Farmersville Public Works Yard Expansion Project

Prepared for:



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PROJECT INFORMATION

This document is the Initial Study/Mitigated Negative Declaration on the potential

environmental effects of the City of Farmersville (City) Public Works Yard Expansion Project

(Project). The City of Farmersville will act as the Lead Agency for this project pursuant to the

California Environmental Quality Act (CEQA) and the CEQA Guidelines. Copies of all materials

referenced in this report are available for review in the project file during regular business hours

at 909 W. Visalia Road, Farmersville, CA 93223.

Project title

Farmersville Public Works Yard Expansion Project

Lead agency name and address

City of Farmersville

909 W. Visalia Road

Farmersville, California 93223

Contact person and phone number

Karl Schoettler, City Planner

City of Farmersville: (559) 734-8737 ext. 8032

Project location

The City of Farmersville is located in Tulare County in the northern part of the San Joaquin Valley, east of the City of Visalia (see Figure 1). The 14.3-acre Project site is located southeast of South Shasta Avenue and West Tulare Street, west of South Farmersville Boulevard (see Figure 2) and

the site would occupy Assessor's Parcel Number (APN) 130-030-017. State Route 198 runs east-

west through Farmersville, approximately 2.45 miles north of the Project site.

Figure 1 – Location

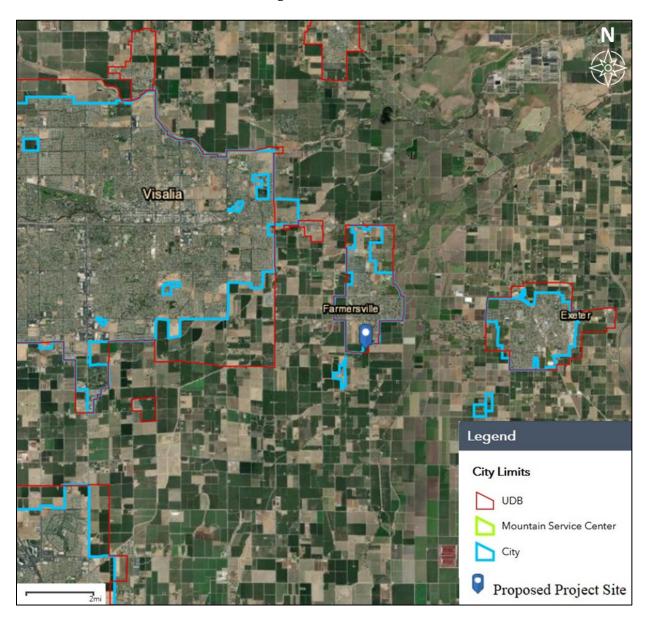




Figure 2 – Site Aerial

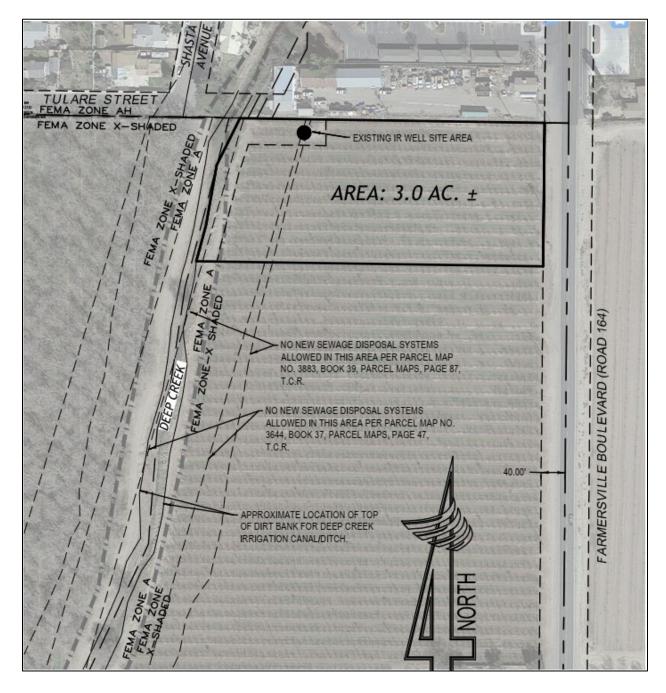


Figure 3 – Site Plan

Project sponsor's name/address

City of Farmersville 909 W. Visalia Road Farmersville, California 93223

General plan designation

Public Facilities, Medium-High Density Residential

Zoning

P-QP (Public/Quasi Public), R-M-2.5 (Multi Family Residential)

Project Description

The Farmersville Public Works Yard Expansion Project (proposed Project) consists of annexation of approximately 14.3 acres into the City of Farmersville, of which approximately 3 acres is proposed to be developed as an expansion of the existing Public Works yard, adjacent to and north of the proposed site. The remaining 11.3 acres will zoned R-M-2.5 Multi Family Residential. No residential development is proposed at this time. The southern portion consists of an existing rural residence which will remain on site. Entitlements needed to accommodate the Project include Annexation, General Plan Amendment, Zone Change, and Tentative Subdivision Map.

Operations

The Public Works Yard currently operates Monday – Friday from 6:30am to 3:00pm, with emergency response and equipment retrieval occurring on an emergency basis. Ten City employees work on-site, and the site's primary purpose is to mobilize City owned vehicles, equipment and materials in the morning and de-mobilize City owned vehicles, equipment and materials in the afternoon.

Types of vehicles that operate from the yard include:

- 10 pick up trucks
- 2 dump trucks

- 2 back hoes2 tractors
- 1 street sweeper
- 1 vactor
- 1 forklift
- 2 rider mowers
- 1 bobcat skid steer

The purpose of the expansion is to better utilize site efficiency and circulation and no new personnel, vehicles or equipment are anticipated with the site's expansion. New motion-detected onsite lighting will be installed over the expanded portion for security and safety.

It is anticipated that the Project would begin development in early 2024 and construction would last approximately six months.

Surrounding Land Uses/Existing Conditions

The proposed Project site currently consists of orchards. Deep Creek, a channelized canal, runs along the western edge of the site. The site is highly disturbed.

Lands surrounding the proposed Project are described as follows:

- North: Public Works Department, Tulare County Housing Authority, Single Family Residences towards northeast.
- South: Agricultural land cultivated with orchards.
- East: Vacant/Agricultural land.
- West: Deep Creek, Agricultural land.

Other Public Agencies Involved

- The adoption of a Mitigated Negative Declaration by the City of Farmersville
- Approval of a General Plan Amendment by the City of Farmersville
- Approval of a Zone Change by the City of Farmersville
- Approval of a Site Plan Review by the City of Farmersville
- Approval of Building Permits by the City of Farmersville

- Approval of a Stormwater Pollution Prevention Plan by the Central Valley Regional Water Quality Control Board
- Dust Control Plan Approval letter from the San Joaquin Valley Air Pollution Control District
- Compliance with other federal, state and local requirements.

Tribal Consultation

ASM Affiliates, Inc. notified the following California Native American Tribes pursuant to AB 52 (Public Resources Code Section 21080.3.1, et seq.) on behalf of the City of Farmersville on March 21, 2022.

- o Big Sandy Rancheria of Western Mono Indians
- o Santa Rosa Indian Community of the Santa Rosa Rancheria
- o Tule River Indian Tribe
- Wuksache Indian Tribe/Eshom Valley band

Tribes were provided 30 days, to request consultation pursuant to those statutes. The Santa Rosa Rancheria – Tachi Yokuts responded on March 31, 2022 and requested to be retained to perform a cultural presentation for all construction staff and to be informed of any and all discoveries made related to the Project. No other comments were received.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

DETERMINATION

On the basis of 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 in the X project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. 1/16/24 Date School Karl Schoettler

City Planner

City of Farmersville

ENVIRONMENTAL CHECKLIST

			Less than		
	AESTHETICS ould the project:	Potentially Significant Impact	Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b.	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
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 publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?				
d.	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

RESPONSES

a. Have a substantial adverse effect on a scenic vista?

Less than Significant Impact. The proposed Project consists of annexation of approximately 14.3 acres into the City of Farmersville, of which approximately 3 acres is proposed to be developed as an expansion of the existing Public Works yard, adjacent to and north of the proposed site. The remaining 11.3 acres will be zoned R-M-2.5, Multi Family Residential, with no residential development proposed at this time. The southern portion of the site currently consists of a rural residence that will remain on site. The site is

within the City's Urban Development Boundary, and the entitlements needed to accommodate the Project include Annexation, General Plan Amendment, Zone Change, and a Tentative Subdivision Map.

The proposed Project also includes improvements typically associated with a new Public Works Yard development, including site access, lighting, and site landscaping. The structures will conform to design standards set forth by the City's General Plan and Zoning Ordinance. The proposed Project site is located in an area that is partially surrounded by urban uses and will not result in a use that is visually incompatible with the surrounding area. Construction activities will be visible from the adjacent roadsides; however, the construction activities will be temporary in nature and will not affect a scenic vista.

A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area. The City of Farmersville General Plan does not identify any scenic vistas within the Project area. The impact will be *less than significant*.

Mitigation Measures: None are required.

b. <u>Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?</u>

Less than Significant Impact. There are no state designated scenic highways within the immediate proximity to the Project site. California Department of Transportation Scenic Highway Mapping System identifies SR 198 east of SR 99 as an Eligible State Scenic Highway. This is the closest highway, located approximately 2.45 miles north of the Project site; however, the Project site is both physically and visually separated from SR 198 by intervening land uses. In addition, no scenic highways or roadways are listed within the Project area in the City of Farmersville's General Plan or Tulare County's General Plan. Based on the National Register of Historic Places (NRHP) and the City's General Plan, no historic buildings exist on the Project site. The proposed Project would not damage any trees, rock outcroppings or historic buildings within a State scenic highway corridor. Any impacts would be considered *less than significant*.

Mitigation Measures: None are required.

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 publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?

Less than Significant Impact. Site construction will site grading, paving, and lighting. No residential development is proposed at this time. The proposed Project site is located in an area that is substantially surrounded by urban uses, including public services, commercial, agricultural, and residential, and as such, will not result in a use that is visually incompatible with the surrounding area. The proposed Project will not substantially degrade the existing visual character or quality of the area or its surroundings.

The impact will be *less than significant*.

Mitigation Measures: None are required.

d. <u>Create a new source of substantial light or glare which would adversely affect day or nighttime views</u> in the area?

Less Than Significant Impact. Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments; however, these lights have the potential to produce spillover light and glare and waste energy, and if designed incorrectly, could be considered unattractive. Light that falls beyond the intended area is referred to as "light trespass". Types of light trespass include spillover light and glare. Minimizing all these forms of obtrusive light is an important environmental consideration. A less obtrusive and well-designed energy efficient fixture would face downward, emit the correct intensity of light for the use, and incorporate energy timers.

Spillover light is light emitted by a lighting installation that falls outside the boundaries of the property on which the installation is sited. Spillover light can adversely affect light-sensitive uses, such as residential neighborhoods at nighttime. Because light dissipates as it travels from the source, the intensity of a light fixture is often increased at the source to compensate for the dissipated light. This can further increase the amount of light that illuminates adjacent uses. Spillover light can be minimized by using only the level of light necessary, and by using cutoff type fixtures or shielded light fixtures, or a combination of fixture types.

Glare results when a light source directly in the field of vision is brighter than the eye can comfortably accept. Squinting or turning away from a light source is an indication of glare. The presence of a bright light in an otherwise dark setting may be distracting or annoying, referred to as discomfort glare, or it may diminish the ability to see other objects in the darkened environment, referred to as disability glare. Glare can be reduced by design features that block direct line of sight to the light source and that direct light downward, with little or no light emitted at high (near horizontal) angles, since this light would

travel long distances. Cutoff-type light fixtures minimize glare because they emit relatively low-intensity light at these angles.

Currently, the sources of light in the Project area are from streetlights, vehicles traveling along Farmersville Boulevard, Tulare Street, the adjacent Public Works yard and residential streets, and nighttime lighting from adjacent residences and businesses. The Project would necessitate motion-detected nighttime lighting and such lighting that would be subject to City of Farmersville standards. Accordingly, potential impacts would be considered *less than significant*.

Less than

II. AGRICULTURE AND FOREST Significant Potentially With Less than **RESOURCES** Significant Significant Mitigation No Would the project: Impact **Impact** Incorporation **Impact** Convert Prime Farmland, Unique a. Farmland, or Farmland of Statewide Importance (Farmland), as shown on the Xmaps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use? Conflict with existing zoning for b. Xagricultural use, or a Williamson Act contract? Conflict with existing zoning for, or cause c. rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public XResources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? Result in the loss of forest land or d. \boxtimes conversion of forest land to non-forest use? Involve other changes in the existing environment which, due to their location or nature, could result in conversion of XFarmland, to non-agricultural use or conversion of forest land to non-forest use?

RESPONSES

a. <u>Convert Prime Farmland</u>, <u>Unique Farmland</u>, <u>or Farmland of Statewide Importance (Farmland)</u>, <u>as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</u>

No Impact. The Project site is located in an area of the City considered *Prime Farmland* by the State Farmland Mapping and Monitoring Program.¹ The entire 14.3-acre site to be annexed into the City is within the adopted Urban Development Boundary (UAB), with the northern portion designated in the General plan as Public Facilities, and the southern portion as Service Commercial. As part of the proposed Project, the southern 11.3 acres will be designated as Residential. As the site is within the UAB, potential conversion of Prime Farmland has been analyzed in the City's General Plan EIR (SCH# 2002071029). Therefore, the proposed Project does not have the potential to result in the new conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. There is *no impact*.

Mitigation Measures: None are required.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project site is within the adopted Farmersville Urban Development Boundary and has been designated for urban uses by the City of Farmersville General Plan. The site is not under a Williamson Act Contract. There are *no impacts*.

Mitigation Measures: None are required.

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))?

No Impact. The Project is not zoned for forestland and does not propose any zone changes related to forest or timberland. There is *no impact*.

¹ Farmland Mapping and Monitoring Program, California Department of Conservation Division of Land Resource Protection. https://maps.conservation.ca.gov/DLRP/CIFF. Accessed October, 2023.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. No conversion of forestland, as defined under Public Resource Code or General Code, as referenced above, would occur as a result of the Project. There is *no impact*.

Mitigation Measures: None are required.

e. <u>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?</u>

No Impact. No land conversion from Farmland would occur for the Project. Surrounding land uses include residential, commercial, and agriculture. The proposed Project site is designated for urban development by the Farmersville General Plan and as such, does not have the potential to result in the new conversion of Farmland to non-agricultural uses or forestland uses to non-forestland. There is *no impact*.

, W o	AIR QUALITY uld the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?				
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?				
c.	Expose sensitive receptors to substantial pollutant concentrations?				
d.	Result in other emissions (such as those leading to odors or adversely affecting a substantial number of people)?				

RESPONSES

- a. Conflict with or obstruct implementation of the applicable air quality plan?
- b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- c. Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The proposed Project site is located within the jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD). To show attainment of the standards, the SJVAPCD analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures.

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed SJVAPCD regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable AQP.

The proposed Project lies within the San Joaquin Valley Air Basin (SJVAB). The San Joaquin Valley Air Basin (SJVAB) is designated nonattainment of state and federal health-based air quality standards for ozone and PM2.5. The SJVAB is designated nonattainment of state PM10. To meet Federal Clean Air Act (CAA) requirements, the SJVAPCD has multiple air quality attainment plan (AQAP) documents, including:

- Extreme Ozone Attainment Demonstration Plan (EOADP) for attainment of the 1-hour ozone standard (2004)
- 2007 Ozone Plan for attainment of the 8-hour ozone standard
- 2007 PM₁₀ Maintenance Plan and Request for Redesignation
- 2008 PM_{2.5} Plan

Because of the region's non-attainment status for ozone, PM2.5, and PM10, if the project-generated emissions of either of the ozone precursor pollutants (ROG or NOx), PM10, or PM2.5 were to exceed the SJVAPCD's significance thresholds, then the project uses would be considered to conflict with the attainment plans. In addition, if the project uses were to result in a change in land use and corresponding increases in vehicle miles traveled, they may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

The annual significance thresholds to be used for the Project for construction and operational emissions are as follows²:

- 10 tons per year ROG
- 10 tons per year NOx
- 15 tons per year PM10
- 15 tons per year PM2.5

² San Joaquin Valley Air Control District – Air Quality Threshold of Significance – Criteria Pollutants. http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf. Accessed October 2023.

Project Emissions

Site preparation and Project construction would involve excavation, grading, hauling, and various activities needed to construct the Project. During construction, the Project could generate pollutants such as hydrocarbons, oxides of nitrogen, carbon monoxide, and suspended PM. A major source of PM would be windblown dust generated during construction activities. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Vehicles leaving the site could deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries.

PM10 emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM10 emissions would depend on soil moisture, the silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Emissions were estimated using the California Emissions Estimator Model (CalEEMod), ver. 2020.4.0 (Appendix A). Construction related emissions are shown in Table 1.

Table 1
Project Construction and Operational Emissions

	VOC (ROG)	NOx	со	\$Ox	PM10	PM2.5	CO2
	(tons/year)	(tons/			(tons/year)	(tons/year)	(MT/year)
2023	0.0375	0.3331	0.3145	0.0007	0.0446	0.0261	54.995
2024	0.2172	1.4531	1.6583	0.004	0.1175	0.0715	296.47
Annual Construction Emissions Maximum	0.2172	1.4531	1.6583	0.004	0.1175	0.0715	296.47
Total Operational Emissions	0.0113	0.0001	0.002	0	0	0	0.003
Threshold of Significance	10	10	100	27	15	15	-
Exceed Threshold	No	No	No	No	No	No	N/A

As shown in Table 1, annual construction and operational emissions would be below the SJVAPCD's significance threshold. Additionally, the SJVAPCD has implemented Regulation VIII measures for dust control related to construction projects, which are applicable to the Project and will be enforced by the City and the City's contractor, which will further reduce construction PM10 emissions. The Project uses would not conflict with emissions inventories contained in regional air quality attainment plans and

would not result in a significant contribution to the region's air quality non-attainment status³. Likewise, the Project would not result in a cumulatively considerable net increase of any criteria pollutant within the SJVAPCD jurisdiction as no emissions thresholds were met.

Based on Table 1, Project construction and operational emissions will not exceed the SJVAPCD's significance thresholds for ROG, NOx, PM10, and PM2.5, and will not lead to a cumulatively considerable net increase of these pollutants. Additionally, the Project consists of expansion of an existing Public Works yard, therefore, the Project would not potentially expose nearby sensitive receptors to additional substantial pollutant concentrations or result in other emissions. It will not cumulatively increase any criteria pollutant and will not result in substantial pollutant concentrations.

Any impacts to air resources would be considered *less than significant*.

Mitigation Measures: None are required.

d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less Than Significant Impact. Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Although the Project is less than one mile from the nearest sensitive receptor, the Project is not expected to be a significant source of odors since it consists of expanding the existing Public Works yard located adjacent to the site. The screening levels for these land use types are shown in Table 2.

Table 2
Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile

³ San Joaquin Valley Air Pollution Control District. Guidance to Assessing and Mitigating Air Quality Impacts. February 19, 2015. Page 65. https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed October 2023

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Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Wastewater Treatment Facilities	2 miles

Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19.

 $We bsite: \underline{https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF.}\\$

Accessed October, 2023.

The Project includes expansion of an existing Public Works yard and as such, would not result in a significant increase of ongoing objectionable odors. During construction, the various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and would not likely be noticeable for extended periods of time beyond the Project's site boundaries. The potential for diesel odor impacts would therefore be less than significant. Any impacts would be *less than significant*.

	BIOLOGICAL RESOURCES uld the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
C.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				

e.	Conflict with any local policies or				
	ordinances protecting biological		\square		
	resources, such as a tree preservation				
	policy or ordinance?				
f.	Conflict with the provisions of an adopted				
	Habitat Conservation Plan, Natural				
	Community Conservation Plan, or other			\boxtimes	
	approved local, regional, or state habitat				
	conservation plan?				

ENVIRONMENTAL SETTING

The proposed Project site is located in a portion of the central San Joaquin Valley that has, for decades, experienced intensive agricultural and urban disturbances. Current agricultural endeavors in the region include dairies, groves, and row crops.

Like most of California, the Central San Joaquin Valley experiences a Mediterranean climate. Warm dry summers are followed by cool moist winters. Summer temperatures usually exceed 90 degrees Fahrenheit, and the relative humidity is generally very low. Winter temperatures rarely raise much above 70 degrees Fahrenheit, with daytime highs often below 60 degrees Fahrenheit. Annual precipitation within the proposed Project site is between 7-10 inches, almost 85% of which falls between the months of October and March. Nearly all precipitation falls in the form of rain and storm-water readily infiltrates the soils of the surrounding the sites.

Native plant and animal species once abundant in the region have become locally extirpated or have experienced large reductions in their populations due to conversion of upland, riparian, and aquatic habitats to agricultural and urban uses. Remaining native habitats are particularly valuable to native wildlife species including special status species that still persist in the region.

The Project site is currently vacant, consisting of cultivated orchards. Deep Creek runs along the western site boundary.

RESPONSES

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

Less than Significant Impact with Mitigation. According to the biotic survey prepared for the Farmersville General Plan update, the overwhelming bulk of the Farmersville planning area has been severely disturbed from its natural state by urbanization and agricultural activities. A total of 8 special status animal species could potentially occur in the Farmersville area. Two of the 8 species, San Joaquin Kit Fox and burrowing owl are listed as threatened or endangered by the U.S. Fish and Wildlife Service or the California Department of Fish and Game. No special status plant species are likely to occur in the planning area.⁴

The Project site consists of an orchard and is located in an area of agricultural, residential, and roadway uses. Agricultural uses occur to the east, south, and west, with urban and residential used to the north, including an existing Public Works yard. Active disturbance in the immediate surrounding areas indicates that the Project site is unlikely to support native wildlife and is not expected to provide habitat for special status species due to the high disturbance.

Construction activities such as excavating, trenching, or using other heavy equipment that disturbs or harms a special-status species could constitute a significant impact. Incorporation of Mitigation Measures BIO-1 and BIO-2 will reduce the potential impacts to a *less than significant* level.

Mitigation Measures:

BIO-1: Protect San Joaquin Kit Fox

To protect San Joaquin kit fox, a qualified biologist shall conduct a preconstruction survey within 30 days prior to the start of ground-disturbing activities to identify potential dens (burrows larger than 4 inches in diameter) in suitable land cover types on and within 250 feet of the Project site. If potential dens for San Joaquin kit fox are present, their disturbance and destruction shall be avoided. Exclusion zones shall be implemented based on the type of den and current use: Potential Den—50 feet; Known Den—100 feet; Natal or Pupping Den—to be determined on a case-by-case basis in coordination with USFWS and CDFW. All pipes greater than 4 inches in diameter stored on the construction site shall be capped and exit ramps shall be installed in trenches and other excavations to avoid direct mortality. When possible, construction shall be

⁴ Ch 4: Conservation, Open Space, Parks, and Recreation Element. Part I: Farmersville General Plan Update 2000-2025. Page 4-6..

conducted outside of the breeding season from October 1 to November 30. If den avoidance is not possible, procedures in *U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior or During Ground Disturbance* shall be followed.

BIO-2: Protect burrowing owls.

- Conduct focused burrowing owl surveys to assess the presence/absence of burrowing owl in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012) and Burrowing Owl Survey Protocol and Mitigation Guidelines (CBOC 1997). These involve conducting four pre-construction survey visits.
- 2. If a burrowing owl or sign of burrowing owl use (e.g., feathers, guano, pellets) is detected on or within 500 feet of the Project site, and the qualified biologist determines that Project activities would disrupt the owl(s), a construction-free buffer, limited operating period, or passive relocation shall be implemented in consultation with the CDFW.
- b. <u>Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</u>
- c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact With Mitigation. The channelized Deep Creek runs along the western boundary of the Project site. As a stream in California, it is likely under the regulatory jurisdiction of the CDFW; as a potential surface water in California, it may be under the regulatory jurisdiction of the SWRCB; and as a potential tributary of the Tule River, it may be under the regulatory jurisdiction of the USACE. No impacts to the creek are anticipated. A buffer will be maintained with the creek per regulatory requirements. If impacts to the creek are unavoidable, further delineation of their boundaries and consultation with the CDFW, SWRCB, and/or the USACE may be required. Implementation of mitigation measure BIO-3 will ensure that impacts are less than significant. As such, any impacts would be *less than significant*.

Mitigation Measures:

BIO-3: Regulatory Permits

Should it be determined that construction activities require work within an established creek bed below the Ordinary High Water Mark, the Project would be subject to regulatory permitting through the California Department of Fish & Wildlife (Section 1602 Streambed Alteration Agreement), the U.S. Army Corps (Clean Water Act Section 404) and the Regional Water Quality Control Board (Section 401 Water Quality Certification).

d. <u>Interfere substantially with the movement of any native resident or migratory fish or wildlife</u> species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact. The Project could impede the use of nursery sites for native birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC). Migratory birds are expected to nest on and near the Project site. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Disturbance that causes nest abandonment or loss of reproductive effort can be considered take under the MBTA and CFGC. Loss of fertile eggs or nesting birds, or any activities resulting in nest abandonment, could constitute a significant effect if the species is particularly rare in the region. Construction activities such as excavating, trenching, and grading that disturb a nesting bird on the Project site or immediately adjacent to the construction zone could constitute a significant level. Mitigation Measure BIO-4 (below) will reduce the potential effect to a *less than significant* level.

Mitigation Measures:

BIO-4: Protect nesting birds.

- 1. To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August.
- 2. If it is not possible to schedule construction between September and January, pre-construction surveys for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during the implementation of the Project. A pre-construction survey shall be conducted no more than 14 days prior to the initiation of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the

nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has otherwise failed for non-construction related reasons.

e. <u>Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</u>

Less than Significant Impact. The City of Farmersville's General Plan includes various policies for the protection of biological resources. The proposed Project would not conflict with any of the adopted policies and any impacts would be considered *less than significant*.

Mitigation Measures: None are required.

f. <u>Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</u>

No Impact. There are no adopted habitat conservation plans that apply to the Project site. There is no impact.

Loce than

٧.	CULTURAL RESOURCES	Potentially Significant	Significant With Mitigation	Less than Significant	No	
Wo	uld the project:	Impact	Incorporation	Impact	Impact	
a.	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		\boxtimes			
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?					
C.	Disturb any human remains, including those interred outside of formal cemeteries?					

RESPONSES

a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less than Significant Impact with Mitigation. A Class III Inventory/Phase I Cultural Survey was performed on the site by ASM Affiliates, Inc. in May of 2023, on behalf of a previously proposed Project (provided as Appendix B). The subsequent archival records search conducted at the SSJVIC on March 2022 indicated that one previous study had covered small portions of the study area on the north. No cultural resources of any kind are known to exist within the study area. An additional eight previous studies had been completed within 0.5-miles of the study area, resulting in the recordation of four historic cultural resources within that outer radius. These resources include a single-family property, a canal and two historic bridges.

A Sacred Lands File (SLF) request was also submitted to the NAHC on March 17, 2022. The SLF indicated that no tribal cultural resources were known to exist within the APE. Outreach letters were sent on March 21, 2022 to tribal organizations on the NAHC contact list requesting additional information about the Project APE. The Santa Rosa Rancheria – Tachi Yokuts responded on March 31, 2022 and requested to be retained to perform a cultural presentation for all construction staff and to be informed of any and all discoveries made related to the Project. Follow-up emails were also sent to the remaining tribal organizations in April 2022; however, no additional responses have been received.

The Class III inventory/Phase I survey fieldwork was conducted in April 2022 with the entire Project area walked by an archaeological crew.

While no archaeological or built environment resources were identified within the area, subsurface construction activities associated with the proposed Project could potentially damage or destroy previously undiscovered historic resources. This is considered a potentially significant impact; however, implementation of Mitigation Measure CUL-1 will ensure that significant impacts remain *less than significant with mitigation incorporation*.

Mitigation Measures:

CUL-1: The following measures shall be implemented:

- Before initiation of construction or ground-disturbing activities associated with the Project, the City shall require all construction personnel to be alerted to the possibility of buried cultural resources, including historic, archeological and paleontological resources;
- The general contractor and its supervisory staff shall be responsible for monitoring the construction Project for disturbance of cultural resources; and
- If a potentially significant historical, archaeological, or paleontological resource, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains or trash deposits are encountered during subsurface construction activities (i.e., trenching, grading), all construction activities within a 100-foot radius of the identified potential resource shall cease until a qualified archaeologist evaluates the item for its significance and records the item on the appropriate State Department of Parks and Recreation (DPR) forms. The archaeologist shall determine whether the item requires further study. If, after the qualified archaeologist conducts appropriate technical analyses, the item is determined to be significant under California Environmental Quality Act, the archaeologist shall recommend feasible mitigation measures, which may include avoidance, preservation in place or other appropriate measure, as outlined in Public Resources Code section 21083.2. The City of Farmersville shall implement said measures.

b. <u>Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?</u>

Less than Significant Impact with Mitigation. The possibility exists that subsurface construction activities may encounter undiscovered archaeological resources. This would be a potentially significant

impact. Implementation of Mitigation Measure CUL-1 would require inadvertently discovery practices to be implemented should previously undiscovered archeological resources be located. As such, impacts to undiscovered archeological resources would be *less than significant with mitigation incorporation*.

c. <u>Disturb any human remains, including those interred outside of formal cemeteries?</u>

Less than Significant Impact with Mitigation. There are no unique geological features or known fossil-bearing sediments in the vicinity of the proposed Project site. However, there remains the possibility for previously unknown, buried paleontological resources or unique geological sites to be uncovered during subsurface construction activities. Therefore, this would be a potentially significant impact. Mitigation is proposed requiring standard inadvertent discovery procedures to be implemented to reduce this impact to a level of *less than significant with mitigation incorporation*.

Mitigation Measures:

CUL-2: The Project applicant shall incorporate into the construction contract(s) a provision that in the event a fossil or fossil formations are discovered during any subsurface construction activities for the proposed Project (i.e., trenching, grading), all excavations within 100 feet of the find shall be temporarily halted until the find is examined by a qualified paleontologist, in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the Project applicant, who shall coordinate with the paleontologist as to any necessary investigation of the find. If the find is determined to be significant under CEQA, the City shall implement those measures, which may include avoidance, preservation in place, or other appropriate measures, as outlined in Public Resources Code section 21083.2.

			Less than		
			Significant		
VI.	ENERGY	Potentially	With	Less than	
		Significant	Mitigation	Significant	No
Wo	uld the project:	Impact	Incorporation	Impact	Impact
a.	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			\boxtimes	

RESPONSES

- a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The proposed Project consists of annexation of approximately 14.3 acres into the City of Farmersville, of which approximately 3 acres is proposed to be developed as an expansion of the existing Public Works yard, adjacent to and north of the proposed site. The remaining 11.3 acres will zoned R-M-2.5 Multi Family Residential. No residential development is proposed at this time.

During construction, the Project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials. Title 24 Building Energy Efficiency Standards would provide guidance on construction techniques for the plant house to maximize energy conservation and it is expected that contractors and the City have a strong financial incentive to use recycled materials and products originating from nearby sources in order to reduce materials costs. As such, it is anticipated that materials used in construction and construction vehicle fuel energy would not involve the wasteful, inefficient, or unnecessary consumption of energy.

Operational Project energy consumption would occur for multiple purposes, including but not limited to the use of vehicle maintenance equipment and site lighting. Energy consumption related to vehicle maintenance equipments would be minimal, as the equipment are used sporadically. Operational energy

would also be consumed during each vehicle trip stored or parked at the yard or associated with the proposed use for maintenance or otherwise.

As discussed in Impact XVII – Transportation/Traffic, once constructed the proposed Project would not generate any on-going vehicle trips except for maintenance or inspection. The length of these trips and the individual vehicle fuel efficiencies are not known as the City of Farmersville employs various service vehicles; therefore, the resulting energy consumption cannot be accurately calculated. Adopted federal vehicle fuel standards have continually improved since their original adoption in 1975 and assists in avoiding the inefficient, wasteful, and unnecessary use of energy by vehicles.

As discussed previously, the proposed Project would be required to implement and be consistent with existing energy design standards at the local and state level, such as Title 24. The Project would also be subject to energy conservation requirements in the California Energy Code and CALGreen. Adherence to state code requirements would ensure that the Project would not result in wasteful and inefficient use of non-renewable resources due to Public Works yard operation.

Compliance with established and applicable regulations would ensure that the Project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency. Moreover, compliance with Title 24 standards would ensure that the proposed Project would not conflict with any energy conservation policies related to the proposed Project's building envelope, mechanical systems, and indoor and outdoor lighting. As such, the Project proposes to expand the existing Public Works yard north of the site, and would not result in new unusually long trip lengths.

For the above reasons, the proposed Project would not result in significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation, or conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would be *less than significant*.

	GEOLOGY AND SOILS uld the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii. Strong seismic ground shaking?			\boxtimes	
	iii. Seismic-related ground failure, including liquefaction?				
	iv. Landslides?				
b.	Result in substantial soil erosion or the loss of topsoil?				
c.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d.	Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?			\boxtimes	

e.	Have soils incapable of adequately		
	supporting the use of septic tanks or		
	alternative waste water disposal		
	systems where sewers are not available		
	for the disposal of waste water?		
f.	Directly or indirectly destroy a unique		
	paleontological resource or site or		
	unique geologic feature?		

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

No Impact. The proposed Project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone. Since no known surface expression of active faults are believed to cross the site, fault rupture through the site is not anticipated. *No impacts* would occur.

Mitigation Measures: None are required.

a-ii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Less than Significant Impact. There are no known active earthquake faults in the City of Farmersville. The proposed Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no known faults cut through the local soil at the site. The closest known faults likely to affect the community are the Owens Valley fault, located about 65 miles to the east along the base of the Sierra Nevada in the Owens Valley, and the San Andreas fault located about 70 miles to the southwest in the coastal range. According to the Five County Seismic Safety Element (FCSSE), Farmersville is located in the V-1 zone, defined as an area "of hard rock alluvium on valley floors". The FCSSE further states that, "The distance to either

of the faults expected to be a source of shaking is sufficiently great that shaking should be minimal and the requirements of the Uniform Building Code Zone II should be adequate for normal facilities."⁵

Therefore, the impact is *less than significant*.

Mitigation Measures: None are required.

a-iii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Less than Significant Impact. Tulare County has extremely low seismic activity levels, although shaking may be felt from earthquakes whose epicenter lie to the south and west. The proposed Project would comply with existing Building Code standards or design and construction, which would minimize any impacts resulting from ground shaking or liquefaction. Due to the relatively flat topography of the proposed Project area, impacts associated with landslides are not anticipated. Impacts would be *less than significant*.

Mitigation Measures: None are required.

a-iv. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Less than Significant Impact. The City of Farmersville sits on the floor of the San Joaquin Valley. The City is nearly flat which precludes the occurrence of landslides. Any potential impact is *less than significant*.

Mitigation Measures: None are required.

b. Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. The City of Farmersville sits on top of the alluvial fans of the Kaweah River and its distributaries. The soil in the proposed Project area are on typical of alluvial fans and floodplains, and characterized as very deep, somewhat poorly drained, and with low shrink/swell

⁵ City of Farmersville General Plan Update Community Profile. 2002. Page 2-4.

potential.⁶ The proposed Project site has a generally flat topography, is in a growing urban area and does not include any Project features that would result in significant soil erosion or loss of topsoil. Therefore, the impact is *less than significant*.

Mitigation Measures: None are required.

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

Less Than Significant Impact. The City of Farmersville is nearly flat and soils in the area are moderately deep, well-drained with a low shrink/swell potential. See also Response a-ii. Any impacts would be *less than significant*.

Mitigation Measures: None are required.

d. <u>Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?</u>

Less than Significant Impact. See Responses (c) and (a-ii). The impact is *less than significant*. **Mitigation Measures:** None are required.

e. <u>Have soils incapable of adequately supporting the use of septic tanks or alternative waste water</u> disposal systems where sewers are not available for the disposal of waste water?

No Impact. No wastewater-generating facilities are proposed as a part of the Project. There is *no impact.*

Mitigation Measures: None are required.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

⁶ Web Soil Survey, Natural Conservation Service, US Department of Agriculture. https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed October 2023.

Less Than Significant Impact. As identified in the cultural evaluation performed for the project site, there are no known paleontological resources on or near the site (See Section V. for more details). Mitigation measures have been added that will protect unknown (buried) resources during construction, including paleontological resources. There are no unique geological features on site or in the area. Therefore, there is a *less than significant impact*.

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

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant. The proposed Project consists of annexation of approximately 14.3 acres into the City of Farmersville, of which approximately 3 acres is proposed to be developed as an expansion of the existing Public Works yard, adjacent to and north of the proposed site. The remaining 11.3 acres will zoned R-M-2.5, Multi-Family Residential. No residential development is proposed at this time.

The U.S. Environmental Protection Agency published a rule for the mandatory reporting of greenhouse gases from sources that in general emit 25,000 metric tons or more of carbon dioxide (CO₂) per year (MT/yr). As shown in the CalEEMod results (Appendix A), the proposed Project is estimated to produce a total of approximately 351.48 metric tons per year of CO₂ during construction. The Project is estimated to produce less than 0.003 MT/yr of CO₂ during operations. This represents approximately 0.015% of the reporting threshold.

Additionally, emissions from Project construction are temporary in nature. The SJVAPCD has implemented a guidance policy for development projects within their jurisdiction. This policy, "Guidance for Land Use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA," approved by the Board on December 17, 2009, does not address temporary GHG emissions from construction, nor does this policy establish numeric thresholds for ongoing GHG emissions. As such, any impacts resulting from conflicting a GHG emissions, either directly or indirectly, as a result of Project development is considered *less than significant*.

Mitigation Measures: None are required.

b. <u>Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</u>

Less Than Significant. Projects implementing Best Performance Standards (BPS) strategies in accordance with SJVAPCD's guidance would be determined to have a less than significant impact on greenhouse gas emissions and would not require project specific quantification of greenhouse gas emissions. The Project consists of expansion of an existing Public Works yard, and would implement BPS strategies as discussed in the SJVAPCD's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA, as applicable. Therefore, the proposed Project would not conflict with policies or regulations adopted for the purpose of reducing the emissions of greenhouse gases. Any impacts would be *less than significant*.

Accordingly, taking into account the proposed Project's emissions, Project design features, and the progress being made by the State towards reducing emissions in key sectors such as transportation, industry, and electricity, the Project would be consistent with State GHG Plans and would further the State's goals of reducing GHG emissions to 1990 levels by 2020, 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050, and does not obstruct their attainment. Impacts would be *less than significant*.

Less than

IX. HAZARDS AND HAZARDOUS Significant Potentially With Less than **MATERIALS** Significant Mitigation Significant No Would the project: **Impact** Incorporation Impact Impact Create a significant hazard to the public or the environment through the routine \boxtimes transport, use, or disposal of hazardous materials? b. Create a significant hazard to the public or the environment through reasonably \boxtimes foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Emit hazardous emissions or handle hazardous or acutely hazardous materials, \bowtie substances, or waste within one-quarter mile of an existing or proposed school? d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section \bowtie 65962.5 and, as a result, would it create a significant hazard to the public or the environment? 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 \boxtimes airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? f. Impair implementation of or physically interfere with an adopted emergency \bowtie response plan or emergency evacuation plan?

g.	Expose people or structures either directly		
	or indirectly to a significant risk of loss,		
	injury or death involving wildland fires?		

a. <u>Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</u>

Less than Significant Impact. The proposed Project consists of annexation of approximately 14.3 acres into the City of Farmersville, of which approximately 3 acres is proposed to be developed as an expansion of the existing Public Works yard, adjacent to and north of the proposed site. The remaining 11.3 acres will zoned R-M-2.5 Multi Family Residential. No residential development is proposed at this time.

Proposed Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit program through the submission and implementation of a Stormwater Pollution Prevention Plan during construction activities to prevent contaminated runoff from leaving the project site. Therefore, no significant impacts would occur during construction activities.

Materials such as chlorine, base rock, asphalt and paint are currently stored at the Public Works yard in compliance with regulations and will continue to be stored on-site after the expansion. Activities at the public works yard do not include the routine transport, use, or disposal of hazardous materials, or would not present a reasonably foreseeable release of hazardous materials, with the exception of common residential or commercial grade hazardous materials such as household and commercial cleaners, paint, vehicle maintenance fluids, etc. The proposed Project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials, nor would a significant hazard to the public or to the environment through the reasonably foreseeable upset and accidental conditions involving the likely release of hazardous materials into the environment occur. Therefore, the proposed Project will not create a significant hazard to the public or the environment and any impacts would be *less than significant*.

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?

Less than Significant Impact. See Response a. above. Any accumulated hazardous construction or operational wastes will be collected and transported away from the site in compliance with all federal, state and local regulations. Any impacts would be *less than significant*.

Mitigation Measures: None are required.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact. Snowden Elementary School is approximately 0.35 miles north of the proposed Project site. The proposed Project intends to annex approximately 14.3 acres into the City of Farmersville, expand the existing Public Works yard north of the site over 3 acres of the proposed site, and change zoning for the southern portion of the proposed site to Residential. No residential development is proposed at this time. As the proposed Project includes expansion of an existing Public Works yard, it is not reasonably foreseeable that the proposed Project will cause a significant impact by emitting hazardous waste or bringing hazardous materials within one-quarter mile of an existing or proposed school. Such land uses do not generate, store, or dispose of significant quantities of hazardous materials. Such uses also do not normally involve dangerous activities that could expose persons onsite or in the surrounding areas to large quantities of hazardous materials. See also Responses a. and b. regarding hazardous material handling. The impact is *less than significant*.

Mitigation Measures: None are required.

d. <u>Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</u>

No Impact. The proposed Project site is not located on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 (Geotracker⁷ and DTSC Envirostor⁸ databases – accessed in October, 2023). There are no hazardous materials sites that impact the Project. As such, *no impacts* would occur that would create a significant hazard to the public or the environment.

Mitigation Measures: None are required.

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 for people residing or working in the project area?

No Impact. The proposed Project site is approximately five miles northwest of the Exeter Airport and the airport's safety zones do not extend into the City of Farmersville. There is *no impact*.

Mitigation Measures: None are required.

f. <u>Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</u>

No Impact. The Project will not interfere with any adopted emergency response or evacuation plan. There is *no impact*.

Mitigation Measures: None are required.

g. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. There are no wildlands on or near the Project site. There is *no impact*.

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⁷ GeoTracker, State Water Resources Control Board. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=farmersville.
Accessed October, 2023.

⁸ EnviroStor, Department of Toxic Substances Control. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=farmersville. Accessed October, 2023.

Ql	HYDROLOGY AND WATER JALITY uld the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				
b.	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c.	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	 Result in substantial erosion or siltation on- or off- site; 			\boxtimes	
	ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				
	iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			\boxtimes	
	iv. impede or redirect flood flows?			\boxtimes	

QU	HYDROLOGY AND WATER JALITY uld the project:	Potentially Significant Impact	Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
d.	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			\boxtimes	

The City of Farmersville provides water services to all residential, commercial, and industrial customers, as well as to the unincorporated Cameron Creek Colony. On average, the wells can each produce around 700 gallons per minute (gpm), and are considered fa irly shallow, with groundwater depths encountered approximately 60 feet below ground surface. The proposed Project site is within the Farmersville Urban Development Boundary.

The Kaweah Basin is the source of all drinking water supply for the City of Farmersville and surrounding communities. The Kaweah Delta Water Conservation District (KDWCD) manages the Basin. KDWCD and other irrigation districts and companies have historically managed groundwater through the conjunctive use of surface water. KDWCD regularly provides programs that benefit local agricultural customers by making available additional surface water supplies for irrigation. These programs effectively reduce the withdrawals of groundwater resulting in in-lieu recharge of the aquifer. Groundwater is normally used by agriculture as an alternate source when surface supplies are not available and is the sole source in areas within KDWCD jurisdiction that do not have access to surface water.

RESPONSES

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Ohapter 4 Water System, City of Farmersville Comprehensive Infrastructure Master Plan. Page 4-2. Accessed July, 2023.

Less than Significant Impact. The proposed Project consists of annexation of approximately 14.3 acres into the City of Farmersville, of which approximately 3 acres is proposed to be developed as an expansion of the existing Public Works yard, adjacent to and north of the proposed site. This northern portion is currently designated in the General Plan for Public Facilities. The remaining 11.3 acres of the southern portion of the site is currently designated as Service Commercial, and will be designated Medium-High Density Residential, and zoned as R-M-2.5, Multi-Family Residential as part of the Project.

The Project will comply with all City ordinances and standards to assure proper grading and drainage. Compliance with all local, state, and federal regulations will prevent violation of water quality standards or waste discharge requirements. The proposed Project will be required to prepare a grading and drainage plan for review and approval by the City Engineer, prior to issuance of building permits.

The proposed Project will not result in additional wastewater from the Public Works yard that will be discharged into the City's existing wastewater treatment system.

Additionally, there will be no discharge to any surface or groundwater source. A development buffer will be maintained with Deep Creek. As such, the proposed Project will not violate any water quality standards and will not impact waste discharge requirements. The impact will be *less than significant*.

Mitigation Measures: None are required.

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

Less Than Significant Impact. The City of Farmersville is located in the Kaweah Subbasin area and falls under the Greater Kaweah Groundwater Sustainability Agency (GKGSA). The Kaweah Subbasin is classified as high-priority, according to California Water Code § 10933 (b) and has been designated a critically overdrafted by the California Department of Water Resources (DWR). OKGSA acknowledges a continuing decline in groundwater levels of the aquifer system below the Farmersville area. The City of Farmersville's water supply comes from groundwater extraction.

No additional water supplies will be demanded with Project implementation; however, to assist in mitigating any groundwater decline, the City of Farmersville has established fees that may be charged to new developments, which will fund groundwater recharge and other water resource projects within

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¹⁰ Executive Summary, Greater Kaweah Groundwater Sustainability Agency Groundwater Sustainability Plan. January 2020. https://greaterkaweahgsa.org/resources/.

the City. No residential developments are proposed at this time, therefore, the proposed Project will not result in a significant increase in water demand. Impacts would be *less than significant*.

Mitigation Measures: None are required.

- c. <u>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:</u>
 - i. result in substantial erosion or siltation on- or offsite;
 - <u>ii.</u> substantially increase the rate or amount of surface runoff in a manner which would result in <u>flooding on- or offsite;</u>
 - <u>iii.</u> create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv. impede or redirect flood flows?

Less than Significant Impact. The site currently consists of orchard trees. The proposed Project will change drainage patterns of the site through the installation of impervious surfaces and will be required by the City to be graded to facilitate proper stormwater drainage to the City's stormwater system. Storm water during construction will be managed as part of the Storm Water Pollution Prevention Plan (SWPPP). A copy of the SWPPP will be retained on-site during construction.

The Western edge of the proposed site consists of Deep Creek, a channelized waterway, and is located within FEMA Flood Zone "A" – defined as "1% Annual Chance Flood Hazard Contained In Channel". The majority of the site is located within Flood Zone "X" – defined as "0.2% Annual Chance Flood Hazard". The Public Works yard will be built in accordance with the current California Building Code, with no development in Flood Zone "A" and a development buffer will be maintained with Deep Creek. Accordingly, the chance of flooding (and therefore the release of pollutants due to flooding) at the site is remote. Impacts are *less than significant*.

¹¹ National Flood Hazard Layer Viewer, Federal Emergency Management Agency. https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed October, 2023.

- d. <u>In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?</u>
- e. <u>Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</u>

Less than Significant Impact. As discussed in Impact X(c), the majority of the proposed Project site is located within Flood Zone "X", with a portion of the western edge of the site consisting of Deep Creek and within the Flood Zone "A". The site will be designed for adequate storm drainage and will be required to prepare and submit a water quality control plan to be implemented during construction, as required by the National Pollutant Discharge Elimination System. This plan must be reviewed and approved by the City Engineer prior to the start of construction.

There are no inland water bodies that could be potentially susceptible to a seiche in the Project vicinity. This precludes the possibility of a seiche inundating the Project site. The Project site is more than 100 miles from the Pacific Ocean, a condition that precludes the possibility of inundation by tsunami. There are no steep slopes that would be susceptible to a mudflow in the Project vicinity, nor are there any volcanically active features that could produce a mudflow in the City of Farmersville. An appropriate development buffer will be maintained with Deep Creek. These criteria preclude the possibility of a mudflow inundating the Project site. Any impacts are *less than significant*.

Less than

			LC33 trair			
			Significant			
LAI	ND USE AND PLANNING	Potentially	With	Less than		
		Significant	Mitigation	Significant	No	
Wo	uld the project:	Impact	Incorporation	Impact	Impact	
a.	Physically divide an established community?					
b.	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				\boxtimes	

RESPONSES

- a. Physically divide an established community?
- b. <u>Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</u>

No Impact. The proposed Project consists of annexation of approximately 14.3 acres into the City of Farmersville, of which approximately 3 acres is proposed to be developed as an expansion of the existing Public Works yard, adjacent to and north of the proposed site. This northern portion is currently designated in the General Plan for Public Facilities. This development is consistent with the City's 2000-2025 General Plan which identified the need for expansion of the existing Public Works yard. ¹² The remaining 11.3 acres of the southern portion of the site is currently designated as Service Commercial, and will be designated Medium-High Density Residential, and zoned as R-M-2.5, Multi-Family Residential as part of the Project. No residential development is proposed at this time. The southern portion of the site currently consists of a rural residence that will remain on site and not be demolished. Entitlements needed to accommodate the Project include Annexation, General Plan Amendment, Zone Change, and Tentative Subdivision Map.

The Project site is located in the southern part of the City of Farmersville, in an area of suburban residential, public services, and agricultural land uses. The site currently consists of orchard trees and a

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¹² Ch 2 Land Use Element, Part I: Farmersville General Plan Update 2000-2025. Page 2-40. Accessed October, 2023.

rural residence at the southern boundary of the parcel. Residential land uses are located approximately 850 feet northeast and northwest of the Project site. Upon approval the Project will be in compliance with the General Plan and zoning ordinance. The Project has no characteristics that would physically divide the City of Farmersville. Access to the existing surrounding areas will be improved. *No impacts* would occur as a result of this Project.

			Less than		
			Significant		
XII.	MINERAL RESOURCES	Potentially	With	Less than	
-4-		Significant	Mitigation	Significant	No
Wot	uld the project:	Impact	Incorporation	Impact	Impact
a.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
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?				

- 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?
- 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?

No Impact. The most economically important minerals that are extracted in Tulare County are sand, gravel, crushed rock, and natural gas. The four streams that have provided the main source of high-quality sand and gravel in Tulare County to make Portland cement concrete and asphaltic concrete are the Kaweah River, Lewis Creek, Deer Creek and the Tule River¹³.

The proposed Project area is not included in a State classified mineral resource zone¹⁴, and the Kaweah River is approximately four miles north of the Project site. Therefore, there is *no impact*.

¹³ Tulare County General Plan 2030 Update Recirculated Draft EIR. February 2010. Page 3.7-9.

¹⁴ Ibid. Page 3.7-10.

XIII.	NOISE	Potentially	Less than Significant With	Less than	
Wot	ıld the project:	Significant Impact	Mitigation Incorporation	Significant Impact	No Impact
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b.	Generation of excessive groundborne vibration or groundborne noise levels?				
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?				

- a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b. Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact. The City of Farmersville General Plan does not include a noise element, but rather states that the City has adopted Tulare County's Noise Element. The County of Tulare Noise Element of the General Plan (August 2012) establishes noise level criteria in terms of the Day-Night Average Level (Ldn) metric. The Ldn is the time-weighted energy average noise level for a 24-hour day, with a 10 dB penalty added to noise levels occurring during the nighttime hours (10:00 p.m.-7:00 a.m.). The Ldn represents cumulative exposure to noise over an extended period of time and is therefore calculated based upon *annual average* conditions.

Site development may increase ambient noise levels in the Project vicinity beyond those already present on the site from the residential activity. In the short term, noise levels would be raised during construction of the Project phases by the operation of heavy equipment and other associated activities. Because construction noise would generally occur intermittently on Monday through Saturdays during daylight hours, per the Farmersville Noise Ordinance, the impact of noise in surrounding land uses is not expected to be significant.

The Project includes expansion of an existing Public Works yard, north of the proposed site. In the long term, the proposed development would not add significant amount of traffic or other sources of noise that will somewhat increase the ambient noise levels in the vicinity. These noise levels should be relatively consistent with those experienced in the area and other existing developed areas of Farmersville.

Typical outdoor sources of perceptible ground borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. Construction vibrations can be transient, random, or continuous. Construction associated with the proposed Project includes construction of a Public Works yard, paving, and associated site improvements.

The approximate threshold of vibration perception is 65 VdB, while 85 VdB is the vibration acceptable only if there are an infrequent number of events per day. Table 3 describes the typical construction equipment vibration levels.

Table 3 - Typical Construction Vibration Levels

Equipment	VdB at 25 ft
Small Bulldozer	58
Jackhammer	79

Vibration from construction activities will be temporary and not exceed the Federal Transit Authority threshold for the nearest residential land uses located approximately 850 feet northeast and northwest of the Project site, and an existing rural residence in the southern portion of the site. As such, any impacts resulting from an increase in ambient noise levels or excessive groundborne vibration will be *less than significant*.

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¹⁵ Transit Noise and Vibration Impact Assessment Manual (Report 0123), U.S. Federal Transit Administration. September 2018.
<a href="https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Table 7-4. Accessed October 2023.

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?

No Impact. The Project is not located within an airport land use plan. Therefore, there is *no impact*.

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

- a. <u>Induce substantial 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)?</u>
- b. <u>Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</u>

Less than Significant Impact. There are no new homes associated with the proposed Project, nor would Project implementation displace people or housing. The proposed Project intends to annex approximately 14.3 acres into the City of Farmersville, expand the existing Public Works yard north of the site over 3 acres of the proposed site, and change zoning for the southern portion of the proposed site to Residential. No residential development is proposed at this time. There is a *less than significant impact*.

Less than

		Significant		
XV. PUBLIC SERVICES	Potentially	With	Less than	
Would the project:	Significant Impact	Mitigation Incorporation	Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	impact	ncorporation	impact	Impact
Fire protection?			\boxtimes	
Police protection?				
Schools?				
Parks?				
Other public facilities?				
RESPONSES				
a. Would the project result in substantial adverse physically altered governmental facilities, need for nuconstruction of which could cause significant environmentatios, response times or other performance objectives Fire protection?	ew or phys	ically altered g cts, in order to r	overnmenta	al facilities, the

Less than Significant Impact. The Farmersville Fire Department maintains a fleet of specialized fire apparatus including a 4-wheel drive Brush Fire Patrol Unit, a Quick Attack Squad Unit (250 GPM Pumper), an Engine (1,500 GPM Pumper), a 55 Ft. Ladder Truck (1,500 GPM Pumper), and several

Police protection?

Command/Utility Vehicles. The Project site will be serviced by the Fire Department and the City of Farmersville Police Department. Implementation of the proposed Project would result in an increase in demand for fire or police services. As the Project includes expansion of the existing City Public Works yard, the proposed development would not directly or indirectly induce population growth. No additional fire or police equipment, personnel, or services will be required by Project implementation. As such, any impacts would be less *than significant*.

Schools?

Parks?

Other public facilities?

No Impact. The proposed Project includes annexation of land, expansion of an existing Public Works yard in the northern portion of the site, and General Plan Amendment and zone change of the southern portion to residential land. No residential development is proposed at this time. The proposed Project would not directly or indirectly induce population growth and as such, the Project will not increase demand for schools, parks, or other public facilities. There would be *no impact*.

			Less than		
			Significant		
XVI	I. RECREATION	Potentially	With	Less than	
TA7	11.1	Significant	Mitigation	Significant	No
VV O	uld the project:	Impact	Incorporation	Impact	Impact
a.	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b.	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				

- 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?

No Impact. As noted earlier, the proposed Project consists of annexation of approximately 14.3 acres into the City of Farmersville, of which approximately 3 acres is proposed to be developed as an expansion of the existing Public Works yard, adjacent to and north of the proposed site. The proposed Project does not include the construction of residential uses or recreational facilities and would not directly or indirectly induce population growth. Therefore, the proposed Project would not cause physical deterioration of existing recreational facilities from increased usage or result in the need for new or expanded recreational facilities. The Project includes zone change and General Plan Amendment for the southern 11.3-acre portion of the site to Residential. No residential development is proposed at this time. There is *no impact*.

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

- a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
- c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- d. Result in inadequate emergency access?

Less than Significant Impact. The proposed Project consists of annexation of approximately 14.3 acres into the City of Farmersville, of which approximately 3 acres is proposed to be developed as an expansion of the existing Public Works yard, adjacent to and north of the proposed site. The remaining 11.3 acres will be zoned R-M-2.5 Multi-Family Residential. No residential development is proposed at this time.

The entire site is outside the City limits but within the Farmersville Urban Development Boundary. Entitlements needed to accommodate the Project include Annexation, General Plan Amendment, Zone Change, and Tentative Subdivision Map. The City of Farmersville General Plan Circulation Element contains Goals, Objectives and Action Plans to Ensure that streets in Farmersville are not congested and that the traffic on Farmersville's streets operates in an efficient and safe manner. Project operations would require continued periodic trips from the Public Works yard associated with use and/or maintenance of Public Service vehicles. No new employees or additional vehicles are anticipated with the public works yard expansion and as such, no new trips would be generated as a result of Project implementation.

In addition, the Project would not modify or impact any existing streets or roadways. The proposed Project would not cause a substantial increase in traffic, create any additional congestion at any intersections, or conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). The proposed Project is not anticipated to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, as several improvements would occur. The proposed improvements would be designed in accordance to all City standards to ensure the features would be safe and would not substantially increase hazards due to a geometric design feature such as sharp curves or dangerous intersections. The proposed Project would not result in inadequate emergency access on the existing road system. Construction schedules within roadways will be coordinated with police/fire/emergency services. Adequate emergency access will be maintained at all times. As such, impacts would be *less than significant*.

Less than Significant

XVIII. TRIBAL CULTURAL RESOURCES Would the project:		Potentially Significant Impact	With Mitigation Incorporation	Less than Significant Impact	No Impact	
a.	sign def 210 cul def the	use a substantial adverse change in the nificance of a tribal cultural resource, fined in Public Resources Code section 074 as either a site, feature, place, tural landscape that is geographically fined in terms of the size and scope of landscape, sacred place, or object with tural value to a California Native nerican tribe, and that is:				
	i.	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
	ii.	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the				
		significance of the resource to a California Native American tribe.		\boxtimes		

a-i, a-ii. 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 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 the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than Significant Impact with Mitigation. A Tribal Cultural Resource (TCR) is defined under Public Resources Code section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included and that is listed or eligible for inclusion in the California Register of Historic Resources or in a local register of historical resources, or if the City of Farmersville, acting as the Lead Agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR. As discussed above, under Section V, Cultural Resources, criteria (b) and (d), no known archeological resources, ethnographic sites or Native American remains are located on the proposed Project site. As discussed under criterion (b) implementation of Mitigation Measure CUL-1 would reduce impacts to unknown archaeological deposits, including TCRs, to a less than significant level. As discussed under criterion (d), compliance with California Health and Safety Code Section 7050.5 would reduce the likelihood of disturbing or discovering human remains, including those of Native Americans.

ASM Affiliates, Inc. notified the following California Native American Tribes pursuant to AB 52 (Public Resources Code Section 21080.3.1, et seq.) on behalf of the City of Porterville on March 21, 2022.

- o Big Sandy Rancheria of Western Mono Indians
- Santa Rosa Indian Community of the Santa Rosa Rancheria
- o Tule River Indian Tribe
- o Wuksache Indian Tribe/Eshom Valley band

Tribes were provided 30 days, to request consultation pursuant to those statutes. The Santa Rosa Rancheria – Tachi Yokuts responded on March 31, 2022 and requested to be retained to perform a cultural presentation for all construction staff and to be informed of any and all discoveries made related to the Project. No other comments were received. Implementation of TCR-1 will ensure that impacts to potential tribal cultural resources will remain *less than significant*.

Mitigation Measures:

TCR-1

Santa Rosa Rancheria – Tachi Yokut Tribe shall be allowed to perform a cultural presentation for all construction staff prior to ground-disturbing activities. The Project developer shall hire an archaeological monitor during ground-disturbing activities and the monitor shall provide weekly monitoring logs to the Santa Rosa Rancheria – Tachi Yokut Tribe. The Developer shall notify the Santa Rosa Rancheria – Tachi Yokut Tribe at least seven business days prior to ground-disturbing activities.

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

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?

Less than Significant Impact. Wastewater service, water, electric power, natural gas and telecommunications facilities would all continue to provide service to the proposed Project from their respective existing facilities and as such, would not be required to construct new or expanded facilities. The Project will have a *less than significant impact* to this analysis area.

Mitigation Measures: None are required.

b. <u>Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?</u>

Less than Significant Impact. As discussed in Impact X(b), the proposed Project will not increase demands on the Farmersville water production and distribution area as no residential development is proposed at this time. Water usage for the construction of the City's Public Works yard would be minimal and no additional water supply would be required once construction is complete. The City will have sufficient supply to serve the proposed Project. As such, the proposed Project will have a *less than significant impact* to this impact area.

Mitigation Measures: None are required.

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

Less than Significant Impact. The proposed Project involves annexation of land into the City of Farmersville, and development of a Public Works yard as an expansion of the existing yard north of the site. Due to the nature of the Project, the population is not expected to increase as a result of implementation. Therefore, the proposed Project would not require additional or expanded infrastructure relating to municipal water or wastewater treatment beyond the General Plan documents. The Project will not discharge any unusual or atypical wastewater that would violate the City's waste discharge requirements. Therefore, the impact of the Project on wastewater treatment is *less than significant*.

Mitigation Measures: None are required.

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. Disposal services in the City are provided by a private contractor, Mid Valley Disposal. Solid waste is usually hauled to the Visalia Landfill, north of Visalia on Road 80. The State of California requires that all cities and counties reduce the amount of waste going to landfills and the City is meeting its recycling requirements. Mid Valley Disposal has a program of recycling pick-ups in Farmersville; materials separated for recycling include paper, glass, metals and plastics to provide a diversion of portions of the waste stream resulting in a reduction of the solid waste stream going to landfills and similar disposal locations. The northern portion of the site has been designated for Public Service uses by the General Plan and as such, the demand for City infrastructure, such as disposal services, has been accounted for in City planning documents. The proposed Project includes zone change and General Plan Amendment to designate the southern portion of the site as Residential, but no residential development is proposed at this time. Impacts to this resource area are less than significant.

Mitigation Measures: None are required.

e. Comply with federal, state, and local statutes and regulations related to solid waste?

Less than Significant Impact. See Response d, above. The proposed Project would be required to comply with all federal, State, and local regulations related to solid waste. Furthermore, the proposed Project would be required to comply with all standards related to solid waste diversion, reduction, and recycling during Project construction and operation. As such, any impacts would be *less than significant*.

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

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b. <u>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?</u>
- 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?

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. The proposed Project is located in an area developed with residential, public services, and agricultural uses, which precludes the risk of wildfire. The area is flat in nature which would limit the risk of downslope flooding and landslides, and limit any wildfire spread.

To receive building permits, the proposed Project would be required to be in compliance with the adopted emergency response plan. As such, any wildfire risk to the project structures or people would be *less than significant*.

Less than XXI. MANDATORY FINDINGS OF Significant Potentially With Less than SIGNIFICANCE Significant Mitigation Significant No Would the project: **Impact** Incorporation Impact **Impact** Does the project have the potential to a. 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 \boxtimes levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when \bowtie viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? Does the project have environmental effects which will cause substantial \boxtimes adverse effects on human beings, either directly or indirectly?

RESPONSES

a. Does the project have the potential to 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, reduce the number or restrict

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

Less than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Mitigation measures have been incorporated in the project design to reduce all potentially significant impacts to *less than significant*.

b. Does the project have impacts that are individually limited, but cumulatively considerable?

("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). The impact is *less than significant*.

c. <u>Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</u>

Less than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project design to reduce all potentially significant impacts to *less than significant*.

LIST OF PREPARERS

Crawford & Bowen Planning, Inc., Initial Study/MND

- Emily Bowen, LEED AP, Principal Environmental Planner
- Travis Crawford, AICP, Principal Environmental Planner
- Deepesh Tourani, Associate Environmental Planner

Technical Studies Prepared by:

- CalEEMod Deepesh Tourani, Crawford & Bowen Planning, Inc.
- Class III Inventory/Phase I Survey ASM Affiliates, Inc.

Persons and Agencies Consulted

City of Farmersville

Karl Schoettler, Contract City Planner

California Historic Resources Information System

• Celeste Thomson, Coordinator

Appendix A

CalEEMod Output Files

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Public Works Yard Expansion Project - San Joaquin Valley Unified APCD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Public Works Yard Expansion Project

San Joaquin Valley Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Urbanization

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	130.68	1000sqft	3.00	130,680.00	0

Precipitation Freq (Davs)

45

1.2 Other Project Characteristics

Urban

0.00	0.24	a opeca (c)			
Climate Zone	7			Operational Year	2024
Utility Company					
CO2 Intensity (lb/MWhr)	0	CH4 Intensity (lb/MWhr)	0	N2O Intensity (lb/MWhr)	0

2.7

Wind Speed (m/s)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project includes annexation of approx. 14.3-acre site, of which approx. 3 acres is propopsed for development of a Public Works Yard. No development is currently proposed on the remaining 11.3 acres. Air quality modeling performed only for the 3-acre Public Works Yard development.

Land Use - Parking lot land use subtype is used here to represent the Public Works Yard development.

Table Name	Column Name	Default Value	New Value

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2023	0.0375	0.3331	0.3145	6.3000e- 004	0.0299	0.0147	0.0446	0.0122	0.0138	0.0261	0.0000	54.9949	54.9949	0.0116	6.4000e- 004	55.4754
2024	0.2172	1.4531	1.6583	3.4500e- 003	0.0598	0.0577	0.1175	0.0162	0.0552	0.0715	0.0000	296.4665	296.4665	0.0430	7.0600e- 003	299.6444
Maximum	0.2172	1.4531	1.6583	3.4500e- 003	0.0598	0.0577	0.1175	0.0162	0.0552	0.0715	0.0000	296.4665	296.4665	0.0430	7.0600e- 003	299.6444

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2023	0.0375	0.3331	0.3145	6.3000e- 004	0.0299	0.0147	0.0446	0.0122	0.0138	0.0261	0.0000	54.9949	54.9949	0.0116	6.4000e- 004	55.4754
2024	0.2172	1.4531	1.6583	3.4500e- 003	0.0598	0.0577	0.1175	0.0162	0.0552	0.0715	0.0000	296.4662	296.4662	0.0430	7.0600e- 003	299.6442
Maximum	0.2172	1.4531	1.6583	3.4500e- 003	0.0598	0.0577	0.1175	0.0162	0.0552	0.0715	0.0000	296.4662	296.4662	0.0430	7.0600e- 003	299.6442

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-27-2023	1-26-2024	0.5257	0.5257
2	1-27-2024	4-26-2024	0.5087	0.5087
3	4-27-2024	7-26-2024	0.5074	0.5074
4	7-27-2024	9-30-2024	0.3680	0.3680
		Highest	0.5257	0.5257

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	0.0113	1.0000e- 005	1.2000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e- 003	2.3400e- 003	1.0000e- 005	0.0000	2.4900e- 003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste	,					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water	1 1 1 1					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0113	1.0000e- 005	1.2000e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.3400e- 003	2.3400e- 003	1.0000e- 005	0.0000	2.4900e- 003

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	0.0113	1.0000e- 005	1.2000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e- 003	2.3400e- 003	1.0000e- 005	0.0000	2.4900e- 003
Energy	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste	1 1 1					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water	1 1 1					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0113	1.0000e- 005	1.2000e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.3400e- 003	2.3400e- 003	1.0000e- 005	0.0000	2.4900e- 003

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/27/2023	11/23/2023	5	20	
2	Site Preparation	Site Preparation	11/24/2023	11/28/2023	5	3	
3	Grading	Grading	11/29/2023	12/6/2023	5	6	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		Building Construction	12/7/2023	10/9/2024	5	220	
5	Paving	Paving	10/10/2024	10/23/2024	5	10	
6		Architectural Coating	10/24/2024	11/6/2024	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 6

Acres of Paving: 3

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 7,841 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Scrapers	1	8.00	367	0.48
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37

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Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	55.00	21.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	11.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 **Demolition - 2023**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0147	0.1432	0.1346	2.4000e- 004		6.7700e- 003	6.7700e- 003		6.3300e- 003	6.3300e- 003	0.0000	21.0866	21.0866	5.3500e- 003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e- 004		6.7700e- 003	6.7700e- 003		6.3300e- 003	6.3300e- 003	0.0000	21.0866	21.0866	5.3500e- 003	0.0000	21.2202

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3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e- 004	2.7000e- 004	3.2400e- 003	1.0000e- 005	1.0400e- 003	1.0000e- 005	1.0400e- 003	2.8000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.8416	0.8416	3.0000e- 005	2.0000e- 005	0.8496
Total	4.1000e- 004	2.7000e- 004	3.2400e- 003	1.0000e- 005	1.0400e- 003	1.0000e- 005	1.0400e- 003	2.8000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.8416	0.8416	3.0000e- 005	2.0000e- 005	0.8496

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0147	0.1432	0.1346	2.4000e- 004		6.7700e- 003	6.7700e- 003		6.3300e- 003	6.3300e- 003	0.0000	21.0865	21.0865	5.3500e- 003	0.0000	21.2202
Total	0.0147	0.1432	0.1346	2.4000e- 004		6.7700e- 003	6.7700e- 003		6.3300e- 003	6.3300e- 003	0.0000	21.0865	21.0865	5.3500e- 003	0.0000	21.2202

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3.2 **Demolition - 2023**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.1000e- 004	2.7000e- 004	3.2400e- 003	1.0000e- 005	1.0400e- 003	1.0000e- 005	1.0400e- 003	2.8000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.8416	0.8416	3.0000e- 005	2.0000e- 005	0.8496
Total	4.1000e- 004	2.7000e- 004	3.2400e- 003	1.0000e- 005	1.0400e- 003	1.0000e- 005	1.0400e- 003	2.8000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.8416	0.8416	3.0000e- 005	2.0000e- 005	0.8496

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	11 11 11				2.3900e- 003	0.0000	2.3900e- 003	2.6000e- 004	0.0000	2.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9500e- 003	0.0214	0.0147	4.0000e- 005		8.1000e- 004	8.1000e- 004		7.5000e- 004	7.5000e- 004	0.0000	3.2317	3.2317	1.0500e- 003	0.0000	3.2578
Total	1.9500e- 003	0.0214	0.0147	4.0000e- 005	2.3900e- 003	8.1000e- 004	3.2000e- 003	2.6000e- 004	7.5000e- 004	1.0100e- 003	0.0000	3.2317	3.2317	1.0500e- 003	0.0000	3.2578

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3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e- 005	3.0000e- 005	3.0000e- 004	0.0000	1.0000e- 004	0.0000	1.0000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0777	0.0777	0.0000	0.0000	0.0784
Total	4.0000e- 005	3.0000e- 005	3.0000e- 004	0.0000	1.0000e- 004	0.0000	1.0000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0777	0.0777	0.0000	0.0000	0.0784

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust	ii ii				2.3900e- 003	0.0000	2.3900e- 003	2.6000e- 004	0.0000	2.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
I on read	1.9500e- 003	0.0214	0.0147	4.0000e- 005		8.1000e- 004	8.1000e- 004		7.5000e- 004	7.5000e- 004	0.0000	3.2317	3.2317	1.0500e- 003	0.0000	3.2578
Total	1.9500e- 003	0.0214	0.0147	4.0000e- 005	2.3900e- 003	8.1000e- 004	3.2000e- 003	2.6000e- 004	7.5000e- 004	1.0100e- 003	0.0000	3.2317	3.2317	1.0500e- 003	0.0000	3.2578

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3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e- 005	3.0000e- 005	3.0000e- 004	0.0000	1.0000e- 004	0.0000	1.0000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0777	0.0777	0.0000	0.0000	0.0784
Total	4.0000e- 005	3.0000e- 005	3.0000e- 004	0.0000	1.0000e- 004	0.0000	1.0000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0777	0.0777	0.0000	0.0000	0.0784

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e- 003	0.0434	0.0261	6.0000e- 005		1.8100e- 003	1.8100e- 003		1.6700e- 003	1.6700e- 003	0.0000	5.4312	5.4312	1.7600e- 003	0.0000	5.4751
Total	4.0000e- 003	0.0434	0.0261	6.0000e- 005	0.0213	1.8100e- 003	0.0231	0.0103	1.6700e- 003	0.0119	0.0000	5.4312	5.4312	1.7600e- 003	0.0000	5.4751

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3.4 Grading - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e- 005	6.0000e- 005	7.5000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.1942	0.1942	1.0000e- 005	1.0000e- 005	0.1961
Total	9.0000e- 005	6.0000e- 005	7.5000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.1942	0.1942	1.0000e- 005	1.0000e- 005	0.1961

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	ii ii		i i i		0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0000e- 003	0.0434	0.0261	6.0000e- 005		1.8100e- 003	1.8100e- 003		1.6700e- 003	1.6700e- 003	0.0000	5.4312	5.4312	1.7600e- 003	0.0000	5.4751
Total	4.0000e- 003	0.0434	0.0261	6.0000e- 005	0.0213	1.8100e- 003	0.0231	0.0103	1.6700e- 003	0.0119	0.0000	5.4312	5.4312	1.7600e- 003	0.0000	5.4751

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3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e- 005	6.0000e- 005	7.5000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.1942	0.1942	1.0000e- 005	1.0000e- 005	0.1961
Total	9.0000e- 005	6.0000e- 005	7.5000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.1942	0.1942	1.0000e- 005	1.0000e- 005	0.1961

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
	0.0146	0.1158	0.1208	2.1000e- 004		5.2200e- 003	5.2200e- 003		5.0000e- 003	5.0000e- 003	0.0000	17.6547	17.6547	3.3400e- 003	0.0000	17.7381
Total	0.0146	0.1158	0.1208	2.1000e- 004		5.2200e- 003	5.2200e- 003		5.0000e- 003	5.0000e- 003	0.0000	17.6547	17.6547	3.3400e- 003	0.0000	17.7381

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3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e- 004	7.8900e- 003	2.4200e- 003	4.0000e- 005	1.1800e- 003	5.0000e- 005	1.2300e- 003	3.4000e- 004	5.0000e- 005	3.9000e- 004	0.0000	3.4507	3.4507	1.0000e- 005	5.2000e- 004	3.6049
Worker	1.4700e- 003	9.8000e- 004	0.0116	3.0000e- 005	3.7400e- 003	2.0000e- 005	3.7600e- 003	9.9000e- 004	2.0000e- 005	1.0100e- 003	0.0000	3.0266	3.0266	9.0000e- 005	9.0000e- 005	3.0552
Total	1.6700e- 003	8.8700e- 003	0.0141	7.0000e- 005	4.9200e- 003	7.0000e- 005	4.9900e- 003	1.3300e- 003	7.0000e- 005	1.4000e- 003	0.0000	6.4773	6.4773	1.0000e- 004	6.1000e- 004	6.6602

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0146	0.1158	0.1208	2.1000e- 004		5.2200e- 003	5.2200e- 003		5.0000e- 003	5.0000e- 003	0.0000	17.6547	17.6547	3.3400e- 003	0.0000	17.7381
Total	0.0146	0.1158	0.1208	2.1000e- 004		5.2200e- 003	5.2200e- 003		5.0000e- 003	5.0000e- 003	0.0000	17.6547	17.6547	3.3400e- 003	0.0000	17.7381

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0000e- 004	7.8900e- 003	2.4200e- 003	4.0000e- 005	1.1800e- 003	5.0000e- 005	1.2300e- 003	3.4000e- 004	5.0000e- 005	3.9000e- 004	0.0000	3.4507	3.4507	1.0000e- 005	5.2000e- 004	3.6049
Worker	1.4700e- 003	9.8000e- 004	0.0116	3.0000e- 005	3.7400e- 003	2.0000e- 005	3.7600e- 003	9.9000e- 004	2.0000e- 005	1.0100e- 003	0.0000	3.0266	3.0266	9.0000e- 005	9.0000e- 005	3.0552
Total	1.6700e- 003	8.8700e- 003	0.0141	7.0000e- 005	4.9200e- 003	7.0000e- 005	4.9900e- 003	1.3300e- 003	7.0000e- 005	1.4000e- 003	0.0000	6.4773	6.4773	1.0000e- 004	6.1000e- 004	6.6602

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1621	1.3016	1.4312	2.5400e- 003		0.0546	0.0546		0.0523	0.0523	0.0000	210.8296	210.8296	0.0393	0.0000	211.8113
Total	0.1621	1.3016	1.4312	2.5400e- 003		0.0546	0.0546		0.0523	0.0523	0.0000	210.8296	210.8296	0.0393	0.0000	211.8113

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3.5 Building Construction - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2900e- 003	0.0943	0.0282	4.2000e- 004	0.0141	6.1000e- 004	0.0148	4.0800e- 003	5.9000e- 004	4.6700e- 003	0.0000	40.5471	40.5471	1.7000e- 004	6.0600e- 003	42.3582
Worker	0.0162	0.0104	0.1284	3.8000e- 004	0.0446	2.2000e- 004	0.0449	0.0119	2.1000e- 004	0.0121	0.0000	35.2353	35.2353	1.0100e- 003	9.7000e- 004	35.5498
Total	0.0185	0.1047	0.1566	8.0000e- 004	0.0588	8.3000e- 004	0.0596	0.0159	8.0000e- 004	0.0167	0.0000	75.7823	75.7823	1.1800e- 003	7.0300e- 003	77.9080

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.1621	1.3016	1.4312	2.5400e- 003		0.0546	0.0546		0.0523	0.0523	0.0000	210.8294	210.8294	0.0393	0.0000	211.8111
Total	0.1621	1.3016	1.4312	2.5400e- 003		0.0546	0.0546		0.0523	0.0523	0.0000	210.8294	210.8294	0.0393	0.0000	211.8111

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3.5 Building Construction - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2900e- 003	0.0943	0.0282	4.2000e- 004	0.0141	6.1000e- 004	0.0148	4.0800e- 003	5.9000e- 004	4.6700e- 003	0.0000	40.5471	40.5471	1.7000e- 004	6.0600e- 003	42.3582
Worker	0.0162	0.0104	0.1284	3.8000e- 004	0.0446	2.2000e- 004	0.0449	0.0119	2.1000e- 004	0.0121	0.0000	35.2353	35.2353	1.0100e- 003	9.7000e- 004	35.5498
Total	0.0185	0.1047	0.1566	8.0000e- 004	0.0588	8.3000e- 004	0.0596	0.0159	8.0000e- 004	0.0167	0.0000	75.7823	75.7823	1.1800e- 003	7.0300e- 003	77.9080

3.6 Paving - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
1	4.2100e- 003	0.0405	0.0585	9.0000e- 005		1.9800e- 003	1.9800e- 003		1.8300e- 003	1.8300e- 003	0.0000	7.7574	7.7574	2.4600e- 003	0.0000	7.8188
l aving	3.9300e- 003		i i			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.1400e- 003	0.0405	0.0585	9.0000e- 005		1.9800e- 003	1.9800e- 003		1.8300e- 003	1.8300e- 003	0.0000	7.7574	7.7574	2.4600e- 003	0.0000	7.8188

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3.6 Paving - 2024
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e- 004	1.4000e- 004	1.7300e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.4734	0.4734	1.0000e- 005	1.0000e- 005	0.4776
Total	2.2000e- 004	1.4000e- 004	1.7300e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.4734	0.4734	1.0000e- 005	1.0000e- 005	0.4776

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
On Road	4.2100e- 003	0.0405	0.0585	9.0000e- 005		1.9800e- 003	1.9800e- 003		1.8300e- 003	1.8300e- 003	0.0000	7.7573	7.7573	2.4600e- 003	0.0000	7.8188
'aving	3.9300e- 003		 		 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.1400e- 003	0.0405	0.0585	9.0000e- 005		1.9800e- 003	1.9800e- 003		1.8300e- 003	1.8300e- 003	0.0000	7.7573	7.7573	2.4600e- 003	0.0000	7.8188

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3.6 Paving - 2024

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e- 004	1.4000e- 004	1.7300e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.4734	0.4734	1.0000e- 005	1.0000e- 005	0.4776
Total	2.2000e- 004	1.4000e- 004	1.7300e- 003	1.0000e- 005	6.0000e- 004	0.0000	6.0000e- 004	1.6000e- 004	0.0000	1.6000e- 004	0.0000	0.4734	0.4734	1.0000e- 005	1.0000e- 005	0.4776

3.7 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e- 004	6.0900e- 003	9.0500e- 003	1.0000e- 005		3.0000e- 004	3.0000e- 004		3.0000e- 004	3.0000e- 004	0.0000	1.2766	1.2766	7.0000e- 005	0.0000	1.2784
Total	0.0282	6.0900e- 003	9.0500e- 003	1.0000e- 005		3.0000e- 004	3.0000e- 004		3.0000e- 004	3.0000e- 004	0.0000	1.2766	1.2766	7.0000e- 005	0.0000	1.2784

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3.7 Architectural Coating - 2024 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
, worker	1.6000e- 004	1.0000e- 004	1.2700e- 003	0.0000	4.4000e- 004	0.0000	4.4000e- 004	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.3472	0.3472	1.0000e- 005	1.0000e- 005	0.3502
Total	1.6000e- 004	1.0000e- 004	1.2700e- 003	0.0000	4.4000e- 004	0.0000	4.4000e- 004	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.3472	0.3472	1.0000e- 005	1.0000e- 005	0.3502

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0273					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e- 004	6.0900e- 003	9.0500e- 003	1.0000e- 005		3.0000e- 004	3.0000e- 004		3.0000e- 004	3.0000e- 004	0.0000	1.2766	1.2766	7.0000e- 005	0.0000	1.2784
Total	0.0282	6.0900e- 003	9.0500e- 003	1.0000e- 005		3.0000e- 004	3.0000e- 004		3.0000e- 004	3.0000e- 004	0.0000	1.2766	1.2766	7.0000e- 005	0.0000	1.2784

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3.7 Architectural Coating - 2024 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e- 004	1.0000e- 004	1.2700e- 003	0.0000	4.4000e- 004	0.0000	4.4000e- 004	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.3472	0.3472	1.0000e- 005	1.0000e- 005	0.3502
Total	1.6000e- 004	1.0000e- 004	1.2700e- 003	0.0000	4.4000e- 004	0.0000	4.4000e- 004	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.3472	0.3472	1.0000e- 005	1.0000e- 005	0.3502

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.511221	0.052103	0.170611	0.160645	0.028932	0.007649	0.013284	0.025916	0.000654	0.000315	0.023645	0.001472	0.003552

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated	1					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	-/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Parking Lot	45738		0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Parking Lot	45738	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0113	1.0000e- 005	1.2000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e- 003	2.3400e- 003	1.0000e- 005	0.0000	2.4900e- 003
Unmitigated	0.0113	1.0000e- 005	1.2000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e- 003	2.3400e- 003	1.0000e- 005	0.0000	2.4900e- 003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	/yr		
	2.7300e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.4500e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e- 004	1.0000e- 005	1.2000e- 003	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e- 003	2.3400e- 003	1.0000e- 005	0.0000	2.4900e- 003
Total	0.0113	1.0000e- 005	1.2000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e- 003	2.3400e- 003	1.0000e- 005	0.0000	2.4900e- 003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	/yr		
Coating	2.7300e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Products	8.4500e- 003		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landocaping	1.1000e- 004	1.0000e- 005	1.2000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e- 003	2.3400e- 003	1.0000e- 005	0.0000	2.4900e- 003
Total	0.0113	1.0000e- 005	1.2000e- 003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3400e- 003	2.3400e- 003	1.0000e- 005	0.0000	2.4900e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
ga.cu	0.0000	0.0000	0.0000	0.0000
-	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
Mitigated	. 0.0000	0.0000	0.0000	0.0000
Unmitigated	• 0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Unmitigated

CO2e		0.0000	00000
N20	MT/yr	0.0000	0000'0
CH4	MT	0.0000 0.0000 0.0000	0.0000
Total CO2		0.0000	0.000.0
Waste Disposed	tons	0	
	Land Use	Parking Lot	Total

Mitigated

0.0000	0.0000	0.0000	0.0000		Total
0.0000	0.0000 0.0000 0.0000	0.0000	0.0000	0	Parking Lot
	MT/yr	MT		tons	Land Use
CO2e	N2O	CH4	Total CO2	Waste Disposed	

9.0 Operational Offroad

1	
	Fuel Type
	Load Factor
	Horse Power
	Days/Year
	Hours/Day
	Number
	Equipment Type

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

_ .

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
Equipment Type	Number

11.0 Vegetation

Appendix B

Class III Inventory/Phase I Cultural Resources
Survey

CLASS III INVENTORY/PHASE I SURVEY, EAGLE MEADOWS PROJECT, TULARE COUNTY, CALIFORNIA

Prepared for:

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> April 2022 PN 36790.05

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MANAGEMENT SUMMARY

An intensive Class III inventory/Phase I cultural resources survey was conducted for the Eagle Meadows Project (Project), Farmersville, Tulare County, California. The proposed Project will result in residential development of approximately 105-acres (ac) in Farmersville, Tulare County, California. The Area of Potential Effect (APE) was defined as the work and construction areas for the proposed development. The horizontal APE totals approximately 105-ac, while the vertical APE, representing the maximum depth of excavation, is ten feet. ASM Affiliates, Inc., conducted this study, with David S. Whitley, Ph.D., RPA, serving as principal investigator. The study was undertaken to assist with compliance with the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act of 1966, (NHPA) as amended.

A records search of site files and maps was obtained from the Southern San Joaquin Valley Archaeological Information Center (IC), California State University, Bakersfield. This indicated that only small portions of the APE had previously been surveyed and that no cultural resources are known to exist within it. Seven previous studies had been completed for locations within a half mile radius of the APE, and four previously recorded resources were known to exist within that same radius.

A Sacred Lands File Request (SLF) was also submitted to the Native American Heritage Commission (NAHC). The SLF indicated that no tribal cultural resources were known to exist within the APE. Outreach letters were sent to tribal organizations on the NAHC contact list requesting additional information about sites. The Santa Rosa Rancheria – Tachi Yokut responded and requested to be retained to perform a cultural presentation for all construction staff and to be informed of any and all discoveries made related to the Project. In addition, follow-up emails were also sent to the remaining tribal organizations as suggested by the NAHC. No additional responses have been received.

The Class III inventory/Phase I survey fieldwork was conducted on 8 April 2022 with crew walking the entire 105-ac APE. No cultural resources or built environment resources of any kind were identified within the APE and a Determination of No Effect and No Significant Impact for cultural resources is recommended for the Project.

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1. INTRODUCTION AND REGULATORY CONTEXT

ASM Affiliates, Inc., was retained by Crawford & Bowen Planning, Inc. to conduct an intensive Class III inventory/Phase I cultural resources survey for the Eagle Meadows Project (Project). This Project is located in the community of Farmersville, Tulare County, California (Figure 1). The study was undertaken to assist with compliance with the California Environmental Quality Act (CEQA), and Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. The investigation was conducted, specifically, to ensure that significant impacts or adverse effects to historical resources or historic properties do not occur as a result of project construction.

This current study included:

- A background records search and literature review to determine if any known cultural resources were present in the project zone and/or whether the area had been previously and systematically studied by archaeologists;
- An on-foot, intensive inventory of the APE to identify and record previously undiscovered cultural resources and to examine known sites; and
- A preliminary assessment of any such resources found within the subject property.

David S. Whitley, Ph.D., RPA, served as principal investigator and the fieldwork was conducted by ASM Associate Archaeologist Robert Azpitarte, B.A., with assistance from Maria Silva, B.A., and Cameron Jackson B.A., ASM Assistant Archaeologists.

This document constitutes a report on the Class III inventory/Phase I survey. Subsequent chapters provide background to the investigation, including historic context studies; the findings of the archival records search; a summary of the field surveying techniques employed; and the results of the fieldwork. We conclude with management recommendations for the APE.

1.1 PROJECT LOCATION

The Project is located within the community of Farmersville, Tulare County, California. Specifically, the proposed Project is in Section 12, Township 19 South, Range 25 East, M.D.B.M, as seen within the Exeter USGS 7.5' Quadrangle. The Project area currently consists of undeveloped agricultural fields and active walnut orchards bounded by residential tract development on the north, northeast, and west, and additional agricultural fields along the south and southwest.

More generally, the Project area is located on the open flats on the eastern San Joaquin Valley approximately 5-miles (mi) west of the Sierra Nevada foothills. Elevation within the Project area, which is flat, varies between approximately 355-feet (ft) and 360-ft above mean sea level (amsl).

1.2 PROJECT DESCRIPTION AND APE

The purpose of the Project is for residential development of 105-ac within the community of Farmersville. Planned unit development will involve subdivisions southwest of the Tulare Street

and Farmersville Boulevard, as well as undeveloped area between Virginia Avenue and Ventura Avenue. A community park within the development, located southwest of the intersection of Visalia Road and Ventura Avenue, is also proposed.

The horizontal APE for the Project consists of all construction and work areas and totals approximately 105-ac. The vertical APE for the Project is ten feet, the maximum depth of excavation for footings, foundations and subsurface infrastructure.

1.3 REGULATORY CONTEXT

1.3.1 California Environmental Quality Act

CEQA is applicable to discretionary actions by state or local lead agencies. Under CEQA, lead agencies must analyze impacts to cultural resources. Significant impacts under CEQA occur when "historically significant" or "unique" cultural resources are adversely affected, which occurs when such resources could be altered or destroyed through project implementation. Historically significant cultural resources are defined by eligibility for or by listing in the California Register of Historical Resources (CRHR). In practice, the federal NRHP criteria (below) for significance applied under Section 106 are generally (although not entirely) consistent with CRHR criteria (see PRC § 5024.1, Title 14 CCR, Section 4852 and § 15064.5(a)(3)).

Significant cultural resources are those archaeological resources and historical properties that:

- (A) Are associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (B) Are associated with the lives of persons important in our past;
- (C) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
- (D) Have yielded, or may be likely to yield, information important in prehistory or history.

Unique resources under CEQA, in slight contrast, are those that represent:

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 meets any of the following criteria:

- (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person (PRC § 21083.2(g)).

Preservation in place is the preferred approach under CEQA to mitigating adverse impacts to significant or unique cultural resources.

1.3.2 National Historic Preservation Act Section 106

NHPA Section 106 is applicable to federal undertakings, including projects financed or permitted by federal agencies regardless of whether the activities occur on federally managed or privately-owned land. Its purpose is to determine whether adverse effects will occur to significant cultural resources, defined as "historical properties" that are listed in or determined eligible for listing in the National Register of Historic Places (NRHP). The criteria for NRHP eligibility are defined at 36 CFR § 60.4 as follows:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

- (A) are associated with events that have made a significant contribution to the broad patterns of our history; or
- (B) are associated with the lives of persons significant in our past; or
- (C) embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (D) have yielded or may be likely to yield, information important in prehistory or history.

There are, however, restrictions on the kinds of historical properties that can be NRHP listed. These have been identified by the Advisory Council on Historic Preservation (ACHP), as follows:

Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- (a) A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- (b) A building or structure removed from its original location, but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- (c) A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life.

- (d) A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- (e) A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- (f) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
- (g) A property achieving significance within the past 50 years if it is of exceptional importance. (ACHP n.d.)

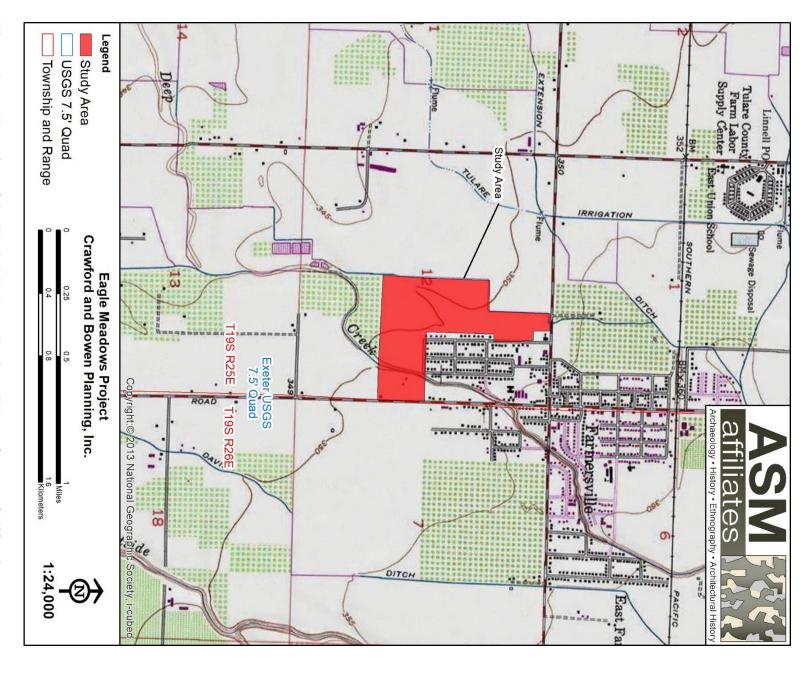


Figure 1. Location of the Eagle Meadows Project, Tulare County, California.

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2. ENVIRONMENTAL AND CULTURAL BACKGROUND

2.1 ENVIRONMENTAL BACKGROUND AND GEOARCHAEOLOGICAL SENSITIVITY

As noted above, the Project is located at between 355-ft and 360-ft amsl on the open flats of the San Joaquin Valley. The Project area is located about 2.5-mi south of the Kaweah River on the Kaweah fan. Prior to the appearance of agriculture, starting in the nineteenth century, this location was within one of the densest oak forests in California (Preston 1981). Historically, and likely prehistorically, riparian environments would have been present along the drainages, waterways and marshes. The APE and immediate surroundings had been farmed and grazed for many years, and more recently have been developed for housing and commercial uses, and no native vegetation is present. Perennial bunchgrasses such as purple needlegrass and nodding needlegrass most likely would have been the dominant plant cover in the study area prior to cultivation.

According to the geoarchaeological model developed by Meyer et al. (2010), the APE has a very high potential for buried archaeological deposits. Given the history of previous farming with the Project APE, however, the likelihood of intact archaeological deposits is considered low.

2.2 ETHNOGRAPHIC BACKGROUND

Penutian-speaking Yokuts tribal groups occupied the southern San Joaquin Valley region and much of the nearby Sierra Nevada. Ethnographic information about the Yokuts was collected primarily by Powers (1971, 1976 [originally 1877]), Kroeber (1925), Gayton (1930, 1948), Driver (1937), Latta (1977) and Harrington (n.d.). For a variety of historical reasons, existing research information emphasizes the central Yokuts tribes who occupied both the valley and particularly the foothills of the Sierra. The northernmost tribes suffered from the influx of Euro-Americans during the Gold Rush and their populations were in substantial decline by the time ethnographic studies began in the early twentieth century. In contrast, the southernmost tribes were partially removed by the Spanish to missions and eventually absorbed into multi-tribal communities on the Sebastian Indian Reservation (on Tejon Ranch), and later the Tule River Reservation and Santa Rosa Rancheria to the north. The result is an unfortunate scarcity of ethnographic detail on southern Valley tribes, especially in relation to the rich information collected from the central foothills tribes where native speakers of the Yokuts dialects are still found. Regardless, the general details of indigenous life-ways were similar across the broad expanse of Yokuts territory, particularly in terms of environmentally influenced subsistence and adaptation and with regard to religion and belief, which were similar everywhere.

According to Kroeber (1925: Plate 47), the APE is located in Choinok Yokuts territory along Deep Creek. No historic villages are recorded for this immediate area by Kroeber (1925) or by Latta (1977), with the recorded villages located adjacent to major streams and rivers either upstream or downstream from the Project area. The Yokuts settlement pattern, nonetheless, was largely consistent, regardless of specific tribe involved. Winter villages were typically located along

lakeshores and major stream courses (as these existed circa AD 1800), with dispersal phase family camps located at elevated spots on the valley floor and near gathering areas in the foothills.

The Yokuts settlement pattern was largely consistent, regardless of specific tribe involved. Winter villages were typically located along lakeshores and major stream courses (as these existed circa AD 1800), with dispersal phase family camps located at elevated spots on the valley floor and near gathering areas in the foothills.

Most Yokuts groups, again regardless of specific tribal affiliation, were organized as a recognized and distinct tribelet; a circumstance that almost certainly pertained to the tribal groups noted above. Tribelets were land-owning groups organized around a central village and linked by shared territory and descent from a common ancestor. The population of most tribelets ranged from about 150 to 500 peoples (Kroeber 1925).

Each tribelet was headed by a chief who was assisted by a variety of assistants, the most important of whom was the *winatum*, a herald or messenger and assistant chief. A shaman also served as religious officer. While shamans did not have any direct political authority, as Gayton (1930) has illustrated, they maintained substantial influence within their tribelet.

Shamanism is a religious system common to most Native American tribes. It involves a direct and personal relationship between the individual and the supernatural world enacted by entering a trance or hallucinatory state (usually based on the ingestion of psychotropic plants, such as jimsonweed or more typically native tobacco). Shamans were considered individuals with an unusual degree of supernatural power, serving as healers or curers, diviners, and controllers of natural phenomena (such as rain or thunder). Shamans also produced the rock art of this region, depicting the visions they experienced in vision quests believed to represent their spirit helpers and events in the supernatural realm (Whitley 1992, 2000).

The centrality of shamanism to the religious and spiritual life of the Yokuts was demonstrated by the role of shamans in the yearly ceremonial round. The ritual round, performed the same each year, started in the spring with the jimsonweed ceremony, followed by rattlesnake dance and (where appropriate) first salmon ceremony. After returning from seed camps, fall rituals began in the late summer with the mourning ceremony, followed by first seed and acorn rites and then bear dance (Gayton 1930:379). In each case, shamans served as ceremonial officials responsible for specific dances involving a display of their supernatural powers (Kroeber 1925).

Subsistence practices varied from tribelet to tribelet based on the environment of residence. Throughout Native California, and Yokuts territory in general, the acorn was a primary dietary component, along with a variety of gathered seeds. Valley tribes augmented this resource with lacustrine and riverine foods, especially fish and wildfowl. As with many Native California tribes, the settlement and subsistence rounds included the winter aggregation into a few large villages, where stored resources (like acorns) served as staples, followed by dispersal into smaller camps, often occupied by extended families, where seasonally available resources would be gathered and consumed.

Although population estimates vary and population size was greatly affected by the introduction of Euro-American diseases and social disruption, the Yokuts were one of the largest, most successful groups in Native California. Cook (1978) estimates that the Yokuts region contained 27 percent of the aboriginal population in the state at the time of contact; other estimates are even higher. Many Yokuts people continue to reside in the southern San Joaquin Valley today.

2.3 PRE-CONTACT ARCHAEOLOGICAL BACKGROUND

The southern San Joaquin Valley region has received minimal archaeological attention compared to other areas of the state. In part, this is because the majority of California archaeological work has concentrated in the Sacramento Delta, Santa Barbara Channel, and central Mojave Desert areas (see Moratto 1984). Although knowledge of the region's prehistory is limited, enough is known to determine that the archaeological record is broadly similar to south-central California as a whole (see Gifford and Schenk 1926; Hewes 1941; Wedel 1941; Fenenga 1952; Elsasser 1962; Fredrickson and Grossman 1977; Schiffman and Garfinkel 1981). Based on these sources, the general prehistory of the region can be outlined as follows.

Initial occupation of the region occurred at least as early as the *Paleoindian Period*, or prior to about 10,000 years before present (YBP). Evidence of early use of the region is indicated by characteristic fluted and stemmed points found around the margin of Tulare Lake, in the foothills of the Sierra, and in the Mojave Desert proper.

Both fluted and stemmed points are particularly common around lake margins, suggesting a terminal Pleistocene/early Holocene lakeshore adaptation similar to that found throughout the far west at the same time; little else is known about these earliest peoples. Over 250 fluted points have been recovered from the Witt Site (CA-KIN-32), located along the western shoreline of ancient Tulare Lake west of the study area, demonstrating the importance of this early occupation in the San Joaquin Valley specifically (see Fenenga 1993). Additional finds consist of a Clovis-like projectile point discovered in a flash-flood cut-bank near White Oak Lodge in 1953 on Tejon Ranch (Glennan 1987a, 1987b). More recently, a similar fluted point was found near Bakersfield (Zimmerman et al. 1989), and a number are known from the Edwards Air Force Base and Boron area of the western Mojave Desert. Although human occupation of the state is well-established during the Late Pleistocene, relatively little can be inferred about the nature and distribution of this occupation with a few exceptions. First, little evidence exists to support the idea that people at that time were big-game hunters, similar to those found on the Great Plains. Second, the western Mojave Desert evidence suggests small, very mobile populations that left a minimal archaeological signature. The evidence from the ancient Tulare Lake shore, in contrast, suggests much more substantial population and settlements which, instead of relying on big game hunting, were tied to the lacustrine lake edge. Variability in subsistence and settlement patterns is thus apparent in California, in contrast to the Great Plains.

Substantial evidence for human occupation across California, however, first occurs during the middle Holocene, roughly 7,500 to 4,000 YBP. This period is known as the *Early Horizon*, or alternatively as the Early Millingstone along the Santa Barbara Channel. In the south, populations concentrated along the coast with minimal visible use of inland areas. Adaptation emphasized hard seeds and nuts with tool-kits dominated by mullers and grindstones (manos and metates).

Additionally, little evidence for Early Horizon occupation exists in most inland portions of the state, partly due to a severe cold and dry paleoclimatic period occurring at this time, although a site deposit dating to this age has been identified along the ancient Buena Vista shoreline in Kern County to the south (Rosenthal et al. 2007). Regardless of specifics, Early Horizon population density was low with a subsistence adaptation more likely tied to plant food gathering than hunting.

Environmental conditions improved dramatically after about 4,000 YBP during the Middle Horizon (or Intermediate Period). This period is known climatically as the Holocene Maximum (circa 3,800 YBP) and was characterized by significantly warmer and wetter conditions than previously experienced. It was marked archaeologically by large population increase and radiation into new environments along coastal and interior south-central California and the Mojave Desert (Whitley 2000). In the Delta region to the north, this same period of favorable environmental conditions was characterized by the appearance of the Windmiller culture which exhibited a high degree of ritual elaboration (especially in burial practices) and perhaps even a rudimentary moundbuilding tradition (Meighan, personal communication, 1985). Along with ritual elaboration, Middle Horizon times experienced increasing subsistence specialization, perhaps correlating with the appearance of acorn processing technology. Penutian speaking peoples (including the Yokuts) are also posited to have entered the state roughly at the beginning of this period and, perhaps to have brought this technology with them (cf. Moratto 1984). Likewise, it appears the so-called "Shoshonean Wedge" in southern California, the Takic speaking groups that include the Gabrielino/Fernandeño, Tataviam and Kitanemuk, may have moved into the region at that time (Sutton 2009, rather than at about 1500 YBP as first suggested by Kroeber (1925).

Evidence for Middle Horizon occupation of interior south-central California is substantial. For example, in northern Los Angeles County along the upper Santa Clara River, to the south of the San Joaquin Valley, the Agua Dulce village complex indicates occupation extending back to the Intermediate Period, when the population of the village may have been 50 or more people (King et al n.d.). Similarly, inhabitation of the Hathaway Ranch region near Lake Piru, and the Newhall Ranch near Valencia, appears to date to the Intermediate Period (W & S Consultants 1994). To the west, little or no evidence exists for pre-Middle Horizon occupation in the upper Sisquoc and Cuyama River drainages; populations first appear there at roughly 3,500 YBP (Horne 1981). The Carrizo Plain, the valley immediately west of the San Joaquin, experienced a major population expansion during the Middle Horizon (W & S Consultants 2004; Whitley et al. 2007), and recently collected data indicates the Tehachapi Mountains region was first significantly occupied during the Middle Horizon (W & S Consultants 2006). A parallel can be drawn to the inland Ventura County region where a similar pattern has been identified (Whitley and Beaudry 1991), as well as the western Mojave Desert (Sutton 1988a, 1988b), the southern Sierra Nevada (W & S Consultants 1999), and the Coso Range region (Whitley et al. 1988). In all of these areas a major expansion in settlement, the establishment of large site complexes and an increase in the range of environments exploited appear to have occurred sometime roughly around 4,000 years ago. Although most efforts to explain this expansion have focused on local circumstances and events, it is increasingly apparent this was a major southern California-wide occurrence and any explanation must be sought at a larger level of analysis (Whitley 2000). Additionally, evidence from the Carrizo Plain suggests the origins of the tribelet level of political organization developed during this period (W & S Consultants 2004; Whitley et al. 2007). Whether this same demographic process holds for the southern San Joaquin Valley, including the study area, is yet to be determined.

The beginning of the Late Horizon is set variously at 1,500 and 800 YBP, with a growing archaeological consensus for the shorter chronology. Increasing evidence suggests the importance of the Middle-Late Horizons transition (AD 800 to 1200) in the understanding of south-central California prehistory. This corresponds to the so-called Medieval Climatic Anomaly, followed by the Little Ice Age, and this general period of climatic instability extended to about A.D. 1860. It included major droughts matched by intermittent "mega-floods," and resulted in demographic disturbances across much of the west (Jones et al. 1999). It is believed to have resulted in major population decline and abandonments across south-central California, involving as much as 90% of the interior populations in some regions, including the Carrizo Plain (Whitley et al. 2007). It is not clear whether site abandonment was accompanied by a true reduction in population or an agglomeration of the same numbers of peoples into fewer but larger villages in more favorable locations. Population along the Santa Barbara coast appears to have spiked at about the same time that it collapsed on the Carrizo Plain (ibid). Along Buena Vista Lake, in Kern County, population appears to have been increasingly concentrated towards the later end of the Medieval Climatic Anomaly (Culleton 2006), and population intensification also appears to have occurred in the wellwatered Tehachapi Mountains during this same period (W & S Consultants 2006).

What is then clear is that Middle Period villages and settlements were widely dispersed across the south-central California landscape, including in the Sierras and the Mojave Desert. Many of these sites are found at locations that lack existing or known historical fresh water sources. Late Horizon sites, in contrast, are typically concentrated in areas where fresh water was available during the historical period, if not currently.

One extensively studied site that shows evidence of intensive occupation during the Middle-Late Horizons transition (~1,500 - 500 YBP) is the Redtfeldt Mound (CA-KIN-66/H), located northwest of the current study area, near the north shore of ancient Tulare Lake. There, Siefkin (1999) reported on human burials and a host of artifacts and ecofacts excavated from a modest-sized mound. He found that both Middle Horizon and Middle-Late Horizons transition occupations were more intensive than Late Horizon occupations, which were sporadic and less intensive (Siefkin 1999:110-111).

The Late Horizon can then be understood as a period of recovery from a major demographic collapse. One result is the development of regional archaeological cultures as the precursors to ethnographic Native California; suggesting that ethnographic life-ways recorded by anthropologists extend roughly 800 years into the past.

The position of southern San Joaquin Valley prehistory relative to patterns seen in surrounding areas is still somewhat unknown. The presence of large lake systems in the valley bottoms appears to have mediated some of the desiccation seen elsewhere. But, as the reconstruction of Soda Lake in the nearby Carrizo Plain demonstrates (see Whitley et al. 2007) environmental perturbations had serious impacts on lake systems too. Identifying certain of the prehistoric demographic trends for the southern San Joaquin Valley, and determining how these trends (if present) correlate with those seen elsewhere, is a current important research objective.

2.4 HISTORICAL BACKGROUND

Spanish explorers first visited the San Joaquin Valley in 1772, but its lengthy distance from the missions and presidios along the Pacific Coast delayed permanent settlement for many years, including during the Mexican period of control over the Californian region. In the 1840s, Mexican rancho owners along the Pacific Coast allowed their cattle to wander and graze in the San Joaquin Valley (JRP Historical Consulting 2009). The Mexican government granted the first ranchos in the southern part of the San Joaquin Valley in the early 1840s, but these did not result in permanent settlement. It was not until the annexation of California in 1848 that the exploitation of the southern San Joaquin Valley began (Pacific Legacy 2006).

The discovery of gold in northern California in 1848 resulted in a dramatic increase of population, consisting in good part of fortune seekers and gold miners, who began to scour other parts of the state. After 1851, when gold was discovered in the Sierra Nevada Mountains in eastern Kern County, the population of the area grew rapidly. Some new immigrants began ranching in the San Joaquin Valley to supply the miners and mining towns. Ranchers grazed cattle and sheep, and farmers dry-farmed or used limited irrigation to grow grain crops, leading to the creation of small agricultural communities throughout the valley (JRP Historical Consulting 2009).

After the American annexation of California, the southern San Joaquin Valley became significant as a center of food production for this new influx of people in California. The expansive unfenced and principally public foothill spaces were well suited for grazing both sheep and cattle (Boyd 1997). As the Sierra Nevada gold rush presented extensive financial opportunities, ranchers introduced new breeds of livestock, consisting of cattle, sheep and pig (Boyd 1997).

With the increase of ranching in the southern San Joaquin came the dramatic change in the landscape, as non-native grasses more beneficial for grazing and pasture replaced native flora (Preston 1981). After the passing of the Arkansas Act in 1850, efforts were made to reclaim small tracts of land in order to create more usable spaces for ranching. Eventually, as farming supplanted ranching as a more profitable enterprise, large tracts of land began to be reclaimed for agricultural use, aided in part by the extension of the railroad in the 1870s (Pacific Legacy 2006).

Following the passage of state-wide 'No-Fence' laws in 1874, ranching practices began to decline, while farming expanded in the San Joaquin Valley in both large land holdings and smaller, subdivided properties. As the farming population grew, so did the demand for irrigation. Settlers began reclamation of swampland in 1866. The 76 Land and Water Company was founded in 1882, named after State Senator and cattleman Thomas Fowler's "76 Ranch," which included significant holdings in the Project area. With the passage of the Wright Act in 1887, the legislature allowed the creation of bonded irrigation districts as public entities. The Alta Irrigation District (AID) was created in 1888 with bonds in the amount of \$676,000.00. The district purchased the 76 Land and Water Company canal system for \$410,000.00 (Grunsky 1898:24) and was one of the first irrigation districts formed in Tulare County (Preston 1981).

During the period of reclaiming unproductive land in the southern San Joaquin Valley, grants were given to individuals who had both the resources and the finances to undertake the operation alone. One small agricultural settlement, founded by Colonel Thomas Baker in 1861 after procuring one

such grant, took advantage of reclaimed swampland along the Kern River. This settlement became the City of Bakersfield in 1869, and quickly became the center of activity in the southern San Joaquin Valley, and in the newly formed Kern County. Located on the main stage road through the San Joaquin Valley, the town became a primary market and transportation hub for stock and crops, as well as a popular stopping point for travelers on the Los Angeles and Stockton Road. The Southern Pacific Railroad reached the Bakersfield area in 1873, connecting it with important market towns elsewhere in the state, dramatically impacting both agriculture and oil production (Pacific Legacy 2006).

The San Joaquin Valley was dominated by agricultural pursuits until the oil boom of the early 1900s, which saw a shift in the region, as some reclaimed lands previously used for farming were leased to oil companies. Nonetheless, the shift of the San Joaquin Valley towards oil production did not halt the continued growth of agriculture (Pacific Legacy 2006). The Great Depression of the 1930s brought with it the arrival of great number of migrants from the drought-affected Dust Bowl region, looking for agricultural labor. These migrants established temporary camps in the valley, staying on long past the end of the drought and the Great Depression, eventually settling in towns such as Bakersfield where their descendants live today (Boyd 1997).

The community of Farmersville was first settled in the 1850s, when it was known as the community of Deep Creek. The community was named Farmersville in 1868 with the application for a post office. Farmersville was incorporated in 1960 and as of 2019 hosted a population of approximately 10,703.

2.5 RESEARCH DESIGN

2.5.1 Pre-Contact Archaeology

Previous research and the nature of the pre-contact archaeological record suggest two significant NRHP themes, both of which fall under the general Pre-Contact Archaeology area of significance. These are the Expansion of Pre-Contact Populations and Their Adaptation to New Environments; and Adaptation to Changing Environmental Conditions.

The Expansion of Pre-Contact Populations and Their Adaptation to New Environments theme primarily concerns the Middle Horizon/Holocene Maximum. Its period of significance runs from about 4,000 to 1,500 YBP. It involves a period during which the prehistoric population appears to have expanded into a variety of new regions, developing new adaptive strategies in the process.

The Adaptation to Changing Environmental Conditions theme is partly related to the Holocene Maximum, but especially to the Medieval Climatic Anomaly. The period of significance for this theme, accordingly, extends from about 4,000 to 800 YBP. This theme involves the apparent collapse of many inland populations, presumably with population movements to better environments such as the coast. It is not yet known whether the southern San Joaquin Valley, with its system of lakes, sloughs and swamps, experienced population decline or, more likely, population increase due to the relatively favorable conditions of this region during this period of environmental stress.

The range of site types that are present in this region include:

- Villages, primarily located on or near permanent water sources, occupied by large groups during the winter aggregation season;
- Seasonal camps, again typically located at water sources, occupied during other parts of the year tied to locally and seasonally available food sources;
- Special activity areas, especially plant processing locations containing bedrock mortars (BRMs), commonly (though not exclusively) near existing oak woodlands, and invariably at bedrock outcrops or exposed boulders;
- Stone quarries and tool workshops, occurring in two general contexts: at or below naturally occurring chert exposures on the eastern front of the Temblor Range; and at quartzite cobble exposures, often on hills or ridges;
- Ritual sites, most commonly pictographs (rock art) found at rockshelters or large exposed boulders, and cemeteries, both commonly associated with villages; and
- A variety of small lithic scatters (low density surface scatters of stone tools).

The first requisites in any research design are the definition of site age/chronology and site function. The ability to determine either of these basic kinds of information may vary between survey and test excavation projects, and due to the nature of the sites themselves. BRM sites without associated artifacts, for example, may not be datable beyond the assumption that they post-date the Early Horizon and are thus less than roughly 4,000 years old.

A second fundamental issue involves the place of site in the settlement system, especially with respect to water sources. Because the locations of the water sources have sometimes changed over time, villages and camps are not exclusively associated with existing (or known historical) water sources (W&S Consultants 2006). The size and locations of the region's lakes, sloughs and delta channels, to cite the most obvious example, changed significantly during the last 12,000 years due to major paleoclimatic shifts. This altered the area's hydrology and thus prehistoric settlement patterns. The western shoreline of Tulare Lake was relatively stable, because it abutted the Kettleman Hills. But the northern, southern and eastern shorelines comprised the near-flat valley floor. Relatively minor fluctuations up or down in the lake level resulted in very significant changes in the areal expression of the lake on these three sides, and therefore the locations of villages and camps. Although perhaps not as systematic, similar changes occurred with respect to stream channels and sloughs, and potential site locations associated with them. This circumstance has implications for predicting site locations and archaeological sensitivity. Site sensitivity is then hardest to predict in the open valley floor, where changes in stream courses and lake levels occurred on numerous occasions.

Nonetheless, the position of southern San Joaquin Valley prehistory relative to the changing settlement and demographic patterns seen in surrounding areas is still somewhat unknown (cf. Siefkin 1999), including to the two NRHP themes identified above. The presence of large lake systems in the valley bottoms can be expected to have mediated some of the effects of desiccation seen elsewhere. But, as the reconstruction of Soda Lake in the nearby Carrizo Plain demonstrates (see Whitley et al. 2007), environmental perturbations had serious impacts on lake systems too. Identifying certain of the prehistoric demographic trends for the southern San Joaquin Valley, and

determining how these trends (if present) correlate with those seen elsewhere, is another primary regional research objective.

Archaeological sites would primarily be evaluated for NRHP eligibility under Criterion D, research potential.

2.5.2 Historical Archaeology: Native American

Less research has been conducted on the regional historical archaeological record, both Native American and Euro-American. For Native American historical sites, the ethnographic and ethnohistoric periods in the southern San Joaquin Valley extended from first Euro-American contact, in AD 1772, to circa 1900, when tribal populations were first consolidated on reservations. The major significant historic NRHP themes during this period of significance involve the related topics of Historic-Aboriginal Archaeology, and Native American Ethnic Heritage. More specifically, these concern the Adaptation of the Indigenous Population to Euro-American Encroachment and Settlement, and their Acculturation to Western Society. These processes included the impact of missionization on the San Joaquin Valley (circa 1800 to about 1845); the introduction of the horse and the development of a San Joaquin Valley "horse culture," including raiding onto the coast and Los Angeles Basin (after about 1810); the use of the region as a refuge for mission neophyte escapees (after 1820); responses to epidemics from introduced diseases (especially in the 1830s); armed resistance to Euro-American encroachment (in the 1840s and early 1850s); the origins of the reservation system and the development of new tribal organizations and ethnic identities; and, ultimately, the adoption of the Euro-American society's economic system and subsistence practices, and acculturation into that society.

Site types that have been identified in the region dating to the ethnographic/ethnohistoric period of significance primarily include villages and habitations, some of which contain cemeteries and rock art (including pictographs and cupules). Dispersed farmsteads, dating specifically from the reservation period or post-1853, would also be expected. The different social processes associated with this historical theme may be manifest in the material cultural record in terms of changing settlement patterns and village organization (from traditional nucleated villages to single family dispersed farmsteads); the breakdown of traditional trading networks with their replacement by new economic relationships; changing subsistence practices, especially the introduction of agriculture initially via escaped mission neophytes; the use of Euro-American artifacts and materials rather than traditional tools and materials; and, possibly, changing mortuary practices.

Inasmuch as culture change is a primary intellectual interest in archaeology, ethnographic villages and habitations may be NRHP eligible under Criterion D, research potential. Rock art sites, especially pictographs, may be eligible under Criterion C as examples of artistic mastery. They may also be eligible under Criterion A, association with events contributing to broad patterns of history. Ethnographic sites, further, may be NRHP eligible as Traditional Cultural Properties due to potential continued connections to tribal descendants, and their resulting importance in traditional practices and beliefs, including their significance for historical memory, tribal- and self-identity formation, and tribal education.

For Criteria A, C and D, eligibility requires site integrity (including the ability to convey historical association for Criterion A). These may include intact archaeological deposits for Criterion D, as

well as setting and feel for Criteria C and A. Historical properties may lack physical integrity, as normally understood in heritage management, but still retain their significance to Native American tribes as Traditional Cultural Properties if they retain their tribal associations and uses.

2.5.3 Historical Archaeology: Euro-American

Approaches to historical Euro-American archaeological research relevant to the region have been summarized by Caltrans (1999, 2000, 2007, 2008). These concern the general topics of historical landscapes, agriculture and farming, irrigation (water conveyance systems), and mining. Caltrans has also identified an evaluation matrix aiding determinations of eligibility. The identified research issues include site structure and land-use (lay-out, land use, feature function); economics (self-sufficiency, consumer behavior, wealth indicators); technology and science (innovations, methods); ethnicity and cultural diversity (religion, race); household composition and lifeways (gender, children); and labor relations. Principles useful for determining the research potential of an individual site or feature are conceptualized in terms of the mnemonic AIMS-R, as follows:

- 1. Association refers to the ability to link an assemblage of artifacts, ecofacts, and other cultural remains with an individual household, an ethnic or socioeconomic group, or a specific activity or property use.
- 2. *Integrity* addresses the physical condition of the deposit, referring to the intact nature of the archaeological remains. In order for a feature to be most useful, it should be in much the same state as when it was deposited. However, even disturbed deposits can yield important information (e.g., a tightly dated deposit with an unequivocal association).
- 3. *Materials* refers to the number and variety of artifacts present. Large assemblages provide more secure interpretations as there are more datable items to determine when the deposit was made, and the collection will be more representative of the household, or activity. Likewise, the interpretive potential of a deposit is generally increased with the diversity of its contents, although the lack of diversity in certain assemblages also may signal important behavioral or consumer patterns.
- 4. Stratigraphy refers to the vertically or horizontally discrete depositional units that are distinguishable. Remains from an archaeological feature with a complex stratigraphic sequence representative of several events over time can have the added advantage of providing an independent chronological check on artifact diagnosis and the interpretation of the sequence of environmental or sociocultural events.
- 5. *Rarity* refers to remains linked to household types or activities that are uncommon. Because they are scarce, they may have importance even in cases where they otherwise fail to meet other thresholds of importance (Caltrans 2007:209).

For agricultural sites, Caltrans (2007) has identified six themes to guide research: Site Structure and Land Use Pattern; Economic Strategies; Ethnicity and Cultural Adaptation; Agricultural Technology and Science; Household Composition and Lifeways; and Labor History. Expected site types would include farm and ranch homesteads and facilities, line camps, and refuse dumps. In general terms, historical Euro-American archaeological sites would be evaluated for NRHP

eligibility under Criterion D, research potential. However, they also potentially could be eligible under Criteria A and B for their associate values with major historical trends or individuals. Historical landscapes might also be considered.

Historical structures, which are most likely to be pertinent to the APE, are typically evaluated for NRHP eligibility under Criteria A and/or B, for their associate values with major historical trends or individuals, and C for potential design or engineering importance.

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3. ARCHIVAL RECORDS SEARCH

3.1 ARCHIVAL RECORDS SEARCH

In order to determine whether the APE had been previously surveyed for cultural resources, and/or whether any such resources were known to exist on any of them, a records search of site files and maps was conducted by the Southern San Joaquin Valley Information Center (IC), California State University, Bakersfield on 28 March 2022. The records search was completed to determine: (i) if prehistoric or historical archaeological sites had previously been recorded within the APE; (ii) if the Project area had been systematically surveyed by archaeologists prior to the initiation of this field study; and/or (iii) whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive. Records examined included archaeological site files and maps, the NRHP, Historic Property Data File, California Inventory of Historic Resources, and the California Points of Historic Interest.

The IC results indicated that two previous studies had covered small portions of the study area on the north and near the east boundary (Table 1). No cultural resources of any kind are known to exist within it. An additional seven (7) previous studies had been completed within 0.5-mi of the study area (Table 2), resulting in the recordation of four (4) historic cultural resources within that outer radius (Table 3).

Table 1. Survey Reports within the Study Area

Report No.	Year	Author (s)/Affiliation	Title
TU-01659	2009	Haley, Kathryn/ ICF Jones & Stokes	Historic Property Survey Report for Avenue 280 Road Widening Project, Tulare County, California
TU-01783	2017	Lloyd, Jay B. and Tibbet Josh / Applied EarthWorks, Inc.	Cultural Resource Inventory for the Deep Creek Restoration Project in Farmersville, Tulare County, California

Table 2. Survey Reports within 0.5-mi of the Study Area

Report No.	Year	Author (s)/Affiliation	Title
TU-00134	1998	Parr, Robert E. and Sutton, Mark Q./ Center for Archaeological Research, California State University, Bakersfield	Archaeological Assessment of the Tulare Irrigation District Main Canal Lining Project, Tulare County, California
TU-00404	1988	Napton, Kyle L./ California State University, Stanislaus	Cultural Resource Investigation of the Westview Garden Apartments and the Virginia Manor Apartments, Farmersville, Tulare County, California
TU-01071	2000	Collet, Tom/ Terracon	Indian Religious Site and American Historical Site Determination for a Proposed Cellular Communications Tower, 70' East of Virginia Ave. & 350' South of Visalia Rd. Farmersville, California, Terracon Project No. 64007869-A
TU-01409	2010	Orfila, Rebecca S./ RSO Consulting	Archaeological Survey for the Southern California Edison Company: Replacement of 11 Deterioriated Power Poles on the Burr, Delta, Hack, Mississippi, Nickerson, Redbanks, Roeding, and Tarusa 12 kV Circuits in Tulare County, California

3. Archival Records Search

Report No.	Year	Author (s)/Affiliation	Title
TU-00134	1998	Parr, Robert E. and Sutton, Mark Q./ Center for Archaeological Research, California State University, Bakersfield	Archaeological Assessment of the Tulare Irrigation District Main Canal Lining Project, Tulare County, California
TU-01439	2010	Windmiller, Ric/Ric Windmiller Consulting Archaeologist	Cultural Resources Inventory and Evaluation in Farmersville, Tulare County, California
TU-01456	2007	Henrikson, Suzanne L./ Center for Archaeological Research, California State University, Bakersfield	Archaeological Survey for the Southern California Edison Company Replacement of 11 Deteriorated Power Poles on the El Mirador, Ducor, Chinowith, Nickerson, Gill, Roeding, and Caratan 12 kV Distribution Circuits, Tulare County, California
TU-01739	2015	Clifton, Virginia and Travers, Aniela / EBI Consulting	Cultural Resources Survey Farmersville/Ensite #26106 (269407) 586 South Farmersville Boulevard, Farmersville, Tulare County, California

Table 3. Resources within the 0.5-mi of the Study Area

Primary #	Type	Description
P-54-005076	Building	Single family property
P-54-005296	Structure	Canal
P-54-005306	Structure	Historic bridge
P-54-005308	Structure	Historic bridge

3.2 SACRED LANDS FILE

An SLF request was also submitted to the NAHC on 17 March 2022. The SLF indicated that no tribal cultural resources were known to exist within the APE. Outreach letters were sent on 21 March 2022 to tribal organizations on the NAHC contact list requesting additional information about the Project APE. The Santa Rosa Rancheria – Tachi Yokuts responded on 31 March 2022 and requested to be retained to perform a cultural presentation for all construction staff and to be informed of any and all discoveries made related to the Project. Follow-up emails were also sent to the remaining tribal organizations in April 2022; however, no additional responses have been received.

4. METHODS AND RESULTS

4.1 FIELD METHODS

An intensive Class III inventory/Phase I survey of the Eagle Meadows Project APE was conducted in April 2022 by ASM Associate Archaeologist Robert Azpitarte, B.A., with help from ASM Assistant Archaeologists Maria Silva, B.A., and Cameron Jackson, B.A. The field methods employed included intensive pedestrian examination of the ground surface for evidence of archaeological sites in the form of artifacts, surface features (such as bedrock mortars, historical mining equipment), and archaeological indicators (e.g., organically enriched midden soil, burnt animal bone); the identification and location of any discovered sites, should they be present; tabulation and recording of surface diagnostic artifacts; site sketch mapping; preliminary evaluation of site integrity; and site recording, following the California Office of Historic Preservation Instructions for Recording Historic Resources, using DPR 523 forms.

4.2 SURVEY RESULTS

The Project APE (~105-ac) consists of active walnut orchards (~80-ac) and fallow agricultural land (~25-ac) with associated dirt roads, in Farmersville, Tulare County, California (Figure 2). Built structures were present on properties that bordered the horizontal APE. These included zero lot-line commercial buildings and residential tract development on the north, northeast, and west (Figure 3). Additional agricultural fields and active irrigation ditches abut the Project horizontal APE on the west, south and southeast. The APE is mostly devoid of native vegetation, with wildflowers and seasonal grasses visible along the edges of roads and adjacent fallow fields. Modern refuse in the form of concrete fragments, plastic piping, clothing, and paper products were noted within the APE.

Ground surface visibility was excellent within the orchard portions of the APE. Grass covered much of the fallow agricultural field, impeding visibility in this area. Survey transects were reduced to 5-meter spacing within this area to insure survey coverage at intensive Class III/Phase I levels.

The bisecting Deep Creek is a natural intermittent channel. As a natural feature, it was not recorded nor treated as a cultural resource. An additional irrigation conveyance feature – Extension Ditch – borders the APE outside the western and northern peripheries and will not be affected by the proposed Eagle Meadows development project. No archaeological or built environment resources were identified within the Project APE.



Figure 2. Overview of the approximate center of the Project APE, looking north.



Figure 3. Overview along the northern boundary of the Project APE, looking south...

5. SUMMARY AND RECOMMENDATIONS

5.1 SUMMARY

An intensive Class III inventory/Phase I cultural resources survey was conducted for the Eagle Meadows Project, located in the community of Farmersville, Tulare County, California. A records search was obtained from the Southern San Joaquin Valley Archaeological Information Center, California State University, Bakersfield. This indicated that two previous studies had covered small portions of the study area, and that no cultural resources are known to exist within it.

A Sacred Lands File Request (SLF) was also submitted to the Native American Heritage Commission (NAHC). The SLF indicated that no tribal cultural resources were known to exist within the APE. Outreach letters were sent to tribal organizations on the NAHC contact list requesting additional information about sites. The Santa Rosa Rancheria – Tachi Yokuts responded and requested to be retained to perform a cultural presentation for all construction staff and to be informed of any and all discoveries made related to the Project. Follow-up emails were also sent to the remaining tribal organizations but no additional comments have been received.

The Class III inventory/Phase I survey fieldwork was conducted in April 2022 with the entire 105-ac APE walked by an archaeological crew. No archaeological or built environment resources were identified within the APE.

5.2 RECOMMENDATIONS

No cultural resources of any kind have been identified within the Eagle Meadows Project APE, and the Project does not have the potential to results in adverse impacts or affects to historical resources or historic properties. A Determination of No Effect and No Significant Impact for cultural resources is recommended for the Project. It is further recommended that, in the unlikely event that cultural resources are encountered during construction or use of the APE, an archaeologist be contacted to assess the discovery.

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