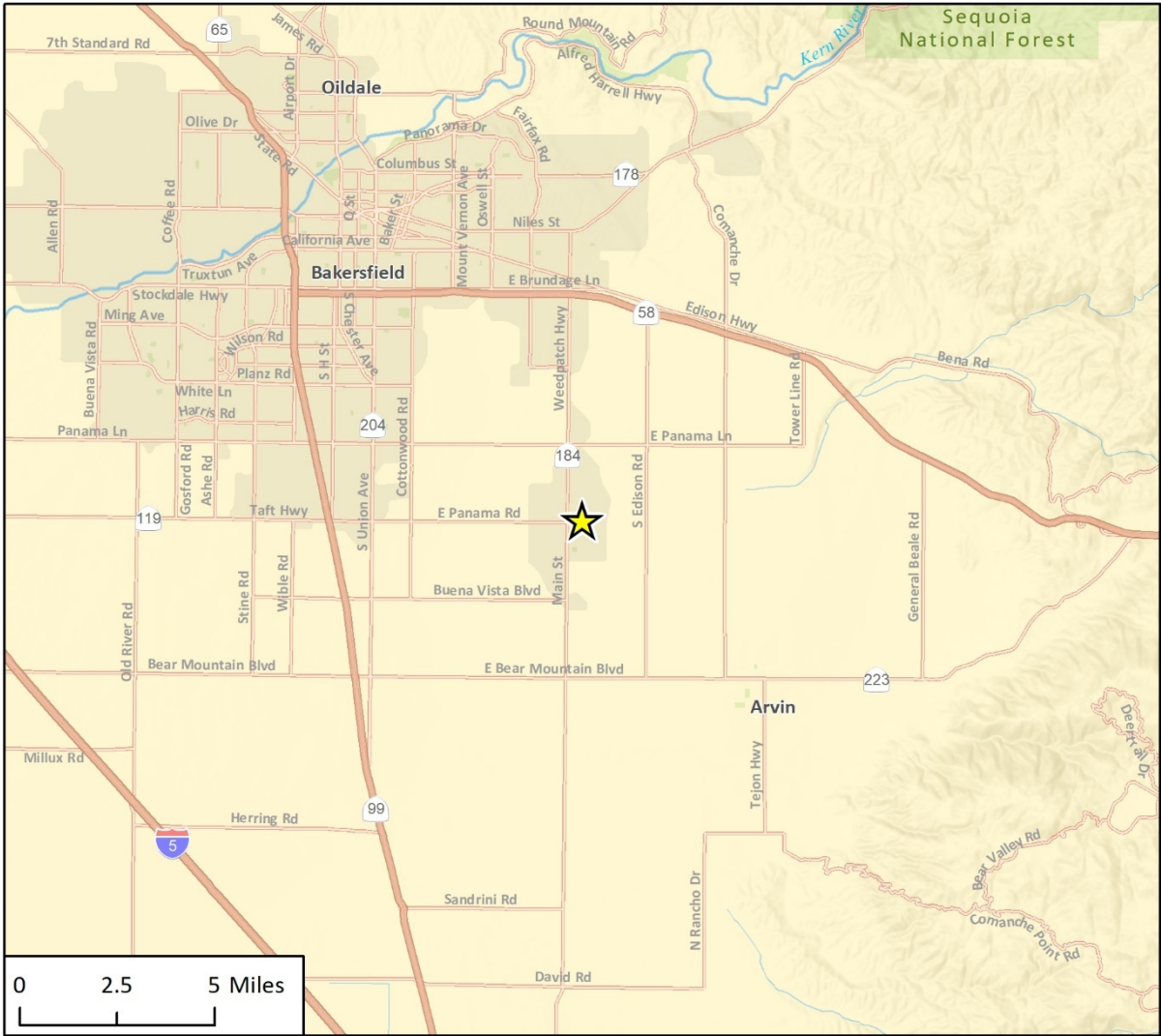
### **Current Land Use Designation and Zoning**

The land use designation for the site from the Kern County General Plan is Suburban Residential and Low Medium Density Residential. The site is currently undeveloped, and zoned Exclusive Agriculture.

### **Surrounding Land Uses and Setting**

The site is a semi-rural unincorporated area of Kern County (Figure 1). The nearest incorporated city is Bakersfield approximately 2.25 miles to the west. The site is vacant grassland with a single tree on the southeast corner of the site and has no current uses. Surrounding land uses include single-family residences with a few multi-family residences along Panama Road and Carnation Avenue to the south and west. On the northern and eastern sides of the site are exclusively agricultural land. The East Side Canal provides irrigation to the surrounding agricultural uses and runs north-south approximately 0.25 mile east of the site. Figure 2 and Figure 2b are photos of the project site.

Figure 1 Site Location



Imagery provided by Esri and its licensors © 2021.



Fig 1. Regional Location



Figure 2a Photos of the project site



**Photo 1.** Aerial view of the project site looking southwest.



**Photo 2.** Looking northwest along Panama Lane.



Figure 3b Photos of the project site



**Photo 1.** View of the project site looking southwest.



**Photo 2.** View of the project site looking northwest.

## 6. Project Characteristics

### Background

In February 2015, the District purchased the 22-acre parcel for the purpose of constructing a new school facility. The project proposes to develop a new school within the project site, with a Science Technology Engineering and Mathematics (STEM) focus. The facilities would include the new STEM school, joint central kitchen, and Maintenance, Operation, and Transportation (MOT) facility on the eastern intersection of Panama Road and Habecker Road. The new school will be built on the western portion of the project parcel. The current student enrollment in the District is 2,802 students. The new school would serve the existing student population and would not increase student enrollment throughout the district.

### Project Description

The project would involve construction of a six-building elementary school campus that serves STEM students as well as a Central Kitchen, Maintenance, Operation, and Transportation (MOT) Facility. The proposed structures would have a total floor area of approximately 26,340 square feet of:

- General education facilities (classrooms, community, library area, break out spaces),
- Administrative offices (offices, reception area, storage, workroom, workstations),
- Outdoor (playgrounds, sports fields, and storage),
- Kitchen space with storage, refrigeration, and administrative spaces, and
- Maintenance, Operation and Transportation Facility

The proposed structures would be one-story. Table 1 summarizes the project's characteristics. Figure 1 shows the proposed site plan for the STEM Academy and the Central Kitchen and Maintenance, Operation, and Transportation facility.

**Table 1 Proposed Project Characteristics**

|                               |                            |
|-------------------------------|----------------------------|
| Assessor's Parcel Number      | 178-282-25                 |
| Height/Stories                | Single                     |
| Lot Area                      | 22-acres (958,320 sq feet) |
| Structure Footprint           | 26,340 sq. feet            |
| Total Floor Area <sup>1</sup> | 26,340 sq. feet            |
| Teaching Space                | 14,980 sq. feet            |
| Teacher's Workroom            | 720 sq. feet               |
| Total Admin Space             | 1,245 sq. feet             |
| Total Library Space           | 1,384 sq. feet             |
| Central Kitchen               | 4,538 sq. feet             |
| MOT Facility                  | 3,982 sq. feet             |
| Blacktop                      | 58,079 sq. feet            |
| Play Areas                    | 86,914 sq. feet            |

---

|                     |                |
|---------------------|----------------|
| Bus Maintenance     | 1,740 sq. feet |
| Interim Eating Room | 2,880 sq. feet |

---

<sup>1</sup> The total floor area does not include rooms housing building operating equipment or machinery rooms, or areas outside the surrounding walls of the structure.

Source: Lamont Element School District 2020

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## Enrollment and Class Schedule

Designed to provide classroom space and education facilities to accommodate existing and projected student enrollment, the proposed project would support anticipated increases in student population in the District. Classes would be scheduled at similar times as existing schools in the District, with classes occurring Monday through Friday according to the academic calendar of the Lamont Element School District. Weekday operation would typically begin no earlier than 7:00 a.m. and typically end around 4:00 p.m. Afternoon and evening programming would occur intermittently throughout the year. Weekend activity would be minimal as the public would not have access to the school outside of school hours.

## Parking and Site Access

The proposed project would include 30 on-site vehicle parking spaces for school staff and visitors, as well as parking for the Central Kitchen and MOT facility. No modifications to existing street parking are proposed. Pedestrians would access the building through the parking lot on Carnation Road. While the project site is not near any rail or subway stations, the site is within two miles of several bus stops along Main Street.

## Utilities

The project would include utility connections for water, wastewater, stormwater drainage, power, and telecommunication services in accordance with requirements of applicable utility providers. These utilities would connect to existing infrastructure near the site. Pacific Gas and Electric Company (PG&E) would provide electrical service; Lamont Public Utility District would provide water service; Kern County would provide stormwater, wastewater, and solid waste services. The project would use natural gas and would connect to local natural gas infrastructure. The project would rely on existing public services, including but not limited to, Kern County police and fire protection and parks and open space provided by Lamont, the County of Kern, and the State of California.

## 7. Required Discretionary Approvals

The proposed project is subject to approval by the Lamont Element School District and the Division of the State Architect (DSA). Local approvals from the County would be required for any work on County property or within public rights-of-way, including utility work, sidewalk and hardscape modifications, trees or landscaping modification and temporary closures of street parking areas or read laneways.

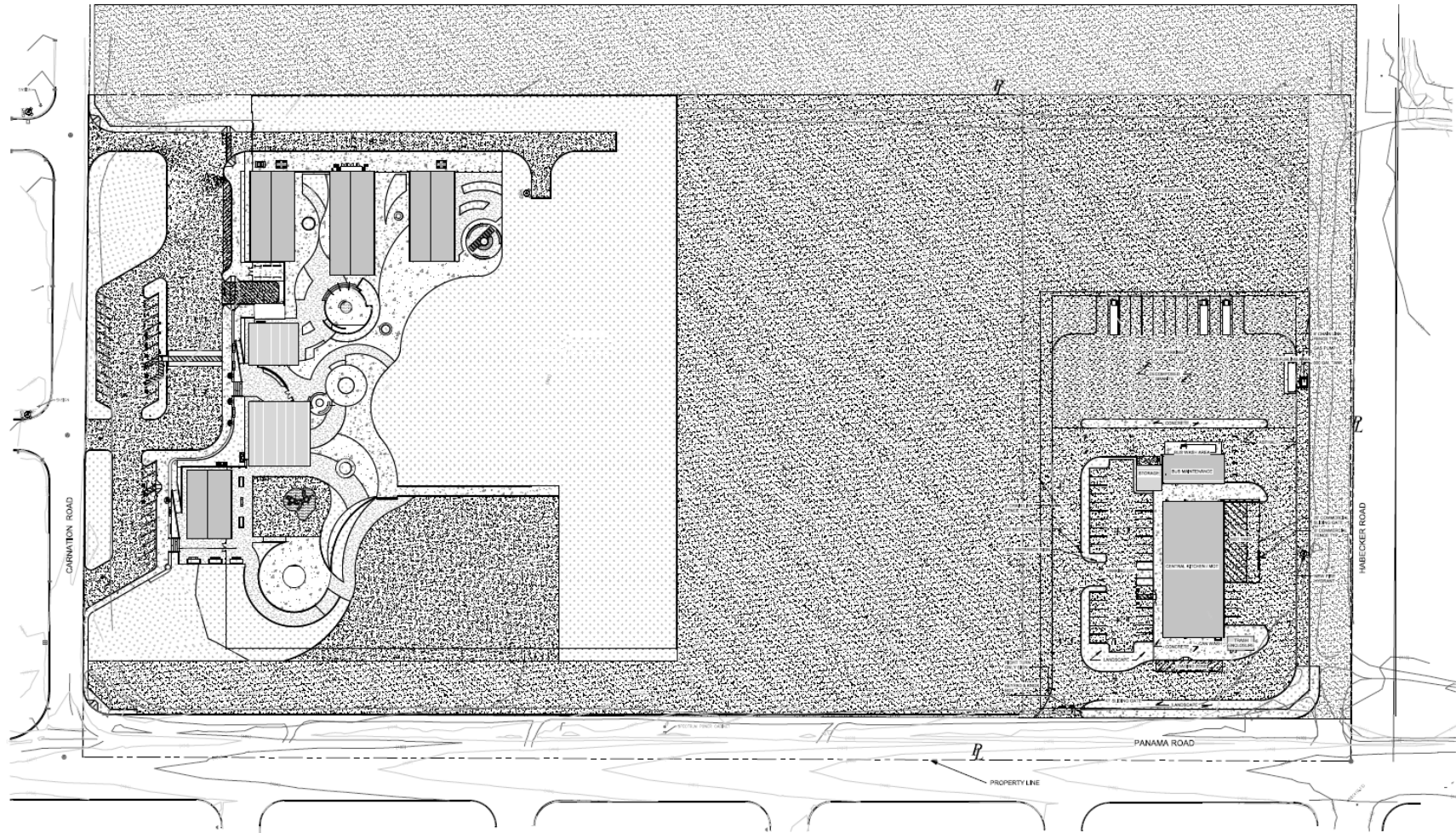
8. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

The California Native American tribes traditionally and culturally affiliated with the project area include the Big Pine Paiute Tribe of Owens Valley, the Chumash Council of Bakersfield, the Kitanemuk & Yowlumne Tejon Indians, the Tejon Indian Tribe, and the Tule River Indian Tribe.



Figure 4 Overall Site Plan

Phase 1



## Environmental Factors Potentially Affected

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This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Aesthetics                      | <input type="checkbox"/> Agriculture and Forestry Resources  | <input checked="" type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources       | <input type="checkbox"/> Energy  |
| <input type="checkbox"/> Geology/Soils                   | <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials      |
| <input type="checkbox"/> Hydrology/Water Quality         | <input type="checkbox"/> Land Use/Planning                   | <input type="checkbox"/> Mineral Resources                             |
| <input checked="" type="checkbox"/> Noise                | <input type="checkbox"/> Population/Housing                  | <input type="checkbox"/> Public Services                               |
| <input type="checkbox"/> Recreation                      | <input checked="" type="checkbox"/> Transportation           | <input checked="" type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities/Service Systems       | <input type="checkbox"/> Wildfire                            | <input checked="" type="checkbox"/> Mandatory Findings of Significance |



# Determination

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Based on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potential 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.

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Signature

---

Date

---

Printed Name

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Title

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# Environmental Checklist

## 1 Aesthetics

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Except as provided in Public Resources Code Section 21099, would the project:   |                                      |  |                                     |                                     |
| a. Have a substantial adverse effect on a scenic vista?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

*a. Would the project have a substantial adverse effect on a scenic vista?*

A scenic vista is a view from a public place (roadway, designated scenic viewing spot, etc.) that is expansive and visually notable. It can be obtained from an elevated position (such as from the top of a hillside) or it can be seen from a roadway with a longer-range view of the landscape.

The nearest scenic vista is in eastern Kern County approximately 7 miles from the project site. The construction of the STEM Academy and Central Kitchen and MOT Facility would not impact a scenic vista because the site is not located near a scenic vista; therefore, no scenic vistas would be impacted or obstructed by the proposed project. There would be no impact to scenic vistas.

**NO IMPACT**

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

The nearest officially designated scenic highway is State Route 33 approximately 40 miles southwest. State Route 58 approximately 60 miles east of the site is an eligible scenic highway but not an officially designated scenic highways (Caltrans 2021). The project contains one existing tree, which would not be removed by the proposed project. There are no rock outcroppings, historical buildings, or other identified scenic resources on or adjacent to the project site (Kern County 2009). Therefore, there would be no impact to scenic resources.

**NO IMPACT**

c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from 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?*

The project is not located in an urbanized area and is surrounded by low-density residential and agricultural uses. the project site is currently vacant, and the proposed construction of a school on-site would be compatible with surrounding residential uses. The project would not eliminate views of surrounding agricultural lands, as only a portion of the site would be developed., therefore, the project would have a less than significant impact on the existing visual character or quality of public views of the site and its surroundings.

**LESS THAN SIGNIFICANT IMPACT**

d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The proposed project would create six permanent buildings on the project site. The buildings would be equipped with security lighting, which would create light while in operation. The nearest sensitive receptors are located in the residential neighborhoods to the south and west. All sources of light would follow all guidelines and regulations from Chapter 19.81, *Outdoor Lighting "Dark Skies Ordinance"* section 19.81.040-General Requirements. Thus, the impact would be less than significant.

The proposed project would also include the construction of a central drop-off and pick-up location. The project would result in an increased volume of motor vehicle traffic, including buses, automobiles, and delivery trucks. The increase in traffic would generate new glare from vehicle mirrors, windows, and metal surfaces; however, vehicle glare would be typical of what is normally experienced in the area and would not significantly increases sources of glare and would not adversely affect daytime or nighttime views in the area. Therefore, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

## 2 Agriculture and Forestry Resources

|  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|--|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project:   |                                      |  |                                     |                                     |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use or a Williamson Act contract?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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))? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

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

The project site is designated as grazing land by the department of conservation (DOC 2016). The project site is not located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Additionally, the site is not currently being used for agricultural purposes, therefore there would be no impact.

### NO IMPACT

- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

The project site is not under a Williamson Act contract. However, the project site is zoned exclusive agriculture, or A District, and is intended for agricultural uses and activities compatible with agricultural uses according to the Kern County Zoning Ordinance Chapter 19.12. However, educational institutions and schools are permitted on A District with a conditional use permit. The project would be subject to the Kern County Zoning Ordinance Chapter 19.12.030 and would obtain a conditional use permit which would reduce impacts to less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The project site does not meet the definition of a forestry resource, as defined by California Public Resources Code Section 12220(g): “land that can support ten percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits”. The project site does not have a forest land designation. Therefore, the project would not conflict with existing zoning or cause rezoning of forest land, timberland, timberland zoned Timberland Production, or result in the loss or conversion of forest land. Therefore, there would be no impact

**NO IMPACT**

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

The project is surrounded by low density residential to the west and south. The property to the east is zoned medium density mobile home living but has not been developed yet. The northern border of the project site would be adjacent to agricultural lands. However, the project would not result in the indirect development of adjacent agricultural lands, as the school would serve existing populations. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

### 3 Air Quality

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project:  |                                      |  |                                     |                                     |
| a. Conflict with or obstruct implementation of the applicable air quality plan?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. Expose sensitive receptors to substantial pollutant concentrations?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

#### Overview of Air Pollution

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),<sup>1</sup> nitrogen oxides (NO<sub>x</sub>), particulate matter with diameters of ten microns or less (PM<sub>10</sub>) and 2.5 microns or less (PM<sub>2.5</sub>), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between ROG and NO<sub>x</sub>. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- 1 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.

<sup>1</sup> CARB defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term ROG is used in this IS-MND.

- 2 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 can also be divided into two major subcategories:

- 3 On-road sources that may be legally operated on roadways and highways.
- 4 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.

## **Air Quality Standards and Attainment**

The project site is located in the San Joaquin Valley Air Basin (SJVAB), which is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). As the local air quality management agency, the SJVAPCD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the SJVAB is classified as being in “attainment” or “nonattainment.” In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 2, are already occurring in that area as part of the environmental baseline condition.

Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The SJVAB is designated a nonattainment area for the state one-hour ozone standard as well as for the federal and state eight-hour ozone standards. The SJVAB is also designated as nonattainment for the state annual arithmetic mean and federal 24-hour PM<sub>2.5</sub> standards as well as the state 24-hour and annual arithmetic mean PM<sub>10</sub> standards. The nonattainment statuses of the SJVAB are the result of several factors, such as increased population and unique topographical and meteorological conditions that exacerbate the formation and retention of high levels of air pollution in the SJVAB (SJVAPCD 2016). The SJVAB is unclassified or in attainment for all other ambient air quality standards (SJVAPCD 2018a).



**Table 2 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 <sub>10</sub> )  | (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).   |
| Suspended particulate matter (PM <sub>2.5</sub> ) | (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: U.S. EPA 2021a

## Air Quality Management

The SJVAB is currently designated nonattainment for the ozone and PM<sub>2.5</sub> NAAQS. The SJVAPCD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS. The SJVAPCD 2016 Ozone Plan and 2018 PM<sub>2.5</sub> Plan include emissions inventories that identify sources of air pollutants, evaluations for feasibility of implementing potential opportunities to reduce emissions, sophisticated computer modeling to estimate future levels of pollution, and a strategy for how air pollution will be further reduced. The plans also include innovative alternative strategies for accelerating attainment through non-regulatory measures. The 2016 Ozone Plan determines that, with implementation of the proposed control strategy, the SJVAB can expect to reach attainment of the 2008 eight-hour ozone NAAQS by December 31, 2031 (SJVAPCD 2016). The 2018 PM<sub>2.5</sub> Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> NAAQS includes a strategy for bringing SJVAB into attainment by the respective deadlines of 2023, 2024, and 2025 (SJVAPCD 2021).

## Air Emission Thresholds

The SJVAPCD has adopted guidelines for quantifying and determining the significance of air quality emissions in its *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI; SJVAPCD 2015a). The SJVAPCD recommends the use of quantitative thresholds to determine the significance of construction-and operational related emissions of criteria air pollutant emissions. SJVAPCD has two sets of significance thresholds for operational emissions depending on whether the activities are for permitted equipment and activities or non-permitted equipment and activities. Project operation does not include permitted equipment or activities such as the use of back-up generators. Therefore, only the operational thresholds for non-permitted equipment and activities and construction activities are appropriate for evaluating project impacts. These thresholds are shown in Table 3.

Table 3 SJVAPCD Air Quality Thresholds of Significance – Criteria Pollutants

| Pollutant         | Construction (tons per year) | Operation (tons per year) |
|-------------------|------------------------------|---------------------------|
| NO <sub>x</sub>   | 10                           | 10                        |
| ROG               | 10                           | 10                        |
| PM <sub>10</sub>  | 15                           | 15                        |
| PM <sub>2.5</sub> | 15                           | 15                        |
| SO <sub>x</sub>   | 27                           | 27                        |
| CO                | 100                          | 100                       |

NO<sub>x</sub> = Nitrogen Oxides; VOC = Volatile Organic Compounds; PM<sub>10</sub> = Particulate Matter with a diameter no more than 10 microns; PM<sub>2.5</sub> = Particulate Matter with a diameter no more than 2.5 microns; SO<sub>x</sub> = Sulfur Oxide; CO = Carbon Monoxide

Source: Source: SJVAPCD 2015b

In addition to the annual SJVAPCD thresholds presented above, SJVAPCD has published the *Ambient Air Quality Analysis Project Daily Emissions Assessment* guidance, which is summarized in Section 8.4.2, *Ambient Air Quality Screening Tools*, of the SJVAPCD's GAMAQI (SJVAPCD 2018b). The Ambient Air Quality Screening Tools guidance provides a screening threshold of 100 pounds per day to evaluate construction and operational activities the following pollutants: NO<sub>x</sub>, ROG, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, and carbon monoxide. An ambient air quality assessment, which includes refined dispersion modeling, would be necessary if an exceedance occurs.

The SJVAPCD also recommends quantitative thresholds for evaluating a project's air quality impacts related to toxic air contaminants (TACs). Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SJVAPCD recommends a carcinogenic (cancer) risk threshold of 20 in a million. The Chronic Hazard Index is the sum of the individual substance chronic hazard indices for all TACs affecting the same target organ system. The SJVAPCD recommends a Chronic Hazard Index significance threshold of 1.0 and an Acute Hazard Index of 1.0.

## Methodology

Air pollutant emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including the project's land uses, square footages for different uses (e.g., education and parking), and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described under *Project Description*.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. CalEEMod estimates construction emissions by multiplying the amount of time equipment is in operation by emission factors. Construction of the proposed project was analyzed based on the applicant provided land use type and square footage. The proposed construction start date was assumed to begin in January 2023. Based on the applicant provided land uses, the CalEEMod model estimates construction would occur over approximately 17 months, and approximately 37,943 cubic yards of material would be imported to the site. To account for the amount of hauling trips to export soil, we assumed one month site preparation phase. It is assumed all construction equipment used would be diesel-powered. This analysis assumes that the project would comply with all applicable regulatory standards. In particular, the project would comply with SJVAPCD Rule 8201 Construction, Demolition, Excavation, Extraction, And Other Earthmoving

Activities and Rule 4601 Architectural Coating. See Appendix A for the project's construction-related air pollutant emissions modeling and calculations.

Operational emissions modeled include mobile source emissions (i.e., vehicle emissions), energy emissions, and area source emissions. Mobile source emissions are generated by vehicle trips to and from the project site. The trip generation rates for elementary school developments were based on average trip rates from the Institute of Transportation Engineers (ITE) 10th edition of the Trip Generation Manual (California Air Pollution Control Officers Association [CAPCOA] 2021). Emissions attributed to energy use include natural gas consumption by appliances as well as for space and water heating. Area source emissions are generated by landscape maintenance equipment, consumer products and architectural coatings.

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

Construction, and operation of the project would result in emissions of criteria pollutants including ozone precursors, such as ROG and NO<sub>x</sub>, as well as particulate matter. The SJVAPCD has prepared several air quality attainment plans to achieve ozone and particulate matter standards, the most recent of which include the 2016 Plan for the 2008 8-Hour Ozone Standard and the 2018 Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> Standards. The SJVAB is in attainment for carbon monoxide, sulfur dioxide, and lead; therefore, the SJVAPCD has not developed attainment plans for these pollutants. The SJVAPCD has determined that projects with emissions above the thresholds of significance for criteria pollutants would conflict with and obstruct implementation of the SJVAPCD's air quality plans (SJVAPCD 2015b). As discussed under item (b), the project would not exceed the SJVAPCD's significance thresholds for criteria air pollutant emissions. Therefore, the project would not conflict with applicable air plans, and no impact would occur.

**NO IMPACT**

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

**Construction Emissions**

Project construction would generate temporary air pollutant emissions associated with fugitive dust (PM<sub>10</sub> and PM<sub>2.5</sub>) and exhaust emissions from heavy construction equipment and construction vehicles. In addition to ROG emissions that would be released during the drying phase of architectural coating. Table 4 summarizes the estimated annual emissions of criteria air pollutants during project construction. As shown therein, construction-related emissions would not exceed SJVAPCD thresholds. In addition, pursuant to the SJVAPCD's Rule 9510, *Indirect Source Review*, the project would be subject to reduce construction NO<sub>x</sub> and PM<sub>10</sub> emissions by 20% and 45%, respectively, since it would develop more than 9,000 square feet of education space, which is the ambient air quality analysis screening level threshold for educational developments. Therefore, project construction would not 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. Impacts would be less than significant.

**Table 4 Project Construction Emissions**

| Construction Year                  | Annual Construction Emissions (tons/year) |                 |           |                 |                  |                   |
|------------------------------------|---|-----------------|-----------|-----------------|------------------|-------------------|
|                                    | ROG                                       | NO <sub>x</sub> | CO        | SO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| 2023                               | <1  | 3               | 3         | <1              | <1               | <1                |
| 2024                               | <1  | 1               | 1         | <1              | <1               | <1                |
| SJVAPCD Thresholds of Significance | 10  | 10              | 100       | 27              | 15               | 15                |
| <b>Threshold Exceeded?</b>         | <b>No</b>                                 | <b>No</b>       | <b>No</b> | <b>No</b>       | <b>No</b>        | <b>No</b>         |

ROG = reactive organic gas, NO<sub>x</sub> = nitrogen oxides, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides, PM<sub>10</sub> = particulate matter 10 microns in diameter or less, PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter

Notes: All calculations were made using CalEEMod v.2020.4.0. See Appendix A for calculations. Some numbers may not add up due to rounding. Emission data is pulled from CalEEMod's "mitigated" results, which is a term of art for the modeling output and is not equivalent to mitigation measures that may apply to the CEQA impact analysis. The CalEEMod "mitigated" results account for compliance with regulations (Rule 8021) and project design features.

As shown in Table 5, maximum daily emissions associated with project construction would not exceed the SJVAPCD's 100-pounds-per-day screening threshold during construction. Therefore, an ambient air quality assessment is not required for construction activities.

**Table 5 Maximum Daily Project Construction Emissions**

|                                      | Emissions (lbs/day) |                 |           |                 |                  |                   |
|--------------------------------------|---------------------|-----------------|-----------|-----------------|------------------|-------------------|
|                                      | ROG                 | NO <sub>x</sub> | CO        | SO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Maximum Daily Emissions              | 10                  | 88              | 31        | <1              | 19               | 9                 |
| SJVAPCD Screening Threshold          | 100                 | 100             | 100       | 100             | 100              | 100               |
| <b>Screening Threshold Exceeded?</b> | <b>No</b>           | <b>No</b>       | <b>No</b> | <b>No</b>       | <b>No</b>        | <b>No</b>         |

lbs/day = pounds per day, ROG = reactive organic gas, NO<sub>x</sub> = nitrogen oxides, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides, PM<sub>10</sub> = particulate matter 10 microns in diameter or less, PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter

Notes: All calculations were made using CalEEMod v.2020.4.0. See Appendix A for calculations. Some numbers may not add up due to rounding. Emission data is pulled from CalEEMod's "mitigated" results, which is a term of art for the modeling output and is not equivalent to mitigation measures that may apply to the CEQA impact analysis. The CalEEMod "mitigated" results account for compliance with regulations (Rule 8021) and project design features. Emissions presented are the highest of the winter and summer modeled emissions.

Because the SJVAPCD annual and daily thresholds would not be exceeded, project construction would not 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. In addition, pursuant to the SJVAPCD's Rule 9510, *Indirect Source Review*, the project would be subject to reduce construction NO<sub>x</sub> and PM<sub>10</sub> emissions by 20% and 45%, respectively, since it would develop more than 9,000 square feet of education space, which is the ambient air quality analysis screening level threshold for educational developments. Impacts would be less than significant.

## Operational Emissions

Operation of the project would generate criteria air pollutant emissions associated with area sources (e.g., fireplaces, architectural coatings, consumer products, and landscaping equipment), energy sources (i.e., use of natural gas for space and water heating and cooking), and mobile

sources (i.e., vehicle trips to and from the project site). Table 6 summarizes the project's annual operational emissions by emission source. As shown therein, operational emissions would not exceed SJVAPCD regional thresholds for criteria pollutants. Therefore, project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment, and impacts would be less than significant.

**Table 6 Project Operational Emissions**

| Emissions Source    | Pollutant (tons/year) |                 |          |                 |                  |                   |
|---------------------|-----------------------|-----------------|----------|-----------------|------------------|-------------------|
|                     | ROG                   | NO <sub>x</sub> | CO       | SO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Area                | <1                    | <1              | <1       | <1              | <1               | <1                |
| Energy              | <1                    | <1              | <1       | <1              | <1               | <1                |
| Mobile              | <1                    | <1              | 2        | <1              | <1               | <1                |
| <b>Total</b>        | <b>&lt;1</b>          | <b>&lt;1</b>    | <b>2</b> | <b>&lt;1</b>    | <b>&lt;1</b>     | <b>&lt;1</b>      |
| SJVAPCD Thresholds  | 10                    | 10              | 100      | 27              | 15               | 15                |
| Threshold Exceeded? | No                    | No              | No       | No              | No               | No                |

lbs/day = pounds per day; VOC = Volatile organic compounds, NO<sub>x</sub> = nitrogen oxides, CO = carbon monoxide, SO<sub>2</sub> = sulfur dioxide, PM<sub>10</sub> = particulate matter 10 microns in diameter or less, PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter

Source: All emissions modeling was completed made using CalEEMod. See Appendix A for modeling results. Some numbers may not add up due to rounding. Emission data is pulled from "mitigated" results, which account for compliance with regulations (including SJVAPCD Rules 8021 and 4601) and project design features. Emissions presented are the highest of the winter and summer modeled emissions.

Project-related operational emissions must be compared to the SJVAPCD's 100-pounds-per-day ambient air quality screening threshold for ROG, NO<sub>x</sub>, sulfur dioxide, carbon monoxide, PM<sub>10</sub>, and PM<sub>2.5</sub>. As shown in Table 7, maximum daily emissions associated with project operation would not exceed the SJVAPCD's 100-pounds-per-day screening threshold during construction. Therefore, an ambient air quality assessment is not required for operational activities.

**Table 7 Maximum Daily Project Operational Emissions**

|                               | Emissions (lbs/day) |                 |           |                 |                  |                   |
|-------------------------------|---------------------|-----------------|-----------|-----------------|------------------|-------------------|
|                               | ROG                 | NO <sub>x</sub> | CO        | SO <sub>2</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Maximum Daily Emissions       | 3                   | 3               | 13        | <1              | 3                | 1                 |
| SJVAPCD Screening Threshold   | 100                 | 100             | 100       | 100             | 100              | 100               |
| Screening Threshold Exceeded? | <b>No</b>           | <b>No</b>       | <b>No</b> | <b>No</b>       | <b>No</b>        | <b>No</b>         |

lbs/day = pounds per day, ROG = reactive organic gas, NO<sub>x</sub> = nitrogen oxides, CO = carbon monoxide, SO<sub>x</sub> = sulfur oxides, PM<sub>10</sub> = particulate matter 10 microns in diameter or less, PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter

Notes: All calculations were made using CalEEMod v.2020.4.0. See Appendix A for calculations. Some numbers may not add up due to rounding. Emission data is pulled from CalEEMod's "mitigated" results, which is a term of art for the modeling output and is not equivalent to mitigation measures that may apply to the CEQA impact analysis. The CalEEMod "mitigated" results account for compliance with regulations (Rule 8021) and project design features. Emissions presented are the highest of the winter and summer modeled emissions.

Because the SJVAPCD annual and daily thresholds would not be exceeded, project's operational activities would not 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. In addition, pursuant to the SJVAPCD's Rule 9510, *Indirect Source Review*, the project

would be subject to reduce operational NO<sub>x</sub> and PM<sub>10</sub> emissions by 33% and 50%, respectively, since it would develop more than 9,000 square feet of education space, which is the ambient air quality analysis screening level threshold for educational developments. Impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

*c. Would the project expose sensitive receptors to substantial pollutant concentrations?*

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. According to SJVAPCD, sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s). The nearest sensitive receptor to the project site is a single-family residence located approximately 60 feet west of the project site. Localized air quality impacts to sensitive receptors typically result TACs, which are discussed in the following subsections.

#### **Toxic Air Contaminants**

TACs are defined by California law as air pollutants that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The following subsections discuss the project's potential to result in impacts related to TAC emissions during construction and operation.

##### *Construction*

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2020) and is therefore the focus of this analysis.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 17 months. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 17 months) is approximately five percent of the total exposure period used for 30-year health risk calculations. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (BAAQMD 2017).

The maximum PM<sub>10</sub> and PM<sub>2.5</sub> emissions would occur during the site preparation and grading activities, which would last for approximately 40 days. DPM generated by project construction

would not create conditions where the probability is greater than 20 in one million of contracting cancer for the Maximally Exposed Individual (the SJVAPCD's carcinogenic risk threshold) or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Chronic or Acute Hazard Index greater than one for the Maximally Exposed Individual (the SJVAPCD's hazard index thresholds). Therefore, project construction would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

### *Operation*

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). The proposed project is not considered land uses that generate substantial TAC emissions based on review of the air toxic sources listed in CARB's guidelines. It is expected that quantities of hazardous TACs generated on-site (e.g., cleaning solvents, paints, landscape pesticides, etc.) for the types of proposed land uses would be below thresholds warranting further study under the California Accidental Release Program. Because the project would not include substantial TAC sources and is consistent with CARB guidelines, it would not result in the exposure of off-site sensitive receptors to significant amounts of carcinogenic or toxic air contaminants. Impacts would be less than significant.

### **LESS THAN SIGNIFICANT IMPACT**

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

During construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be intermittent and temporary and would cease upon completion, and odors disperse with distance. Overall, project construction would not generate other emissions, such as those leading to odors, affecting a substantial number of people. Construction-related impacts would be less than significant.

SJVAPCD has identified some common types of facilities that have been known to produce odors in the SJVAB. Refer to Table 6 of the SJVAPCD's GAMAQI to see screening distances that have the potential to generate substantial odor complaints. The uses in the table include wastewater treatment plants, landfills or transfer stations, refineries, composting facilities, asphalt batch plant, chemical manufacturing, fiberglass manufacturing, painting/coating operations, food processing facility, feed lot/dairy, and rendering plant (SJVAPCD 2015a). The proposed project is not associated with operational odors in the SJVAB. In addition, solid waste generated by the proposed on-site uses would be properly stored in lidded dumpsters and/or trash cans and collected by a contracted waste hauler, ensuring that on-site waste would be managed and collected in a manner to prevent the proliferation of odors. The SJVAPCD does not have an individual rule or regulation that specifically addresses odors; however, odors would be subject to SJVAPCD's *Rule 4102, Nuisance*. Therefore, the proposed project would not generate other emissions such as those leading to odors affecting a substantial number of people, and no operational impact would occur.

### **NO IMPACT**

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## 4 Biological Resources

|  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|--|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project:   |                                      |  |                                     |                                     |
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 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?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

## Existing Setting

The project site is located on parcel number 178-282-25 in Lamont, CA, east of State Route (SR) 184, along Panama Road. The site is located in a semi-rural unincorporated area of Kern County. The site is currently undeveloped but has been used for cattle grazing in the past. The site is vacant grassland with a single tree on the southeast corner of the site and has no current uses. Surrounding land uses include single-family residences with a few multi-family residences along Panama Road and Carnation Avenue to the south and west. On the northern and eastern sides of the site are exclusively agricultural land.

## Regulatory Setting

### *Federal and State*

Regulatory authority over biological resources is shared by federal, state, and local agencies under a variety of laws, ordinances, regulations, and statutes. Primary authority for biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the City of Lamont).

The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State under CEQA and has direct jurisdiction under the California Fish and Game Code (CFGF). Under the California Endangered Species Act (CESA) and the federal Endangered Species Act (FESA), the CDFW and the U.S. Fish and Wildlife Service (USFWS), respectively, have direct regulatory authority over species formally listed as threatened or endangered (and listed as rare for CDFW). Native and/or migratory bird species are protected under the Migratory Bird Treaty Act and CFGF Sections 3503, 3503.5, and 3511.

Laws and regulations found within the Clean Water Act (CWA), CFGF, California Water Code, and California Code of Regulations (CCR) protect wetlands and riparian habitat. The U.S. Army Corps of Engineers (USACE) has regulatory authority over wetlands and other waters of the United States under Section 404 of the CWA. The State Water Resources Control Board and the nine Regional Water Quality Control Boards (RWQCBs) ensure water quality protection in California pursuant to Section 401 of the CWA and Section 13263 of the Porter-Cologne Water Quality Control Act. The CDFW regulates certain waters features, such as streams and lakes, under the CFGF Section 1600 et seq.

Special status species are those plants and animals: 1) listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS and the National Marine Fisheries Service (NMFS) under the FESA; 2) listed or proposed for listing as Candidates, Rare, Threatened, or Endangered by the CDFW under the CESA; 3) recognized as California Species of Special Concern (CSSC) by the CDFW; 4) afforded protection under the Migratory Bird Treaty Act (MBTA) or CFGF; and 5) occurring on Lists 1 and 2 of the California Native Plant Society's California Rare Plant Ranking (CRPR) system.

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

A search of the United States Fish and Wildlife Service (USFWS) Information Planning and Consultation (IPaC) system concluded that the project site does not contain critical habitats (USFWS

2021a). The USFWS national wetlands inventory did not identify wetland or riparian habitat on the project site (USFWS 2021b). The project site has been heavily grazed in the past and thus is unlikely to contain special-status plant and wildlife taxa recognized on the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2021) and the California Department of Fish and Wildlife (CDFW) State and Federally Listed Endangered, Threatened, And Rare Plants of California (CDFW 2021). Additionally, the project site is not located on or near critical habitat according to the US Fish and Wildlife Service Environmental Conservation Online System (ECOS) (USFWS 2022). The project site lacks habitat that would be suitable for sensitive animal or plant species. Therefore, impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*
- c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The project site does not contain any riparian habitats as there are no creeks or rivers located site. Additionally, there are no wetlands identified on the project site by the USFWS (USFWS 2021b). Therefore, there would be no impact to riparian habitats or wetlands.

#### **NO IMPACT**

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

It is unlikely that wildlife movement corridors or habitat linkages would be present in the project site. Due to the relatively small size of the project footprint, and its location in proximity with existing development and agricultural use, the project would not interfere substantially with the movement of wildlife species. Impacts to wildlife movement would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

As previously mentioned, the project site has been heavily grazed and thus the majority of the project site has been cleared. The project site contains one tree on the southeastern edge of the project site along Panama Road. However, the tree will not be removed as part of the project. Additionally, Kern County does not currently have a tree ordinance in place. Therefore, there would be no impact.

#### **NO IMPACT**

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The project is located within the Metropolitan Bakersfield Habitat Conservation Plan (MBHCP). The MBHCP covers a 405-square-mile area of County of Kern and the City of Bakersfield jurisdiction in and around Metropolitan Bakersfield. The MBHCP is intended to ensure the protection of species habitat while allowing reasonable urban growth. However, as mentioned in *item a*, the project does not appear on any list as containing critical habitat. Additionally, projects within the MBHCP boundary are subject to the terms in the Metropolitan Bakersfield HCP Incidental Take Permit (ITP). The project therefore is required to conform to the terms of the ITP. This includes the payment of habitat mitigation fees; a Biological Clearance Survey; inspection of all open holes, sumps, and trenches three times a day for species covered by the MBHCP; and a notice to County of Kern, USFWS, and the CDFW prior to grading of the site. The project would be required to comply with all terms of ITP prior to the issuance of a building and grading permit. Therefore, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

## 5 Cultural Resources

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project:  |                                      |  |                                     |                                     |
| g. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?      | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| i. Disturb any human remains, including those interred outside of formal cemeteries?                          | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

This section provides an analysis of the project's impacts on cultural resources, including historical and archaeological resources, as well as human remains. CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC], Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant (State CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

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; or

3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

In September and October 2021, Rincon prepared a cultural resources study (Appendix B) in support of the project, which included: a cultural resources records search at the California Historical Resources Information System Southern San Joaquin Valley Information Center (SSJVIC) located at California State University, Bakersfield; a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search; and a pedestrian field survey.

The SSJVIC records search was performed to identify previously conducted cultural resources studies, as well as previously recorded cultural resources within the project site and a 0.8-kilometer (0.5-mile) radius surrounding it. The records search included a review of available records at the SSJVIC, as well as the National Register of Historic Places, CRHR, the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, the Archaeological Determinations of Eligibility list, and historical maps.

The SSJVIC records search identified 12 cultural resources studies conducted within a 0.5-mile radius of the project site, one of which evaluated portions of the project site. The SSJVIC search identified five previously recorded cultural resources within a 0.5-mile radius of the project site, one of which occurs within the project site. Resource P-15-020570, Panama Road, was recorded within the current project site by Urbana Preservation & Planning, LLC in 2019. Panama Road is recorded as 20-foot wide, oriented east to west, originating at S. Union Avenue to the west, and terminating near General Beale Road to the east, spanning 14.65 miles (Urbana Preservation & Planning, 2019). Panama Road is recommended ineligible for listing in the NRHP or CRHR under all four (A/1 – D/4) criteria.

Rincon contacted the Native American Heritage Commission (NAHC) on September 21, 2021, to request a Sacred Lands File (SLF) search of the project site. The NAHC emailed a response on October 22, 2021, stating the SLF search was negative.

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

The background research and pedestrian field survey identified one historic-period cultural resource within the project site. The resource (P-15-020570; Panama Road) was previously recommended ineligible for listing in the NRHP and CRHR by Urbana Preservation & Planning in 2019. Rincon concurs with the recommendation presented by Urbana Preservation & Planning and did not identify new information to suggest the resource needs to be reevaluated. As such Panama Road is not considered a historical resource pursuant to CEQA. An adjacent wooden utility line was also observed; however, it does not appear to meet the age threshold triggering the need for historical resources evaluation and it would not be directly affected as part of the proposed project. Therefore, ***no impact to historical resources*** would occur.

#### **NO IMPACT**

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The site has been disturbed by grading from at least 1987 to current. Additionally, substantial development surrounds the project site in all directions.

Rincon conducted a pedestrian survey of the project site in October 2021. The pedestrian survey consisted of a series of transects oriented generally east-west, spaced no more than 15 meters apart across the project site. Areas of exposed ground were inspected for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features that indicate the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances, such as burrows were also visually inspected. Ground visibility within the project site was excellent, approximately 100 percent. No archaeological resources were identified during the pedestrian survey.

The SLF search was returned with negative results, no prehistoric resources were identified within the project site, and no cultural resources were identified during the pedestrian survey. Given the negative results of this study, the project site is considered to have low archaeological sensitivity. However, it is possible that unanticipated archaeological deposits and/or human remains could be encountered and damaged during the ground-disturbing activities associated with construction (such as grading and excavation), especially if those activities occur in less-disturbed buried sediments. Consequently, mitigation is necessary to ensure that potential impacts to archaeological resources, including those that may be considered historical resources, are reduced to a less-than-significant level.

## Mitigation Measure

### *CUL-1 Unanticipated Discovery of Cultural Resources*

In the unlikely event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archeology (National Park Service 1983) will be contacted immediately to evaluate the find. If the find is prehistoric, then a Native American representative will be contacted to participate in the evaluation of 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 eligible for listing in the CRHR and cannot be avoided additional work, such as testing and data recovery excavations, may be warranted to mitigate any significant impacts to cultural resources to less than a significant level.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

#### *c. Would the project disturb any human remains, including those interred outside of formal cemeteries?*

The cultural resources records search did not identify cemeteries or archaeological resources containing human remains within the site. However, the discovery of human remains is always a possibility during ground disturbances, as would be required for future development within the site. Human burials outside of formal cemeteries often occur in prehistoric archaeological contexts. In addition to being potential archaeological resources, human burials have specific provisions for treatment in Section 5097 of the California Public Resources Code. Additionally, the California Health and Safety Code (Sections 7050.5, 7051, and 7054) has specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains, and protects them from disturbance, vandalism, or destruction. Public Resources Code

Section 5097.98 also addresses the disposition of Native American burials, protects such remains, and establishes the NAHC as the entity to resolve any related disputes.

If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Compliance with Public Resources Code Section 5097.98 and State of California Health and Safety Code Section 7050.5 would ensure impacts to human remains are less than significant.

**LESS THAN SIGNIFICANT IMPACT**



## 6 Energy

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                |
|---|--------------------------------------|--|-------------------------------------|--------------------------|
| Would the project:  |                                      |  |                                     |                          |
| a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

### Energy Setting

Energy consumption has a direct effect on environmental quality in that consumption of nonrenewable energy resource releases criteria air pollutant and greenhouse gas emissions on the atmosphere.

As a state, California is one of the lowest per capita energy users in the United States, ranked 50th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration 2021). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating, and cooling systems, fireplaces, and other uses such as industrial processes in addition to being consumed by alternative fuel vehicles. Most of California's electricity is generated in state with approximately 30 percent imported from the Northwest and Southwest in 2020; however, the state relies on out-of-state natural gas imports for nearly 90 percent of its supply (California Energy Commission [CEC] 2021a, 2021b). In addition, approximately 33 percent of California's electricity supply in 2020 came from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2021a). In 2018, Senate Bill 100 accelerated the state's Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy and zero-carbon resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. Electricity and natural gas service would be provided to the project by PG&E. Table 8 summarizes the electricity and natural gas consumption for Kern County, in which the project site would be located, and for PG&E, as compared to statewide consumption.

#### *Pacific Gas & Electric Co.*

PG&E supplies electricity to Lamont using transmissions infrastructure operated and maintained by PG&E. PG&E is a publicly owned power supplier that provides electricity to Kern County residents and businesses. The Lamont Public Utilities District (LPUD) serves as a liaison between PG&E and residents. PG&E is one of the nation's largest electric and gas utility companies, and it maintains 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected

transmission lines (PG&E 2021a). According to PG&E's 2020 Integrated Resource Plan, PG&E anticipates meeting a 2030 gross system usage of 82,306 GWh (PG&E 2021b).

As shown in Table 8, California used 200,475 gigawatt hours (GWh) of electricity in 2020, of which 30 percent were from renewable resources (CEC 2021b). California also consumed approximately 3,243 million U.S. therms (MMthm) of natural gas in 2020 (CEC 2021b). Table 8 also shows the total electricity and natural gas consumption for the PG&E service area.

**Table 8 2020 Electricity and Natural Gas Consumption**

| Energy Type                      | Kern County | Pacific Gas & Electric | California | Proportion of PG&E Consumption | Proportion of Statewide Consumption <sup>1</sup> |
|----------------------------------|-------------|------------------------|------------|--------------------------------|--|
| Electricity (GWh)                | 14,966      | 78,519                 | 200,475    | 19%                            | 7%   |
| Natural Gas (millions of therms) | 2,224       | 4,508                  | 3,243      | 49%                            | 68%  |

GWh = gigawatt-hours

<sup>1</sup> For reference, the population of Kern County (914,193 persons) is approximately 1.0 percent of the population of California (39,466,855 persons) (California Department of Finance 2021).

Source: CEC 2021c

## Petroleum and Natural Gas Setting

California is one of the top producers of petroleum in the nations with drilling operations occurring throughout the state but concentrated in Kern and Los Angeles counties. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay area, and the Central Valley. California oil refineries also process Alaskan and foreign crude oil received at ports in Los Angeles, Long Beach, and San Francisco Bay area (CEC 2021c). According to the U.S. Energy Information Association, California's field production of crude oil totaled 143,114 million barrels in 2020 (U.S. Energy Information Association 2021).

As shown in Table 9, Kern County consumed an estimated 364 million gallons of gasoline and 116 million gallons of diesel fuel in 2020, which was approximately 3.3 percent of statewide gasoline consumption and approximately 7 percent of statewide diesel fuel consumption (CEC 2021b).

**Table 9 2020 Annual Gasoline and Diesel Consumption**

| Fuel Type | Kern County (million gallons) | California (million gallons) | Proportion of Statewide Consumption |
|-----------|-------------------------------|------------------------------|-------------------------------------|
| Gasoline  | 364                           | 11,173                       | 3.3%                                |
| Diesel    | 116                           | 1,626                        | 7.1%                                |

Source: CEC 2021b

## Methodology

Energy consumption is analyzed herein in terms of construction and operational energy. Construction energy demand accounts for anticipated energy consumption during project construction, such as fuel consumed by construction equipment and construction workers' vehicles traveling to and from the project site. Operational energy demand accounts for the anticipated energy consumption during project operation, such as fuel consumed by cars, trucks, and public

transit; natural gas consumed for heating building space; and electricity consumed for building power needs, including, but not limited to lighting, water conveyance, and air conditioning.

The CalEEMod outputs for the air quality and greenhouse gas (GHG) modeling (Appendix A) and the vehicle miles traveled (VMT) calculations (Appendix TRA) were used to estimate energy consumption associated with operation of the proposed project. The CalEEMod results provide the average travel distance and trip numbers during construction, the vehicle fleet mix during operation, and the estimated gross electricity and natural gas use by land use during project operation.

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

## Construction

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.

As shown in Table 10, project construction would require approximately 13,560 gallons of gasoline and approximately 89,842 gallons of diesel fuel. Construction energy use would be temporary, and construction equipment used would be typical of similar sized projects in the region. In addition, construction contractors would be required to comply with the provisions of the CCR Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption.

**Table 10 Estimated Fuel Consumption during Construction**

| Source   | Fuel Consumption (Gallons) |        |
|--|----------------------------|--------|
|  | Gasoline                   | Diesel |
| Construction Equipment & Hauling Trips   | –                          | 89,842 |
| Construction Worker Vehicle Trips  | 13,560                     | –      |
| See Appendix A for CalEEMod default values for fleet mix and average distance of travel, and Appendix NRG for energy calculation sheets. |                            |        |

In addition, per applicable regulatory requirements such as 2019 CalGreen, the project would comply with construction waste management practices to divert a minimum of 65 percent of construction and demolition debris. These practices would result in efficient use of energy necessary to construct the project. Furthermore, in the interest of cost-efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, project construction would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

## Operation

Project operation would require energy use in the form of electricity, natural gas, and gasoline consumption. Natural gas would be used for heating and cooling systems and electricity would be

used for lighting and appliances. Gasoline consumption would be attributed to vehicular travel from students, staff, and visitors traveling to and from the project site. Table 11 shows the project's estimated total annual gasoline and diesel fuel consumption, as well as electricity and natural gas use.

**Table 11 Estimated Project Annual Operational Energy Consumption**

| Source  | Energy Consumption |                |
|---|--------------------|----------------|
| Vehicle Trips   |                    |                |
| Gasoline  | 39,962 gallons     | 4,387.28 MMBtu |
| Diesel  | 10,009 gallons     | 1,275.75 MMBtu |
| Built Environment   |                    |                |
| Electricity   | 204.85 MWh         | 1,838 MMBtu    |
| Natural Gas   | 7.99 therms        | 0.74 MMBtu     |
| MWh = megawatt-hours; MMBtu = million British thermal units |                    |                |
| Source: Appendix NRG  |                    |                |

As shown in Table 11, project operation would consume approximately 204.85 megawatt-hours of electricity per year. The project would comply with standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. CalGreen (as codified in CCR Title 24, Part 11) requires implementation of energy-efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2020 Building Energy Efficiency Standards (CBC Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the CEC. These standards are specifically crafted for new buildings to achieve energy efficient performance. The standards are updated every three years, and each iteration increases energy efficiency standards.

In addition, the project's vehicle trips would require approximately 39,962 gallons of gasoline and 10,009 gallons of diesel fuel annually. Although the project site is not located near existing transit facilities, the site is one half mile distance of several bus stops along Main Street. As mentioned above, the project would comply with CalGreen standards, CCR provisions, and the USEPA Construction Equipment Fuel Efficiency Standard which would minimize the project's potential to result in the wasteful, inefficient, or unnecessary consumption of vehicle fuels. Therefore, project operation would not result in potentially significant environmental effects due to the wasteful, inefficient, or unnecessary consumption of energy. Impacts would be less than significant.

With the energy efficiency measures described above, the project would minimally increase energy demand and petroleum demand due to the development of the project, compared with existing conditions. However, the impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The project would result in increased energy consumption when compared to existing conditions, through electricity to power facilities, natural gas for heating and cooking, and petroleum use by motor vehicles traveling to and from the project site. As discussed under *criterion (a)*, new development would comply with Title 24 Building Energy Efficiency Standards.

In addition, Senate Bill 100 (SB 100) mandates 100 percent clean electricity for California by 2045. Because the project would be powered by the existing electricity grid, the project would eventually be powered by renewable energy mandated by SB 100 and would not conflict with this statewide plan. Therefore, no conflict with an applicable plan, policy or regulation adopted for the purpose energy efficiency is anticipated. Therefore, the impacts would be less than significant.

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## 7 Geology and Soils

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project:  |                                      |  |                                     |                                     |
| a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:  |                                      |  |                                     |                                     |
| 1. 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?             | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 2. Strong seismic ground shaking?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3. Seismic-related ground failure, including liquefaction?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4. Landslides?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| a. Result in substantial soil erosion or the loss of topsoil?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. 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? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. 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?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. 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?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

- a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?*
- a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

The closest fault to the project site is the White Wolf Fault located approximately 9.0 miles to the southeast. There is no indication of active faults on the project site and the site is not located within a designated Alquist-Priolo Earthquake fault zone (DOC 2021). Additionally, all development is required to comply with the California Building Standards Commission (CBSC), which provides minimum standards to ensure that proposed structures are designed using sound engineering practices and appropriate engineering standards for the seismic area in which a project site is located. Projects designed in accordance with the CBSC would be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage, but with some non-structural damage; and 3) resist major earthquakes without collapse, but with some structural, as well as non-structural, damage. Although conformance with the CBSC does not guarantee that substantial structural damage would not occur in the event of a maximum magnitude earthquake, conformance with the CBSC can reasonably be assumed to ensure that the proposed structures would be survivable, allowing occupants to safely evacuate in the event of a major earthquake.

The project site is not in a location of known active faults and would be required to comply with the CBCS building codes; Thus, impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

The project site is generally flat and is surrounded by residential to the west and south, and agricultural uses to the north and east. The site is not located in a landslide zone or a liquefaction zone (DOC 2021). Thus, there would be no impact.

#### **NO IMPACT**

- b. Would the project result in substantial soil erosion or the loss of topsoil?*

Development of the proposed project would involve construction activities such as stockpiling, grading, excavation, paving, and other earth-disturbing activities that could result in erosion or the loss of topsoil.

Construction activities that disturb one or more acres of land surface are 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) adopted by the State Water Resources Control Board (SWRCB). Compliance with the permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require development of a storm water 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, control of construction sediment and erosion control measures, maintenance responsibilities, and non-storm water management controls. Inspection of construction sites before and after storms is also required to identify storm water discharge from the construction activity and to identify and implement erosion controls, where necessary. Compliance with the Construction General Permit is reinforced through the Kern County Municipal Code Section 14.26.310. As part of this plan Construction Best Management Practices (BMP) would be implemented for soil stability and erosion control. Soil stabilization techniques may include preservation of existing vegetation, silt fencing, fiber rolls, sandbag barriers, gravel bag berms and stabilized construction site driveways. Adherence to BMPs and the NPDES General Permit would ensure the project is designed to support erosion control. Thus, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

As mentioned above in *item a.3* and *a.4*, the project site is not located in a landslide zone or a liquefaction zone. The project site is not located near any open faces, such as riverbanks and streams, that would be considered susceptible to lateral spreading. Therefore, the potential for liquefaction and lateral spreading to pose a risk to the proposed development is relatively low. Land subsidence is the gradual, local settling or sinking of the earth's surface with little or no horizontal motion and is typically a result of groundwater depletion. The CBSC building regulations require the preparation of geotechnical reports, which would determine the site's potential for subsidence and recommend necessary design features to ensure the stability of proposed structures. Compliance with CBSC building regulations would reduce impacts related to the lateral spreading and subsidence/settlement hazards. Therefore, would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

Expansive soils are soils that, due to their composition and moisture content, have a potential to undergo significant changes in volume, in the form of either shrinking or swelling. The project site consists entirely of Granoso loamy sand, which has a low susceptibility to expansion due to its high drainage properties (USDA 2019). Additionally, the project would comply with the CBSC requirements to address soil-related hazards. In cases where soil remediation is not feasible, the California Building Code requires structural reinforcement of foundations to resist the forces of expansive soils. Compliance with the requirements of the California Building Code would reduce impacts related to expansive soils to a less than significant level.

**LESS THAN SIGNIFICANT IMPACT**

- e. *Would the project 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?*

The project would be served by the Lamont Public Utilities District. Therefore, the construction or operation of septic tanks or other alternative wastewater disposal systems is not included as part of the project. No impacts from septic or alternative wastewater disposal systems would occur.

#### **NO IMPACT**

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

### **Paleontological Resources**

Rincon evaluated the paleontological sensitivity of the geologic units that underlie the project site using the results of the paleontological locality search and review of existing information in the scientific literature concerning known fossils within those geologic units. Rincon reviewed fossil collections records from the University of California Museum of Paleontology (UCMP) online database and Paleobiology Database (PBDB), which contain known fossil localities in Kern County.

Following the literature review and museum record search a paleontological sensitivity classification was assigned to the geologic units within the project area. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units. The Society of Vertebrate Paleontology (SVP) (2010) 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. This criterion 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 located in the southern part of the Great Central Valley geomorphic province, one of the 11 major geomorphic provinces in California (California Geological Survey 2002). The Great Central Valley is a more than 400-mile-long, asymmetrical, northwestwardly-trending structural trough formed between the uplands of the Coast Ranges to the west and the Sierra Nevada to the east. The valley is filled with up to six vertical miles of sediment, including marine, alluvial, and lacustrine (lake) deposits. The project site is in the Lamont United States Geological Survey 7.5-minute topographic quadrangle and is mapped at a scale of 1:62,500 by Dibblee and Minch (2008). The project site contains one geologic unit mapped at ground surface: Quaternary (Holocene) alluvium (Qa). Qa consists of alluvial gravel and sand that includes loamy silt in floodplain areas (Dibblee and Minch 2008).

Based on a literature review and online database search, and in accordance with SVP (2010) guidelines, the geologic unit (Qa) underlying the project site was determined to have low paleontological sensitivity. Although alluvial sediments are known to produce fossils throughout California, including in Kern County (PBDB 2022; UCMP 2022), Holocene units, such as Qa, are generally considered too young to preserve scientifically significant paleontological resources. Holocene sediments may grade into Pleistocene sediments, which are of an appropriate age to preserve scientifically significant paleontological resources, in the subsurface; however, the site is more centrally located within the basin, where young Holocene sediments (i.e., younger than 5000 years old) are expected to be relatively thick, exceeding typical depths of construction ground disturbance activity. The proposed ground-disturbing activities associated with this project are unlikely to reach depths at which younger sediments would transition into sediments that have

potential to support fossils. Therefore, impacts to paleontological resources are not expected, and no further paleontological resource management is recommended.

**LESS THAN SIGNIFICANT IMPACT**

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## 8 Greenhouse Gas Emissions

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project:  |                                      |  |                                     |                                     |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?       | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### Overview of Climate Change and Greenhouse Gases

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 gas (GHG) emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO<sub>2</sub>), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO<sub>2</sub>) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO<sub>2</sub>e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO<sub>2</sub> on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).<sup>2</sup>

The United Nations IPCC expressed that the rise and continued growth of atmospheric CO<sub>2</sub> concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report

<sup>2</sup> The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

(2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, a total of 2,390 gigatonnes of anthropogenic CO<sub>2</sub> was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO<sub>2</sub>, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (U.S. EPA 2021b). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts 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 (State of California 2018).

## Regulatory Framework

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the California Air Resources Board (CARB) adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard, and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (discussed further below). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of CO<sub>2</sub>e by 2030 and two MT of CO<sub>2</sub>e by 2050 (CARB 2017).

Other relevant state laws and regulations include:

- 5 **SB 375:** The Sustainable Communities and Climate Protection Act of 2008 (SB 375), signed in August 2008, enhances the state's ability to reach AB 32 goals by directing the CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. Metropolitan Planning Organizations are required to adopt a Sustainable Communities Strategy (SCS), which allocates land uses in the Metropolitan Planning Organization's Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. The Kern Council of Governments (Kern COG) was assigned targets of a nine percent reduction in per capita GHG emissions from passenger vehicles from 2005 levels by 2020 and a 15 percent reduction in per capita GHG emissions from passenger vehicles from 2005 levels by 2035. Kern COG adopted the 2018 RTP in August 2018, which meets the requirements of SB 375.
- 6 **SB 100:** Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program. SB

100 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.

- 7 **California Building Standards Code (California Code of Regulations Title 24):** The California Building Standards Code consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2019 Title 24 standards. Part 6 is the Building Energy Efficiency Standards, which establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. Part 12 is the California Green Building Standards Code (CALGreen), which includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures.

### *Local Regulations*

#### **SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT CLIMATE CHANGE ACTION PLAN**

In August 2008, the SJVAPCD Governing Board adopted the Climate Change Action Plan (CCAP) (SJVAPCD 2008a). The CCAP directed the SJVAPCD Air Pollution Control Officer to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project specific GHG emissions on global climate change. In 2009, the SJVAPCD adopted the *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA* and the *District Policy – Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. The guidance and policy rely on the use of performance-based standards, otherwise known as Best Performance Standards, to assess significance of project-specific GHG emissions on global climate change during the CEQA review process (SJVAPCD 2009a and 2009b).

The use of Best Performance Standards is a method for streamlining the process of determining the significance of a project's GHG emissions under CEQA and is not a required emission reduction measure. Projects that implement Best Performance Standards are determined to have a less-than-significant GHG emissions impact. Otherwise, the demonstration of a 29-percent reduction in GHG emissions from business-as-usual is required to determine that a project would have a less-than-significant impact and would be consistent with the 2020 GHG emissions reduction targets under AB 32. However, the guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project-related impacts on global climate change (SJVAPCD 2008b).

SJVAPCD's adopted Best Performance Standards are specifically directed at reducing GHG emissions from stationary sources that require a permit from the SJVAPCD. Therefore, the adopted Best Performance Standards would not generally be applicable to the project because the project would not be a stationary source of emissions.

### **Significance Thresholds**

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the

effects of past projects, other current projects, and probable future projects (*CEQA Guidelines*, Section 15064[h][1]).

Section 15064.4 of the *CEQA Guidelines* recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions.

*CEQA Guidelines* Section 15064.4 does not establish a threshold of significance. Lead agencies have the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies, or suggested by other experts, as long as any threshold chosen is supported by substantial evidence (*CEQA Guidelines* Section 15064.7[c]).

According to *CEQA Guidelines* Section 15183.5, projects can tier off of a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP) in their white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions (AEP 2016). However, Town of Lamont does not have a qualified CAP and the SJVAPCD has not adopted a numeric threshold to address project-level GHG emissions. The SJVAPCD's BPS approach does not include measures to address the 2030 target established by SB 32. Therefore, an efficiency-based threshold based on the CARB 2017 Scoping Plan is the appropriate threshold to apply to the proposed project.

Efficiency based thresholds represent the rate of emission reductions needed to achieve a fair share of California's GHG emission reduction target established under SB 32. Accordingly, a year 2030 GHG efficiency threshold can be calculated to represent the rate of emissions reduction necessary for the proposed project to achieve a fair share of statewide GHG reductions necessary to meet 2030 SB 32 targets.<sup>3</sup>

With the release of the 2017 Scoping Plan, CARB recognized the need to balance population growth with emissions reductions and in doing so, provided a new local plan level methodology for target setting that provides consistency with state GHG reduction goals using per capita efficiency targets. These statewide per capita targets account for all emissions sectors in the state, statewide population forecasts, and the statewide reductions necessary to achieve the 2030 and 2050 statewide target under SB 32. The targets are generated by dividing the statewide 2030 GHG emissions targets by the statewide service population (employees plus residents) for that year. The 2017 Scoping Plan recommends that local governments aim to achieve a community-wide goal of no more than 6 MT of CO<sub>2</sub>e per service population by 2030 and no more than 2 MT of CO<sub>2</sub>e per service population by 2050 (CARB 2017). Since the land use section inventory only includes residential and commercial sources, industrial, marine vessels, aviation, and other emission sources not applicable

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<sup>3</sup> The *Cleveland National Forest Foundation vs. San Diego Association of Governments* (2017) case established that a GHG reduction goal established by executive order does not have to be used as significance threshold for the purposes of CEQA because it is not a binding legal mandate and does not include an adopted plan that demonstrates a discrete pathway to achieving that goal. In light of that case ruling, this analysis does not use the carbon neutrality goal set forth by EO B-55-18 as a significance threshold. Rather, this analysis uses the GHG reduction targets established by SB 32, which is a legal mandate, and the 2017 Scoping Plan, which is an adopted plan that demonstrates a discrete pathway to achieving the GHG reduction targets of SB 32.



to land use developments are not included as part of project efficiency-based thresholds and are excluded.

The following equations detail how the emissions target/efficiency threshold was calculated:

### Equation 3.3-1

$$\text{Efficiency Threshold} = \frac{2030 \text{ Emissions Goal}}{2030 \text{ Population} + 2030 \text{ Employment}}$$

#### Where:

Efficiency Threshold = 2.4 MT CO<sub>2</sub>e per service population per year in 2030

2030 Emissions Goal = 2017 Scoping Plan Emissions Goals for Residential/Commercial<sup>4</sup>, High Global Warming Potential (GWP), and Transportation Sectors: 149 MMT CO<sub>2</sub>e per year (per 2017 Scoping Plan, see Table 12)

2030 Statewide Population = 41,860,549 (California Department of Finance 2021)

2030 Statewide Employment = 20,197,000 (California Department of Transportation 2021)

**Table 12 Scoping Plan 2030 Emissions Goals by Land Use Sector**

| Land Use Sector            | Emissions (MMT of CO <sub>2</sub> e) <sup>1</sup> |
|----------------------------|---|
| Residential and Commercial | 38  |
| High GWP                   | 8   |
| Transportation             | 103   |
| <b>Total</b>               | <b>149</b>  |

<sup>1</sup>CARB 2017

The targets recommended by the 2017 Scoping Plan, adjusted to be specific for Lamont, are appropriate for the Town of Lamont (a local government) to use as the basis for determining an applicable significance threshold at a project-level. Based on the above, the project must meet the target GHG emissions of approximately 2.4 MT CO<sub>2</sub>e per person per year at full buildout in the year 2024. Emissions greater than 2.4 MT CO<sub>2</sub>e per person per year may conflict with substantial progress toward the long-term reduction targets identified by SB 32 and the 2017 Scoping Plan, and the project's cumulative contribution of long-term emissions would be considered significant.

## Methodology

Calculations of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions are provided to identify the magnitude of potential project effects. The analysis focuses on CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O because these make up 98 percent of all GHG emissions by volume and are the GHG emissions the project would emit in the largest quantities (IPCC 2014). Emissions of all GHGs are converted into their equivalent GWP in terms of CO<sub>2</sub> (i.e., CO<sub>2</sub>e). Minimal amounts of other GHGs (such as chlorofluorocarbons [CFCs]) would be emitted; however, these other GHG emissions would not substantially add to the total GHG emissions. GHG emissions associated with project construction and operation were estimated using CalEEMod, version 2020.4.0, with the assumptions described under Section 3, *Air Quality*, in addition to the following:

<sup>4</sup> The project does not include commercial uses but the GHG emissions by sector combine residential and commercial GHG emissions.

- The project's CalEEMod model uses CalEEMod default assumptions for energy, solid waste, area, and mobile sources (trip generation rates for elementary school).
- CalEEMod does not incorporate water use reductions achieved by CALGreen (Part 11 of Title 24). New development would be subject to CALGreen, which requires a 20 percent increase in indoor water use efficiency and use of indoor water-efficient irrigation systems. Thus, in order to account for compliance with CALGreen, a 20 percent reduction in indoor water use and the use of water-efficient irrigation systems were included in the water consumption calculations for new development.
- Construction emissions were amortized over the project's estimated 30-year lifetime pursuant to guidance from the Association of Environmental Professionals (2016).

See Appendix A for the project's construction related GHG emissions modeling and calculations.

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

## Project Generated GHG Emissions

Construction and operation of the proposed project would generate GHG emissions. This analysis considers the combined impact of GHG emissions from both construction and operation. Calculations of CO<sub>2</sub>, methane, and nitrous oxide emissions are provided to identify the magnitude of potential project effects. Since SJVAPCD has not adopted a numeric threshold to address project-level GHG emissions, construction and operational emissions would be for informational purposes. The project's GHG emissions impact would be determined in impact analysis (b) below.

### *Construction Emissions*

Construction of the proposed project would generate temporary GHG emissions primarily as a result of operation of construction equipment on-site as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport building materials and soil export. As shown in Table 13, construction of the proposed project would generate an estimated total of 821 MT of CO<sub>2</sub>e or approximately 27 MT CO<sub>2</sub>e per year when amortized over the 30-year project lifetime.

**Table 13 Estimated Construction GHG Emissions**

| Year                           | Emissions (MT of CO <sub>2</sub> e) |
|--------------------------------|-------------------------------------|
| 2023                           | 612                                 |
| 2024                           | 209                                 |
| <b>Total</b>                   | <b>821</b>                          |
| <b>Amortized over 30 years</b> | <b>27</b>                           |

MT = metric tons; CO<sub>2</sub>e = carbon dioxide equivalents  
Notes: Emissions modeling was completed using CalEEMod. See Appendix A for modeling results.

### *Operational and Total Project Emissions*

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. As shown in Table 14, annual operational emissions generated by the proposed project combined with amortized construction emissions would total approximately 408 MT of CO<sub>2</sub>e

per year. The project would generate approximately 0.6 MT of CO<sub>2</sub>e per service population per year, which would not exceed the adjusted 2017 Scoping Plan efficiency threshold of 2.4 MT CO<sub>2</sub>e for the year 2030.

**Table 14 Combined Annual GHG Emissions**

| <b>Emission Source</b>  | <b>Annual Emissions (MT of CO<sub>2</sub>e per year)</b> |
|---|--|
| <b>Construction</b>   | <b>27</b>  |
| <b>Operational</b>  |  |
| Area  | <1   |
| Energy  | 59   |
| Mobile  | 300  |
| Solid Waste   | 20   |
| Water   | 2  |
| <b>Total Emissions</b>  | <b>408</b>   |
| Service Population (Students)   | 713  |
| Emissions per Service Person  | 0.6  |
| <b>Threshold</b>  | <b>2.4</b>   |
| <b>Threshold Exceeded?</b>  | <b>No</b>  |
| MT = metric tons; CO <sub>2</sub> e = carbon dioxide equivalents                                      |  |
| Notes: Emissions modeling was completed using CalEEMod. See Appendix Appendix A for modeling results. |  |

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

## Project Generated GHG Emissions

Construction and operation of the proposed project would generate GHG emissions. This analysis considers the combined impact of GHG emissions from both construction and operation. Calculations of CO<sub>2</sub>, methane, and nitrous oxide emissions are provided to identify the magnitude of potential project effects. Since SJVAPCD has not adopted a numeric threshold to address project-level GHG emissions, construction and operational emissions would be for informational purposes. The project's GHG emissions impact would be determined in impact analysis (b) below.

### *Construction Emissions*

Construction of the proposed project would generate temporary GHG emissions primarily as a result of operation of construction equipment on-site as well as from vehicles transporting construction workers to and from the project site and heavy trucks to transport building materials and soil export. As shown in Table 13, construction of the proposed project would generate an estimated

total of 821 MT of CO<sub>2</sub>e or approximately 27 MT CO<sub>2</sub>e per year when amortized over the 30-year project lifetime.

**Table 15 Estimated Construction GHG Emissions**

| Year   | Emissions (MT of CO <sub>2</sub> e) |
|--|-------------------------------------|
| 2023   | 612                                 |
| 2024   | 209                                 |
| <b>Total</b>   | <b>821</b>                          |
| <b>Amortized over 30 years</b>   | <b>27</b>                           |
| MT = metric tons; CO <sub>2</sub> e = carbon dioxide equivalents                             |                                     |
| Notes: Emissions modeling was completed using CalEEMod. See Appendix A for modeling results. |                                     |

### *Operational and Total Project Emissions*

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. As shown in Table 14, annual operational emissions generated by the proposed project combined with amortized construction emissions would total approximately 408 MT of CO<sub>2</sub>e per year. The project would generate approximately 0.6 MT of CO<sub>2</sub>e per service population per year, which would not exceed the adjusted 2017 Scoping Plan efficiency threshold of 2.4 MT CO<sub>2</sub>e for the year 2030.

**Table 16 Combined Annual GHG Emissions**

| Emission Source               | Annual Emissions (MT of CO <sub>2</sub> e per year) |
|-------------------------------|---|
| <b>Construction</b>           | <b>27</b>   |
| <b>Operational</b>            |   |
| Area                          | <1  |
| Energy                        | 59  |
| Mobile                        | 300   |
| Solid Waste                   | 20  |
| Water                         | 2   |
| <b>Total Emissions</b>        | <b>408</b>  |
| Service Population (Students) | 713   |
| Emissions per Service Person  | 0.6   |
| <b>Threshold</b>              | <b>2.4</b>  |
| <b>Threshold Exceeded?</b>    | <b>No</b>   |

The project would not generate construction or operational GHG emissions (total emissions) that would exceed the adjusted 2017 Scoping Plan efficiency threshold and therefore be a less than significant impact.

#### **LESS THAN SIGNIFICANT IMPACT**

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

In accordance with SJVAPCD's CEQA thresholds for the evaluation of GHG impacts, a project would not have a significant GHG impact if it is consistent with an applicable GHG-reduction plan.

Applicable GHG-reduction plans include Kern COG's 2018 RTP/SCS, and the CARB's 2017 Scoping Plan. Consistency with these plans is discussed in greater detail as follows:

#### **Kern COG 2018 RTP/SCS**

SB 375 calls for the 2018 RTP to include an SCS that reduces GHG emissions from passenger vehicles and light-duty trucks. The 2018 RTP/SCS goals and policies were derived from other Kern COG transportation plans and studies. The elementary school would be approximately 60 feet from the nearest single-family residential housing and nearby other residential housing along Panama Road and Carnation Avenue. The 2018 RTP/SCS seeks to improve the communities' health by providing more opportunities to bike and walk to school, which the proposed elementary school would accomplish. Schools that serve the local community would reduce the average travel distance for students and could also promote non-motorized travel (e.g., walking and biking) thereby reducing the overall VMT. A reduction in the overall VMT would reduce GHG emissions from mobile sources. Therefore, the proposed project would be consistent with the 2018 RTP/SCS to reduce air emissions from passenger vehicles and light-duty trucks.

#### **2017 Scoping Plan**

The principal state plan and policy are 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. Pursuant to the SB 32 goal, the 2017 Scoping Plan was created to outline goals and measures for the state to achieve the reductions. The 2017 Scoping Plan's goals include:

- Reducing fossil fuel use and energy demand. Active transportation opportunities.
- Energy-efficient building design.

Nearby single-family residential housing along Panama Road and Carnation Avenue would be encouraged to use active transportation to reduce vehicle miles traveled to the elementary school. The proposed building structures would have code-compliant or better insulation for energy efficiency in all walls and the roof. These improvements would help to further reduce the project's GHG emissions and would also help to reduce community wide GHG emissions. Therefore, the project would not conflict with an applicable plan, policy, or regulation adopted to reduce GHG emissions. No impact would occur.

#### **NO IMPACT**

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## 9 Hazards and Hazardous Materials

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project:  |                                      |  |                                     |                                     |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?   | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 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?   | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. Be located on a site that is included on a list of hazardous material 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?  | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e. For a project located in 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? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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

The subject property is a school, and thus would not create a hazard to the public or environment through the transportation or use of hazardous materials. Prior to construction, the soil remediation discussed below would minimize the risk to the public regarding the disposal of hazardous materials. Thus, the impact is less than significant with the mitigation measures listed below.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

The potential project is an educational institution, and during operation, would not foreseeably create upset or accident conditions involving the release of hazardous materials into the environment. Prior to construction activities, and the implementation of HAZ-1, all hazardous materials identified on the project site will be properly removed and disposed of.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

Based on the Phase I ESA performed by Rincon (Rincon Consultants Inc. 2022), no potential threats to the subject property were identified. Potential migration of hydrocarbon vapors at the site are not identified as the closest hydrocarbon and other contaminants of concern are more than 500 feet away from the property. Furthermore, there are no vapor intrusion threats from petroleum hydrocarbons within 30 feet or other COCs within 100 feet of the subject property.

**LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project be located on a site that is included on a list of hazardous material 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?*

The project site is listed in two regulatory databases, ENVIROSTOR and SCH; these listings indicate the site was investigated for organochlorine pesticides, arsenic, and lead based materials due to the former agricultural use of the property. In 2011, Soils Engineering, Inc. (Soils Engineering Incorporated 2011) investigated the soil within the project site. Elevated concentrations of arsenic were detected in the soil. Currently, the cleanup case is regulated under the Department of Toxic Substances and the case has an "Inactive-Action Required as of 6/6/2012" status. Furthermore, onsite pole-mounted transformers and onsite trash and debris were observed during Rincon's field reconnaissance of the property. The following mitigation measures would reduce the impacts of these findings to less than significant:

*HAZ-1 Soil Remediation Plan*

Before commencing any grading or construction activities within the project site, the applicant shall coordinate with DTSC regarding the current case status and implement and complete a Remedial Action Plan to reduce the elevated levels of arsenic present in the soil to an acceptable level required by the State and DTSC for school sites and receive approval from DTSC for removal from all hazardous material databases.



### HAZ-2 Removal of Trash and Debris

Before commencing construction activities, the proper removal and offsite disposal of onsite trash and debris, including containers and motor oil, shall be performed. Additionally, during all demolition and construction activities, the trash, debris, and oil will be properly handled and disposed of pursuant to County of Kern standards and inspected by County inspectors.

#### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- 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?*

As discussed below in Section 13, *Noise*, the project site is not located within an airport land use plan, or within two miles of a public or private airport. The closest airport is the Bakersfield Municipal Airport, which is approximately six miles northwest of the project site, and the project would not be within identified noise contours of the airport (County of Kern 2012). Thus, no impact is expected.

#### **NO IMPACT**

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

The Kern County Emergency Operations Plan (KCEOP) establishes an emergency management organization and assigns functions and tasks consistent with the California Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The KCEOP provides for the integration and coordination of the planning efforts of Kern County with those of its Cities, towns, and unincorporated areas. The intent of the KCEOP is to facilitate emergency response and short-term recovery by providing a framework for response to all significant emergencies, regardless of the nature of the event.

Proposed project implementation would not hinder the County's implementation of its emergency response and emergency evacuation plans. As the primary north-south transportation corridor through the community of Lamont, the adjacent SR 184 serves as an obvious route for both emergency response and emergency evacuation purposes. During the construction phase, the staging area is expected to remain on-site. Once the proposed project is operational, traffic volume is not expected to increase as the school will serve existing residents within district boundaries. Therefore, no impact is anticipated.

#### **NO IMPACT**

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

As discussed below in Section 20, *Wildfire*, the project is not located in a state responsibility area or land classified as very high fire hazard severity zones. The nearest state responsibility area is about 10 miles east (CAL FIRE 2021). Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

#### **NO IMPACT**

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# 10 Hydrology and Water Quality

|  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                |
|--|--------------------------------------|--|-------------------------------------|--------------------------|
| Would the project:   |                                      |  |                                     |                          |
| a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?                                  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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;  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or                            | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| (iv) Impede or redirect flood flows?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

The project site is within the Tulare Buena Vista Lakes Watershed, within the Tulare Lake Hydrologic Region. The project is located on the San Joaquin Valley Basin-Kern County Groundwater Subbasin. Water supply for Lamont is provided by Lamont Public Utility District (LPUD), which relies solely on groundwater to supply water to its residents.

## Regulatory Setting

### *Federal Clean Water Act*

In 1972, Congress passed the Federal Water Pollution Control Act, commonly known as the Clean Water Act (CWA). The CWA directs states to establish water quality standards for all “waters of the United States” and to review and update such standards on a triennial basis. The USEPA has delegated responsibility for implementation of portions of the CWA, including water quality control planning and control programs, such as the National Pollutant Discharge Elimination System (NPDES) Program, to the SWRCB and the Regional Water Quality Control Boards (RWQCB).

Section 303(c)(2)(b) of the CWA requires states to adopt water quality standards for all surface waters of the United States based on the water body’s designated beneficial use. Water quality standards applicable to the proposed project are contained in the Water Quality Control Plan for the Tulare Lake Basin (Basin Plan).

### *Safe Drinking Water Act*

The Safe Drinking Water Act was originally passed by Congress in 1974 to protect public health by regulating the nation’s public drinking water supply. The Act authorizes the USEPA to set national health-based standards for drinking water to protect against both naturally occurring and human-produced contaminants that may be found in drinking water. The Act applies to every public water system in the U.S.

### *Porter-Cologne Water Quality Control Act*

The Porter-Cologne Water Quality Control Act of 1967 requires the SWRCB and the nine RWQCBs to adopt water quality criteria to protect State waters. These criteria include the identification of beneficial uses, narrative and numerical water quality standards, and implementation procedures. The Water Quality Control Plan, or Basin Plan, protects designated beneficial uses of State waters through the issuance of WDRs and through the development of TMDLs. Anyone proposing to discharge waste that could affect the quality of the waters of the State must make a report of the waste discharge to the RWQCB or SWRCB as appropriate, in compliance with the Porter-Cologne Act.

### *California Stormwater NPDES Permitting Program*

California’s Construction General Permit for Stormwater Discharges Associated with Construction and Land Activities (Construction General Permit [CGP]) Order No. 2009-0009- DWQ as amended by Order No. 2010-0014-DWQ and 2012-0006-DWQ issued by the SWRCB is required for construction or demolition activity resulting in land disturbance of equal to or greater than one acre.

Construction activities, including grading, trenching, excavation, stockpiling, and disturbances to the ground, are covered under the CGP. Dischargers must file Permit Registration Documents to the SWRCB, including a Notice of Intent, risk assessment, site map, SWPPP, signed certification statement, and first annual fee. Under the CGP, responsible parties must address pollutants and their sources, including sources of sediment associated with construction; install effective site BMPs

that result in the reduction or elimination of pollutants in stormwater discharges; and either eliminate, control, or treat all non-stormwater discharges. BMPs are designed to reduce impacts to the Maximum Extent Practicable by focusing on pollution prevention and source control.

### *Sustainable Groundwater Management Act*

The Sustainable Groundwater Management Act of 2014 (SGMA) provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention only if necessary to protect the resource. SGMA is intended to ensure a reliable groundwater water supply for California for years to come. SGMA requires the formation of local Groundwater Sustainability Agencies (GSA), which are required to adopt Groundwater Sustainability Plans (GSP) to manage the sustainability of groundwater basins. The San Joaquin Valley Basin-Kern County Groundwater Subbasin is managed by the Kern Groundwater Authority GSA, which drafted a GSP for the basin in April 2021.

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The project would involve grading over the approximate 22-acre site, which would disturb more than 1.0 acre of land. Therefore, the project would be required to comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the SWRCB. The Kern County Municipal Code (Chapter 17.28) also requires an erosion and sediment control plan for construction sites that is equivalent to the required SWPPP. Under the conditions of the General Construction Permit, the applicant would be required to develop and implement a SWPPP for construction activities. The SWPPP must include BMPs specific to project construction and is subject to inspections by a Qualified Stormwater Professional. BMPs aim to control degradation of surface water by preventing soil erosion or pollution discharge from the project area.

The project would also be required to adhere to the Kern County Municipal Code requirements for all development, including BMPs, to minimize soil erosion by onsite activities, rainfall, flowing water, or wind. The Kern County Storm Water Ordinance requirements are designed to achieve compliance with the RWQCB's NPDES permit and Waste Discharge Requirements for MS4 Discharges (Order No. R1-2015-0030; NPDES No. CA0025054). These requirements would ensure that construction and operational stormwater runoff does not degrade surface or groundwater quality in the vicinity of the site. Therefore, impacts would be less than significant

### **LESS THAN SIGNIFICANT IMPACT**

- b. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*
- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The Lamont Public Utility District (LPUD) is the retail water supplier for the City of Lamon and provides water solely from groundwater supplies. The LPUD water supply system consists of seven wells and five storage tanks. The District water supply is managed by the Kern River Groundwater Sustainability Agency (GSA). 80 percent of water consumption in the San Joaquin Valley is allocated to agriculture (Lamont 2020).

The Sustainable Groundwater Management Act (SGMA) requires all high- and medium-priority basins, designated by Department of Water Resources (DWR), to be sustainably managed. It is focused on limiting the adverse effects of groundwater overextraction: groundwater-level declines, land subsidence, and water quality degradation. The Kern County Subbasin is designated as a high-priority basin. To comply with SGMA, the Kern County Subbasin has been organized into several Groundwater Sustainability Agencies (GSAs), which coordinated on five Groundwater Sustainability Plans (GSPs) that cover the entire subbasin. The LPUD is covered under the Kern River GSA (Lamont 2020).

As discussed in *item (a)*, the project would be required to comply with NPDES requirements, and the Kern County Municipal Code which requires an erosion and sediment control plan, for construction sites, that is equivalent to a SWPPP. Additionally, as previously mentioned the project will be served by the LUPD, which coordinates with the Kern River GSA to ensure that it meets SGMA requirements including monitoring and reporting groundwater supplies. Therefore, the proposed project would not interfere with water quality control plans or sustainable groundwater management plans. The project would comply SGMA requirements in order to ensure that groundwater quality and groundwater levels are not significantly impacted. Thus, there would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

The project site is currently vacant and would require grading and excavation of the 22-acre site, which would disturb more than 1.0 acre of land. Therefore, the project would be required to comply with 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) adopted by the SWRCB. Additionally, the project would be required to perform temporary drainage and erosion control in accordance with Kern County Municipal Code 17.28.140, such as assuring existing drainage channels are not blocked along with dust control measures. Additionally, the project would be required to comply with Kern County Municipal Code for drainage standards (Chapter 19.88 Section 19.88.060) which requires drainage facilities to “be designed in such a manner as to minimize soil erosion”. The project would be required to comply with the NPDES General Construction Permit, which includes preparing a SWPPP and following BMPs. Additionally, the project would comply with the Kern County Municipal Code requiring an erosion control. Compliance with the NPDES permit and the Kern County Municipal Codes would reduce impacts to less than less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- c.(ii) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iv) *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

The project site is generally flat and does not contain any existing structures, thus the project site is currently permeable. Buildout of the project would introduce impervious surface (USGS 2018). Additionally, the project is located on a flood zone AO, which is an area of shallow flooding (FEMA 2021). However, the project would connect to stormwater drainage facilities adjacent to the project site along Panama Road as required by Kern County Municipal Code (Chapter 17.06.200 Section R401.3) regarding standards for drainage. Additionally, the project would be required to comply with Kern County Municipal Code for drainage standards (Chapter 19.88 Section 19.88.060) which requires drainage facilities to preserve major drainage channels. The project would also incorporate a bioswale along Panama Road, which would allow the infiltration of stormwater and reduce flooding. Implementation of Mitigation Measure HYDRO-1 would require the building area to be constructed at least two feet above natural grade to elevate buildings above estimated flood levels in the AO flood zone. Compliance with Kern County Municipal Codes, the NPDES General Construction Permit and Mitigation Measure HYDRO-1 would reduce impacts to a less than significant level.

## Mitigation Measure

### *HYDRO-1 Finished Grade for the Building Area*

The finished grade for the building area on the site will be at least two feet above natural grade or as calculated to be above identified flooding height in the AO FEMA flood zone.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- d. *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project area is not located in a tsunami inundation area, nor is there a water body near the project area capable of seiche (DOC 2009). The project site is located on flood zone AO, which is an area of shallow flooding (FEMA 2021). However, due to the nature of the project it is unlikely that the project would contain pollutants or hazardous materials. Additionally, the project would be required to comply with Mitigation Measure HYDRO-1, as mentioned above, which would mitigate the impact of buildings being flooded on the project site. Therefore, impacts would be less than significant.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# 11 Land Use and Planning

|  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No Impact                           |
|--|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project:   |                                      |  |                                    |                                     |
| a. Physically divide an established community?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |

a. *Would the project physically divide an established community?*

The proposed project would not involve the demolition of an existing structure as the site is currently vacant. The project would not separate connected neighborhoods or land uses from each other. No new roads, linear infrastructure, or other development features are proposed that would divide an established community or limit movement, travel, or social interaction between established land uses. No impact would occur.

**NO IMPACT**

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

The project site is located on an empty lot in the semi-rural area of Lamont. The proposed project would construct a new school on the existing lot. The site of the project is designated as Agriculture by the Kern County General Plan. Land Use Guidelines for institutional and public service facilities requires that school projects be reviewed by the County Planning Agency (Kern Count, 2009). The site is zoned as Agriculture, which allows for schools to be developed with a Conditional Use Permit (Kern County 2021). The proposed project would not introduce a new use that would conflict with the Kern County General Plan, the Kern County Zoning Ordinance, or state plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. There would be no impact to an established community or inconsistency with applicable land use regulation. Therefore, the project would have no impact.

**NO IMPACT**

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## 12 Mineral Resources

|  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No Impact                           |
|--|--------------------------------------|--|------------------------------------|-------------------------------------|
| Would the project:   |                                      |  |                                    |                                     |
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                 | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The project site is not located on a Mineral Resource Zone (USGS 2021). The project is in an area of Kern County where there are no active mining operations or known mineral resources present. The project site does not fall within a Mineral Resource Zone (Kern County 2017). Therefore, no mineral resources would be altered or displaced by the project. There would be no impact.

**NO IMPACT**

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# 13 Noise

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| 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?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Generation of excessive groundborne vibration or groundborne noise levels?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 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? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

## Overview of Noise and Vibration

### 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 (California Department of Transportation [Caltrans] 2013).

### HUMAN PERCEPTION OF SOUND

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. 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 (Caltrans 2013).

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 (10.5 times the sound energy) (Caltrans 2013).

## SOUND PROPAGATION AND SHIELDING

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 the noise 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 will travel, site conditions, and obstructions.

Sound levels are described as either a “sound power level” or a “sound pressure level,” which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as  $L_{pw}$ ) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (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 will provide 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 guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

## DESCRIPTORS

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. The noise descriptors used for this study are the equivalent noise level ( $L_{eq}$ ), Day-Night Average Level ( $L_{dn}$ ), and the community noise equivalent level (CNEL).

$L_{eq}$  is one of the most frequently used noise metrics; it considers both duration and sound power level. The  $L_{eq}$  is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The  $L_{max}$  is the highest noise level within the sampling period, and the  $L_{min}$  is the lowest noise level within the measuring period. 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 (Federal Transit Administration [FTA] 2018).

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 hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL or  $L_{DEN}$ ), 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).<sup>5</sup> The relationship between the peak-hour  $L_{eq}$  value and the  $L_{DN}$ /CNEL depends on the distribution of noise during the day, evening, and night; however noise levels described by  $L_{DN}$  and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

### *Groundborne Vibration*

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. 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 at vibration-sensitive land uses and may cause structural damage.

Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. 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 as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage nearby buildings and structures; these levels are identified in Table 15.

**Table 17 AASHTO Maximum Vibration Levels for Preventing Damage**

| Type of Situation  | Limiting Velocity (in/sec) |
|--|----------------------------|
| Historic sites or other critical locations                   | 0.1                        |
| Residential buildings, plastered walls                       | 0.2–0.3                    |
| Residential buildings in good repair with gypsum board walls | 0.4–0.5                    |
| Engineered structures, without plaster                       | 1.0–1.5                    |

Source: Caltrans 2020

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended for use by Caltrans, which are based on the

<sup>5</sup> Because DNL and CNEL are typically used to assess human exposure to noise, the use of A-weighted sound pressure level (dBA) is implicit. Therefore, when expressing noise levels in terms of DNL or CNEL, the dBA unit is not included.

general human response to different levels of groundborne vibration velocity levels, are described in Table 16.

**Table 18 Vibration Annoyance Potential Criteria**

| Human Response         | Vibration Level (in/sec PPV) |   |
|------------------------|------------------------------|---|
|                        | Transient Sources            | Continuous/Frequent Intermittent Sources <sup>1</sup> |
| Severe                 | 2.0                          | 0.4   |
| Strongly perceptible   | 0.9                          | 0.10  |
| Distinctly perceptible | 0.25                         | 0.04  |
| Barely perceptible     | 0.04                         | 0.01  |

in/sec = inches per second; PPV = peak particle velocity  
Source: Caltrans 2020

<sup>1</sup> Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

## Project Noise Setting

### SENSITIVE RECEIVERS

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise sensitive receivers include residential areas, school, convalescent and acute care hospitals, parks and recreational areas, and churches (Kern County Planning Department, 2009). The nearest noise-sensitive receivers are single-family homes located approximately 30 feet west of the project site along Carnation Avenue. Additional sensitive receivers include residences approximately 50 feet south of the project site along Panama Road.

### EXISTING NOISE ENVIRONMENT

Kern County is affected by a variety of noise sources, including mobile and stationary sources. Mobile noise is primarily generated by automobiles, trucks, trains, and airplanes. Mobile-source noises generally affect numerous receptors along lengths of roadways, railroad tracks, or flight paths. Stationary source noise is primarily generated by industrial and commercial land uses; however, all land uses can generate some type of noise. As discussed in the County's General Plan Noise Element, significant noise sources include highways and freeways, primary arterial and major local streets, railroad operations, aircraft and airport operations, local industrial facilities, other stationary sources (Kern County Planning Department 2009).

Vehicular traffic produces relatively constant sound that characterize the minimum ambient noise levels. The main noise sources near the project site are Carnation Avenue, Panama Road, and State Route 184 (SR-184; located approximately 1,330 feet west of the project site). According to traffic data collected by Kern Council of Governments (KCOG), existing roadway volume along Panama Road result in 2,947 average daily trips (ADTs) south of the project site (KCOG, 2022). Appendix NOI of the County's Noise Element shows noise contours around SR-184 based on traffic volume and speed. (Kern County Planning Department, 2009). The project site does not exist near the contour lines; therefore, the contours are not applicable to the project.

According to the *Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol (TeNS)*, common outdoor noise level associated with a quiet urban area during the daytime is 50 dBA  $L_{eq}$



(e.g., residential neighborhood with local or collector streets). These noise levels typically decrease during nighttime hours as traffic activity slows. The document also states that quiet urban and rural areas commonly experience nighttime noise levels of 40 dBA  $L_{eq}$  and 20 dBA  $L_{eq}$ , respectively. Given the location of the project site on the outer edge of Lamont next to agricultural fields, ambient noise levels would be anticipated to be within this range.

## Regulatory Setting

### *Federal Transit Administration*

The FTA has recommended noise criteria related to traffic-generated noise in *Transit Noise and Vibration Impact Assessment* that can be used to determine whether a change in traffic would result in a substantial permanent increase in noise (FTA 2018). Table 17 shows the significance thresholds for increases in traffic-related noise levels. These standards are applicable to project impacts on existing sensitive receivers (as defined under *Environmental Setting* above).

**Table 19 Significance of Changes in Operational Roadway Noise Exposure**

| Existing Noise Exposure<br>(dBA DNL or $L_{eq}$ )  | Allowable Noise Exposure Increase<br>(dBA DNL or $L_{eq}$ ) |
|--|---|
| 45-49  | 7   |
| 50-54  | 5   |
| 55-59  | 3   |
| 60-64  | 2   |
| 65-74  | 1   |
| 75+  | 0   |
| dBA = A-weighted sound pressure level<br>DNL =Day-Night Average Level<br>$L_{eq}$ =Equivalent continuous sound level<br>Source: FTA 2018 |   |

The FTA also provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction in their *Transit and Noise Vibration Impact Assessment Manual* (FTA 2018). For adjacent residential uses, the daytime noise threshold is 80 dBA  $L_{eq}$  for an 8-hour period. These values are used in the construction noise analysis as the thresholds as the County does not specify construction noise limits.

### *Kern County*

#### **KERN COUNTY MUNICIPAL CODE**

Section 9.36.020 establishes prohibited sounds within the unincorporated areas of the county, which includes the following applicable to the project:

- A. Operate any public address system in any event when the sound emanating therefrom can be heard beyond the confines of any permanent building to such degree that such sound constitutes a loud and raucous noise;

- B. Operate upon any public street or highway any vehicle equipped with and operating any public address system when such operation constitutes a traffic hazard or interferes with the safe and orderly flow of traffic over and along any such public street or highway;
- C. In any manner whatever willfully make, emit or transmit any loud or raucous noise upon or from any public street or highway or upon or from any public park or any public property whatever;
- D. Operate any public address system when the sound emanating therefrom can be heard beyond the confines of a permanent building when such operation constitutes the promotion or advertisement of any private affair or business or commercial enterprise;
- E. Operate any public address system when the sound emanating therefrom can be heard beyond the confines of a permanent building when such operation is for purposes other than the promotion or advertisement of any private affair or business or commercial enterprise unless such operation shall first be declared as hereinafter provided;
- F. The provisions of subsection (D) of this section shall not prohibit the incidental sounding, between the hours of nine (9:00) a.m. and nine (9:00) p.m. of any day, of a musical sound apparatus consisting of bells or the sounding of a bell or horn when the sound thereof is not audible to a person of average hearing faculties or capacity at a distance of one hundred fifty (150) feet, when such incidental sounding is in connection with the ordinary use and operation of a tradesman's, peddler's, or huckster's cart, wagon or other vehicle; provided, however, that no such sounding in any event shall be permitted between the hours of nine (9:00) p.m. of any day and nine (9:00) a.m. of the following day;
- G. Operate or permit to be operated any public address system or sound equipment so as to be audible to a person of average hearing faculties or capacity at a distance of:
  - 1. One hundred fifty (150) feet from the public address system or sound equipment, if operated on a public street, sidewalk or any other public property; or
  - 2. If operated elsewhere, one hundred fifty (150) feet from the property line of the property on which the public address system or sound equipment is located; or
  - 3. Between the hours of eight (8:00) a.m. and midnight (12:00) a.m., one thousand (1,000) feet from the public address system or sound equipment connected with either short-term events held on public property with the consent of the responsible public agency, short-term public events held historically and regularly, or short-term events authorized by any kind of permit or license issued by the county. This subsection shall not apply to acts proscribed by Section 27007 of the California Vehicle Code, as amended from time to time.
- H. Create noise from construction, between the hours of nine (9:00) p.m. and six (6:00) a.m. on weekdays and nine (9:00) p.m. and eight (8:00) a.m. on weekends, which is audible to a person with average hearing faculties or capacity at a distance of one hundred fifty (150) feet from the construction site, if the construction site is within one thousand (1,000) feet of an occupied residential dwelling except as provided below:
  - 1. The development services agency director or his designated representative may for good cause exempt some construction work for a limited time.
  - 2. Emergency work is exempt from this section.

## KERN COUNTY GENERAL PLAN

The County's General Plan Noise Element establishes reasonable standards for maximum desired noise levels in Kern County and develops an implementation program which could effectively deal with the noise problem. The following goals in the Noise Element applicable to the project includes the following:

- E. Review discretionary development plans to ensure compatibility with adopted Airport Land Use Compatibility Plans.
- F. Require proposed commercial and industrial uses or operations to be designed or arranged so that they will not subject residential or other noise sensitive land uses to exterior noise levels in excess of 65 dB Ldn and interior noise levels in excess of 45 dB Ldn.
- H. Encourage cooperation between the County and the incorporated cities within the County to control noise.

### *Noise Level Increases over Ambient Noise Levels*

The operational and construction noise limits used in this analysis are set at reasonable levels at which a substantial noise level increase as compared to ambient noise levels would occur. Operational noise limits are lower than construction noise limits to account for the fact that permanent noise level increases associated with continuous operational noise sources typically result in adverse community reaction at lower magnitudes of increase than temporary noise level increases associated with construction activities that occur during daytime hours and do not affect sleep. Furthermore, these noise limits are tailored to specific land uses; for example, the noise limits for residential land uses are lower than those for commercial land uses. The difference in noise limits for each land use indicates that the noise limits inherently account for typical ambient noise levels associated with each land use. Therefore, an increase in ambient noise levels that exceeds these absolute limits would also be considered a substantial increase above ambient noise levels. As such, a separate evaluation of the magnitude of noise level increases over ambient noise levels would not provide additional analytical information regarding noise impacts and therefore is not included in this analysis.

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

## Construction Noise

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction related equipment noise levels for a variety of construction and demolition operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment.

Construction activity would result in temporary noise in the project area, exposing surrounding sensitive receivers to increased noise levels. The project would involve site preparation, grading, building construction, paving, and architectural coating. Construction noise would typically be higher during the heavier periods of initial construction (i.e., grading) and would be lower during the later construction phases. Typical heavy construction equipment during project grading could

include dozers, front-end loaders, and graders. It is assumed that diesel engines would power all construction equipment. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the assumed 8-hour operating day.

Project construction would occur nearest to single-family residences to the west and south of the project site. Over the course of a typical construction day, construction equipment would be located as close as 30 feet to the single-family residences west along Carnation Avenue, but would typically be located at an average distance farther away due to the nature of construction and the size of the project (i.e., construction equipment is mobile throughout a typical construction day, moving vertically and horizontally across the project site). Therefore, it is assumed that over the course of a typical construction day the construction equipment would operate at an average distance of 680 feet from the residences to the west of the project site.

A potential high-intensity construction scenario includes a dozer, grader and front-end loader working during grading to excavate and move soil. At a distance of 680 feet, a dozer, grader and front-end loader would generate a noise level of 61 dBA  $L_{eq}$  (RCNM calculations are included in Appendix NOI). This would be below the FTA threshold of 80 dBA  $L_{eq}$  (8-hour) for construction noise at a residential land use. In addition, construction would be required to occur within the Municipal Code allowed hours of 6:00 a.m. to 9:00 p.m., Monday through Friday, and 8:00 a.m. to 9:00 p.m. on Saturday. Therefore, impacts from construction equipment would be less than significant.

## On-site Operational Noise

The primary on-site operational noise source from the project would be heating, ventilation, and air conditioning (HVAC) units. Specific planning data for the future HVAC systems are not available at this stage of project design; however, this analysis assumes the use of a typical HVAC system for commercial or multi-family residential sites, which has a sound power level of 85 dBA. The unit used in this analysis is a 16.7-ton Carrier 38AUD25 split system condenser (see Appendix NOI for manufacturer's specifications). The project was assumed to contain three HVAC units based upon one ton of HVAC per 600 sf of building space, as shown in Table 18. It is assumed that three rooftop-mounted HVAC units distributed across the project site would produce a combined noise level at off-site receptors that is equivalent to all units being located at the center of the project site, which is measured at approximately 680 feet from the nearest off-site sensitive receptors west of the project boundary. See Appendix NOI for the manufacturer's noise data and HVAC noise calculations.

**Table 20 Modeled HVAC**

| Use/Description | Building Square Footage | Model   | Estimated HVAC Tons | Estimated HVAC Units | Sound Power Level per Unit |
|-----------------|-------------------------|---------|---------------------|----------------------|----------------------------|
| Commercial Use  | 26,570                  | 38AUD25 | 50                  | 3                    | 85                         |

See Appendix NOI for sample HVAC specification sheets.

The combined operation of three HVAC units would generate an estimated noise level of 35 dBA  $L_{eq}$  at the nearest off-site sensitive receivers west of the project site boundary along Carnation Avenue (Appendix NOI). The HVAC noise levels would be below the Kern County General Plan recommended exterior allowable noise levels of 65 dBA for both the daytime and nighttime hours. Therefore, impacts would be less than significant.

## Off-site Roadway Noise

Project trip rates were estimated to be approximately 519 average daily trips (ADTs) for the project's school use based on institute of Transportation Engineers (ITE) publication *Trip Generation Manual (11<sup>th</sup> Edition)* rate land use code 520. Existing traffic counts for Habecker Road located adjacent east of the project site and Panama Road located adjacent south of the project site were obtained from KCOG *MS2 Transportation Data Management System* (KCOG 2022). The existing traffic volume on Carnation Avenue located adjacent west of the project site were estimated using typical roadway traffic volume data from the *Highway Capacity Manual* (HCM 6<sup>th</sup> Edition). The HCM has published ADT based on roadway types and level of congestion. Based on knowledge of the local area, Carnation Avenue can be classified as a two-lane local roadway operating at Level of Service C, which represents the least-congested traffic conditions. Based on this classification, existing traffic volumes on Carnation Avenue was estimated at approximately 3,000 ADT. Existing traffic counts combined with project average daily trips are shown in Table 19.

**Table 21 Existing and Proposed ADT Volume**

| Street <sup>1</sup> | Segment  | Existing ADT | Project ADT <sup>2</sup> | Existing With Project ADT |
|---------------------|--|--------------|--------------------------|---------------------------|
| Carnation Avenue    | Northbound from Panama Road to Collision Street  | 1,500        | 519                      | 2,019                     |
| Carnation Avenue    | Southbound from Collision Street to Panama Road  | 1,500        | 519                      | 2,019                     |
| Habecker Road       | Northbound from Panama Road to Collision Street  | 1,147        | 519                      | 1,666                     |
| Habecker Road       | Southbound from Collision Street to Panama Road  | 1,242        | 519                      | 1,761                     |
| Panama Road         | Westbound from Habecker Road to Carnation Avenue | 1,441        | 519                      | 1,960                     |
| Panama Road         | Eastbound from Carnation Avenue to Habecker Road | 1,506        | 519                      | 2,025                     |

<sup>1</sup> Project ADT obtained from CalEEMod (Rincon 2022) trip generation findings, based on ITE (11<sup>th</sup> Edition) land use code 520 for "Elementary School".

Source: Rincon Consultants 2022

In order for a barely perceptible noise increase of at least 3 dBA to occur, the project would need to result in a doubling of traffic on the affected road segment. The addition of 519 trips on Carnation Avenue, Habecker Road and Panama Road would result in a percentage increase in traffic of 35 percent, 45 percent, and 36 percent, respectively. This would result in a noise level increase of approximately 1 dBA on Carnation Avenue and Panama Road, and approximately 2 dBA on Habecker Road. This increase would be below the barely perceptible noise increase of 3 dBA. Therefore, impacts would be less than significant.

### LESS THAN SIGNIFICANT IMPACT

- b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

## Construction

The greatest vibratory source during construction would be a dozer. Neither blasting nor pile driving would be required for construction of the proposed project. Construction vibration estimates are based on vibration levels reported by Caltrans and the FTA (Caltrans 2020a; FTA 2018). A large dozer would be used during site preparation and grading activities and may be used within 30 feet of the nearby residential buildings along Carnation Avenue. A dozer would create approximately 0.089 in./sec. PPV at 25 feet (Caltrans 2020). This would equal a vibration level of 0.073 in./sec. PPV at a distance of 30 feet.<sup>6</sup> This would be lower than what is considered a distinctly perceptible impact for humans of 0.25 in/sec PPV, and the structural damage impact to residential structures of 0.4 in/sec PPV. Therefore, temporary vibration impacts associated with the dozer (and other potential equipment) would be less than significant.

## Operation

As a school use, the proposed project would not generate significant stationary sources of vibration, such as manufacturing or heavy equipment operations. No operational vibration impact would occur.

## LESS THAN SIGNIFICANT IMPACT

- 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?*

The project site is not located within an airport land use plan, or within two miles of a public or private airport. The closest airport is the Bakersfield Municipal Airport, which is approximately six miles northwest of the project site, and the project would not be within identified noise contours of the airport (County of Kern 2012). Therefore, the project would result in no impact related to exposure of future residents to aircraft noise.

## NO IMPACT

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<sup>6</sup>  $PPV_{Equipment} = PPV_{Ref} (30/D)^n$  (in/sec),  $PPV_{Ref}$  = reference PPV at 30 feet,  $D$  = distance, and  $n = 1.1$

# 14 Population and Housing

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|---|--------------------------------------|--|-------------------------------------|-------------------------------------|
| Would the project:  |                                      |  |                                     |                                     |
| a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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

The project would include the construction of a new school, grades TK through eighth. The school is meant to serve the existing surrounding community by introducing a STEM-focused school to meet the states Common Core State Standards (CCSS) and Next Generation Science Standards (NGSS). Additionally, the project would not involve residential or commercial development that would directly or indirectly result in population growth. Therefore, the project would not result in substantial unplanned population growth and impacts would be less than significant.

## LESS THAN SIGNIFICANT IMPACT

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

The project site does not currently contain housing or habitable structures, and the project would not result in the removal of housing. Therefore, the project would not displace people or housing. There would be no impact.

## NO IMPACT

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## 15 Public Services

|  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|--|--------------------------------------|--|-------------------------------------|-------------------------------------|
| a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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: |                                      |  |                                     |                                     |
| 1 Fire protection?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2 Police protection?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3 Schools?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4 Parks?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5 Other public facilities?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

*a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The Kern County Fire Department provides fire protection services to Lamont. The closest fire station to the project site, Station 51, is located approximately 0.5 mile to the north. The project would follow the School Fire Safety Guidelines from the Kern County Fire Department, which establish standards for emergency exits, flammable and hazardous materials, electrical hazards, and building practices to decrease the risk of a fire hazard (Kern County 2018). The proposed project would not increase the local population, and thus would not result in substantial adverse impacts or the need for additional fire protection facilities. As the project site lies in an area of minimal risk for fire (Kern County 2009) and near local fire protection resources, impacts would be less than significant.

### LESS THAN SIGNIFICANT IMPACT

*a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental*

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

Police protection services in the Lamont are provided by the Kern County Sheriff's Office (KCSO). The station nearest to the project, the KCSO Lamont Substation, is located at 12022 Main Street, approximately 1.5 miles south of the project site. As the school will be serving the existing community, the project is not anticipated to result in an increase in demand for police services. Therefore, it would not result in substantial adverse impacts to existing police facilities or impact the need for additional facilities or staff. Impacts on police services would be less than significant.

#### **LESS THAN SIGNIFICANT**

*a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

The project would develop a school in Lamont that would serve the existing and projected populations. The project would not induce population growth or demand for schools (see section 14, *Population and Housing*). The environmental impacts of the proposed school is addressed throughout this document, and the project would not result in the need for off-site schools. Therefore, there would be no impacts associated with the provision of new or physically altered schools, or the need for new schools.

#### **NO IMPACT**

*a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

Demand for parks and open space is directly related to population. The proposed project would not result in substantial population growth and therefore would not increase demand for public services, such as parks and open space. Construction of the project would not impact parks or alter access to parks. The proposed project would create outdoor recreational spaces for the school community and would not increase demand for park facilities or result in the need for new off-site parks. There would be no impact.

#### **NO IMPACT**

*a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The proposed project would increase the capacity of the District's elementary schools by 192 students but would not result in population growth because the increased capacity provided by the project is intended to serve the existing elementary student population and projected growth in the area. Therefore, the project would not result in substantial adverse impacts to existing government

facilities or impact the need for additional public facilities, such as libraries, roadways, and infrastructure. There would be no impact to government services.

**NO IMPACT**

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## 16 Recreation

|  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                |
|--|--------------------------------------|--|-------------------------------------|--------------------------|
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| a. 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?                        | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- a. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

As mentioned in Section 14, *Population and Housing*, the project would not generate a substantial increase in population; therefore, it would not significantly increase the use of existing neighborhood or regional parks and recreational facilities. Additionally, the project would include on-site recreation through the addition of a 1,200-square foot playground for students. No additional environmental impacts would occur beyond those that have been identified as part of this analysis. Thus, impacts would be less than significant.

### LESS THAN SIGNIFICANT IMPACT

*This page intentionally left blank.*

# 17 Transportation

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                |
|---|--------------------------------------|--|-------------------------------------|--------------------------|
| Would the project:  |                                      |  |                                     |                          |
| a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?         | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Result in inadequate emergency access?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- a. *a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Several regionally- and locally-adopted land use plans, policies, and regulations apply to the proposed project. These include the Kern County General Plan Circulation Element, the Kern County Active Transportation Plan (ATP), and the Kern Council of Governments (KCOG) 2018 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS).

The Kern County General Plan is a policy document that is designed to give long-range guidance to County officials making decisions that affect the growth and resources of the unincorporated Kern County jurisdiction. The General Plan is intended to ensure that day-to-day decisions are in conformance with the long-range program designed to protect and further the public interest related to Kern County's growth and development. The General Plan Circulation Element is intended to set up local Goals and guiding Policies regarding transportation, such as the intent to make certain that transportation facilities needed to support development are available, to ensure that such facilities occur in a timely manner as to avoid traffic degradation, and to plan for transportation modes available to all segments of the population, including people with restricted mobility (County of Kern 2009).

The Kern County ATP is a county-wide planning effort to enhance walking, bicycling, and transit access throughout Kern County. Overall, the ATP encourages safer and healthier communities by developing comprehensive bicycle and pedestrian networks that provide safe and comfortable access to local parks, schools, workplaces, retail, transit, and other essential destinations. The ATP includes a variety of goals to guide the development of a network of active transportation infrastructure and programs linking communities of all sizes across Kern County, so that walking and bicycling are a common part of everyday life for both residents and visitors. The ATP goals are

generally oriented around accessibility and safety, network connectivity, community and economic development, health, equity, education, and strategic implementation (County of Kern 2018a).

The 2018 KCOG RTP/SCS is a long-range planning document that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. Overall, the 2018 RTP/SCS aims to improve economic vitality, improve air quality, improve the health of communities, improve transportation and public safety, promote the conservation of natural resources and undeveloped land, increase regional access to community services, increase regional and local energy independence, and increase opportunities to help shape the community's future (County of Kern 2018b).

The proposed project would not result in the closure of existing roadways or construction of new roadways in the vicinity of the project site. Access to the transit stops located along SR-184 (Main Street) and the sidewalk located along the south side of Panama Road would be maintained during project construction. Project implementation would not alter the roadways, transit stops, or sidewalk, increase commercial or residential development, generate growth, or cause an increase in traffic in the vicinity of the project. The school would be accessible by pedestrians and bicyclists through the parking lot on Carnation Road. There is currently no marked bicycle infrastructure in the vicinity of the project site on Carnation Avenue or Panama Road. Therefore, the project would not impact the overall use of the roadways, bicycle or pedestrian facilities, or transit facilities in the vicinity of the project site. The project would not conflict with the goals, objectives, or policies addressing the circulation system in the Kern County General Plan Circulation Element, the Kern County ATP, or the 2018 KCOG RTP/SCS.

Overall, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle or pedestrian facilities. This impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

CEQA Guidelines section 15064.3 requires an analysis of a project's effect on vehicle miles traveled (VMT). The proposed project would not involve residential or commercial development that would directly or indirectly result in population growth. As a result, the project would not introduce substantial unplanned population growth in its vicinity. Instead, the project would serve the existing surrounding community. The new school would be designed to provide classroom space and education facilities to accommodate existing and projected Lamont School District STEM students. As the proposed project would only serve the existing and projected student population in the school district, the proposed project would not result in additional vehicle trips in the region.

Implementation of the proposed project would result in the utilization of a vacant site on a parcel with no current uses. Other Lamont School District schools currently serving the surrounding community include Alicante Elementary School, located 0.7 mile southwest of the project site; Lamont Elementary School, located one mile south of the project site; Myrtle Ave Elementary School, located 1.3 mile north of the project site, and; Mountain View Middle School, located 0.4 mile south of the project site (Lamont Elementary School District 2022). As the proposed project would be constructed in the vicinity of existing schools currently serving the surrounding community, the proposed project would not result in an increase in the length of vehicle trips, but



rather might actually shorten trips by serving the student population in the vicinity of the project site in Lamont.

Overall, the proposed project would not result in an increase in VMT. This impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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

The project site is regionally accessible from SRs 58, 184, and 223, and 99. Direct access to the project site would be provided from a parking lot constructed with ingress and egress from Carnation Avenue. The school would also be accessible by pedestrians and bicyclists through the parking lot on Carnation Road. Development of the project site would adhere to requirements outlined in the Kern County Development Standards (County of Kern 2022). The proposed project would not alter or affect the existing street and intersection networks in its vicinity, nor increase hazards due to a new geometric design feature. Therefore, the proposed project would not substantially increase hazards due to a geometric design feature.

The project site is surrounded by existing residential and agricultural development. The proposed construction of a school on-site would be compatible with surrounding residential uses. As such, the project would not introduce incompatible uses, such as unplanned vehicles or new farm equipment, to the project site or the surrounding area. In addition, according to the Kern County Zoning Ordinance Chapter 19.12, the project site is zoned as exclusive agriculture, or A District, which is intended for agricultural uses and activities compatible with agricultural uses. Educational institutions and schools are permitted on A District-zoned parcels with a conditional use permit. As such, the project would obtain a conditional use permit. Therefore, the proposed project would be consistent with the Kern County Zoning Ordinance and the project would not substantially increase hazards due to incompatible uses. Overall, this impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project result in inadequate emergency access?*

The proposed project would not result in the construction of new roadways, modifications to existing roadways or modifications to existing street parking. The project would include the construction of a parking areas to accommodate 21 on-site vehicle parking spaces for school staff and visitors, as well as parking for the Central Kitchen and MOT facility. The project would adhere to the Kern County Development Standards pertaining to Pedestrian Accessibility, Design, Construction, Site Access, and Temporary Street Closures (County of Kern 2022). Staging equipment and temporary work areas utilized during construction of the proposed project would be located within the project site and would not require closure of existing roadways in the vicinity of the proposed project. Local approvals from the County would be required for any work on County property or within public rights-of-way, including any temporary closures of street parking areas or laneways. As a result, the proposed project would not result in inadequate emergency access. This impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

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# 18 Tribal Cultural Resources

|  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No Impact                |
|--|--------------------------------------|--|------------------------------------|--------------------------|
| Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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:                         |                                      |  |                                    |                          |
| e. 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   | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                            | <input type="checkbox"/>           | <input type="checkbox"/> |
| f. 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                            | <input type="checkbox"/>           | <input type="checkbox"/> |

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 establishes that "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 that the lead agency shall establish measures to avoid impacts that would alter 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 California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code 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 Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

Assembly Bill 52 (AB 52) establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. 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 that have requested notice of projects proposed within the jurisdiction of the lead agency.

The Lamont School District, pursuant to Public Resources 21080.3.1 and AB 52, sent via certified mail notification letters to seven California Native American Tribes that are traditionally and culturally affiliated with the project area. The letter was sent to representatives of the Big Pine Paiute Tribe of Owens Valley, the Chumash Council of Bakersfield, the Kitanemuk & Yowlumne Tejon Indians, the Tejon Indian Tribe, and the Tule River Indian Tribe. The District has not received requests for additional consultation.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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?*

As of the date of this draft, AB 52 consultation is ongoing. The cultural resources study did not identify cultural resources listed on or eligible for listing on the CRHR or a local register within the project site. However, there is always potential to uncover buried archaeological and tribal cultural resources during ground disturbing activities, which could potentially be considered tribal cultural resources eligible for listing in the CRHR or a local register or be considered tribal cultural resources. Should project construction activities encounter and damage or destroy a tribal cultural resource or resources, impacts would be potentially significant. Mitigation Measure TCR-1 would ensure that tribal cultural resources are preserved in the event they are uncovered during construction and would reduce impacts regarding disrupting tribal cultural resources to a less than significant level.

## Mitigation Measure

### *TCR-1 Inadvertent Discoveries During Construction*

In the event that cultural resources of Native American origin are identified during ground-disturbing activities, all earth disturbing work within 50 feet of the find shall be temporarily suspended or redirected until a qualified archaeologist has evaluated the nature and significance of the find; an appropriate Native American representative, based on the nature of the find, is consulted; and mitigation measures are put in place for the disposition and protection of any find pursuant to Public Resources Code Section 21083.2. If the District, in consultation with local Native Americans, determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in accordance with state guidelines and in consultation with local Native American group(s) prior to continuation of any earth disturbing work within the vicinity of the find. The plan shall include avoidance of the resource or, if avoidance of the resource is infeasible, shall outline the appropriate treatment of the resource in coordination with the appropriate local Native American tribal representative and, if applicable, a qualified

archaeologist. Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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## 19 Utilities and Service Systems

|  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                |
|--|--------------------------------------|--|-------------------------------------|--------------------------|
| 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? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| a. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. 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?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. 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?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

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

## Wastewater

The Lamont Public Utility District (LPUD) owns, operates, and maintains the wastewater collection system that includes approximately 35 miles of public sewer lines. The collection system flows by gravity to the District's wastewater treatment plant (WWTP), therefore there are no lift stations or force mains (Lamont 2021). The District operates a 3.25 million gallons per day (MGD) secondary level WWTP located on west of East Bear Mountain Road at Wildman Road. The permitted capacity of this facility is 2.0 MGD. The average day flow to the WWTP is 1.2 MGD. This leaves a remaining capacity of 0.8 MGD or 960,760 gallons per day.

The project's estimated wastewater generation would be approximately 6,621 gallons per day (Appendix A). The project would use approximately 0.7 percent of the available unused capacity. This increase would be within the WWTP's capacity for collection and treatment. Therefore, the WWTP would have sufficient capacity to serve the project and the project would not require the construction of wastewater infrastructure.

## Water

The 2020 Urban Water Management Plan (UWMP) states that Lamont has enough water supply to meet current demands, as well as demands during normal water years through 2040. Additionally, according to the 2020 UWMP, based on the 2040 water demand projection Lamont is expected to have adequate water supplies to 2040 for single-dry years and multiple dry years (Lamont 2020).

Water for the project would be provided by the Lamont Public Utility District (LPUD) via existing utilities adjacent to the project site. The LPUD meets all of its water supply demands solely through the use of groundwater wells. The water supply system consists of seven wells and five storage tanks. There are no plans to change the current source of water, however, the district plans to drill more groundwater wells in order to maintain sufficient water supply.

The annual average water use in the LPUD between 2013 and 2020 is 1,153 million gallons (MG) per year. In 2020, water use in the LPUD was 1,191 MG per year. Currently, LPUD uses 50 percent of its available water supply. LPUD can provide up to 2,221 MG of groundwater supply annually. The LPUD's demands for potable water in 2020 was 1,191 MG, and averages to 1,153 MG annually. The LPUD does not provide non-potable water to any of its customers. This leaves an available 1,030 MG of water supply.

The project's estimated water demand would be approximately 2,900,000 gallons per year or 2.9 MG, approximately 0.3 percent of Lamont's remaining water supply. The project would not demand water supply that would exceed the LPUD's available water supply. The project site would be served by adequate water supplies and no new facilities would be needed.

## Stormwater

The project site is vacant and thus would require connection to off-site stormwater drainage facilities. The project would comply with Kern Municipal Code (Chapter 17.06.200 Section R401.3) regarding standards for stormwater drainage. Additionally, the project would also incorporate a bioswale along Panama Road, which would allow the infiltration of stormwater.

## Electricity, Natural Gas, and Telecommunications

Electricity and natural gas service in Lamont are provided by PG&E. Long-term operation of development projects, including the proposed project, would require permanent grid connections



for electricity and natural gas service to power internal and exterior building lighting, and heating and cooling systems. In 2020, PG&E provided approximately 102,247 GWh to its service area. Due to the nature and size of the project it is not expected to use a substantial amount of energy. Electricity for the project would be provided as needed by PG&E. Telecommunications in Lamont are provided by several service providers including AT&T and Spectrum. Telecommunications would be provided as needed and facility upgrades would not be necessary. Accordingly, the project would be accommodated adequately by existing electricity and telecommunication facilities and would not require improvements to existing facilities, or the provision of new facilities, that would cause significant environmental effects. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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

According to the 2020 UWMP, based on historical data and future projections, the LPUD assessed the future water reliability and its ability to meet the demands of its customers through 2040 during normal, single dry, and multiple dry years. With respect to historical data and future projections, it was established that the LPUD could provide water to customers even during a 5-year prolonged drought. As shown on Table 20, 2020 UWMP determined that the LPUD would be able to meet water supply demand during normal, dry, and multiple dry years; therefore, impacts would be less than significant.

**Table 22 Water Supply and Demand in Acre-Feet for Normal, Single Dry, and Multiple Dry Year**

|                        | Year  |       |       |       |
|------------------------|-------|-------|-------|-------|
|                        | 2025  | 2030  | 2035  | 2040  |
| <b>Normal Year</b>     |       |       |       |       |
| Supply Totals          | 2,615 | 2,615 | 2,615 | 2,615 |
| Demand Totals          | 1,241 | 1,293 | 1,348 | 1,404 |
| Difference             | 1,374 | 1,322 | 1,267 | 1,211 |
| <b>Single Dry Year</b> |       |       |       |       |
| Supply Totals          | 2,615 | 2,615 | 2,615 | 2,615 |
| Demand Totals          | 1,303 | 1,358 | 1,415 | 1,474 |
| Difference             | 1,312 | 1,257 | 1,200 | 1,141 |
| Multiple Dry Years     | Year  |       |       |       |
|                        | 2025  | 2030  | 2035  | 2040  |
| <b>First Year</b>      |       |       |       |       |
| Supply Totals          | 2,615 | 2,615 | 2,615 | 2,615 |
| Demand Totals          | 1,368 | 1,426 | 1,486 | 1,548 |
| Difference             | 1,247 | 1,189 | 1,129 | 1,067 |
| <b>Second Year</b>     |       |       |       |       |
| Supply Totals          | 2,615 | 2,615 | 2,615 | 2,615 |
| Demand Totals          | 1,314 | 1,369 | 1,427 | 1,487 |
| Difference             | 1,301 | 1,246 | 1,188 | 1,128 |
| <b>Third Year</b>      |       |       |       |       |
| Supply Totals          | 2,615 | 2,615 | 2,615 | 2,615 |
| Demand Totals          | 1,325 | 1,381 | 1,439 | 1,499 |
| Difference             | 1,290 | 1,234 | 1,177 | 1,116 |
| <b>Fourth Year</b>     |       |       |       |       |
| Supply Totals          | 2,615 | 2,615 | 2,615 | 2,615 |
| Demand Totals          | 1,336 | 1,392 | 1,450 | 1,512 |
| Difference             | 1,279 | 1,223 | 1,165 | 1,103 |
| <b>Fifth Year</b>      |       |       |       |       |
| Supply Totals          | 2,615 | 2,615 | 2,615 | 2,615 |
| Demand Totals          | 1,347 | 1,404 | 1,463 | 1,524 |
| Difference             | 1,268 | 1,211 | 1,152 | 1,091 |
| Source: LPUD UWMP 2020 |       |       |       |       |

#### LESS THAN SIGNIFICANT IMPACT

- d. *Would the project 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. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste*

In Kern County, municipal solid waste (MSW) is disposed by burial in one of seven county-owned, permitted landfills, which are operated by the Waste Management Department. The County does not provide waste centralized collection, which is instead done by both cities and private haulers. Approximately 90% of all waste generated within the county is diverted or disposed within the county and not exported to other jurisdictions.

Increased student enrollment would increase solid waste generation at the project site by an estimated 78,000 pounds per year, or 39 tons per year (Appendix A). The nearest landfill to the project site is the Bena Landfill, located approximately 15 miles northeast of the project site. The Bena Landfill has a maximum capacity of 4,500 tons per day, or 1,642,500 tons per year. The Bena Landfill receives an approximate average of 3,000 tons per day, which leaves a remaining capacity of approximately 1,500 tons per day (CalRecycle 2021). The project would produce approximately 39 tons of solid waste per day, which is less than one percent of the remaining capacity. The estimated closure for the Bena Landfill site is 2038. The project would not exceed the landfill's maximum capacity or produce a substantial amount of solid waste of which would cause the early closure of the landfill. Therefore, the proposed project would be served by a landfill with sufficient capacity to accommodate its solid waste disposal needs and would not violate any statute or regulation regarding solid waste capacity, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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## 20 Wildfire

|  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact  | No Impact                           |
|--|--------------------------------------|--|-------------------------------------|-------------------------------------|
| 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?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?   | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- b. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project is not located in a state responsibility area or land classified as very high fire hazard severity zones. The nearest state responsibility area is about 10 miles to east (CAL FIRE 2021). Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan. The project would not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. There would be no impact.

**NO IMPACT**

## 21 Mandatory Findings of Significance

|   | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with<br>Mitigation<br>Incorporated | Less than<br>Significant<br>Impact | No Impact                           |
|---|--------------------------------------|--|------------------------------------|-------------------------------------|
| Does the project:   |                                      |  |                                    |                                     |
| a. 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? | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |
| b. 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)?   | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                            | <input type="checkbox"/>           | <input type="checkbox"/>            |
| c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?  | <input type="checkbox"/>             | <input type="checkbox"/>                                       | <input type="checkbox"/>           | <input checked="" type="checkbox"/> |

- 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?*

As previously discussed in Section 4, *Biological Resources*, the project site has been heavily grazed in the past and thus unlikely to contain special status-plant, wildlife, and habitats. Furthermore, there are no creeks, wetlands, or rivers within or in close proximity to the project site. As stated above, no State or Federal databases have identified any sensitive plant or animal species on the project site. Additionally, due to the small footprint of the project site and surrounding agricultural land uses, it is unlikely that the project will disturb wildlife within the vicinity of site.

In Section 5, *Cultural Resources*, Rincon conducted a survey of the project site and did not identify any archeological resources. A Sacred Lands File search was also conducted and did not identify any cultural resources. Upon the completion of the survey and consultation with the NAHC, NRHP, and CRHR, it was determined no historical resources would directly be impacted by the project. Furthermore, the project site has been disturbed by grading since 1987, and development surrounds the site. Therefore, it is unlikely that the project would eliminate important examples of major periods of California history or prehistory.

**NO IMPACT**

- 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)?*

The project site is currently vacant and would have no foreseeable significant impacts. As a school, it would serve the existing population living within the district’s boundaries. It would also serve as an infill development project, which may reduce traffic in the area. Furthermore, with the implementation of the mitigation measures above the impacts would not be cumulatively considerable.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

With the mitigation measures in place for construction, the project itself, once operational, would not have an adverse environmental impact. The proposed project is a school, and the foreseeable environmental impacts from the construction and operation of the project would not cause substantial adverse effects on human beings, either directly or indirectly.

**NO IMPACT**



# References

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- CalGreen Energy Systems. 2020. *A Comprehensive List of All Changes to the 2020 California CalGreen Code*. Available at: <https://calgreenenergyservices.com/wp/wp-content/uploads/2020-CalGreen-Code-Changes.pdf>.
- California Air Pollution Control Officers Association (CAPCOA). 2008. *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA)*.
- \_\_\_\_\_. 2018e. *2020 Business-as-Usual (BAU) Emissions Projection – 2014 Edition*. Modified: June 2018. Available at: <http://www.arb.ca.gov/cc/inventory/data/bau.htm> (accessed January 2022).
- \_\_\_\_\_. 2020. *California Emissions Estimator Model User Guide: Version 2016.3.2*. Prepared by BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. Available at: <http://www.aqmd.gov/docs/default-source/caleemod/user's-guide---october-2017.pdf?sfvrsn=6> (accessed October 2021).
- \_\_\_\_\_. 2021d. *California Greenhouse Gas Emissions for 2000-2020*. (Accessed January 2022)
- California Building Standards Commission (CBSC). 2017. *2016 California Building Code, Part 2*. Available at: <https://codes.iccsafe.org/content/chapter/10004/>.
- California Climate Change Center (CCCC). 2006. *Climate Scenarios for California*.
- California Department of Finance (California DOF). 2016. *E-5 Population and Housing Estimates for Cities, Counties, and the State 2011-2016*. Available at: <http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php> (accessed January 2022).
- \_\_\_\_\_. 2019. *E-5 Population and Housing Estimates for Cities, Counties, and the State 2011-2020 with 2010 Census Benchmark*. Available at: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/> (accessed December 2019).
- California Department of Fish and Wildlife (CDFW). 2021. *State and Federally Listed Endangered, Threatened, and Rare Plants of California*. Available at : C:/Users/mfajardo/Downloads/CNDDDB\_Endangered\_Threatened\_and\_Rare\_Plants\_List.pdf
- California Department of Forestry and Fire Protection (CAL FIRE). 2018. *Strategic Plan*. <https://www.fire.ca.gov/media/5504/strategicplan2019-final.pdf> (accessed October 2021).
- \_\_\_\_\_. 2021. *FHSZ Viewer*. Available at: <https://egis.fire.ca.gov/FHSZ/>. (accessed October 2021).
- California Department of Transportation (Caltrans). 2021. *California State Scenic Highways*. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways> (accessed January 2022).
- California Energy Commission (CEC). 2006. *California Commercial End-Use Survey*. Available at: <https://ww2.energy.ca.gov/2006publications/CEC-400-2006-005/CEC-400-2006-005.PDF> (accessed November 2019).

- \_\_\_\_\_. 2020a. *Utility Annual Power Labels*. Available at:  
[http://www.energy.ca.gov/pcl/labels/2014\\_labels/all\\_labels/Southern California Edison \(SCE\).pdf](http://www.energy.ca.gov/pcl/labels/2014_labels/all_labels/Southern_California_Edison_(SCE).pdf) (accessed January 2022).
- \_\_\_\_\_. 2016b. *Total Electricity System Power*. Available at:  
[http://www.energy.ca.gov/almanac/electricity\\_data/total\\_system\\_power.html](http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html) (accessed January 2022).
- \_\_\_\_\_. 2016c. *Supply and Demand of Natural Gas in California*. Available at:  
[http://www.energy.ca.gov/almanac/naturalgas\\_data/overview.html](http://www.energy.ca.gov/almanac/naturalgas_data/overview.html) (accessed January 2022).
- \_\_\_\_\_. 2016d. *2015 Integrated Energy Policy Report*. Available at:  
[http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-01/TN212017\\_20160629T154354\\_2015 Integrated Energy Policy Report Small File Size.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-01/TN212017_20160629T154354_2015_Integrated_Energy_Policy_Report_Small_File_Size.pdf) (January 2022).
- \_\_\_\_\_. 2018a. *Revised Transportation Energy Demand Forecast 2018-2030*. Available at:  
<https://efiling.energy.ca.gov/getdocument.aspx?tn=221893> (accessed January 2022).
- \_\_\_\_\_. 2018b. *2019 Building Energy Efficiency Standards*. Available at:  
[https://ww2.energy.ca.gov/title24/2019standards/documents/2018 Title 24 2019 Building Standards FAQ.pdf](https://ww2.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf).
- \_\_\_\_\_. 2020a. *Electricity Consumption by Entity*. Available at:  
[https://ww2.energy.ca.gov/almanac/electricity\\_data/total\\_system\\_power.html](https://ww2.energy.ca.gov/almanac/electricity_data/total_system_power.html) (accessed January 2022).
- \_\_\_\_\_. 2020b. *Gas Consumption by Entity*. Available at: <http://ecdms.energy.ca.gov/gasbyutil.aspx>. (accessed January 2022).
- \_\_\_\_\_. 2019c. *Toward A Clean Energy Future, 2018 Integrated Energy Policy Report Update Volume II*.
- \_\_\_\_\_. 2020d. *California Retail Fuel Outlet Annual Reporting (CEC-A15) Results*. Available at:  
[https://ww2.energy.ca.gov/almanac/transportation\\_data/gasoline/piira\\_retail\\_survey.html](https://ww2.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html) (accessed January 2022).
- \_\_\_\_\_. 2020d. *Total System Electric Generation*. Available at:  
[https://ww2.energy.ca.gov/almanac/electricity\\_data/total\\_system\\_power.html](https://ww2.energy.ca.gov/almanac/electricity_data/total_system_power.html) (accessed January 2022).
- California Gas and Electric Utilities. 2018. *California Gas Report*. Decision D.95.01-039. Los Angeles, CA.
- California Geological Survey (CGS). 2002. *California Geomorphic Provinces*, Note 36.
- California Government Code. 2016. *Title 7: Planning and Land Use*. Available at:  
<https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=GOV>.
- California Native Plant Society (CNPS). Rare Plant Program. 2021. *Inventory of Rare and Endangered Plants* (online edition, v8-03 0.45). California Native Plant Society, Sacramento, CA. Available at: <http://www.rareplants.cnps.org>
- California Public Utilities Commission (CPUC). 2017a. General Order Number 165.  
<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K552/209552704.pdf> (accessed October 2021).

- \_\_\_\_\_. 2017b. Standards for Operation, Reliability, and Safety During Emergencies and Disasters. Revised December 14, 2017.  
<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M209/K451/209451792.pdf> (accessed October 2021).
- \_\_\_\_\_. 2018. Overhead Electric Line Construction. May 2018.  
<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M217/K244/217244586.pdf> (accessed October 2021).
- Dibblee, T.W. and Minch, J.A. 2008. Geologic map of the Edison & Breckenridge Mountain 15 minute quadrangles, Kern County, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-419, scale 1:62,500.
- Federal Emergency Management Agency (FEMA). 2020. FEMA's National Flood Hazard Map. Available at: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>. Accessed October 2021.
- National Park Service. 1983. Archeological and Historic Preservation: Secretary of the Interior's Standards and Guidelines. Electronic document, online at [http://www.nps.gov/history/local-law-Arch\\_Standards.htm](http://www.nps.gov/history/local-law-Arch_Standards.htm) (accessed December 2011).
- NETR Online. 2021. *Historic Aerials*. <https://www.historicaerials.com/viewer> (accessed October 2021).
- Paleobiology Database (PBDB). 2022. <http://paleobiodb.org/> (accessed January 2022).
- Rincon Consultants, Inc. 2022. Phase I Environmental Site Assessment. April 2022.
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee.
- Soils Engineering, Inc. (SEI). 2011. Enhanced Phase I Environmental Site Assessment Report (PEA Equivalent Report) for Proposed School Site, Northwest of Habecker Road & Panama Road in Lamont, CA. February 2011.  
[https://www.envirostor.dtsc.ca.gov/public/deliverable\\_documents/8455525040/PEA%20Equivalent%20Report%20Part%201.pdf](https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/8455525040/PEA%20Equivalent%20Report%20Part%201.pdf) (accessed April 2022).
- State of California. 2018. *California's Fourth Climate Change Assessment Statewide Summary Report*. August. Available at: <http://www.climateassessment.ca.gov/state/> (accessed October 2021).
- United States Army Corps of Engineers. 1987. Draft Caliente Creek Stream Group Investigation California Feasibility Report and Environmental Impact Statement. Electronic document at <https://books.googleusercontent.com/books/content?req=AKW5QafL3f-yqI5tTUMSKoWA-120Pvf57D19U0jSJc41EdwklQJ7iSBnjevgIxaTj-VWVGvN9n6-Nw5WALFzSrDtP4ySetLXSmBR7XmMAugsDILf56mvoQpnM51HubE25tX0lkSRaepZ6e1FTPHTDFKJh4hoF5JnQoOYvUnNP9kHcFng7R4Or-A8w5VezrFX-d-xxBtROfAX352RgKwbL9glwiAV8tRo3NtzOCqBYEi6BPHPBRFbWpPA1R6CIYsYv-DEMxb7UD8uLQzKVzoGIVAlz0JE6eGzzCQtVGVCpd42rJdvNGrM5al> (accessed October 2021).

United States Department of Agriculture (USDA), United States Department of the Interior (DOI). 2002. *FY 2001 Performance Report – National Fire Plan*.  
<https://www.forestsandrangelands.gov/documents/resources/reports/2001/6-16-en.pdf>  
(accessed October 2021).

United States Department of Energy (DOE). 2019. *Alternative Fuels Data Center*. Available at:  
<https://afdc.energy.gov/stations/#/find/nearest> (accessed January 2022).

\_\_\_\_\_. 2018. *Alternative Fuels Data Center: Average Fuel Economy of Major Vehicle Categories*.  
Available at: <https://afdc.energy.gov/data/10310>.

United States Department of Transportation (DOT). 2018. *National Transportation Statistics*.  
Available at: <https://www.bts.gov/sites/bts.dot.gov/files/docs/browse-statistical-products-and-data/national-transportation-statistics/223001/ntsntire2018q4.pdf> (accessed January 2022).

United States Energy Information Administration (USEIA). 2021a. *California Energy Production Estimates 2020*. Available at: <https://www.eia.gov/state/?sid=CA#tabs-2> (accessed January 2022).

\_\_\_\_\_. 2018b. *Rankings: Total Energy Consumed per Capita, 2017*. Available at:  
<https://www.eia.gov/state/rankings/?sid=CA#series/12>.

\_\_\_\_\_. 2018c. *State Energy Data System (SEDS): 2017, Total petroleum consumption*. Available at:  
[https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep\\_use/tx/use\\_tx\\_CA.html&sid=CA](https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_use/tx/use_tx_CA.html&sid=CA) (accessed January 2022).

\_\_\_\_\_. 2018d. *Natural Gas Fuel Basics*. Updated May 22, 2018. Available at:  
[https://www.afdc.energy.gov/fuels/natural\\_gas\\_basics.html](https://www.afdc.energy.gov/fuels/natural_gas_basics.html) (accessed January 2022).

\_\_\_\_\_. 2019. *Monthly Energy Review, Table 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy*. Washington, DC. January 2022.

United States Fish and Wildlife Service (USFWS). 2021a. Information for Planning and Consultation.  
Available at: <https://ecos.fws.gov/ipac/>

\_\_\_\_\_. 2021b. Wetlands Mapper. November 30, 2021. Available at:  
<https://www.fws.gov/wetlands/data/mapper.html>

\_\_\_\_\_. 2022. US Fish and Wildlife Service Environmental Conservation Online System (ECOS).  
Critical Habitat for Threatened & Endangered Species.  
<https://ecos.fws.gov/ecp/report/table/critical-habitat.html>

United States Geological Survey (USGS). 2021. Topo View. [online map database].  
<https://ngmdb.usgs.gov/topoview/> (accessed October 2021).

University of California Museum of Paleontology (UCMP). 2022. UCMP online database specimen search portal, <http://ucmpdb.berkeley.edu/> (accessed January 2022).

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