INITIAL STUDY / MITIGATED NEGATIVE DECLARATION
Pursuant to the California Environmental Quality Act, as amended

A. PROJECT DESCRIPTION

1.	**Project title:**	10 South Grant Line Road Service Station and Convenience Store, Conditional Use Permit and Site Development Review, PLN2015-00208
2.	**Lead agency name & address:**	Alameda County Planning Department 224 W. Winton Avenue, Room 111 Hayward, CA 94544
3.	**Contact person & phone number:**	Albert Lopez, Planning Director, Alameda County Planning Department 510-670-5436
4.	**Project location:**	10 South Grant Line Road, Livermore, east side of Grant Line Road, south of Interstate 580 in the unincorporated Altamont Pass/Mountain House area of Alameda County, bearing County Assessor's Parcel Number: 099B-7700-012-02. (See **Figure 1, Project Location**)
5.	**Project sponsor's name & address:**	Hamid Amini 1175 Catalina Drive Livermore, CA
6.	**General Plan designation:**	Large Parcel Agriculture, *East County Area Plan* (Portion of the Alameda County General Plan, adopted 1994, amended November 2000 by Alameda County Voter Initiative Measure D, with modifications adopted May 2002.
7.	**Zoning:**	"H-1" (Highway Frontage) Zoning District

8. **Description of project:** The Project is a proposed service station and convenience store on an approximately one-acre vacant site, located to the southeast of the Interstate I-580 and Grant Line Road interchange, immediately south of the eastbound on-ramp (**Figure 1**).

The Project site encompasses a trapezoidal lot of 1.04 acres (45,203 sq. ft.), 310 feet wide along Grant Line Road and approximately 203 feet deep from Grant Line Road. Ground surface elevations range from about 316 feet above mean sea level (msl) at its easterly perimeter to 330 feet above msl at its southernmost edge. The Project site is fenced, vacant, and adjoins grazing lands. The existing site topography is generally flat, sloping gently to the north and west, with a drainage swale along its northern boundary that drains into the adjacent parcel to the east. The proposed building pad on the property is elevated relative to the surrounding topography along its southeastern, eastern and northeastern property boundaries.

Figure 1
Project Location

10 South Grant Line Road Chevron Gas Station & Convenience Store
Source: Green Planning Collaborative and TomTom Maps

The Project's objective is to replace a previously existing Chevron service station that operated on the site between 1971 and 1986 and was demolished in 1991. The site was used as a gas station and "Type A" auto repair shop (as defined by the Alameda County Zoning Ordinance) between 1971 and 1986 under Conditional Use Permit C-2285, approved on May 12, 1971 pursuant to the provisions of the H-1 zone district. The Project requires approval of a Conditional Use Permit to re-establish the Type A service station use, based on the H-1 zone district standards and to further allow a convenience store, which is deemed to be an appropriate use compatible with the service station use. The use is intended to be a continued use that was not abandoned for the purpose of the Zoning Ordinance with respect to non-conforming uses (Sections 17.52.610 through 17.52.690).

The site was designated as Large Parcel Agriculture by the 1994 East County Area Plan, which allowed pre-existing commercial uses to continue as non-conforming land uses. In November 2000, the voter initiative and ordinance Measure D (the Save Agriculture and Open Space Initiative) was approved which among other changes to the East County Area Plan, was understood to limit commercial uses and sites such as the former service station site to agriculture-serving uses only, and to make the service station use a non-conforming use that would be regulated as provided for in the County Zoning Ordinance (e.g., deemed to have been abandoned if not active for six months). However, the Initiative also included Section 3, "Protection of Legal Rights", stating that the provisions of the ordinance do not apply to the extent that courts (or if subject to a court decision) they would deprive any person of constitutional or statutory rights or privileges, or be otherwise inconsistent with U.S. or state constitutions or laws. The applicant and the County Planning Commission, as discussed below, view this protection as enabling the application to be considered as a suitable request to allow the prior use to be reestablished, in that the land use rights to continued operation of the service station under the prior CUP and H-1 zone district were only interrupted by the necessity of completing soil remediation on the site prior to reestablishing the service station use.

The applicant's objective is to develop a gas station with a convenience store as an associated use, on the same site and with the same uses as the previous site development, to serve motorists on Interstate 580 on Grant Line Road and connecting local roads. The Project proposal was first presented to the Alameda County Planning Commission in 2008 as a request initiated by the Planning Director for a Determination by the Planning Commission relating to General Plan compliance or conformity for reconstruction of the service station and to consider addition of retail sales, fast food and coffee vendors. The Planning Commission deliberated the matter with a focus on the re-establishment of land use rights and the applicant's entitlement to rebuild the service station, or to develop it with uses that were permitted (or in the case of retail sales, restaurants and cafes, conditionally permitted) at the time it began soil remediation.

Following this discussion, the Commission approved a motion of determination, that the use had been an on-going use and a long-established site as a gas and service station, and that it was not abandoned for the purposes of categorizing it as a non-conforming use that could not be reestablished under the Zoning Ordinance (Sections 17.52.610 through 17.52.690). The Planning Commission also approved a motion to find that "if the use is a [legal] non-conforming use, then the accessory uses [should] be treated similarly [as legally non-conforming, and thus allowed]." Since 2008, the applicant has continued to coordinate with the County Department of Environmental Health, and the state DTSC, which determined in 2015 that reconstruction of the gas station could proceed.

The proposed Project's components are:

- A gas station that provides three grades of gasoline in addition to diesel #2 product and propane tank refills at six fuel dispensaries.
- A convenience store for sale of prepackaged food, beverages, hot and cold drinks, pre-packaged pastries and sundries. Additional uses such as fast food restaurants located inside the convenience store are not proposed.

The Project would occupy a total footprint of 35,675 square feet. Of this, the total building envelope would comprise of 9,942 square feet or 22% of the site, including a 2880-square foot fuel canopy that would cover 5 dispensers for retail fuel, a separate canopy of 1,250 square feet that would cover one dispenser for commercial diesel fuel along with a 5,812-square foot convenience store. Another 24,320 square feet (53.3% of the site) would be composed of impervious surfaces, including driveways, parking areas, fueling platforms, and other paved surfaces. The remaining 11,355 square feet, or 24.7% of the Project site, would be landscaped areas and the bio-retention areas (9,527 square feet for landscaping and 1,828 square feet for bioretention). **Figures 2, 3**, and **4** show, respectively, the plan and elevation views of the proposed Project.

The Project would include bio-retention basin/planters near the northeast, south, and west corners of the Project site to provide treatment of stormwater runoff from site pavement and rooftops (as shown in the Project's storm water control plan), to comply with the County's Municipal Regional Permit (MRP) for water quality management, issued by the state Regional Water Quality Control Board to the County. The project's impervious surfaces are summarized in the table below.

SITE AREA AND IMPERVIOUS SURFACES

Square Feet	Description	% of Total Site
35,675	Total impervious surface including roof and canopy	64.7
2,880	Fuel canopy	-
1,250	Diesel canopy	-
5,812	Convenience Store	-
7,699	Landscaping	14
1,828	Bio-retention pond	3.3
55,144	**Total site**	**100**

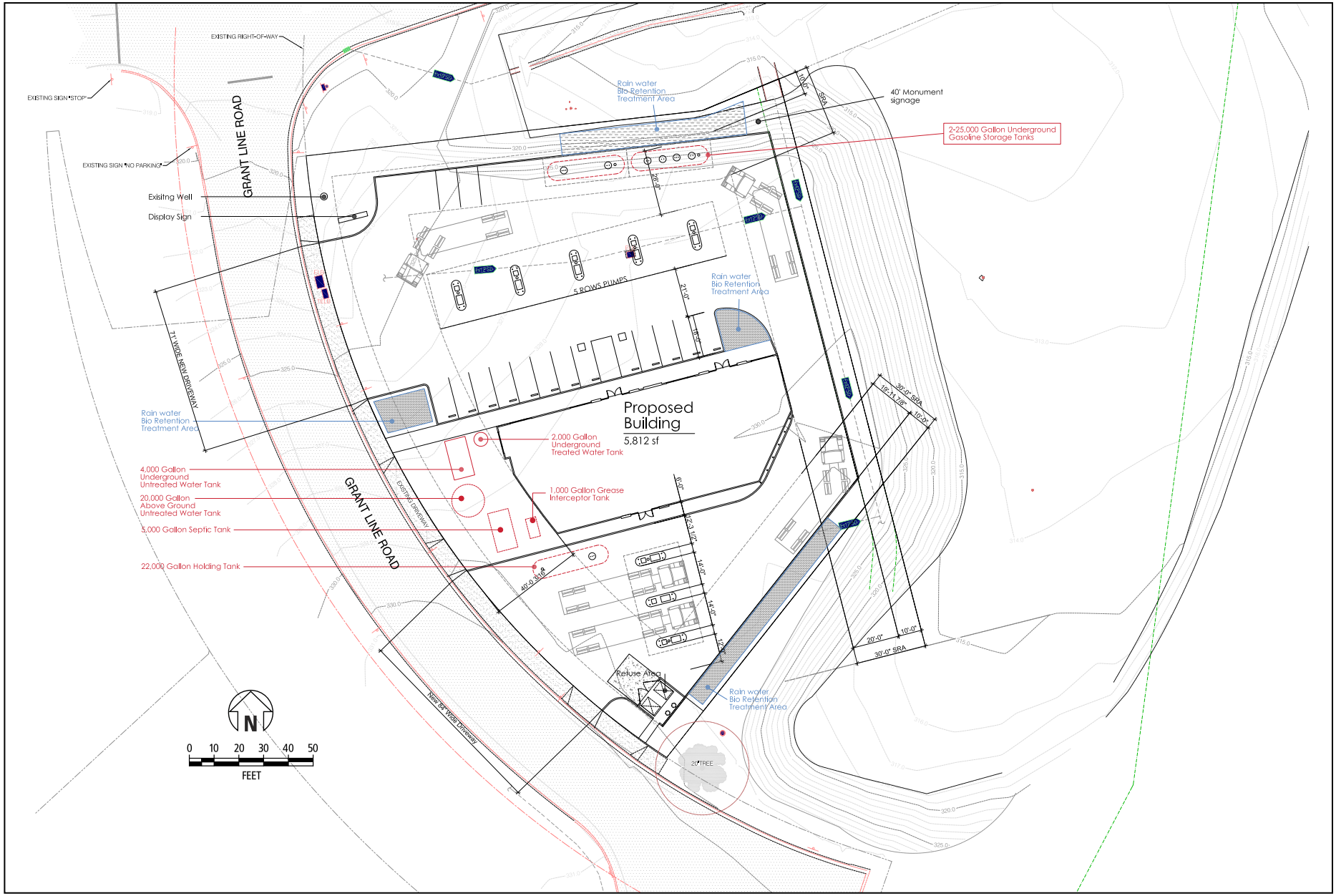
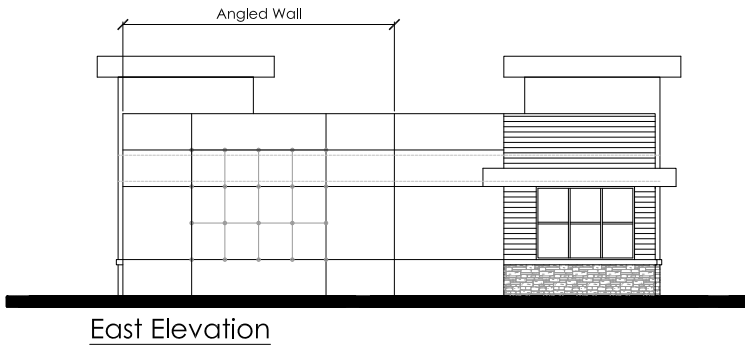


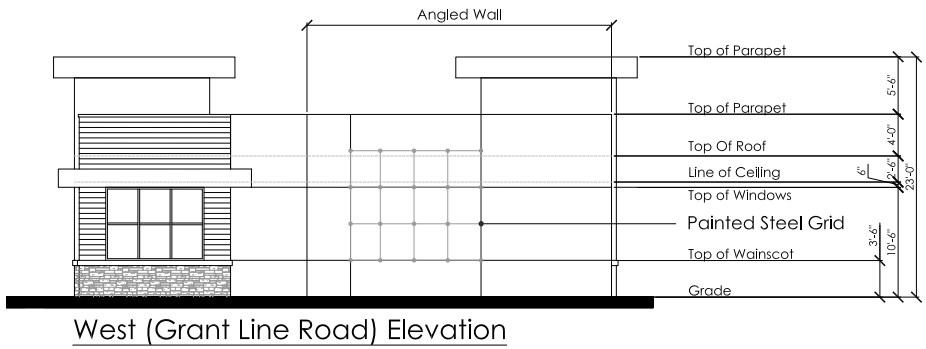
Figure 2
Project Site Plan

Source: Lee • Jagoe Architecture, Inc.

Figure 3
Gas Station Elevations

Source: Lee • Jagoe Architecture, Inc.





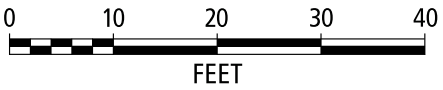


Figure 4
Convenience Store Elevations

Source: Lee • Jagoe Architecture, Inc.

The fuel-area canopy would be composed of metal panels, aluminum composite metal fascia, steel beams and columns. The convenience store would be constructed of wood with a cement plaster exterior finish. The building would receive natural light though north-westward-facing aluminum storefront windows and entry doors. No windows are planned on the other three sides; only one door at the side of the building is proposed. The proposed store floor plan provides for separate men's and women's restrooms, (one each) designed to meet ADA accessibility standards. The fuel area canopy is planned with a height of 20 feet (16'-6" vertical clearance), and the store would be a maximum of 23½ feet for a central architectural tower, but its principal parapet would match the height of the fuel area canopy at 20 feet.

Exterior lighting would be LED fixtures that are down-lit and fully shielded to avoid potential glare toward adjacent roadways and properties.

The gas station and convenience store are projected to generate approximately 400 customer car trips per day. The business is proposed to operate 24 hours a day, 365 days/year, operated by an average of 1.5 employees per shift (i.e., part time assistance during limited peak hours). Fuel delivery would occur 7 times per week and deliveries to the convenience store would occur once a week. Fuel deliveries would occur based on sales and demand and vary from day to day.

The Project includes two access points to the site, both off South Grant Line Road; one would be a new 40-foot wide entrance and exit driveway on the northwestern side of the site, and the other an existing 40-foot driveway along the southeast edge. Jess Ranch Road, a private ranch road, extends westward from the terminus of Grant Line Road.

The Project would include an accessible electrical vehicle charging stall (EVCS) and is proposed to also incorporate solar panels atop the convenience store and the fuel canopy that would generate 100% of the electrical power required for the facility. The facility also would include battery storage.

Signage would include a 40-foot tall pylon sign with standard branded gas and convenience store logos (see Figure 4).

Water services would be furnished through filtered well water from a new well on the gas station site. An approximately 5,000-gallon subsurface potable water tank would be placed on the site. A 20,000-gallon above-ground water supply tank is proposed, exclusively for fire-fighting purposes. The tank would include fittings for direct hook-up to fire trucks. Sewage waste would be stored temporarily in 2 subsurface septic tanks of 1,200 gallon each, and one subsurface holding tank of 10,000 gallons that would be pumped out by septic service truck approximately weekly (expected peak daily wastewater flow of 1,000 gallons/day would be generated). The locations of all of these tanks are shown on Figure 2, above.

Solid waste disposal would be furnished by Waste Management Inc. No natural gas service is planned. Electric services would be provided by Pacific Gas & Electric Co.; telephone service by SBC; fire protection by Alameda County Fire Department,

The proposed grading plan generally follows the existing topography of the site. Approximately 1700 cubic yards of material would be graded, with cut and fill balanced on the site.

Construction is anticipated to involve a two-month grading and site preparation phase, and a four-month construction phase, for a total construction period of six months. Construction is proposed to begin in the summer of 2023, or within six months of approval of the Project application by the County. All construction materials and equipment would be stored on the site and would be

removed after construction is complete. Approximately 5-8 workers would be on-site for each phase of construction.

9. **Setting and surrounding land uses:** The previously graded and filled property is primarily covered with artificial fill and has a sparse ground cover of weeds and grass. A few monitoring wells and drums for collected contaminated soils presently occupy the Project parcel. A shallow drainage swale flows easterly along the northern side of the site into an adjacent seasonal wetland area.

South Grant Line Road ends at the site and the widened segment adjacent to the property serves as an informal "Park and Ride" lot for commuters traveling into the San Francisco Bay Area. It has curb and gutter improvements on both sides, plus a sidewalk on the east side, bordering the Project site. There is an existing driveway curb cut (approximately 20-feet wide) for access to the site at the southwest corner of the Project site, and other curb cuts for Jess Ranch Road, which provides access to a rural residence, a recently approved composting facility, and a former wind energy operations and maintenance facility. Surrounding uses include grazing, rural residential parcels and wind energy production throughout the Altamont Pass area.

10. **Other public agencies whose approval may be required:**
California Department of Toxic Substances Control
State of California Regional Water Quality Control Board
State of California Division of Drinking Water
Alameda County Fire Department
Alameda County Public Works Agency
Alameda County Environmental Health Services Department

B. 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	[ ]	Agricultural Resources	[ ]	Air Quality
[X]	Biological Resources	[ ]	Cultural Resources	[ ]	Energy
[ ]	Geology/Soils	[X]	Hazards/Hazardous Materials	[X]	Hydrology/Water Quality
[ ]	Land Use/Planning	[ ]	Mineral Resources	[ ]	Noise
[ ]	Population/Housing	[ ]	Public Services	[ ]	Recreation
[ ]	Transportation	[ ]	Utilities/Service Systems	[ ]	Wildfire Hazards
[ ]	Mandatory Findings of Significance				

C. LEAD AGENCY 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.

[**X**] 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 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** (EIR) 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.

Signature	Date
Albert Lopez	Planning Director.
Name	Title

D. EVALUATION OF ENVIRONMENTAL EFFECTS:

The Environmental Checklist and discussion that follows is based on sample questions provided in the CEQA Guidelines (Appendix G) which focus on various individual concerns within 17 different broad environmental categories, such as air quality, climate change, cultural resources, land use, public services, noise and traffic (and arranged in alphabetical order). The Guidelines also provide specific direction and guidance for preparing responses to the Environmental Checklist. The sample questions are meant to be used to meet the requirements for an initial study when the criteria set forth in CEQA Guidelines have been met. Substantial evidence of potential environmental impacts that are not listed in the checklist must also be considered. The sample questions are intended to encourage thoughtful assessment of impacts, and do not necessarily represent thresholds of significance.

Each question in the Checklist requires a "yes" or "no" reply as to whether or not the Project will have a potentially significant environmental impact of a certain type, and allows for a conditional "no" response based on changes to the Project that the proponent and the Lead Agency agree to implement if the Project is approved, including mitigation measures to assure that potentially significant effects are avoided or reduced to less than significant levels. The Checklist table also provides for two other possible "no" responses based on information provided that, supported by citations and analysis of existing conditions, threshold(s) of significance used that the Project effects would be less than significant or have no potential for any effect or impact. Each Checklist table section, with all of the questions in each major environmental heading required by Appendix G, is followed by citations, information and/or discussion that supports that determination. Each possible answer to the questions in the Checklist, and the different type of discussion required, is discussed below:

a) Potentially Significant Impact. Checked if a discussion of the existing setting (including relevant regulations or policies pertaining to the subject) and Project characteristics with regard to the environmental topic demonstrates, based on substantial evidence, supporting information, previously prepared and adopted environmental documents, and specific criteria or thresholds used to assess significance, that the Project will have a potentially significant impact of the type described in the question.

b) Less Than Significant with Mitigation. Checked if the discussion of existing conditions and specific Project characteristics, also adequately supported with citations of relevant research or documents, determine that the Project clearly will or is likely to have particular physical impacts that will exceed the given threshold or criteria by which significance is determined, but that with the incorporation of clearly defined mitigation measures into the Project, that the Project applicant or proponent has agreed to, such impacts will be avoided or reduced to less-than-significant levels.

c) Less Than Significant Impact. Checked if a more detailed discussion of existing conditions and specific Project features, also citing relevant information, reports or studies, demonstrates that, while some effects may be discernible with regard to the individual environmental topic of the question, the effect would not exceed a threshold of significance which has been established by the Lead or a Responsible Agency. The discussion may note that due to the evidence that a given impact would not occur or would be less than significant, no mitigation measures are required.

d) No Impact. Checked if brief statements (one or two sentences) or cited reference materials (maps, reports or studies) clearly show that the type of impact could not be reasonably expected to occur due to the specific characteristics of the Project or its location (e.g. the Project falls outside the nearest fault rupture zone, or is several hundred feet from a 100-year flood zone, and relevant citations are provided). The referenced sources or information may also show that the impact simply does not apply to Projects like the one involved. A response to the question may also be "No Impact" with a brief explanation that the basis of adequately supported Project-specific factors or general standards

(e.g., the Project will not expose sensitive receptors to pollutants, based on a basic screening of the specific Project).

The discussions of the replies to the Checklist questions must take account of the whole action involved in the Project, including off-site as well as on-site effects, both cumulative and Project-level impacts, indirect and direct effects, and construction as well as operational impacts. Except when a "No Impact" reply is indicated, the discussion of each issue must identify:

a) The significance criteria or threshold, if any, used to evaluate each question; and

b) The mitigation measure identified, if any, to reduce the impact to less than significance, with sufficient description to briefly explain how they reduce the effect to a less than significant level.

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063(c)(3)(D) of the Guidelines). In this case, a brief discussion should identify the following:

a) Earlier Analysis Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the Project.

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

Discussion

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

The Project site is located in an area with unique scenic qualities that are experienced by thousands of daily commuters as well as by visitors to the San Francisco Bay Area. Interstate I-580 is one of the two highest-used highway gateways in and out of the Bay Area, and the lower foothill area around the site marks the general boundary between the coast ranges and the Central Valley. The scenic quality of open, gently rolling hills and long-distance views, however, is adversely affected by the high-tension power lines and towers that cross the vicinity on a north-south axis, and large wind turbines in the foreground and on the horizon. The site is west of two major high-tension power line corridors, and east of another such corridor. The power lines and pylons may represent visual cluttering or obfuscation of the otherwise attractive hills. While the wind turbines may be perceived positively or of interest to some viewers, they also may be seen as negative features. The area is also almost entirely treeless, with scattered residences and agricultural buildings, as well as a large warehouse visible in the distance to the south of the Project site. The freeway and directional signage are also prominent components of the visual setting. Although there are some aesthetically negative features in the landscape, the overall aesthetic quality of the area is considered neutral, being neither exceptionally high or broadly negative (see Figure 5).

The Project site itself is a flat site in a shallow basin on the south side of I-580 by a diamond-style freeway interchange, and between two minor ridges, so that it is visible from I-580 only for a distance of approximately 2,000 feet. The site is distinguished by the concentration of casual car-pool vehicles parked along Grant Line Road bordering it. The site is also only visible from I-580 when viewed from east-bound Interstate 580 and above the site. The view toward the site from I-580 as well as from Grant Line Road directly bordering the site is dominated on weekdays by the casual carpool parking area (normally an estimated fifty or more cars), and by trucks stopped on the eastbound off-ramp (typically to cool their brakes from the descent of Altamont Pass).

Development of the service station and convenience store would alter the view within the corridor of the site, as seen by passing traffic on both I-580 and Grant Line Road, by introducing a commercial use in an otherwise semi-rural vicinity. Although a gas station was previously on the site for about 20 years prior to 1991, it has been absent for almost 30 years. The current proposal includes one 40’ tall sign and a 20’

tallcanopy and the main body of the store, with just a single, proportionally modest tower element (an additional 3½ feet in height). Signage would be limited to the canopy parapet, the store 'tower', and to monument-type signage with fuel prices and general business identification (76 Station). The architecture of the store includes attractive and appropriate faux stone work column features and stucco molding. The structures would therefore not obstruct any long-distance view from I-580, and would only represent the change in land use from an open field to a service station with a convenience store.

There is no scenic vista that would be obscured by or negatively impacted by the Project. Therefore, the impact on a scenic vista are considered ***less than significant***.

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

I-580 and Grant Line Road are identified respectively as 'Scenic Freeways and Expressways' and 'Major Rural Roads' in the *Scenic Route Element of the Alameda County General Plan* (1966), but the Scenic Route Element policies are primarily focused on preserving and enhancing scenic views of areas of outstanding natural beauty, such as the principle to provide "A variety of experiences such as changes in terrain, vegetation, land forms and view" and linking recreational areas within the County. The *Scenic Route Element* further classifies the elements of scenic routes by features of the right-of-way, the adjacent corridor (within 1,000 feet of the right-of-way), and the areas beyond (to the horizon in any given view from a designated route). The *Element* provides policy direction that development controls should be applied to scenic corridors to preserve and enhance views or maintain unobstructed distant views. These controls are meant to "restrict unsightly use of land, control height of structures, and provide site design and architectural guidance along the entire scenic corridor." (*Scenic Route Element*, p. 4.)

With respect to State Scenic Highways, Interstate I-580 bordering the Project site, from about 0.4 miles east of the site and extending west about 35 miles to the Oakland city limits is identified as an Eligible State Scenic Route, but is not officially designated as such. Interstate I-205, which connects to I-580 at a point 0.4 miles east of the site, is a formally designated State Scenic Highway, and is a connector section of Interstate 5 within Alameda and San Joaquin Counties. Therefore, there are no scenic resources within a state scenic highway corridor on or near the Project site, and therefore the Project would have ***no impact*** on scenic resources within a designated scenic highway (however, see discussion above of the *Scenic Route Element*).

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The Project is proposed to be developed on a generally flat site on the eastern side of the cul-de-sac terminus of Grant Line Road, south of the eastbound on-ramp to Interstate 580. As discussed above, the site is located in a small, gently sloping small valley between four hills. It is in the Altamont Pass area on the eastern edge of Alameda County, known for its wind turbine farms. The visual character of the Project area is comprised of open, rolling grasslands that are green during the rainy season and straw colored in the dry months of the year. The area just to the north of the site is visually dominated by the 8-lane Interstate 580; to the south it is bounded by low hills, to the west by several farm and wind energy service buildings and the wind turbines of Altamont Pass and to the east by rolling hills and high-tension power lines, and pylon towers. This segment of Grant Line Road serves as an informal "Park and Ride" lot for commuters coming into the San Francisco Bay Area, so weekday views include parked cars along the roadway. The site is fenced with barbed wire and is vacant except for monitoring-well collection tank that occupies a portion of the center of the site, and some storage drums. The monitoring wells were placed as part of the remediation of soil contamination from the previous service station use; they would be removed upon completion of remediation activities.

The proposed facility would include a 20-foot-high, single-story convenience store with a plaster finish and a paint scheme that is intended to blend in with the surroundings during the dry months, with a mix of light brown and brown. The facilities would also include a canopy over the fueling area. The convenience store would be similar in scale to a large house and would be situated in a small shallow basin surrounded by hills, rather than on a ridgeline where it could adversely affect a longer distance view. As demonstrated in the visual simulations of the Project, Figure 5, East-bound View (Day), the facility would have a relatively low profile and small in scale compared to the surrounding hillsides. However, as there has been no commercial use of this site in over 30 years, the reestablishment of a gas station on the site and the addition of an additional commercial use (convenience store) would represent a substantial alteration in the visual character of the site and its vicinity. On balance, combined with the casual carpool, truck parking, nearby power line corridors and agricultural buildings, the visual impact on the vicinity's rural character to passing motorists on I-580 and those using the interchange with Grant Line Road would be ***less than significant***.

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

The Project site is in a relatively dark area of the Altamont Pass area with no urban uses, but is well lit generally at nighttime by street and highway lights and passing traffic lights. The Project site would be illuminated at night at a level that would be noticeable to motorists on I-580. However, the Project site would be illuminated by LED lighting, rather than by metal halide or low-pressure sodium fixtures, as this choice would have the least glare impact. The selected fixtures would be down-lit and fully shielded to avoid glare and light spillage to motorists on I-580 and onto adjacent properties. The visual impact of the proposed Project with these fixtures would be less than significant, as shown in the visual simulations of the Project by night in Figure 6, which represents nighttime east- bound views of the facility. The introduction of outdoor lighting for the proposed facility thus represents a ***less-than-significant*** light and glare impact. Associated glare and night lighting impacts in a potential wildlife corridor/habitat are addressed in Impact BIO-6 in the Biological Resources Section of this Initial Study.

Existing Site

Site with Project

Figure 5
East-bound Daytime View from Interstate 580

Source: Square One Productions

Existing Site

Site with Project

Figure 6
East-bound Nighttime View from Interstate 580

Source: Square One Productions

2. AGRICULTURE AND FOREST RESOURCES Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant with Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				x
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				x
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))?				x
d) Result in the loss of forest land or conversion of forest land to non-forest use?				x
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				x

Discussion

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

and

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

Based upon a review of the *Alameda County General Plan Conservation Element*, Map of Important Farmlands, and Map of Agricultural Preserves, there would be a ***less than significant*** impact to agricultural resources because the site is not considered Important Farmland, as defined by the California Resources Agency, nor is it protected under a California Land Conservation (Williamson Act) contract. The Project site is classified as "Grazing Lands" per the California Department of Conservation, Farmland Mapping and Monitoring Program and the Alameda County Important Farmland 2008 Map. Although the Project site is designated Large Parcel Agriculture by the East County Area Plan (both before and after approval of Measure D, the *Save Agriculture and Open Space* initiative approved by County voters in 2000), development of the site would not be in conflict with this designation, because of its prior use as a service station and its consequent exemption from Measure D's requirements. (See Section 10, Land Use and Planning, of this Initial Study for further explanation.) Functionally, the Project area is a brownfield redevelopment site, i.e., it is composed of disturbed non-agricultural lands with some prior soil/groundwater contamination from gasoline seepage from underground tanks due to its

prior use as a service station. Therefore, the project would have no impact to Important Farmland or Williamson Act-designated lands.

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

The Project site is not under a California Land Conservation (Williamson Act) contract

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

and

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

No forest lands are located within or adjacent to the Project area (which is entirely in grasslands) and, as such, the proposed Project would not involve any loss or conversion of forest land or lands currently under timber preserve.

3. AIR QUALITY Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant with Mitigation	NO: Less Than Significant Impact	NO: 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			×	
c) Expose sensitive receptors to substantial pollutant concentrations?			×	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			×	

Background

The Project site is on the eastern fringe of the Altamont Hills, within the Central Valley climatological basin, which is locally or sub-regionally recognized by the California Air Resources Board (CARB) as the San Joaquin Valley Air Basin (SJVAB). However, the Project site is within Alameda County and as such it is within the administrative jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which monitors and prepares air quality plans for the San Francisco Bay Area Air Basin, including the Livermore Valley climatological sub-region of the Bay Area.

Air pollution potential is high in the Livermore and Central Valleys, especially in the summer and fall when high temperatures increase the potential for ozone formation. The hills surrounding Livermore Valley and the mountains east of the Central Valley not only trap locally generated ozone, but can receive ozone and ozone precursor intrusions from San Francisco, Alameda, Contra Costa and Santa Clara counties. During the winter, strong surface-based temperature inversions (i.e., colder air near the ground, capped by warmer air aloft, which limits the vertical dispersion of air pollutants) often occur. Then, pollutants such as carbon monoxide and particulate matter, generated by motor vehicles, fireplaces/woodstoves and agricultural burning, can become concentrated. Two types of particulate matter are of particular concern as air pollutants: particulate matter less than 10 microns in diameter (PM_{10}) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$).

The Bay Area is currently designated "nonattainment" for state and national (1-hour and 8-hour averages, respectively) ozone standards, for the state PM_{10} standards, for state and national (annual and 24-hour averages, respectively) $PM_{2.5}$ standards, and "attainment" or "unclassifiable" with respect to ambient air quality standards for other pollutants. The CARB and the many local Air Districts maintain many air quality monitoring stations that continually measure the ambient concentrations of major air pollutants. The closest such monitoring station to the Project site is located at 793 Rincon Avenue in central Livermore, about 13 miles to the west-southwest of the Project site. Violations of the ozone and particulate standards have been recorded at this monitoring station on at least a few days a year over the most recent three years for which data is available, as shown in Table 1.

TABLE 1: LOCAL AIR QUALITY MONITORING DATA

Pollutant	Air Quality Standard	Maximum Concentrations and Number of Days Standards Exceeded		
		2019	2020	2021
Ozone (Livermore)				
8-hour National standard (ppb)	70 ppb	78	77	86
# Days 8-hour standard exceeded		7	2	9
8-hour California standard (ppb)	70 ppb	79	78	86
# Days 8-hour California standard exceeded	70 ppb	7	2	9
Nitrogen Dioxide (Livermore)				
Maximum 1-hour concentration (ppb)	180 ppb	47	45	36
# Days 1-hour California standard exceeded	180 ppb	0	0	0
# Days 8-hour national standard exceeded	100 ppb	0	0	0
Suspended Fine Particulates ($PM_{2.5}$) (Livermore)				
Maximum 24-hour Nat'l standard ($\mu g/m^3$)	35 $\mu g/m^3$	28.8	122.0	43.5
# Days national 24-hour standard exceeded		0	17	2

Notes:
$\mu g/m^3$ = micrograms per cubic meter ppb = parts per billion. SIP = State Implementation Plan

*Source: CARB iADAM: Air Quality Data Statistics*https://www.arb.ca.gov/adam/

The Livermore Valley contains a considerable number of stationary industrial/commercial air pollution sources that have air pollutant emissions substantial enough to require that they operate under BAAQMD air permits.[1] Most are in central Livermore and along the I-580 corridor, but none are within a 1000-foot radius of the Project site. The only major local source of air pollutants affecting the Project site is I-580, which passes just north of the Project site.

There are many other chemical compounds that are commonly emitted into the air and are regulated as toxic air contaminants (TACs). In the Bay Area, the majority of the estimated carcinogenic/chronic health risk can be attributed to relatively few TACs, the most important being particulate matter from diesel-fueled engines (DPM). The BAAQMD has identified DPM as being responsible for about 80 percent of the cumulative cancer risk from all airborne TAC exposures.

This air quality analysis addressing the Initial Study air quality checklist items above was performed using the methodologies recommended in the BAAQMD's 2017 *CEQA Air Quality Guidelines*.[2] The criteria air pollutants evaluated in this Initial Study are: reactive organic compounds (ROG) and nitrogen dioxide (NO_2) (both being precursors to ozone formation), inhalable particulates (PM_{10}), and fine particulates ($PM_{2.5}$). Health risks associated with Project-specific and cumulative exposures to DPM are also evaluated.

[1] BAAQMD Stationary Source Screening Map; https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3

According to the *CEQA Air Quality Guidelines*, the Project would have a significant impact and cause or contribute to a local air quality standard violation or making a cumulatively considerable contribution to a regional air quality problem if its criteria pollutant emissions would exceed any of the thresholds during construction or operation as presented in Table 2.

TABLE 2: CEQA AIR QUALITY SIGNIFICANCE THRESHOLDS FOR CRITERIA AIR POLLUTANT EMISSIONS

Pollutant	Construction Average Daily (lbs./day)	Operational	
		Average Daily (lbs./day)	Maximum Annual (tons/year)
Reactive Organic Gases (ROG)	54	54	10
Oxides of Nitrogen (NO_x)	54	54	10
Inhalable Particulate Matter (PM_{10})	82 (exhaust)	82	15
Fine Inhalable Particulate Matter ($PM_{2.5}$)	54 (exhaust)	54	10
PM_{10}/$PM_{2.5}$ (Fugitive Dust)	BMPs[a]	N/A	N/A

Notes: BMPs = Best Management Practices
N/A = Not Applicable

[a] If BAAQMD Best Management Practices (BMPs) for fugitive dust control are implemented during construction, the impacts of such residual emissions are considered to be less than significant.

Source: Bay Area Air Quality Management District, *2017, California Environmental Quality Act Air Quality Guidelines*.

The 2017 *CEQA Air Quality Guidelines* establish a relevant zone of influence for an assessment of Project-level and cumulative health risk from TAC exposure to an area within 1,000 feet of a Project site. Project construction-related or Project operational TAC impacts to sensitive receptors within the zone that exceed any of the following thresholds are considered significant:

- An excess cancer risk level of more than 10 in one million, or a non-cancer hazard index greater than 1.0.
- An incremental increase of greater than 0.3 micrograms per cubic meter (µg/m3) for annual average $PM_{2.5}$ concentrations.

Cumulative impacts from TACs emitted from freeways, state highways or high volume roadways (i.e., the latter defined as having traffic volumes of 10,000 vehicles or more per day or 1,000 trucks per day), and from all BAAQMD-permitted stationary sources within the zone to sensitive receptors within the zone that exceed any of the following thresholds are considered cumulatively significant:

- A combined excess cancer risk level of more than 100 in one million.
- A combined non-cancer hazard index greater than 10.0.
- A combined incremental increase in annual average $PM_{2.5}$ concentrations greater than 0.8 $\mu g/m^3$.

Discussion

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

The Bay Area Air Quality Management District (BAAQMD) adopted its 2017 *Clean Air Plan* (CAP) in May 2017, in accordance with the requirements of the California Clean Air Act (CCAA) to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter and air toxics (TACs) in a single, integrated plan; and establish emission control measures to be adopted or implemented. The primary goals of the 2017 Bay Area CAP are to attain/maintain air quality standards, reduce population exposure to air pollutants, and protect public health in the Bay Area.

Compliance with BAAQMD-approved CEQA thresholds of significance are the conditions for determining that the Project would be consistent with all adopted control measures and would not interfere with the attainment of CAP goals. Also, the proposed Project is a convenience store with motor vehicle fueling facilities. It would serve existing and future traffic on I-580 and would not substantially affect Bay Area (or Central Valley) housing, employment, and population projections that the CAP is based on. As the analysis below demonstrates, the Project impacts would be ***less than significant*** and without unavoidable adverse air quality impacts because it meets all BAAQMD CEQA thresholds.

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

Project Construction-Related Impacts

Project construction of the proposed motor vehicle fueling station/convenience store is expected to take about nine months and be complete in 2021. It would generate temporary emissions of criteria pollutants in equipment exhaust and fugitive dust from equipment and material movement. The *CEQA Air Quality Guidelines* recommend quantification of construction-related exhaust emissions and comparison of those emissions to the CEQA significance thresholds. Thus, CalEEMod (California Emissions Estimator Model, Version 2022.1) was used to quantify construction-related emissions of criteria pollutants.

Table 3 provides the estimated short-term Project construction equipment, supply/debris haul truck and worker vehicle commute emissions. The maximum daily construction period emissions were compared to the CEQA significance thresholds. All construction-related emissions would be well below the thresholds.

TABLE 3: PROJECT CONSTRUCTION CRITERIA POLLUTANT EMISSIONS (maximum pounds per day)

Construction Period	ROG	NOx	PM_{10} (Exhaust)	$PM_{2.5}$ (Exhaust)
Year 2023-24	6.4	12.6	0.60	0.55
Significance Thresholds	54	54	82	54
Significant Impact?	No	No	No	No

The *CEQA Air Quality Guidelines* require a number of construction Best Management Practices (BMPs) to control fugitive dust, and the use of paints and coatings compliant with BAAQMD volatile organic compounds (VOC) control regulations. Thus, the following measures must be implemented by the Project construction contractor:

***BAAQMD Required Dust Control Measures*:** The construction contractor shall reduce construction-related air pollutant emissions by implementing BAAQMD's basic fugitive dust control measures, including:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved surfaces shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- A publicly-visible sign shall be posted with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action with 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

BAAQMD Regulation 8, Rule 3 for Architectural Coatings: Emissions of volatile organic compounds (VOC) due to the use of architectural coatings are regulated by the limits contained in Regulation 8: Organic Compounds, Rule 3: Architectural Coatings (Rule 8-3). Rule 8-3 was revised to include more stringent VOC limit requirements. The revised VOC architectural coating limits, which went into effect on November 21, 2001.

- The construction contractor shall use paints and solvents with a VOC content of 100 grams per liter or less for interior and 150 grams per liter or less for exterior surfaces.

Project Operational Impacts

Air Pollutant Emissions. CalEEMod was also used to estimate emissions that would be associated with Project operation (i.e., motor vehicle use, space and water heating, maintenance equipment etc.) expected to reach full capacity in the year 2024.

Estimated operational daily and annual emissions that would be produced by the Project are presented in Tables 4 and 5 and compared to the CEQA thresholds of significance. As indicated, the estimated Project operational emissions would be well below the thresholds and would be *less than significant*.

As described above, project-related emissions would be below the BAAQMD significance thresholds. Also, Project-specific and cumulative health risks would be below the BAAQMD significance thresholds (see Item c discussion below). Therefore, the Project would not make cumulatively considerable contributions to the Bay Area's regional problems with ozone, particulate matter or TAC health risks. Thus, cumulative emission impacts would be ***less than significant***.

c) Would the Project Expose sensitive receptors to substantial pollutant concentrations?

Ambient toxic air contaminant (TAC) concentrations produced by Project sources and other significant local TAC sources within 1000 feet of a Project site would be considerd "substantial" if they exceed the CEQA health risk thresholds at senstive receptors within this zone. Local land uses around the Project site are largely agricultural, with the closest residential uses greater than 1000 feet from the Project site.

TABLE 4: PROJECT DAILY OPERATIONAL CRITERIA POLLUTANT EMISSIONS (maximum pounds per day)

Emission Source	ROG	NO_x	PM_{10}	$PM_{2.5}$
Total Buildout - CalEEMod Default				
Area	0.17	< 0.005	< 0.005	< 0.005
Energy Use	< 0.005	0.04	< 0.005	< 0.005
Motor Vehicle	11.80	8.91	5.47	1.05
Total	**12.00**	**8.96**	**5.47**	**1.05**
Total Buildout - Project Trip Rates				
Area	0.17	0.00	0.00	0.00
Energy Use	0.00	0.04	0.00	0.00
Motor Vehicle	7.42	5.60	3.44	0.66
Total	**7.59**	**5.64**	**3.44**	**0.66**
Total Buildout - Project Trip Rates No Passby				
Area	0.17	0.00	0.00	0.00
Energy Use	0.00	0.04	0.00	0.00
Motor Vehicle	3.27	2.47	1.51	0.29
Total	**3.44**	**2.51**	**1.51**	**0.29**
Significance Thresholds	**54**	**54**	**82**	**54**
Significant Impact?	**No**	**No**	**No**	**No**

TABLE 5: PROJECT ANNUAL OPERATIONAL CRITERIA POLLUTANT EMISSIONS (tons per year)

Emission Source	ROG	NO_x	PM_{10}	$PM_{2.5}$
Total Buildout - CalEEMod Default				
Area	0.03	< 0.005	< 0.005	< 0.005
Energy Use	< 0.005	0.01	< 0.005	< 0.005
Motor Vehicle	2.16	1.63	1.00	0.19
Total	**2.19**	**1.63**	**1.00**	**0.19**
Total Buildout - Project Trip Rates				
Area	0.03	0.00	0.00	0.00
Energy Use	0.00	0.01	0.00	0.00
Motor Vehicle	1.36	1.03	0.63	0.12
Total	**1.39**	**1.04**	**0.63**	**0.12**
Total Buildout - Project Trip Rates No Pass by				
Area	0.03	0.00	0.00	0.00
Energy Use	0.00	0.01	0.00	0.00
Motor Vehicle	0.60	0.45	0.28	0.05

Total	**0.63**	**0.46**	**0.28**	**0.05**
Significance Thresholds	**10**	**10**	**15**	**10**
Significant Impact?	**No**	**No**	**No**	**No**

Project Construction-Related TAC Impacts

Cancer risk is the lifetime probability of developing cancer from exposure to carcinogenic substances. Following health risk assessment (HRA) guidelines established by California Office of Environmental Health Hazard Assessment (OEHHA) and the BAAQMD in *Recommended Methods for Screening and Modeling Local Risks and Hazards*, incremental cancer risks can be estimated by applying established toxicity factors to modeled TAC concentrations at local sensitive receptors. The maximum cancer risk from Project construction DPM would not exceed the BAAQMD Project-level threshold of ten per million because all Project construction would take place greater than 1000 feet from the nearest residences.

Adverse health impacts unrelated to cancer are measured using a hazard index (HI), which is defined as the ratio of the Project's incremental TAC exposure concentration to a published reference exposure level (REL) as determined by OEHHA. If the HI is greater than 1.0, then the impact is considered to be significant. The HI from Project construction DPM for the closest residential receptor would not exceed the BAAQMD Project-level threshold of 1.0 for the same reason cited above for cancer risk.

Project's maximum annual $PM_{2.5}$ concentration increment would not exceed the BAAQMD threshold of 0.3 $\mu g/m^3$ for the same reason cited above for cancer risk and HI.

Thus, all Project construction-related TAC impacts would be ***less than significant***.

Cumulative TAC Impacts

The *CEQA Air Quality Guidelines* method for determining cumulative TAC health risk requires the tallying of risk from Project sources and all permitted stationary sources and major roadways within 1,000 feet of a Project site and adding them for comparison with the cumulative health risk thresholds.

A database of permitted stationary emissions sources, major roadways and their associated health risks is available online from the BAAQMD through the Stationary Source Screening Map. There are no stationary TAC sources within 1000 feet of the Project site. The only major TAC source located within 1,000 feet of the Project site is I-580. But there are no resident sensitive receptors on the Project site. Thus, cumulative TAC impacts would be ***less than significant***.

d) Would the Project create objectionable odors affecting a substantial number of people?

The BAAQMD's significance criteria for odors are subjective and are based on the number of odor complaints generated by a Project. Generally, the BAAQMD considers any Project with the potential to frequently expose members of the public to objectionable odors to cause a significant impact. With respect to the proposed Project, diesel-fueled construction equipment and operational truck exhaust would be odorous when experienced in close range. However, with the more-than-1000-foot distance separating the Project construction areas and operation vehicle fueling facilities from the closest existing residence, odor impacts would be unlikely. Therefore, odor impacts associated with the Project would be ***less than significant***.

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4. BIOLOGICAL RESOURCES Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: 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?		x		
b) Have a substantial adverse effect on any riparian, aquatic or wetland habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?				x
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		x		
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?		x		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			x	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			x	

Background

A biological resources assessment of the Project site was prepared by Michael Marangio, consulting biologist, including site surveys conducted on April 16, May 24, and July 14, 2010, and March 1 and 9, 2017. . Site conditions were verified and the biological resources assessment was updated by Gabe Saron, staff biologist with Vollmar Natural Lands Consulting ('VNLC'), on February 8, 2023 and Cassie Pinnell, senior biologist with VNLC on February 23, 2023.

The existing site topography is generally flat, sloping to the north and west, with a drainage swale along the site's northern boundary within Caltrans right-of-way. The elevation of the property is higher relative to the surrounding topography along its southeastern, eastern and northeastern property boundaries. A rocky ridge is present about 400 feet east of the southeastern corner of the Project site (Google Earth 2009).

Regulatory Overview

Special status species are native species that have been accorded special legal protection because of concern for their continued existence. The U.S. Fish and Wildlife Service (USFWS) administers the federal Endangered Species Act (ESA). The ESA provides a process for listing species as either threatened or endangered, and methods of protecting listed species. Pursuant to the requirements of the ESA, an agency reviewing a proposed Project within its jurisdiction must determine whether any federally listed threatened or endangered species may be present in the Project area and determine whether the Project will have a potentially significant impact on these species. If endangered species are

present in the Project area, a consultation with the USFWS may be required under Section 7 of the ESA. Section 7 consultation requires a nexus to federal involvement with the Project such as a permit for fill of wetlands through the U.S. Army Corps of Engineers. If a formal consultation is required, the Project proponent prepares a biological assessment to evaluate the potential impacts of the Project on the listed species known or likely to be present on the site. After review of the biological assessment the USFWS issues a Biological Opinion (BO), a report that evaluates whether the Project will jeopardize the continued existence of the species involved. The BO includes the conditions under which the Project may proceed. An incidental take permit may be included to identify the number of listed species allowed to be harmed by Project activities.

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA). State threatened and endangered species are fully protected against take. "Species of special concern" is an informal designation used by CDFW for some declining wildlife species. Pursuant to the requirements of CESA, an agency reviewing a proposed Project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the study area and determine whether the Project will have a potentially significant impact on such species.

Certain animal species receive protection under the Bald Eagle Protection Act and the Migratory Bird Treaty Act (16 U.S.C. 703-711). The Fish & Game Code of California provides protection for "fully protected birds" (§ 3511), "fully protected mammals" (§ 4700), "fully protected reptiles and amphibians" (§ 5050) and "fully protected fish" (§ 5515). The California Code of Federal Regulations (Title 14) prohibits the take of Protected amphibians (Chapter 5 §41), Protected reptiles (Chapter 5 §42) and Protected furbearers (Chapter 5 §460). Additional definitions are given in the California Environmental Quality Act Section 15380(d).

The California Native Plant Society (CNPS) has developed an inventory of California's sensitive plant species (CNPS, 2023). This inventory summarizes information on the distribution, rarity, and endangerment of California's vascular plants. The inventory is divided into four lists based on the rarity of the species. In addition, the CNDDB provides an inventory of plant communities that are considered sensitive.

The Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs. California Fish and Game (CFG) Code 3503 makes it illegal to destroy any birds' nest or any birds' eggs that are protected under the MBTA. CFG Code 3503.5 further protects all birds in the orders *Falconiformes* and *Strigiformes* (birds of prey, such as hawks and owls) and their eggs and nests from any form of take.

Vegetation

The Project site has been disturbed as a result of the presence of a gas station and its subsequent removal 32 years ago. The vegetation on the site thus consists of species characteristic of "ruderal" or disturbed habitat. That is, it is a non-native, annual grassland made up of primarily weedy species including wild oat (*Avena fatua*), red brome (*Bromus rubens*), soft chess (*Bromus mollis*), Mediterranean barley (*Hordeum marinum gussoneanum*), redstem filaree (*Erodium cicutarium*), yellow sweetclover (*Melilotus indica*), wildradish (*Raphanus sativus*), prickly lettuce (*Lactuca serriola*), cheeseweed (*Malva parviflora*), white horehound (*Marrubium vulgare*), red clover (*Trifolium pratense*), yellow starthistle (*Centaurea solstitialis*), broadleaved pepperweed (*Lepidium latifolium*), black mustard (*Brassica nigra*). A few native species that were observed include Common fiddleneck (*Amsinckia menziesii*), purple owl's

clover (*Castilleja exserta*) and Pacific gumplant (*Grindelia stricta*); it is part of the annual grassland series as described by Sawyer and Keeler-Wolf (1995).

Invasive Plants

Broadleaved pepperweed, which is found on site, is an invasive weed introduced from Eurasia. It is an aggressive invader of coastal and interior wetlands throughout California. It forms dense stands that exclude other plants, including natives. For this reason, it is rated as "high" by the California Invasive Plant Council (Cal-IPC). It is designated as a species that has severe impacts on abiotic ecosystem processes and plant communities. Perennial pepperweed reproduces from seed, as well as from pieces of rootstock. Due to these factors pepperweed populations throughout California have expanded over the past 25 years, and the plant has significantly increased its overall range (Cal-IPC 2023). Broadleaved pepperweed was noted in 2017, but not detected during the 2023 survey. This may be due to the timing of the 2023 survey early in the growing season.

Yellow star thistle is also present on the site and is rated as "High" by Cal-IPC. This plant is native to southern Europe and western Eurasia. Human activities are the primary mechanisms for the long-distance spread of yellow star thistle seed. Seed is transported in large amounts by road maintenance equipment and on the undercarriage of vehicles. The movement of contaminated hay and uncertified seed is also an important long-distance transportation mechanism. Once at a new location, seed is transported in lesser amounts and over short to medium distances by animals and humans. Dense infestations of yellow star thistle displace native plants and animals, threatening natural ecosystems and nature reserves (Cal-IPC 2023).

Wildlife

The Project site provides habitat for wildlife species that commonly occur in disturbed grassland communities. A Western fence lizard (*Sceloporus occidentalis*) was observed at the southern corner of the site, and a dead gopher snake (*Pituophis catenifer*) elsewhere on the site. Avian species observed included Western meadowlark (*Sturnella neglecta*), turkey vulture (*Cathartes aura*), and American crow (*Corvus brachyrhynchos*). The seasonal wetland directly northeast of the site was observed to support mallard (*Anas platyrhynchos*), killdeer (*Charadrius vociferus*), and black phoebe (*Sayornis nigricans*). Evidence for the presence of mammal species include tunnels of California ground squirrel (*Spermophilus beecheyi*), California vole (*Microtus californicus*) and Botta's pocket gopher (*Thomomys bottae*).

Burrows being used by unidentified canids (e.g., coyote or fox) were observed along the eastern perimeter of the property on July 14, 2010. Evidence for digging activity of canids at ground squirrel burrows were also noted on the sloping ground to the east on March 1, 2017. However, no evidence of canid or ground squirrel burrows was identified on the site on the February 2023 site survey.

Discussion

a) **Special Status Species.** Based on the California Natural Diversity Data Base (CNDDB, 2022) a total of 22 special-status animal species have been recorded within a five-mile radius of the Project site. Of these, none were detected during the biological reconnaissance surveys for the Project. Thirteen of the species are not expected to occur because of a lack of suitable habitat. The remaining nine species are considered to have a low or moderate potential to occur on site, mostly in the capacity of potential dispersal or occasional foraging, due to the highly disturbed condition of the site. These include: California tiger salamander (*Ambystoma californiense*); California red-legged frog (*Rana draytonii*); Western pond turtle (*Emys marmorata*); Short-eared owl (*Asio flammeus*); Western burrowing owl

(*Athene cunicularia*); Northern harrier (*Circus cyaneus*); California horned lark (*Eremophila alpestris*); American badger (*Taxidea taxus*); and San Joaquin kit fox (*Vulpes macrotis mutica*).

A summary of the formal status, habitat affinities, and potential for occurrence within the Project area for each of the potential special status animal species is presented in **Table 6**; their lifecycle requirements and potential for Project-induced impacts are described below.

Table 6. Special Status Animal Species Known from the Region

Common Name	Scientific Name	Status Fed/CA	Habitat in California	Potential for Occurrence On Site
Invertebrates				
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT/None	Sandstone depression pools in grassland	None. No suitable habitat onsite
curved-foot hygrotus diving beetle	*Hygrotus curvipes*	None/ None	Aquatic beetle found in stock ponds and vernal pools	None. No aquatic habitat present on site
California linderiella	*Linderiella occidentalis*	None/ None	Sandstone depression pools in grassland	None. No suitable habitat onsite
Amphibians				
California tiger salamander	*Ambystoma californiense*	FT/ST	Vernal pools and temporary ponds for breeding, rodent burrows	Low. Suitable habitat near the Project site. Upland dispersal possible across site, but no burrow refugia. Site is of reduced suitability compared to surrounding landscape.
California red-legged frog	*Rana draytonii*	FT/ CSSC	Lowlands and foothills with deep water and dense emergent riparian	Low. Upland dispersal possible across site. Suitable aquatic habitat not present on site. Site is of reduced suitability compared to surrounding landscape.
Western spadefoot toad	*Spea hammondii*	None/ CSSC	Grasslands and occasionally in valley-foothill hardwood woodlands. Vernal pools or pools within streams for egg-laying; loose soils	Not expected. Neither suitable wetland nor upland loose soils are present.
Reptiles				
California glossy snake	*Arizona elegans occidentalis*	None/ CSSC	Chaparral, sagebrush, valley-foothill hardwood, pine-juniper and annual grassland habitats.	Not expected. Could possibly venture from surrounding annual grasslands nearby, but site is highly disturbed and of reduced suitability compared to surrounding landscape.
Western pond turtle	*Emys marmorata*	None/ CSSC	Ponds, marshes, streams, irrigation ditches with basking sites	Low. Marginal upland breeding habitat is present on site, though of very low quality. Site is within dispersal distance from suitable aquatic habitat.

Common Name	Scientific Name	Status Fed/CA	Habitat in California	Potential for Occurrence On Site
San Joaquin whipsnake	*Masticophis flagellum ruddocki*	None/ CSSC	Annual grasslands or grassy open areas with scattered shrubby vegetation. Loose textured soils for burrowing	Not expected. Could venture from rocky outcrops on adjacent lands, but site is highly degraded and of reduced suitability compared to surrounding landscape
Coast horned lizard	*Phyronosoma blainvillii*	None/ CSSC	Scrubland, grassland, coniferous woods and broadleaf woodlands. Associated with sandy soils, scattered shrubs, and ant colonies.	Not expected. Could venture from rocky outcrops on adjacent lands, but site is highly degraded and of reduced suitability compared to surrounding landscape
Birds				
Tricolored blackbird	*Agelaius tricolor*	None/ CSSC	Colonial breeding in freshwater marshes	None. No suitable marsh breeding habitat
Short-eared owl	*Asio flammeus*	None/ CSSC	Open habitats including wetlands, grasslands, woodlands, disturbed areas.	Low. Could forage but unlikely to nest in disturbed habitat
Burrowing owl	*Athene cunicularia*	FSC/ CSSC	Open, dry, annual grasslands, deserts, scrublands. Needs ground squirrel burrows	Low May hunt but no no ground squirrel burrows observed during the 2023 site visits, however, known from surrounding areas.,
Swainson's hawk	*Buteo swainsoni*	None/ST	Grasslands with scattered trees, savannas, agricultural areas	Not expected. Site is highly degraded and of much lower foraging quality than surrounding areas.
Ferruginous hawk	*Buteo regalis*	None/ None	Open grasslands, sagebrush flats. Trees, cliffs, rocks for nesting	Not expected. Site is highly degraded and of much lower foraging quality than surrounding areas.
Northern harrier	*Circus cyaneus*	None/ CSSC	Coastal fresh and brackish water marshes. Nest in grasslands on ground or in shrubby vegetation	Low. May hunt. Nesting possible.
White-tailed kite	*Elanus leucurus*	None/ None	Rolling foothills and valley edges with scattered trees- grasslands and marshes	Not expected. Site is highly degraded and of much lower foraging quality than surrounding areas.
California horned lark	*Eremophila alpestris actia*	None/ None	Short grass prairie, "bald" hills, mountain meadows, fallow grain fields, alkali flats	Low. May forage but unlikely to nest in disturbed habitat
Loggerhead shrike	*Lanius ludovicianus*	None/ CSSC	Broken woodlands, savannah, riparian woodlands	Not expected. Site is highly degraded and of much lower foraging quality than surrounding areas.
Mammals				
American badger	*Taxidea taxus*	None/ CSSC	Dry open areas with friable soils	Low. Disturbed site but observations in general area. Site is of reduced

Common Name	Scientific Name	Status Fed/CA	Habitat in California	Potential for Occurrence On Site
				suitability compared to surrounding landscape
San Joaquin pocket mouse	*Perognathus inornatus inornatus*	None/ None	Grasslands and blue oak savanna	Not expected. Disturbed non-native grassland of low value
San Joaquin kit fox	*Vulpes macrotis mutica*	FE/ST	Annual grasslands or open scattered shrubs with loose textured soils	Low. Disturbed site but recent (5 years) observations in general area

Source: CNDDB 2022

Special Status Species Analysis

The Project site is disturbed as a result of previous construction and demolition of a service station and accessory facilities. The site's soil has been added to the site as fill. The majority of the site is graded with significantly compacted soils. Recent modifications include a stockpile of barrels containing groundwater and soil samples in the center of the site, and significant trash accumulation along the site's western border with Jess Ranch Road. As a result of this disturbed habitat, conditions at the site for native animals and plants are reduced relative to native habitats in the general area of the proposed Project. However, the surrounding area is on the whole minimally developed and has numerous documented observations of several special status species.

Special-Status Wildlife

Specific regulated biological resources potentially present on the site include California tiger salamander, California red legged frog, western pond turtle, Short-eared owl, Western burrowing owl, Northern harrier, California horned lark, American badger, and San Joaquin kit fox. A more detailed discussion of the impacts to the biological resources of the Project site follows.

California tiger salamander (*Ambystoma californiense*)

The California tiger salamander (CTS) is listed as federally and state threatened. It is an amphibian that spends most of its time underground in burrows of ground squirrels and other small mammals. Adults are nocturnal, emerging for only a few weeks a year from their underground retreats. Following heavy winter rains (normally December-February) adults migrate to mate and lay their eggs in seasonal wetlands, slow moving streams, ponds, and ephemeral pools. Gilled larvae develop during the spring until they have developed legs and absorbed their gills to become lung-breathers, whereupon they migrate to upland burrow sites.

California tiger salamanders will migrate to pools and wetlands for breeding purposes and for dispersion among the juvenile members. Breeding migration is the movement of salamanders to and from a pond from the surrounding upland habitat. California tiger salamanders are known to disperse up to 1.3 miles (2 km) from breeding ponds into upland habitats. An estimated 95 percent of adults remained within 0.39 mi. (620 m) of the breeding pond in another study (Trenham and Shaffer 2005). Dispersal among ponds has been shown to range from 60 meters (m) to 670 m (0.42 mi.), and that 0.70 mi. (1.1 km) would encompass 99 percent of dispersal between ponds (Trenham et al 2001).

The closest reported sightings of California tiger salamanders include several from 0.4 miles north of the site on Altamont Pass Road over the years 1975 to 2003. Other known occurrences are from a pond 1.0 mi. to the NW and from a pond 1.0 mi. to the NW and from a location 1.7 mi to the SW (CNDDB 2022).

No aquatic breeding habitat nor upland aestivation habitat (burrow complexes) is present on the Project site. However, several suitable ponds and documented occurrences are present within 3.1 miles. Therefore, upland dispersal is possible across the project site, though the site is highly degraded compared to surrounding areas and the potential for occurrence of CTS on site is considered low.

The proposed Project could result in loss or mortality of adult CTS dispersing across the site as a result of construction activities. This is ***a potentially significant impact*** that would be reduced to a ***less-than-significant*** level with implementation of Mitigation Measure BIO-1a-e.

California red-legged Frog (*Rana draytonii*)

The California red-legged frog (CRLF) is listed by the USFWS as Threatened and is classified by the CDFW as a Species of Special Concern. It breeds primarily in ponds, but also breeds in slow moving streams, or deep pools in intermittent streams. Inhabited ponds are typically permanent, at least 2 feet (0.7 meters) in depth, and contain emergent and shoreline vegetation. Sufficient pond depth and shoreline cover are both critical, because they provide means of escape from predators for the frogs. The breeding period begins during heavy rains, from early to late winter, usually November through early May. The larvae mature in 11 to 20 weeks. Non-breeding CRLF's have been found in both aquatic and upland habitats. The majority of individuals prefer dense, shrubby or emergent vegetation, closely associated with deep (>0.7 meters) still, or slow-moving water. However, some individuals use habitats that are removed from aquatic habitats, seeking cover in ground squirrel burrows in non-native grasslands. "Aestivation" or hibernation habitat includes areas up to 300 feet from a stream corridor and includes natural features, such as boulders, rocks, trees, shrubs, and logs (Tatarian, 2008). In a study of CRLF movement, Fellers and Kleeman (2007) found the greatest straight-line distance noted was 1.4 km. The US Fish and Wildlife Service (USFWS) uses one mile or 1.6 km as a "proximity radius" to a Project site for initial analysis of potential presence of CRLF based on telemetry data collected by Bulger *et al.* (2003).

As previously noted, a seasonal wetland is located near the northeast corner of the Project site. This ephemeral ponded area, as well as others in the Project vicinity, is a potential aquatic/wetland habitat that may support dispersing CRLF. Other potential breeding habitat may also be present at ponds located 1.0 mi. N and 0.5 mi. to the SW. Known locations that are documented for this species in the region include one 0.4 mi. N, 1.2 mi. NW (stock pond), 1.25 mi. W (pool in creek), 1.4 mi. W (stock pond),1.5 mi. NE (drainage channel), 1.9 mi. NE (creek and associated ponds), 2.0 mi. W (stock pond), 2.1 mi. NNE (stock pond), 2.2 mi. SW (reservoir), 2.4 mi. ESE (ponded area), 2.8 mi. WNW (scour hole), and 3.1 mi. SE (CNDDB, 2022).

However, the project site itself is highly degraded and does not support wetland habitat. It is possible that CRLF could disperse across the site, though the surrounding region supports better dispersal habitat than the site. However, based on the proximity of suitable wetland habitat and documented CRLF observations, there is a low potential for CRLF to disperse across the site.

The proposed Project could result in loss or mortality of adult dispersing CRLF as a result of construction activities. This is ***a potentially significant impact*** that would be reduced to a ***less-than-significant*** level with implementation of Mitigation Measure BIO-1a-e.

Western pond turtle (*Emys marmorata*)

The western pond turtle, the only turtle native to California, is a small turtle which is generally brown, olive brown or dark brown. Its shell is often marked with a network of spots, lines, or dashes of brown or black that radiate from growth centers of shields. The legs and head usually have black spots and can show cream or yellow coloring.

These turtles often bask outside of the water, but quickly re-enter if they are threatened. Habitats include aquatic environments ranging in elevation from sea level to 6,500 ft. They are found in rivers, streams, lakes, ponds, wetlands, reservoirs, and brackish estuarine waters (Holland 1994; Jennings and Hayes 1994). They prefer habitats with areas for cover (vegetation, logs) and basking sites (rocks and other substrates) (Holland 1994).

Summer droughts and cold winters are survived by aestivating or burying in loose soil or mud. Western pond turtles are omnivores, with the potential to be opportunistic predators and scavengers (Holland 1985a, 1985b, Bury 1986). Their diet primarily consists of crustaceans, midges, dragonflies, beetles, and caddisflies. They are also known to eat mammal, bird, reptile, amphibian, and fish carrion. They have been observed foraging on willow and alder catkins, and on ditch grass inflorescences (Holland 1991).

Western pond turtles begin to breed between 10 and 14 years of age. Females leave drying creeks from May to July to oviposit in sunny upland habitats such as grazed pastures, and may travel up to 0.31 mile (Avarez 2020). Clutch size ranges from one to 13 eggs, and incubation lasts 80-100 days. Nest predation rates are high and complete failure of nests is common. The western pond turtle is declining in most of its range. It is almost extinct in the San Joaquin Valley and has seen extensive habitat loss, in part due to predation as well as competition from introduced animals, including exotic pet turtles that have been released into the wild (Zeiner, et al 1990).

Four occurrences of western pond turtle are documented within a 5-mile vicinity of the Project site: 1.9 miles NE, 4.5 miles NE, 4.2 miles N, and 4.6 miles N. Though it is unlikely this species would travel the distances required to reach the Project site from these occurrences, it is possible this species could utilize closer wetlands. The Project site itself is does not support aquatic habitat, though it is possible this species could disperse across the site. Therefore, this species has low potential to occur on the site and the proposed Project could result in loss or mortality of dispersing adult western pond turtle as a result of construction activities. This is ***a potentially significant impact*** that would be reduced to a ***less-than-significant*** level with implementation of Mitigation Measure BIO-2.

Short-eared owl (*Asio flammeus*)

This owl species is a state Species of Special Concern and also is protected under the federal Migratory Bird Treaty Act. It is associated with open country habitats which support rodent populations and herbaceous vegetation. This species primarily hunts microtine rodents, and forages during crepuscular hours. California short-eared owl populations and ranges are subject to significant annual variation, tracking the population cycles of California vole (*Microtus californicus*). Small resident populations persist in northeastern California, the Great Basin region, Sacramento-San Joaquin River Delta, inland central-southern Coast Ranges, with occasional incursions into the Central Coast and San Joaquin Valley.

Short-eared owls nest in tall (30-60 cm) herbaceous vegetation, including irrigated grain fields, salt and freshwater marshes, ungrazed grasslands and old pastures. This species breeds from March through May.

The site supports some patches of grass which may provide adequate cover for nesting short-eared owls, however, the site is highly degraded with large portions being covered by compacted soils that do not support vegetation. The surrounding areas support open, undeveloped grassland which provide better

habitat. Therefore, this species has low potential to nest on the Project site, and disturbance during construction could result in nest disturbance or destruction. This ***potentially significant impact*** can be reduced to a ***less-than-significant*** level with implementation of Mitigation Measure BIO-3.

Western burrowing owl (*Athene cunicularia*)

This small owl is a federal Species of Concern and is currently being petitioned for listing as Threatened with the CDFW. Like other raptors and birds in general, the western burrowing owl is protected under California Fish and Game Code 3503.5 and the federal Migratory Bird Treaty Act. Burrowing owls are typically observed on the ground, at or near a burrow, or on elevated areas such as dirt mounds or fence posts that are used as perches. They utilize burrows for shelter and nesting that dug by California ground squirrels. They may also nest under slabs of concrete, railroad ties, and wood debris piles.

Although no individuals or signs of owl presence were observed on site, it is possible they could inhabit the site though it is highly degraded and the surrounding area offers better habitat. In addition, this species has been reported from nearby surrounding areas, including sites 0.4mi. ENE, 0.8 mi. ENE, 0.8 mi. NE, 0.9 mi. NW, 0.9 mi. ESE, 1.1 mi. NE, 1.2 mi. SE, 1.2 mi. S, and 2.5 mi. SW of the Project area (CNDDB 2017). As a result, there is a low potential for this species to occur on site.

Because Western burrowing owl is known to occur in the general vicinity of the Project site, disturbance of their burrows (if present) during construction could result in adult or nestling mortality, nest abandonment, or nest destruction. This would be ***a potentially significant impact***. That can be reduced to a ***less-than-significant*** level with implementation of Mitigation Measures BIO-3 and BIO-4 a-d.

Northern harrier (*Circus cyaneus*)

This raptor species is a state Species of Special Concern and also is protected under the federal Migratory Bird Treaty Act. It is found in a variety of habitats that are generally open including grasslands, meadows, emergent wetlands, and rangelands. It feeds on rodents, birds, small reptiles, crustaceans and insects. They are found along most of the coast of California, in the Central Valley, and east and south of the Sierra Nevada. They are permanent residents along the coast and a migrant in other areas.

Harriers nest on the ground in the open or in shrubby vegetation on a nest built of a large mound of sticks on wet areas, and a smaller cup of grasses on dry sites. This species may breed from April through September, with the greatest likelihood between June and July (Zeiner, et al 1990). Broad rolling, undeveloped, grassland hills are of the general area are optimal for foraging and nesting.

The site is highly disturbed, but does contain some grass surrounded by open, undeveloped grassland. Therefore, there is a low potential for this species to nest on the Project site, though none were detected during the multiple site visits. Disturbance during construction could result in nest disturbance or destruction. This ***potentially significant impact*** can be reduced to a ***less-than-significant*** level with implementation of Mitigation Measure BIO-3.

California horned lark (*Eremophila alpestris*)

The California horned lark is a species of California special concern. A resident of a variety of open habitats, it usually is found where trees and shrubs are absent. Their range covers much of California from grasslands along the coast to alpine dwarf shrub habitats above tree line. They eat mostly insects, snails, spiders as well as grass and herbaceous plant seeds and other plant matter. They make a cup-shaped grass-lined nest in a depression on the ground in the open. They are yearlong residents in California, and are

active by day. After breeding, they form large flocks that forage and roost together. This species breeds from March through July, with peak activity in May. Grasslands on and around the Project site are suitable for nesting and foraging for this species. It is known from locations that are 2 mi. NNE and 2.7 mi. NE of the Project site (CNDDB, 2022).

Because suitable habitat is present on the Project site (though highly degraded), and observations are known within 3 miles of the site, there is a low potential for this species to nest on the Project site. Therefore, disturbance during construction could result in nest disturbance or destruction. This ***potentially significant impact*** can be reduced to a ***less-than-significant*** level with implementation of Mitigation Measure BIO-3.

American Badger

American badger is a California Department of Fish and Wildlife species of special concern. They utilize a variety of open, arid habitats but are most commonly associated with grasslands, savannas, mountain meadows, and open areas of desert scrub. Badgers generally require burrowing rodents for food, friable soils, and relatively open, uncultivated ground (Williams 1986). American badgers are primarily found in areas of low to moderate slope. Burrows are used for dens, escape, and predation on burrowing rodents (Zeiner et al 1990).

Badgers are solitary animals. Although home range size varies according to several variables the general range of individuals among this species covers 395 – 2,100 acres. American badgers are mostly nocturnal but may also forage and disperse during the daytime (Lindzey 1978; Messick and Hornocker 1981). This species is active year-round in the Project vicinity. American badgers are carnivorous and are relatively opportunistic predators, feeding on a rodents and rabbits. They will also eat reptiles, insects, birds and their eggs, and carrion (Zeiner et al. 1990).

Observations of American badger in the vicinity of the Project include one location 2.2 mi. SW and another 2.4 miles south of the Project site. On March 9, 2017, a dead badger was observed as road kill about 0.35 mi north of the Project site. Because there are local observations of this species, suitable potential den sites are present, and preferred prey species are present, there is a potential for this species to utilize the site for foraging and/or denning. However, the site is highly degraded, compacted, and of much lower quality than surrounding grassland. Therefore, the potential for this species is low. Regardless, the Project could result in ***potentially significant impacts*** to this species. Potential impacts would include mortality or injury of individual animals during construction, and loss of habitat as a result of removal of den areas (if present during construction). These impacts would be reduced to a ***less-than-significant*** level with implementation of Mitigation Measure BIO-5.

San Joaquin Kit fox (*Vulpes macrotis mutica*)

The San Joaquin kit fox is listed as federally endangered and state threatened. However, no critical habitat has been designated. In the San Joaquin Valley before 1930, the range of the San Joaquin kit fox extended from southern Kern County north to Contra Costa County on the west side and to Stanislaus County on the east side. Until the 1990s, Tracy was the farthest northwest record of kit fox sightings. Records of further sightings northwest of Tracy are now documented from the Antioch area of Contra Costa County (Zeiner, et al 1990).

This species is generally associated with arid regions such as grasslands or open brushy sites. Historically, they occurred in several native plant communities such as valley sink scrub and valley

saltbush scrub. Diet varies geographically, seasonally and annually, based on abundance of prey. In the northern portion of the range, kit foxes most often prey on California ground squirrels.

This species takes cover in dens which they generally dig in open areas with loose-textured, sandy and loamy soils. They use these dens throughout the year and have an average home range of 1.0 to 2.0 square miles (Zeiner, et al 1990). These animals have been known to move as far as 9 miles in one night (USFWS 1998). In a study of 209 kit foxes studied on the Naval Petroleum Reserves, California, average dispersal distance of kit foxes was about 5 miles.

Kit foxes are mainly nocturnal hunters, but will exhibit diurnal activity in the early spring and summer months in order to forage for their young. This activity pattern coincides with the diurnal activity of ground squirrels.

Known observations of San Joaquin kit fox are documented at the following distances and directions from the Project site: 0.3 mi. NW, 1.25 mi. SE, 1.9 mi. NNW, 2.2 mi. NNE, 2.4 mi. ESE, 2.25 mi. SE, 2.5 mi. S, 2.6 mi. SE, 3.2 mi. NW, and 3.4 mi. ESE.

The most recent survey of Contra Costa County and Alameda Counties within the known range of the San Joaquin kit fox found no evidence of recent occupancy (Clark et al. 2003). These results do not prove absence of kit fox from the inventory area since no private land was surveyed, but do suggest that kit fox density is at best low or their occurrence is periodic in the inventory area.

Five burrow openings were observed during field investigations of the Project site on July 14, 2010. The dimensions of the openings ranged from about 12 to 16 inches in diameter, narrowing down to smaller diameters that were not fully visible but estimated to be approximately 6 to 7 inches. Kit fox are typically found in burrows 4.5 to 8 inches in diameter. Associated with several of the burrows were canid species scat, e.g., of gray fox (*Urocyon cinereoargenteus*), the introduced red fox (*Vulpes vulpes*), or coyote (*Canis latrans*). Suitable kit fox prey is present on and near the site, including ground squirrels, California voles, and Botta pocket gophers. Animal parts were also observed associated with the burrows noted above, including parts of a ground squirrel, an unidentified bird, and a partially eaten gopher snake.

On March 3, 2017 several ground squirrel burrows appeared to have had their openings enlarged, presumably by an unknown *canid* (dog family). On the February 8, 2023 site survey, no evidence of canid activity was observed on the site and burrows were no longer present. The lack of recent observations of kit fox in the Project area indicates a low to moderate probability for their presence.

Because San Joaquin kit fox have been observed in several locations within 3.4 miles of the Project area, one from 0.3 mi. away, appropriate prey species are present, several potential burrows were present during previous surveys (though absent in 2023), and canid scat and animal parts were observed (though not in 2023), there is evidence that this species could potentially utilize the Project site for foraging and possibly for den sites. Therefore, Project implementation could pose **a *potentially significant impact*** to the species. This impact would be reduced to a **less-than-significant** level with implementation of Mitigation Measures BIO-6a-e.

<u>Lighting Impacts on Wildlife Corridor/Habitat.</u>

The California red-legged frog, California tiger salamander, and San Joaquin kit fox are partially or completely nocturnal. The lights used to illuminate the buildings and grounds of the Project site will likely cause disruption for the surface movement of these animals if they are present. This may reduce reproductive success, increase rates of predation, and higher rates of vehicular-related injury or mortality.

These animals may then avoid the Project area, which could change the patterns of their dispersal in the surrounding region.

Rich and Longcore (2006), Beier (2006), Buchanan (2006), and Wise and Buchannan (2002) reviewed the adverse effects of night time illumination on mammal, frog, and salamander species. Artificial lighting used during nighttime operations will likely increase predation of the California red-legged frog and California tiger salamander if it occurs during periods of fall, winter, or spring rains because these species will lose the cover of darkness for movement. San Joaquin kit fox, if present, could be exposed to increased predation, exposure, or stress through disorientation, or loss of shelter.

There is evidence that the use of low-pressure sodium light that emits amber wavelengths has less impact on habitat and life cycle behavior of wildlife than use of other kinds of light. Second best regarding color are high pressure sodium lights which include pink, amber, and white light (IDA 2010). Metal halide produces light that is bluish white and white. Use of bluish-white light disrupts the natural behavior of wildlife and contributes to a decline in population health (Rich and Longcore, 2006).

Lighting associated with the proposed construction of the gas station and convenience store could result in disruption to activities of CTS, CRLF, and SJKF that could increase mortality to these species. This is a ***potentially significant*** impact that can be reduced to a ***less-than-significant*** level with implementation of Mitigation Measure BIO-7.

Special-Status Plants

A total of 20 special-status plant species may be present in the Project region (**Table 7**) using the California Native Plant Society (CNPS) Rare Plant Inventory search tool including the Midway, Clifton Court Forebay, Altamont, Tracy, Byron Hot Springs and Union Island USGS 7.5-minute quadrangles (CNPS 2023). Additional sources used for the classification of sensitive plant resources include CNDDB (2022). These plants are not expected to be present on the site as a result of the previous disturbance of the site from the former development and demolition of the original gas station on the site.

Table 7. Special-Status Plant Species Known from the Region

Common Name	Scientific Name	Status Fed/ CA/Other	Habitat in California	Potential for Occurrence on Site
large-flowered fiddleneck	*Amsinckia grandiflora*	FE/SE/ CNPS 1B.1	Cismontane woodland, valley and foothill grassland	None. Suitable habitat not present.
Alkali milkvetch	*Astragalus tener* var. *tener*	None/None /1B.2	Alkali playa, grasslands, vernal pools	None. Alkali conditions not present.
Heartscale	*Atriplex cordulata*	None/None /1B.2	Chenopod scrub, meadows, grasslands	None. Suitable habitat not present.
Brittlescale	*Atriplex depressa*	None/None /1B.2	Chenopod scrub, meadows, playas grasslands, vernal pools	None. Suitable habitat not present.
San Joaquin spearscale	*Atriplex joaquiniana*	None/ None/ CNPS 1B.2	Chenopod scrub, alkali meadow, and foothill grassland	None. Suitable habitat not present.
Big-scale balsamroot	*Balsamorhiza macrolepis* var. *macrolepis*	None/ None/ CNPS 1B.2	Valley and foothill grassland, cismontane woodland	None. Disturbed soils limit plants to mainly non-native species.

Common Name	Scientific Name	Status Fed/ CA/Other	Habitat in California	Potential for Occurrence on Site
Big tarplant	*Blepharizonia plumosa*	None/ None/ CNPS1 B.1	Valley and foothill grassland	None. Disturbed soils limit plants to mainly non-native species.
Congdon's tarplant	*Centromadia parryi* ssp. *congdonii*	None/ None/ CNPS 1B.2	Valley and foothill grasslands with alkaline soils.	None. Alkaline soil conditions not present.
Livermore tarplant	*Deinandra bacigalupi*	None/ None/ CNPS 1B.2	Alkaline meadows and seeps	None. Moist conditions are not present.
diamond-petaled California poppy	*Eschscholzia rhombipetala*	None/ None/ CNPS 1B.1	Valley and foothill grassland, alkaline clay slopes and flats	None. Alkaline conditions are not present.
Stinkbells	*Fritillaria agrestis*	None/ None/ CNPS 4.2	Cismontane woodland, chaparral, valley and foothill grassland	None. Disturbed conditions provide low-value habitat
Diablo helianthella	*Helianthella castanea*	None/ None/ CNPS 1B.2	Broadleaved upland forest, chaparral, woodland, coastal scrub, riparian, and grassland	None. Disturbed conditions provide low-value habitat
Woolly rose-mallow	*Hibiscus lasiocarpos* var. *occidentalis*	None/ None/ CNPS 2.2	Riverbanks and peat islands – freshwater marshes/ swamps	None. No wetland habitat present.
Mason's lilaeopsis	*Lilaeopsis masonii*	None/Rare/ CNPS1.1	Tidal zones of freshwater and brackish marshes, riparian scrub	None. No wetland habitat present.
Delta mudwort	*Limosella subulata*	None/ None/ CNPS 2.1	Mud banks in riparian scrub, freshwater and brackish marsh	None. No wetland habitat present.
showy golden madia	*Madia radiata*	None/ None/ CNPS 1B.1	Grasslands, cismontane woodland, chenopod scrub	None. Area is too disturbed.
Hairless popcorn flower	*Plagiobothrys glaber*	None/ None/ CNPS 1A	Meadows, seeps, marshes, swamps. May be extirpated	None. No wet areas.
chaparral ragwort	*Senecio aphanactis*	None/None/ CNPS 2.2	Cismontane woodland, coastal scrub	None. Disturbed conditions provide low-value habitat
saline clover	*Trifolium depauperatum var. hydrophilum*	None/ None/ CNPS 1B.2	Marshes, swamps, foothill grassland, vernal pools	None. No wet areas.
Caper-fruited tropidocarpum	*Tropidocarpum capparideum*	None/None/ CNPS 1B.1	Valley and foothill grassland, alkaline clay, 0-455m elev.	None. No alkaline soils

Source: CNDDB 2022, and CNPS 2023

SPECIAL-STATUS SPECIES CODE DESIGNATIONS

FE = Federally listed Endangered
FT = Federally listed Threatened
SE = State listed Endangered
ST = State Threatened
FSC= Federal Species of Concern
CSSC = California Species of Special Concern
CNPS List 1B = Plants rare, threatened, or endangered in California and elsewhere
CNPS List 2 = Plants rare, threatened, or endangered in California but more common elsewhere
CNPS List 3 = Plants about which information is needed-a review list
.1= seriously endangered in California

.2 =fairly endangered in California
.3 =not very endangered in California
.3 =not very endangered in California

Because of the disturbed nature of the Project site, it contains no suitable habitat for any sensitive plant species. However, the site does support invasive plant species, which disrupt ecosystems, replacing native plants that provide food and cover for native insects and wildlife. Soil disturbance on the Project site could further spread weedy species into new areas adjacent to the site. Broadleaved pepperweed and yellow star thistle are noxious weeds present on the site that have a high potential to colonize adjacent areas. Grading activities during Project construction could result in the spread of undesirable invasive non-native plant species such as broadleaved pepperweed and yellow star thistle to adjacent nearby grasslands. Mitigation measure BIO-8 would reduce this impact to a **less-than-significant** level.

Mitigation Measures

Mitigation BIO-1a. A qualified biologist will conduct preconstruction surveys for CTS and CRLF no more than 14 days prior to the start of groundbreaking or other general construction activities that could affect CTS and CRLF. The survey will identify upland CTS and CRLF habitat within the project footprint, including burrows which could serve as refugia for the species. The survey will occur prior to the installation of exclusion fencing along the Project footprint boundary.

a. If burrows are discovered, they will be flagged or otherwise marked, and avoided by at least 50 ft. If burrows cannot be avoided by 50 ft, they will be inspected and excavated by a qualified biologist in accordance with a Relocation Plan, which will establish procedures for burrow excavation and CTS and CRLF relocation to outside of the Project footprint

b. For any work occurring during the wet season (approximately November 1 through May 31, the period of likely adult CTS migration to and from aquatic habitat to breed), burrow excavation must be completed prior to the onset of rain.

Following completion of the burrow survey, a letter report shall be prepared describing the survey methodology, results, and requesting concurrence that the Project will not result in take of CTS or CRLF if none are discovered.

Mitigation BIO-1b. An exclusionary fence surrounding the proposed construction zone shall be installed to reduce the potential for construction-related mortality of either species. Fencing will delineate the footprint of ground disturbance, staging and vehicle access, and prevent CTS and CRLF encroachment to this area. Fencing will include one-way funnels placed at 250ft regular intervals to allow potentially trapped CTS and CRLF to leave the Project footprint, but not reenter it. Fencing will measure at least 3 ft tall and be buried at least 6 inches below the ground.

a. Exclusion fence will be installed no later than 48 hours following burrow excavation (or, the preconstruction survey determining lack of burrows).

b. A qualified biologist shall accompany the exclusion fence construction crew to ensure that no CTS are killed or injured during fence installation.

c. A qualified biologist or work crew members shall conduct weekly inspections of the exclusion fence and maintain/repair the fence when necessary. This will be conducted by the Designated Biologist or a worker who has received the worker awareness training.

d. Exclusion fence shall be removed immediately upon completion of Project activities.

Mitigation BIO-1c. The Project manager and the initial construction workers shall attend a CRLF and CTS information session conducted for the site by the biological monitor. This session should cover identification of the species and procedures to be followed if an individual is found on site, as well as biology and habitat needs of this species. Construction workers shall sign a form stating that they attended the program and understand all protection measures for the CTS and CRLF. This session can coincide with the comparable information session for protected bird species described in Biological Mitigation 3d.

Mitigation BIO-1d. If materials are stored on-site or on adjacent land, pipes, culverts and similar materials greater than four inches in diameter shall be stored so as to prevent covered wildlife species from using these as temporary refuges, and these materials shall be inspected each morning for the presence of animals prior to being moved.

Mitigation BIO-1e. If formal consultation with the USFWS and with the California Department of Fish and Game is required to mitigate for loss of 1.03 acre of upland habitat, mitigation for impacts to CTS and CRLF may include land preservation at another site to compensate for habitat loss. The USFWS and/or the CDFW may require up to 3.5 acres as compensation. Final compensation requirements and mitigation ratios for the proposed Project would be determined through consultation with these agencies. Mitigation credits may be purchased instead, or a conservation area and management plan established, prior to any ground disturbing activities, including grading, in the Project area.

Mitigation BIO-2. Prior to the start of construction, a qualified biologist will conduct a pedestrian preconstruction survey for western pond turtle. The survey will be conducted no more than 24 hours prior to the start of ground-disturbing work, and will include walking the work area limits and interior and investigating all areas that could be used by the species. If western pond turtle individuals are found, the biologist will relocate them to suitable habitat outside the disturbance area and far enough away that they would not be expected to return.

Mitigation BIO-3. In order to protect potential nests of short-eared owl, northern harrier and California horned lark, as well as for the Western burrowing owl, grading of the site would be best conducted outside their nesting season, which occurs approximately between February 1 and August 15. If this is infeasible and groundbreaking needs to occur within the breeding season, a qualified biologist shall conduct a pre-construction nesting bird survey on the site within one week of initialization of construction activities. If no nesting birds are observed no further action is required and grading may occur within one week of the survey to prevent "take" of individual birds that may have begun nesting after the survey.

If nests of any of these or other species protected under the Migratory Bird Treaty Act are encountered, a 500-foot buffer shall be established around the nest site(s), and no grading or construction activity should occur within the buffer zone until it is determined by a qualified biologist that the young have fledged, or until after the nesting season.

Mitigation BIO-4a. If Project ground disturbance is scheduled to take place during non-breeding season (September 1 through January 31), the Project proponent shall conduct preconstruction surveys for Western burrowing owls. The surveys should be conducted within the Project impact area and a 150-foot-wide buffer. If suitable burrows are found, Phase III burrowing owl surveys, census, and mapping using qualified biologists would be conducted in accordance with the survey

protocol. Any burrowing owls found during preconstruction surveys to be occupying the Project site shall be evicted by passive relocation as described in the California Department of Fish and Game *Staff Report on Burrowing Owls* (CDFW 1995).

Mitigation BIO-4b. If ground disturbance is scheduled to occur during the nesting season (February 1 to August 31), a qualified biologist shall conduct a pre-construction nesting burrowing owl survey following CDFW protocols prior to ground disturbance. Any active nests shall not be disturbed until the young have fledged.

Mitigation BIO-4c. If construction is interrupted and then resumes later after 9 months or a longer period, a pre-construction nesting burrowing owl survey following CDFW protocols shall be performed again and prior to resumption of construction activities in any season.

Mitigation BIO-4d. The Project superintendent/manager and the initial construction workers shall attend an information session conducted by the designated monitor on the subject of protected bird species. This session shall cover identification of the species and procedures to be followed if an individual is found on site, as well as biology and habitat needs of this species. Construction workers shall sign a form stating that they attended the program and understand all protection measures for the protected birds.

Mitigation BIO-5. A pre-construction survey for American badger shall be conducted concurrent with surveys for the San Joaquin kit fox (Mitigation 4a) to determine its likelihood of using any burrows on the Project site as dens. These shall be collapsed after excavation and determination of current use. An exclusion fence shall be installed around the Project site perimeter to prevent badgers from entering the site to avoid any additional construction impacts. Implementation of this mitigation would offset the impacts to this species to a level of insignificance. Mitigation measures 4a-e for San Joaquin kit fox would also benefit American badger, so as to reduce impacts to habitat loss to a level of insignificance.

Mitigation BIO-6a. An exclusionary fence surrounding the proposed construction zone shall be required to reduce the potential for construction-related mortality of SJKF.

Mitigation BIO-6b. A biological monitor shall inspect the site weekly for SJKF to ensure that mitigation and habitat protection measures are properly implemented.

Mitigation BIO-6c. The Project construction superintendent/manager and the initial construction workers shall attend a San Joaquin kit fox information session conducted by the site biological monitor. This session shall cover identification of the species and procedures to be followed if an individual is found on site, as well as biology and habitat needs of this species. This session can coincide with comparable sessions identified for protected bird species described in mitigation for CTS and CRLF. Construction workers shall sign a form stating that they attended the program and understand all protection measures for the San Joaquin kit fox.

Mitigation BIO-6d. If suitable on-site den habitat for the SJKF is determined during the preconstruction survey, additional mitigations for impacts to SJKF could include land preservation at another site to compensate for habitat loss. Final compensation requirements and mitigation ratios for the proposed Project would be established through consultation with the USFWS. The USFWS and/or CDFW may require 1 to 3 acres as compensation. If this were to be demonstrated, mitigation credits could be purchased instead, or a conservation area and management plan established, prior to any ground disturbing activities.

Mitigation BIO-7. To reduce effects of light on special status species in the general area, lighting effects should be minimized by the following methods:

a) Eliminate all bare bulbs and any lighting pointing upward;
b) Use only the minimum amount of light needed for safety – use minimum intensity needed;
c) Use narrow spectrum bulbs such as sodium vapor lights to lower the range of species affected by lighting;
d) Shield, canter or cut lighting to ensure that light reaches only areas needing illumination;
e) Use embedded road lights to illuminate the roadway;
f) Use timers or motion sensors to turn off lights when vehicular and human activity is at low; and
g) Use fences to shield adjacent habitats from lights and light reflection from the Project site

Mitigation BIO-8. The potential spread of invasive plant species into adjacent areas should be minimized by:

a) Surveying the Project site and mark off the location of broadleaved pepperweed and yellow star thistle. Within this area all living and dead pepperweed and yellow star thistle plants will be removed, as well as the upper 6 inches of soil within the area of these plants and placed in heavy-duty, 3 mil or thicker, black contractor quality plastic clean-up bags. The bags will be securely tied and transport from the site to an appropriate disposal location;

b) Seeding disturbed areas on the edge of the site with a native grassland mix applied in conjunction with mulch and tackifier as soon as grading activities are completed; and

c) Using rice straw or weed-free straw as mulch to discourage the introduction and establishment of additional invasive plant species.

b) Special-Status Habitats and Sensitive Natural Communities.

Special-status habitats and sensitive natural communities consist of natural (plant) communities that are rare in the region, support special-status wildlife or plant species, or receive regulatory protection (*i.e.,* §404 of the Clean Water Act and/or the CDFW §§1600, *et seq.* of the California Fish and Game Code). In addition, the CNDDB has designated several communities as rare; these communities are given the highest inventory priority (Holland, 1986).

The following natural communities are present within the USGS 7.5-minute quad sheets that were reviewed for the Project: Valley Sink Scrub, Alkali Meadow, Alkali Seep, Cismontane Alkali Marsh, Northern Claypan Vernal Pool, Sycamore Alluvial Woodland, Valley Needlegrass Grassland, and Valley Sink Scrub. The Project site is composed "ruderal" or disturbed habitat. None of these communities, or any other valued natural communities are present on the Project site. Therefore, ***no impacts*** would occur to these resources.

c) Waters of the U.S./Wetlands.

The US Army Corps of Engineers (USACE) jurisdiction over non-tidal waters of the United States extends laterally to the ordinary high-water mark (OHWM) or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.4). During the biological assessment survey, the site was preliminarily evaluated according to the guidelines provided in the USACE 2005 supplement to the manual (USACE, 2005). Waters of the U.S. and State are absent from the site.

The USACE and the US Environmental Protection Agency (EPA) define "wetlands" as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions." In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology (USACE, 2006).

The Project site contains plant species commonly found in disturbed sites and annual grassland plant communities. There were no plants found that are indicators of wetlands. A potential seasonal wetland was observed adjacent to the northeastern corner of the Project site on adjacent property. This area, about 30 feet in diameter, was observed to collect shallow water during the winter. Hydrophytic (water associated) plant species such as curly dock (*Rumex crispus*) were observed there, indicating that it could potentially be considered wetlands under jurisdiction by state or federal agencies. Another potential wetland area about 180 feet east of the southeast corner of the Project site was noted on aerial photographs. This area retains water apparently as a result of construction of a soil berm although review of several years of aerial photos of the Project area (Google Earth 1993, 2002, 2004, 2009) indicates reduction of the site's water retention in the Project area over the years. Recent observations indicated that a channel was constructed to permit site drainage to the east and the low elevation area east of the Project site.

Potential Jurisdictional Areas

No potential jurisdictional waters or wetlands are present on the Project site. A small area of potential wetlands is adjacent to the Project site near its northeastern corner, and another lies about 180 feet to the east. Development of the proposed Project site would not impact any jurisdictional areas directly. However, unintended erosion on the steep slopes of the Project site could result in sedimentation of the adjacent wetland below.

Erosion of the slopes on the north and east sides of the Project site could result in sedimentation of the adjacent seasonal wetland below as well as reduce water quality of runoff flowing into drainage channels and pipes already existing to the north of the site. This would be considered a ***potentially significant impact,*** which would be reduced to a less—than-significant level with implementation of Mitigation Measure BIO-9**.**

> **Mitigation BIO-9.** Prior to the initiation of site grading or construction, silt fencing or other suitable erosion control shall be installed along the northern, eastern, and southeastern sides of the property in order to deter soil erosion into the wet area adjacent to the site to its northeast and to a drainage to its north. Plastic mono-filament netting (erosion control matting) or wattles containing netting shall not be used at the Project because small animals may become entrapped in it. Acceptable substitutes include coconut coir matting, burlap covered wattles, or tackified hydroseeding compounds. This mitigation would fully offset this potential impact.

d) Wildlife Movement – Migration and Dispersal.

Wildlife movement includes inter- and intra-population movement, migration, and dispersal of juvenile animals. Short travel pathways allow movement for daily home range activities but are also very important to permit gene flow among populations. Where habitats are fragmented, movement between wildlife populations is facilitated through habitat linkages, migration corridors and movement corridors.

The Project site is bordered by roadways to the north, I-580 and adjacent on- and off-ramps. Traffic using the roadway hampers north-south movements of animals. The underpass for Grant Line Road provides a movement corridor beneath the highway connecting the north and south sides of the road. Areas to the east, west, and south are minimally developed, containing few roads and buildings, which allows minimally constrained movement of wildlife in the general region of the Project. Because the proposed Project is located near the Grant Line underpass, development of the site could partially block or deter wildlife access to this corridor.

The gas station and convenience store are projected to generate additional traffic utilization of the Grant Line Road intersection, which may increase wildlife mortality. Vehicle traffic tends to be a significant barrier for many species, including CTS, CRLF, and San Joaquin kit fox (Forman and Alexander 1998).

The proposed service station and convenience store and the increased Grant Line Road intersection traffic could partially block or deter animal movements along Grant Line Road in that it may function as a wildlife corridor beneath Interstate 580, connecting habitat areas north and south of it. This could result in higher mortality of individual CTS, CRLF, and San Joaquin kit fox, *if* they use this underpass as a movement corridor. The purchase of credits of conservation banks are unlikely to offset, minimize, or mitigate the effects on the reduction or loss of the ability of the three listed species to move within the Grant Line Road intersection. This would be considered ***a potentially significant impact*** if evidence of special status species is found during pre-construction surveys. This impact would be reduced to a ***less-than-significant*** level with implementation of Mitigation Measure BIO-10.

Mitigation BIO-10. Some or all of the following measures may be required ***if*** pre construction surveys determine that one or more of these species use the Project site and immediate vicinity as habitat and as part of a wildlife corridor along Grant Line Road beneath I-580:

1) Purchase of fee title of conservation easements for adjacent properties to prevent additional habitat loss and prevent additional traffic from increasing in the area;
2) Development and implementation of USFWS-approved management plans for this land;
3) Sufficient funding for management in perpetuity; and/or
4) Construction or enhancement of a suitable wildlife crossing(s) to areas north of Interstate 580.

e, f) Conflict with any local policies or ordinances protecting biological resources or with the provisions of an adopted Habitat Conservation Plan

The proposed Project is located within the Alameda County East County Area Plan (ECAP). The East Alameda County Conservation Strategy (EACCS, Conservation Strategy) is intended to provide an effective framework to protect, enhance, and restore natural resources in eastern Alameda County, while improving and streamlining the environmental permitting process for impacts resulting from infrastructure and development projects. The Conservation Strategy will focus on impacts on biological resources such as endangered and other special-status species in the East County.

Unlike a federal Habitat Conservation Plan (HCP), the primary focus of the EACCS is to develop a coordinated and biologically sound approach to mitigation that will both support conservation and/or recovery of listed species and streamline state and federal permitting by providing guidance on avoidance, minimization, and mitigation for projects.

The EACCS' program proposes to streamline and simplify the issuance of permits for future project proponents by indicating clear standards for lawful incidental take of species listed as threatened or endangered pursuant to the federal Endangered Species Act (ESA) and California Endangered Species Act (CESA) and by setting clear mitigation ratios for key species and sensitive habitats.

The U.S. Fish and Wildlife Service and local governments and agencies agreed that preparing an HCP for East Alameda County is unnecessary because of the relatively low level of planned development that would typically justify the need for and adequately fund an HCP. The EACCS will not automatically allow local agencies to approve permits for projects that could adversely impact threatened or endangered species. Instead, it will provide guidance during the project planning and permitting process to ensure that impacts are offset in a biologically effective manner.

Several ECAP policies that serve to protect biological resources are relevant to the proposed Project. Summarized, they are as follows:

- Policy 123. Where site-specific impacts on biological resources resulting from proposed land use outside of the Urban Growth Boundary are identified, the County shall encourage that mitigation is complementary to the goals and objectives of the ECAP. To that end, the County shall recommend that mitigation efforts occur in areas designated "Resource Management" or on lands adjacent to or otherwise contiguous with these lands.
- Policy 124. Alameda County shall encourage the maintenance of biological diversity in East County by including a variety of plant communities and animal habitats in areas designated for open space.
- Policy 125. The County shall encourage preservation of areas known to support special status species.

The proposed project, with mitigation identified in this section, would conform to the ECAP policies. This impact would be ***less than significant***.

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

Discussion

a-c) Two cultural resource studies have been previously conducted on the Project site: Slater and Holman conducted a field survey in 1982, , and Theodoratus, et al 1980 conducted a regional overview study. According to these surveys, the Project area contains no archeological or historical resources. Local, state and federal inventories include no recorded building or structures within the proposed Project area. In addition to these inventories, the Northwest Information Center (NWIC) base maps show no recorded buildings or structures (Northwest Information Center, August 2010)

At the onset of European-American contact with the Native Americans in the early 19th century, the Indians that lived in the area were primarily of the Ohlone tribe and were speakers of the Chochenyo language (Levy 1978:485). There are no Native American resources in or adjacent to the proposed Project area in the ethnographic literature (NWIC August 2010).

The proposed Project is in a small valley a mile from the nearest perennial stream. In addition to the lack of resources discovered in prior surveys, there is a low potential of identifying unrecorded historic period archeological resources within the Project site.

In addition, the 1953 USGS Midway 7.5-minute topographic quadrangle does not depict any buildings or other structures in the Project area. Further, there are no structures on the site. Therefore, the project would have no effect on historic structures.

The site has been previously used for a gas station and has had substantial subsurface disturbance associated with installation and removal of underground tanks, as well as remediation of soils for contamination associated with historic fuel-storage-tank leaks. Therefore it is highly unlikely that any human burials may be encountered in construction of the new gas station.

No impacts on cultural resources are expected from Project construction.

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

Discussion

a,b) Project construction would consist of a service station use with the addition of an approximately 5,800 -square foot convenience store adjacent to a freeway interchange, and is therefore not a major construction project that would require a notable quantity of energy resources for construction or operation. There would be ***no impact*** due to wasteful use of energy.

The *2019 California Energy Efficiency Action Plan,* adopted by the California Energy Commission in November 2019 represents the State of California's plan for energy efficiency and guidance to local and regional officials and sponsors of development projects, with specific goals. These include doubling energy efficiency by 2030, removing barriers to improved efficiency in low-income and disadvantaged communities, and reducing greenhouse gas emissions from the development and building sector of the economy. The last of these is also termed *building decarbonization*, to reduce GHG emissions from building operations, to decrease electricity consumption from the electrical grid. Fuel efficiency and the transportation sector is not addressed in the *Action Plan*, which is instead aimed at industry (about 23 percent of energy resource consumption) and residential and commercial buildings (an estimated 37 percent of the sector).

Fuel efficiency in the state is regulated in part by the California Air Resources Board (CARB), which has programs promoting zero-emission vehicles (ZEVs) and policies to for increase the use of ZEVs. California's *Mobile Source Strategy*, *State Implementation Plan* and *2017 Scoping Plan for Climate Change* identify measures needed to "put California on track to attain the national ambient air quality standards, reduce air pollution-related health impacts, and meet State climate goals." (Senate Bill 498, Chapter 628, Statutes of 2017). The proposed project would include a charging station for electric vehicles.

Title 24 of the California Code of Regulations, Part 6 outlines the energy code for the state. These standards are set by the California Energy Commission (CEC), the agency responsible for state energy policy and planning, and the most recent update to the standards went into effect on January 1, 2020. These latest updates are intended to increase energy efficiency, and furthermore, improve air quality both indoors and outdoors. These updated standards include a requirement for homebuilders and new commercial buildings to have solar photovoltaic systems installed at the time of initial construction, making California the first state in the nation to have a solar mandate, and these standards also encourage demand responsive technologies, including battery storage. These standards have been incorporated into the Alameda County Building Code and therefore the service station will be built with roof- and fuel area canopy-top solar panels installed. The County's *Community Climate Action Plan* provides no policies that would directly affect this small project. As such, the Project would have ***no impact*** of causing or

contributing to conflict with or obstructing the implementation of state or local plans for renewable energy or energy efficiency.

7. GEOLOGY AND SOILS Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: 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?				×
iii) Seismic-related ground failure, including liquefaction?				×
iv) Landslides?			×	
b) Result in substantial soil erosion or the loss of topsoil?			×	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			×	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			×	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			×	
f) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?				×

Discussion

a-c) There are no active or potentially active fault traces that are near the Project site. The closest, the Greenville Trace, a spur of the Hayward Fault, is five miles to the east; the Hayward Fault itself is 23 miles distant (CDMG, 1997). the Midway Fault is located adjacent and east of the site, though the exact location is unknown because the fault trace is concealed near the site (U.S. Geological Survey [USGS] 1980)[3].

The U.S. Geological Survey (USGS) Quaternary Fault Database and California Geological Survey designate this fault as potentially active (i.e., experienced movement in the last 130,000 years), rather than active (i.e., experienced movement in the last 11,000 years).

Boring logs from Site investigations show sandstone bedrock is fractured. Geologic description of the Site is found in the *Focused Feasibility Study* dated August 13, 2021[4]. The Midway Fault and resultant

[3] USGS. 1980. Open-File Report 80-535, Thomas W. Dibblee, Jr. Preliminary Geologic Map of the Midway Quadrangle, Alameda and San Joaquin Counties, California.

[4]https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/1253945112/T0600102298.PDF

tectonic activity likely provide an explication of the structural features observed in many of the site soil boring logs[4].

The site is located at an elevation of 320 feet above sea level and slopes toward the southeast. It is located in a small basin at the foot of several hills. Borings reveal that its soils are composed largely of weathered and hard sandstone overlaid by fill of silty and sandy clay and claystone (Korbmacher Engineering, 2009). These factors substantiate relatively stable geology, not subject to landslides or other geotechnical hazards. Therefore, no erosion, or unstable geologic conditions impacts are anticipated. Seismic concerns may exist on the site due to the presence of the potentially active Midway fault that is obscured but possibly adjacent to the site. The proposed structures would be constructed to current codes, including applicable seismic design standards. Therefore, there would be ***less-than-significant*** due to geologically-related hazards or loss of topsoil.

d, e) The site lies within the Great Valley Geomorphic Province of California, which is characterized by semi-consolidated deposits of alluvium (soil deposited by water flow). The site soils and geology consist of fill – composed of sand, silt and clay – to a depth of about 19 feet, underlain by sandstone. The Geotechnical Study prepared for the site's geology and geotechnical considerations for development indicates that it can support development (Korbmacher Engineering 2009). Therefore, no expansive soil impacts are anticipated. Wastewater generated from the project would be collected in onsite subsurface wastewater holding tanks and pumped out and disposed of offsite by licensed septage pumper trucks. The Alameda County Department of Environmental Health (ACDEH) will provide regulatory oversight of the design, installation and operation of the wastewater holding tanks in accordance with the Alameda County Onsite Wastewater Treatment System Ordinance and Manual.

f) The Project would involve minor grading at a site that has been already disturbed, both at surface and at depth, by the construction and subsequent removal of a service station and associated fuel tanks. Therefore, the project would have ***no impact*** with respect to potentially affecting paleontological resources.

8. **GREENHOUSE GAS EMISSIONS** Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			×	
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?			×	

Background

Greenhouse gases (GHGs) are atmospheric gases that capture and retain a portion of the heat radiated from the earth after it has been heated by the sun. The primary GHGs are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), ozone, and water vapor. While GHGs are natural components of the atmosphere, CO_2, CH_4, and N_2O, are also emitted from human activities and their accumulation in the atmosphere over the past 200 years has substantially increased their concentrations. This accumulation of GHGs has been implicated as the driving force behind global climate change.

Human emissions of CO_2 are largely by-products of fossil fuel combustion, whereas CH_4 results from off-gassing associated with organic decay processes in agriculture, landfills, etc. Other GHGs, including hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, are generated by certain industrial processes. The global warming potential of GHGs are typically reported in comparison to that of CO_2, the most common and influential GHG, in units of "carbon dioxide-equivalents" (CO_2e).[5]

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

The California Air Resources Board (CARB) estimated that in 2011 California produced 448 million gross metric tons of CO_2e, or about 535 million U.S. tons. CARB found that transportation is the source of 37.6 percent of the state's GHG emissions, followed by industrial sources at 20.8 percent and electricity generation (both in-state and out-of-state) at 19.3 percent. Commercial and residential fuel use (primarily for heating) accounted for 10.1 percent of GHG emissions.

According to CARB GHG inventory data (2019, the latest year for which data are available), California emitted 418.2 million metric tons (MMT) of CO2 e, including emissions resulting from imported electrical power. Between 1990 and 2020, the population of California grew by approximately 10 million (from 29.8 to 39.8 million) (CDF 2020a), an increase of approximately 34 percent. Despite this growth, CARB's 2019 statewide inventory indicated that California's net GHG emissions in 2019 were below 1990 levels (i.e., 431 MMTCO 2 e).

5 Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in "carbon dioxide-equivalents," which present a weighted average based on each gas's heat absorption (or "global warming") potential.

The Bay Area Air Quality Management District (BAAQMD) is the primary agency responsible for air quality regulation in the nine-county San Francisco Bay Area Air Basin. As part of that role, the BAAQMD has prepared *CEQA Air Quality Guidelines* that provide CEQA thresholds of significance for operational GHG emissions from land use projects (i.e., 1,100 metric tons of CO2e per year, which is also considered the definition of a cumulatively considerable contribution to the global GHG burden and, therefore, of a significant cumulative impact), but has not defined thresholds for project construction GHG emissions. The *CEQA Air Quality Guidelines* methodology and thresholds of significance have been used in this Initial Study's analysis of potential GHG impacts associated with the Project.

The BAAQMD 2017 Clean Air Plan presents GHG inventory data for the Bay Area compiled by BAAQMD. The four largest source categories—transportation, stationary sources, energy, and buildings— collectively account for 91 percent of the total inventory, 86.5 MMTCO2e.

Discussion

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

The California Emissions Estimator Model (CalEEMod Version 2020.1) was used to quantify GHG emissions associated with Project construction activities (for informational purposes) and with operational emissions produced by Project motor vehicles, energy and water use, solid waste generation and refrigerants.

The Project's estimated construction GHG emissions are 140.7 metric tons of CO2e (for which there is no BAAQMD CEQA significance threshold). The Project operational GHG emissions are presented in Table 8. The Project's net new GHG operational emissions would be 975 metric tons per year (about 75% of which comes from motor vehicle sources), which is below the BAAQMD threshold of 1100 metric tons and, thus, less than significant. According to the Project traffic analysis, at least 56% of the Project's associated motor vehicle trips would be "pass-by" trips, which would be drawn from the freeway and other local roadways, with the remainder coming from people living in the western Tracy/Mountain House area. Thus, only about 44% of emissions from the Project associated trips are net new emissions from motor vehicles that would count toward the BAAQMD threshold.

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

In 2006, Assembly Bill 32 (AB 32), the California Global Warming Solutions Act was adopted and codified in the California Health and Safety Code. Under AB 32, CARB established a statewide GHG emissions cap at 1990 levels for 2020, adopted mandatory reporting rules for significant sources of GHGs, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, SB 32 amended the California Global Warming Solution Act to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of CO2 e (MMTCO2e). The 2008 Climate Change Scoping Plan shows 1990 emissions at 426.6 MMTCO2e; the annual 2030 statewide target emissions level for California is 260 MMTCO2e.

Statewide strategies to reduce GHG emissions to attain the 2020 goal include the Low Carbon Fuel Standard (LCFS), the California Appliance Energy Efficiency regulations, the California Renewable

Energy Portfolio standard, changes in the motor vehicle corporate average fuel economy (CAFE) standards, and other early action measures that would ensure the state is on target to achieve the GHG emissions reduction goals of AB 32.

TABLE 8: PROJECT GREENHOUSE GAS EMISSIONS (metric tons/year)

Emission Source	**CO2**	**CH4**	**N2O**	**CO2e**
Total Buildout - CalEEMod Default				
Area	0.09	< 0.005	< 0.005	0.09
Energy Use	37.20	0.01	< 0.005	37.50
Motor Vehicle	2568.00	0.17	0.14	2619.00
Waste	1.61	0.16	0.00	5.63
Water	0.41	0.01	< 0.005	0.87
Refrigerant				206.00
Total	**2607**	**0.35**	**0.14**	**2869**
Total Buildout - Project Trip Rates				
Area	0.09	0.00	0.00	0.09
Energy Use	37.20	0.01	0.00	37.50
Motor Vehicle	1615.02	0.11	0.09	1647.09
Waste	1.61	0.16	0.00	5.63
Water	0.41	0.01	0.00	0.87
Refrigerant				206.00
Total	**1654**	**0.29**	**0.09**	**1897**
Total Buildout - Project Trip Rates No Pass by				
Area	0.09	0.00	0.00	0.09
Energy Use	37.20	0.01	0.00	37.50
Motor Vehicle	710.61	0.05	0.04	724.72
Waste	1.61	0.16	0.00	5.63
Water	0.41	0.01	0.00	0.87
Refrigerant				206.00
Total	**750**	**0.23**	**0.04**	**975**
Significance Threshold				**1100**
Significant Impact?	**No**	**No**	**No**	**No**

In January 2010, the State Building Standards Commission adopted updates to the California Green Building Standards Code (CALGreen), which went into effect in January 2011. CALGreen contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, and site irrigation conservation. CALGreen provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. CALGreen also requires building commissioning, which is a process for verifying that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency. CALGreen provides the

minimum standard that buildings need to meet to be certified for occupancy, but does not prevent a local jurisdiction from adopting more stringent requirements. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; and (3) reduce energy and water consumption.

The BAAQMD's 2017 Clean Air Plan, *Spare the Air, Cool the Climate* (2017 Plan), focuses on two closely-related goals: protecting public health and protecting the climate. Consistent with the GHG reduction targets adopted by the state of California, the plan lays the groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

Alameda County's *Community Climate Action Plan* (CCAP) was adopted as part of the *Alameda County General Plan* in February 2014. The CCAP outlines a course of action to reduce community-wide GHG emissions generated within the unincorporated areas of Alameda County – 15 percent below 2005 levels by 2020, with the ultimate goal of 80 percent below 1990 levels by 2050.

Even with full implementation of State, Bay Area and County plans for reducing GHG emissions (i.e., 40% by 2030 and 80% by 2050), considerable demand will remain for fossil fuels in the transportation sector over the next 10 to 30 years, which the Project will provide for motor vehicles using I-580 and local roadways. The Project will be built to comply with CALGreen standards promoting energy- and water-use efficiency; it has been modified in response to this environmental analysis to include solar (photovoltaic) panels on the station building and fueling canopy roofs to provide a portion of the facility's electric power from a non-fossil-fuel source. When operational, besides providing gasoline, diesel and propane, the Project will include an electric vehicle charging station (EVCS) to serve the growing number of electric vehicles that are expected to be added to the California fleet over the next 30 years. Thus, the Project would not conflict with AB 32, the BAAQMD 2017 Plan, or the County CAP and would have a ***less than significant*** impact.

9. HAZARDS AND HAZARDOUS MATERIALS Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		x		
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?		x		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			x	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		x		
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?				x
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				x
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				x

Background

The Project site is a vacant parcel located on the east side of Grant Line Road, south of Interstate 580. A Chevron gas and service station previously operated on the site from 1971 to 1989, which included one 6,000-gallon and two 10,000-gallon fuel underground storage tanks (USTs), one 1,000-gallon used-oil UST, one 750-gallon heating oil UST, product line piping, two dispenser islands, and a station building. In 1987, an unauthorized release of petroleum hydrocarbons to the subsurface from the USTs and fuel dispensing system components was discovered. Consequently, Alameda County Department of Environmental Health (ACDEH) opened Leaking Underground Storage Tank Case No. RO0000185 (Geotracker Global ID No. T0600102298) for the investigation and cleanup of the unauthorized release. In 1991 the service station was demolished and the UST's were removed. Site investigations and cleanup activities for soil and groundwater have been conducted by Chevron (the Responsible Party for cleanup of the unauthorized release) from 1991 to present under the oversight of ACDEH. Remedial actions have included the following:

1. Soil excavation from the dispenser islands and USTs to depths of 13 to 18 feet below ground surface (bgs) and aeration followed by backfill of the excavations with the aerated soil (1991),
2. Weekly bailing of on-Site monitoring wells from January through March of 1993 removed approximately 2 gallons of light non-aqueous phase liquid (LNAPL) (1993),
3. Placement of oxygen release compound socks in monitoring wells to enhance bioremediation (1998),
4. Injection of hydrogen peroxide into monitoring wells to reduce hydrocarbon concentration in groundwater (1999), and

5. Extraction of 8,300 gallons of groundwater and 2.19 gallons of LNAPL from Site monitoring wells using a passive skimmer (2001-2002).
6. Extraction of approximately 5,100 gallons of groundwater (2003).
7. Vacuum extraction pilot test to remove LNAPL and evaluate the hydrogeologic conditions was performed (2010).
8. Recovery of approximately 76 gallons of LNAPL through biweekly recovery events (2015)
9. A 22-hour Air Sparge/Soil Vapor Extraction pilot test was implemented resulting in the removal of 1,620 pounds of gasoline range hydrocarbons and 22.9 pounds of benzene.
10. A 40-hour DPE pilot test was conducted which resulted in the removal of 50 gallons of LNAPL, 8,670 gallons of contaminated groundwater and 303.2 pounds of vapor phase petroleum hydrocarbons (October 2022).
11. Additional remediation of residual petroleum hydrocarbon impacts to soil and groundwater is required and will be conducted prior to and in conjunction with site redevelopment activities (see discussion under Item d below).

Discussion

a, b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

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?

During construction of the proposed Project there would be a limited potential for accidental release of construction-related products; regardless, they would not be of sufficient quantity to pose a significant hazard to the public nor the environment. The future tenants of the service station and convenience store may use potentially hazardous materials including paint products, solvents, and cleaning products which would be used during the normal operation of the station. The proposed Project would involve the transport and use of gasoline and other petroleum products, which are considered hazardous materials. This is a ***potentially significant impact.*** Implementation of Mitigation HAZ-1, below, would reduce this impact to a less-than-significant level.

Mitigation HAZ-1. The service station will require submittal and approval of the Hazardous Materials Business Plan (HMBP) by Alameda County Environmental Health (EH), per Chapter 6.95 of the CA Health and Safety Code. The HMBP shall address the location, type, quantity, and health risks of the petroleum products and other hazardous materials that would be used and/or generated by the Project and to comply with both the County's Hazardous Waste Generator Program and Underground Storage Tank Program. (Alameda County EH, 2011). This would reduce the impact to a less-than-significant level.

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

There are no schools within one-quarter mile of the Project site. The nearest school is the Mountain House Elementary School approximately three miles north of the site.

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

As described above, the site was listed by the ACDEH in 1991 under the Geotracker case tracking system, which the state operates pursuant to state Government Code 65962.5 to list sites in which USTs have been found to have resulted in unauthorized releases to the environment. Remedial actions and options for control and removal of petroleum hydrocarbons from the reported releases, as described above, are presented in the Focused Feasibility Study dated August 13, 2021 prepared by Arcadis on behalf of Chevron (the "FFS) and in the 2022 Dual Phase Extraction Pilot Test Summary Report and Full-Scale Dual Phase Extraction System Design dated December 7, 2022 (the "Pilot Test Report").

The remedial alternatives evaluated in the FFS were dual phase extraction (DPE) with possible in-situ chemical oxidation (ISCO) and soil vapor extraction (SVE) and vacuum enhanced skimming (VES) paired with in-situ chemical oxidation, SVE/VES and thermal in-situ remediation, and VES/SVE and dynamic groundwater recirculation. The FFS recommended DPE as the preferred remedial alternative with discharge to the storm drain system under a National Pollutant Discharge Elimination System (NPDES) permit and possible multi-stage ISCO injection following implementation of DPE (if needed) through multiple injection wells as the preferred remedial alternative. The FFS assumes station redevelopment and use is possible in conjunction with implementation of ISCO and recommends a Pilot Test Work Plan as an initial step.

The DPE process extracts impacted groundwater and vapor from the subsurface through use of a high-vacuum system and an extraction well network. The vacuum extraction wells are screened across the vadose one and below groundwater to allow removal of soil vapors in the vadose zone and petroleum impacted groundwater. The high vacuum induced on the extraction wells lowers the water table surrounding the well casing to expose soil below the water table and allow extraction of the chemical of concern (COCs) in the newly exposed soils. The vapors and liquid-phase organics and groundwater are removed, separated, and treated in an aboveground treatment system. The DPE system will operate until mass removal rates reach asymptotic levels. Post-remediation monitoring of the existing monitoring wells and vapor probes will allow assessment of the effectiveness of the DPE system in remediating the Site to meet requirements of the State Water Resources Control Board's Low Threat Underground Storage Tank Case Closure Policy (LTCP). Results of the remediation will be evaluated relative to the existing land use per LTCP requirements. Groundwater elevation monitoring and sampling will continue during redevelopment and DPE remediation until remedial action objectives for LNAPL, soil and groundwater have been reached or asymptotic levels have been reached, at which point groundwater monitoring will begin to determine potential for contaminant rebound.

ACDEH concurred with the proposed use of DPE in August 2021 and requested submittal of a Corrective Action Plan detailing plans for remedial actions utilizing DPE. CEMC submitted a Corrective Action Plan (CAP) dated April 5, 2022, prepared by Arcadis U.S., Inc. that presents proposed DPE corrective actions including remediation of petroleum contaminated groundwater and soil vapor, and potential environmental engineering controls to eliminate the exposure pathway for direct contact to shallow contaminated soil and vapor intrusion into the proposed convenience store if warranted based on investigation results that will establish baseline conditions for the remedial actions. ACDEH conditionally approved the CAP in April 2022 pending completion of a 30-day public comment period and submittal and approval by ACDEH of required project plans, such as the DPE pilot test summary report and full scale DPE remedial system design. The public comment period was initiated in April 2022 and ended in June 2022.

The DPE Pilot Test Report was submitted to ACDEH on December 7, 2022 which detailed the successful removal of 50 gallons of LNAPL, 8,670 gallons of contaminated groundwater and 303.2

pounds of vapor phase petroleum hydrocarbons and included the proposed full scale DPE remedial system design and schedule for implementation of corrective actions. Following the permitting, receipt of electrical power from the electrical utility provider, and installation of the DPE system, active remediation is expected to last approximately six months and post-remedial monitoring is expected to last another six months to assess the effectiveness of the remedial action and compliance with the relevant LTCP criteria. The total remediation time, including ACDEH review and approval of remedial plans, procurement of electrical power, system permitting and installation and post-remediation monitoring is expected to take a total of 24 months. Pending results of post-remedial groundwater monitoring, additional treatment of groundwater through the injection of in-situ chemical oxidation may be required, which can be performed in conjunction with station development and operation.

Pending successful implementation of remedial actions at the site, there would be a ***potentially significant impact*** on the environment due to the history of the site on the state and County lists of sites with prior releases of petroleum hydrocarbons into the subsurface soils. Implementation of Mitigation HAZ-2, below, would reduce this impact to a less-than-significant level.

The proposed Project's new underground storage tanks would be regulated under the Federal Resource Cleanup Recovery Act (RCRA) standards for USTs; regulations include registration for tanks, including spill and overflow protection, inspection, maintenance of corrosion protection, and recordkeeping. (40 C.F.R. §§280.30-280.34). It also specifies performance standards for new USTs (40 C.F.R. §280.20). USTS are also regulated by the California Code of Regulations, Title 23: Waters; Division 3: Water Resources Control Board Chapter 16: Underground Storage Tank Regulations; Article 3, Sections 2631, 2632, and 2633.

Section 2631 addresses the requirement for double-lined underground storage tanks, summarized as follows: (a) All new underground storage tanks including associated piping used for the storage of hazardous substances shall have primary and secondary of containment; and (b) The design and construction of all primary containment shall be approved by an independent testing organization in accordance with relevant codes and engineering standards. Section 2632 requires the service station operator to prepare a Monitoring and Response Plan, approved by the local agency. Section 2633 calls for underground storage tanks used for storage of motor vehicle fuel to be composed of fiberglass-reinforced plastic, of cathode-protected steel, or of steel clad with fiberglass-reinforced plastic. These tanks are required to be installed with leak interception and detection systems. As a result, although the site was listed previously on a list of hazardous sites (also known as the Cortese List, prepared pursuant to Government Code Section 65962.5), the site has been the subject of extensive remediation activity and will be subject to ongoing monitoring. With implementation of Mitigation Measure HAZ-1, the potential risk and impact of the project site's prior listing would be reduced to a ***less than significant*** level.

> **Mitigation Measure HAZ-2.** The proposed location of the new convenience store is directly over the top of the former UST footprint and area of highest concentrations of petroleum hydrocarbons in groundwater and soil. Soil vapor samples were collected in July of 2022 (detailed in the November 11, 2022 Soil Vapor Characterization Report) which indicated no detections of petroleum hydrocarbons exceeding applicable LTCP criteria, however, the chlorinated volatile organic compounds of tetrachloroethene (PCE) and trichloroethene (TCE) were reported in soil vapor beneath the proposed convenience store footprint of which PCE was reported exceeding applicable human health screening criteria. Additional soil vapor sampling efforts will be required to determine potential human health risk and potential additional remedial or mitigation measures may be required to mitigate potential vapor intrusion impacts.

If warranted based on soil vapor data, ACDEH will require a vapor mitigation system (VMS) to be installed beneath the station building to mitigate vapor intrusion risk. Under this scenario, ACDEH will require a VMS design to be submitted to ACDEH for review and approval and incorporated into the building permit plans. Construction quality assurance inspections will be required during construction of the VMS and building to ensure the VMS is installed in accordance with the approved design. Performance monitoring including sampling of soil gas and indoor air will be required prior to building occupancy, and following occupancy at a frequency and length of time determined by ACDEH. An Environmental Deed Restriction will be recorded for the property and a Risk Management Plan developed to govern long-term operations, maintenance and reporting of the VMS to ensure it continues to function as designed and remains protective of human health.

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

There are no airports or airstrips within 2 miles of the Project site; the closest airport is the Byron Airport, which is about seven miles to the north, followed by the Tracy Municipal Airport, roughly nine miles to the east-southeast. There would be ***no impact*** due to proximity of a public airport or public use airport.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed Project would not interfere with implementation of the County's disaster management operations plan or emergency response procedures adopted by any local service providers. Therefore, it would have ***no significant impact*** on these plans.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed Project is not at the interface between urbanized development and wildlands, but is in the midst of rangelands and windfarms, but borders Interstate Highway I-580. Grassland fires have occurred periodically alongside the freeway due to careless motorists discarding unextinguished cigarette butts or vehicle malfunction, and therefore some potential exists for a grass fire adjacent to the site. However, the site is separated from the grass closest to the freeway by the east-bound on-ramp, which would also provide access for fire-fighting apparatus. There would be ***no impact*** associated with wildland fires. See also *Section 20, Wildfire*.

10. HYDROLOGY AND WATER QUALITY Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?		x		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			x	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;		x		
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			x	
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		x		
iv) Impede or redirect flood flows?				x
d) In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?				x
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				x

Background

The Project site lies within the Tracy Sub-basin, which is adjacent to the Eastern San Joaquin Sub-basin to the east, and the Delta-Mendota Sub-basin to the south and within the larger San Joaquin Valley Ground-water Basin. The Tracy Sub-basin is drained by the San Joaquin River and is one of its major Westside tributaries (DWR, 2003)

The Project site is mostly composed of a disturbed annual grassland area on a fairly level platform of fill. Runoff from the site currently flows overland to the north and east into a drainage channel that has no direct outlet to a creek. The nearest natural creek is Mountain House Creek, approximately a quarter mile north of the site, which would have received drainage from the site prior to construction of the interstate highway. The next nearest natural watercourse or stream is Patterson Run, about 2 miles to the south; five miles to the north and west is the Altamont Stream. Two major aqueducts or canals of the State Water Project are respectively an estimated one-half mile and one-mile northeast of the Project site, the California Aqueduct and the Delta Mendota Canal.

Groundwater on site has been monitored quarterly from the groundwater wells since 1994. Historical groundwater data indicates that the measured depth-to-groundwater has fluctuated from about 23 to 31 feet below ground (fbg) onsite and 9 to 14 fbg offsite. Groundwater flow trends to the north with a gradient of 0.005 to 0.08. (Conestoga-Rovers and Associates, 2009).

Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Stormwater runoff from the site could contain a variety of contaminants, most notably hydrocarbons from spilled gasoline. Runoff from the gas station and associated driveways would likely be contaminated with gasoline, oil and grease. Runoff from landscaped areas may contain herbicides and pesticides. The Project site is sensitive due to the adjoining small seasonal wetland to the northeast, in the direction of site drainage. While the proposed bioretention pond would partially reduce oil contamination, it may not be sufficient to filter contaminants. This is a ***potentially significant impact.***

All development within County jurisdiction must comply with the Clean Water Act and the County's National Pollution Discharge Elimination System (NPDES) Permit. Under NPDES requirements, the applicant is required to submit and implement a Stormwater Pollution Prevention Plan for the Project construction as well as a Stormwater Management Plan for Project operation (the bio-retention treatment basin noted above would fulfill the latter requirement). Effective implementation of these measures, described in measures HYDRO 1-6, below, would be included as conditions of approval and would reduce the impact to less-than-significant levels.

A new well is planned to use groundwater on the site for the Project's water needs. Previous groundwater quality data indicated the groundwater produced from the well was elevated with respect to the State of California Water Resources Control Board (SWRCB) Division of Drinking Water (DDW) potable drinking water requirements. Additionally, the geology is conducive to low water yield. The DDW issues drinking water permits to public water systems and regulates groundwater quality through primary (health based) and secondary (aesthetic) maximum contaminant levels (MCL).

b) Substantially deplete groundwater supplies or interfere with its recharge?

The roughly half-acre impervious Project site area is not large enough to interfere substantially with ground-water recharge given the thousands of acres of open permeable surfaces surrounding the site in the Altamont Hills.

The proposed water supply well also could affect groundwater conditions. Wood Rodgers reviewed California Department of Water Resources (DWR) Well Completion Report (WCR) WCR2018-010783 for the Production Well. The Production Well was constructed in November 2018 by Building Solution & Drilling, Inc. The borehole was constructed to a depth of 520 feet with a 12-inch diameter steel conductor casing to 100 feet below ground surface (bgs), a 5.6-inch diameter PVC well casing from ground surface to 520 feet bgs, and multiple well screen intervals between 140 and 500 feet bgs. A gravel envelope was installed from 520 to 60 feet bgs, and a sand cement annular seal was installed from 60 feet bgs to ground surface.

A review of available DWR records for wells in the vicinity of the project indicated two wells within one mile of the site. The two well records, DWR WCR2004-004690 and WCR2005-004683, are located 0.87 miles northwest of the site at 15000 Altamont Pass Road. Well WCR2004-004690 was constructed to 700 feet bgs with a four-inch diameter PVC well casing. At the time of construction, the static water level was reported to be at a depth of 10 feet bgs and well yield was 15 gpm after 6 hours of airlifting. Well WCR2005-004683 was constructed in September of 2005 to a depth of 460 feet bgs with a six-inch diameter steel well casing. The static water level was reported to be 15 feet bgs and a well yield of three gpm.

A pumping test was conducted to assess safe yield (the amount of water that can be safely drawn from the well over the long term without substantially drawing down the well or surrounding water table). The overall intent of the well testing was to mimic requirements by the State of California for public water system (PWS) that rely on groundwater sources, specifically those constructed with a fractured bedrock geologic system. The State Water Resources Control Board (SWRCB) prescribes methodology for determining well capacity in bedrock wells. The well testing is required to qualify the capacity of a well and applies a percentage of the well capacity to determine suitable water supply. For a 72-hour test, the testing rationale applies a credit of 25% of the test capacity. The March 2022 test identified a production rate of 2 gallons per minute (120 gallons/hour). Applying the 25% safety factor, this would equate to 30 gallons/hour 720 gallons/day or around 22,000 gallons/month) of well water supply.

The State of California recognizes either a 72-hour or 10-day pumping test to qualify a wells' capacity. However, due to seasonal fluctuations in ground water, the Production Well will need to be retested per DDW requirements within the months of August, September, or October and at a constant pumping rate for 72 hours. Wood Rogers contracted with Abbey Well Service, Inc. to conduct a 72-hour pumping test from September 15-September 18, 2022. The well was equipped with a 1.5-horsepower submersible pump set to a depth of 480 feet bgs. The day prior to the well test, Abbey pumped the well for one-hour on September 14, 2022 to prepare for testing and to allow for an accurate static water level measurement, as outlined in the SWRCB prescribed methodology. During the well test, all pumped groundwater was piped into the drainage located along the northern boundary of the site.

Wood Rodgers was onsite for the startup of the well testing (September 15, 2022) to observe the initial conditions and data collection. Prior to the start of the test, the static water level was measured to be at a depth of 13.0 feet below the reference point (brp) – which was the top of casing measured to be 20.5 inches (1.7 feet) above ground surface. The 72-hour pumping test began at 7:06 AM on September 15, 2022, with an initial pumping rate of seven gpm. After one hour of pumping, the pumping water was measured at a depth of 345 feet bgs, and the pumping rate was reduced to two gpm, where it remained for the remainder of the test. After 12-hours, the pumping water level was observed to have stabilized at a depth of 440 feet bgs. Wood Rodgers conducted additional site visits during the middle and end of the test to observe data collection of flow rate and pumping water level measurements. The well test continued at a consistent pumping rate of 2 gpm with a stabilized pumping water level of 440 feet bgs until 7:06 AM on September 18, 2022. Following the end of the test, the well pump was shut off and Abbey monitored recovery water levels from the well. After 36 hours, the static water level was measured at a depth of 14 feet brp. Terminating groundwater level recovery measurements at that point satisfies the SWRCB requirement of groundwater level recovering within two feet of the static groundwater level prior to the test. Wood Rogers concluded that, per the SWRCB DDW, this well will likely be qualified at a capacity of 0.5 gpm (25% of the pumping rate). (Wood Rogers, October 3, 2022)

Conclusions

Global Petroleum provided water usage data from the year 2020 of a water connection located at 1175 Catalina Drive, in Livermore California. The water meter is shared between a gas station (similar to the proposed project) and a restaurant. The shared water usage (not accounting for irrigation) ranged between 11, 220 to 21,692 gallons per month, with an average of 18,513 gallons per month. It should be noted that the gas station water demand would be less than reported above because it does not include a restaurant. The site Production Well should be expected to produce 22,000 gallons per month on average. Therefore, water supply from the onsite well should be adequate in terms of quantity. The project site is not near any other existing wells so the project's groundwater withdrawal would not adversely affect any such wells. Therefore this impact would be ***less than significant***.

c) (i-iv) Substantially alter the existing drainage pattern of the site or area causing alteration of

stream or river course, erosion, siltation, flooding, or exceeding the capacity of existing or planned stormwater drainage systems?

The Project would occupy a total footprint of 34,011 square feet. Of this, the total building envelope would comprise of 9,878 square feet or 21% of the site. Another 24,133 square feet (53.3% of the site) would be composed of impervious surfaces, including driveways, parking areas, fueling platforms, and other paved surfaces (see table, below). The remaining 11,192 square feet, or 24.7% of the Project site, would be landscape and bio-retention (9,289 square feet for landscaping and 1,903 square feet for bioretention).

The Project would include bio-retention basin/planters near the northeast, south, and west corners of the Project site to provide treatment of stormwater runoff from site pavement and rooftops (as shown in the Project's storm water control plan), to comply with the County's Municipal Regional Permit (MRP) for water quality management, issued by the state Regional Water Quality Control Board to the County.

Site disturbance during development could result in increased erosion and subsequent sedimentation into the adjoining small annual wetland and drainage ditch near the eastern side of the Project if the site is not properly stabilized and proper erosion control mechanisms are not in place prior to the rainy season. This is a ***potentially significant impact*** that can be mitigated to less than significant levels by incorporating the proposed mitigation measure into the revised grading plan and the Stormwater Pollution Prevention Plan for the proposed Project. Implementation of Mitigation Measures HYDRO-1 through HYDRO-6, below, would reduce water quality impacts to ***less-than-significant*** levels.

However, the area potentially affected by project runoff would be limited to the shallow drainage area bordering the Project site, and project runoff would not have any potential for erosion, siltation, re-direction of flooding, or any adverse effects on nearby creeks or other drainage systems or features.

The project area is not served by a storm drainage system, so the project would not affect the capacity of any such system.

Therefore, this hazard would not affect the proposed Project, and ***no impact*** would occur.

> **Mitigation Measure HYDRO-1.** Pursuant to the Alameda County Clean Water Program and the Grading Ordinance, in order to comply with the Clean Water Act and the NPDES Permit, the Project Sponsor or Permittee shall file a Storm Water Pollution Prevention Plan prior to development of the property. The applicant shall also submit a drainage plan and grading plan showing a) where the property will drain to after development; b) how water from the site will be treated before it leaves the site to avoid contaminants flowing off-site; and c) how the water will be handled off-site. These reports must be submitted for review and approval by the Public Works Director prior to Grading Permit approval.
>
> **Mitigation Measure HYDRO-2.** To resolve any potential impacts from increased sedimentation and erosion, the Permittee shall prepare a Sedimentation Control Plan for approval by the Grading Supervisor that includes various methods to reduce erosion during construction. This Plan shall be submitted and approved prior to issuance of Grading Permits. The Permittee shall implement the Plan requirements as approved by the Grading Supervisor.
>
> **Mitigation Measure HYDRO-3**. The Permittee shall comply at all times with the Alameda County Watercourse Protection Ordinance (Chapter 13.12).

Mitigation Measure HYDRO-4. Energy dissipaters and small in-swale detention ponds should be included in the Storm Water Pollution Prevention Plan and be designed and constructed so that they do not provide a suitable breeding place for mosquitoes.

Mitigation Measure HYDRO-5. The energy dissipaters shall be designed and constructed so that they will not become filled with sediment or be undercut by flows in the unnamed tributary.

Mitigation Measure HYDRO-6. Grading shall be prohibited during the rainy season (October 15 – April 15) to mitigate soil loss and sediment transport to Sulfur Creek unless appropriate erosion control measures are in place and approved by the Director of Public Works.

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

The Project site is located more than 40 miles from San Francisco Bay, the closest major water body. Furthermore, the lowest proposed structures would be at an elevation of about 320 feet above sea level. The Project would therefore not be subject to seiches (standing waves resulting from oscillations in enclosed bodies of water) or tsunamis. There is no history of mudflows in the Project vicinity. Therefore, these hazards would not affect the proposed Project, and ***no impact*** would occur.

The Project does is not located in any area subject to mapped flood hazards including a 100-year flood hazard. The site is within a very small watershed (under 50 acres) terminating in the seasonal wetland east of the Project site. The Project site is not downstream of any dams or reservoirs, so there is no risk of flooding or dam failure causing loss, injury, or death. The nearest dam is Bethany Reservoir, approximately two-and-a-half miles north of the Project area and in a watershed separated by several hills. There the project would not have the potential to redirect flood flows and ***no impact*** would occur.

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

See responses to Items a) and b), above. The project would not have the potential to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan and ***no impact*** would occur.

11. LAND USE AND PLANNING Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Physically divide an established community?				x
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?			x	

Discussion

a) Physically divide an established community.

The Project would be constructed on the site of a former gas station adjacent to I-580, in a rural area where there is no adjacent community. It is currently vacant land. Surrounding uses include grazing and wind energy production and isolated residences and agricultural buildings. Therefore, it would not divide an established community and there would be ***no impact***.

b) Conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect

The Project site's land use is governed by the *East County Area Plan* (ECAP), a portion of the Alameda County General Plan, adopted in 1994 and which designated the Project area and the majority of eastern Alameda County east of Livermore, as "Large Parcel Agriculture" (LPA). The LPA land use designation permits single family homes, agricultural uses, agricultural processing facilities (for example wineries, olive presses), limited agricultural support service uses (such as animal feed facilities, silos, etc.), visitor-serving commercial facilities (such as wine-tasting rooms, fruit stands, bed and breakfast inns), recreational uses, public and quasi-public uses, certain waste-related and resource extraction and utility facilities, and similar uses compatible with agriculture. The ECAP provides for existing sites to be retained under Policy 91:

> The County shall continue to honor building site status on existing parcels of less than 100 acres in the "A-100" (Agriculture - 100-acre minimum parcel size) District, less than 160 acres in the "A-160" (Agriculture - 160-acre minimum parcel size) District, or less than 320 acres in the "A-320" (Agriculture - 320-acre minimum parcel size) District only if the parcel is consistent with Zoning Ordinance standards for legal building sites.

The proposed Project is located within the Alameda County East County Area Plan (ECAP). Several ECAP policies that serve to protect biological resources are relevant to the proposed Project. Summarized, they are as follows:

- Policy 123. Where site-specific impacts on biological resources resulting from proposed land use outside of the Urban Growth Boundary are identified, the County shall encourage that mitigation is complementary to the goals and objectives of the ECAP. To that end, the County shall recommend that mitigation efforts occur in areas designated "Resource Management" or on lands adjacent to or otherwise contiguous with these lands.

- Policy 124. Alameda County shall encourage the maintenance of biological diversity in East County by including a variety of plant communities and animal habitats in areas designated for open space.
- Policy 125. The County shall encourage preservation of areas known to support special status species.

The surrounding area is zoned "A" (Agriculture).

The Area Plan was amended in November 2000 by Alameda County voter initiative Measure D, which established an Urban Growth Boundary for development around established cities, primarily in the Livermore Valley area. The intent of Measure D is to protect agriculture and open space lands in the unincorporated portions of Alameda County. However, Measure D exempts land use rights of pre-existing legal land uses and rights to development. This is the case with the proposed Project, as it had prior rights for re-establishing a previous, approved development of a gas station, which was approved in 1971 based on its H-1 (Highway Frontage) zoning of the Project site (Alameda County Zoning Administrator, 1971).

So, while the Project site's H-1 zoning is inconsistent with the Large Parcel Agriculture land use designation in the Area Plan, the County's Planning Commission has deemed that the proposed Project would be compliant with the Area Plan because of the site's prior use as a service station (1971-1986) and the parcel's subsequent and decades-long site remediation for this prior use in anticipation of its re-use for the same purpose as identified in the remediation studies and reports. The County regards this as a grandfathered use within the Agriculture Zone district as reconstruction of a service station and related uses. For a more definitive explanation, please see Appendix A, "Alameda County Planning Commission, RE Reconstruction of a Service Station with Related Uses in the Agriculture Zoning District, April 21, 2008."

The Project site has been undergoing soil remediation for more than two decades from its prior development and use as a gas station between 1971 and 1986.

The proposed Project is located within the Alameda County East County Area Plan (ECAP). Several ECAP policies that serve to protect biological resources are relevant to the proposed Project. Summarized, they are as follows:

- Policy 123. Where site-specific impacts on biological resources resulting from proposed land use outside of the Urban Growth Boundary are identified, the County shall encourage that mitigation is complementary to the goals and objectives of the ECAP. To that end, the County shall recommend that mitigation efforts occur in areas designated "Resource Management" or on lands adjacent to or otherwise contiguous with these lands.
- Policy 124. Alameda County shall encourage the maintenance of biological diversity in East County by including a variety of plant communities and animal habitats in areas designated for open space.
- Policy 125. The County shall encourage preservation of areas known to support special status species.

12. MINERAL RESOURCES Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				×
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?				×

Discussion

a, b) 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?

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

The Project would use typical aggregate resources in the course of construction, including gravel, sand, and asphalt necessary for foundations, roads, and similar improvements on the site. These resources are readily available in the region and no additional sources would be required to meet the Project's demand. No significant deposits of mineral resources are present at the site, nor is the site designated in the ECAP as a site for mineral resource extraction. Therefore, the Project would have ***no impact*** on mineral resources.

13. NOISE Would the Project result in:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Generation 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?			x	
b) Generation of excessive groundborne vibration or groundborne noise levels?			x	
c) For a project located within the vicinity of 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?				x

Background

Sound is created when vibrating objects produce pressure variations that move rapidly outward into the surrounding air. The more powerful the pressure variations, the louder the sound perceived by a listener. The decibel (dB) is the standard measure of loudness relative to the human threshold of perception. Noise is a sound or series of sounds that are intrusive, objectionable or disruptive to daily life. Many factors influence how a sound is perceived and whether it is considered disturbing to a listener; these include the physical characteristics of sound (e.g., loudness, pitch, duration, etc.) and other factors relating to the situation of the listener (e.g., the time of day when it occurs, the acuity of a listener's hearing, the activity of the listener during exposure – is s/he sleeping, working, talking? etc.). Environmental noise has many documented undesirable effects on human health and welfare, either psychological (e.g., annoyance and speech interference) or physiological (e.g., hearing impairment and sleep disturbance).

The Project site is on the extreme eastern fringe of Alameda County surrounded by agricultural lands with widely scattered residences, none of which are within 1000 feet of the site. Motor vehicle traffic on I-580, which runs adjacent to the project site's northern boundary, has by far the largest influence on local noise levels. Tracy Municipal Airport is about 9 miles to the southeast, Livermore Municipal Airport is about 14 miles to the west, and the Altamont Corridor Express rail line passes about 1.5 miles to the southwest at its closest approach. Thus, aircraft and trains have only minor influences on local ambient noise levels.

Policies and Standards

As the Project site is in an unincorporated area of Alameda County, the Noise Element of the *Alameda County General Plan* (County Noise Element; amended 1994) is the primary source for applicable noise control policies and exposure standards. The following content from the County Noise Element is relevant to Project circumstances:

- The County Noise Element recognizes that many sources contribute to ambient noise in Alameda County, but that *"transportation systems are the largest single contributor."*
- County Noise Element policies, which guide development in the County's unincorporated areas, include the following*: "Goal #2: Alameda County should encourage noise compatible land uses near highways and other noise generators."*

The *East County Area Plan* (ECAP or Area Plan; revised 2000) is an adjunct to the *Alameda County General Plan* containing planning policies and standards that apply specifically to the unincorporated areas of eastern Alameda County. Regarding mitigating/avoiding problems of sensitive population exposure to environmental noise, the Area Plan includes:

- *"Policy 289: The County shall limit or appropriately mitigate new noise-sensitive development in areas exposed to projected noise levels above 60 dB based on the California Office of Noise Control Land Use Compatibility Guidelines "*[6]
- The ECAP also contains a table (Table 11) of noise contour distances from freeways and major roadways in eastern Alameda County, which includes the following for I-580.

I-580 Noise Contour Distances (East of Vasco Road - Year 2010)
70 dB L_{dn} – 387 feet
65 dB L_{dn} – 833 feet
60 dB L_{dn} – 1794 feet

While the policies and standards of the Noise Element of the *City of Livermore General Plan 2003-2025* (City Noise Element; amended 2013) have no legal mandate for application in the unincorporated areas of Alameda County, it is a newer document and contains more recent noise measurement and modeling data, some applicable to Project circumstances.

- The City Noise Element future contour distances from I-580 are about 15% greater than the corresponding distances shown in the ECAP.

I-580 Noise Contour Distances (Year 2025)
70 dB L_{dn} – 438 feet
65 dB L_{dn} – 940 feet
60 dB L_{dn} – 2023 feet

- The City of Livermore *Noise Element* and the *San Joaquin County General Plan Background Report* contain graphics showing that the aircraft noise contours (i.e., Figure 9-2 in the former, Figure 15-7 in the latter) around their respective facilities. It shows that the noise contours at 55 dBA or greater are closely confined to areas around the Livermore and Tracy airports. Thus, aircraft influences on Project site noise levels are less than 55 dBA.

Discussion

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

Project plans propose construction of a motor vehicle fueling station and a convenience store on site. Noise contour data in the ECAP and Livermore *Noise Element* imply that locations within about 1000 feet of the centerline of I-580 would have existing/future noise levels greater than 65 dBA L_{dn}. However, none of the Project area land uses are noise sensitive and the 60 dBA L_{dn} exterior standard proposed by the ECAP for noise-sensitive uses would not apply. With standard acoustical insulation provided by the

[6] The ECAP uses the **Day–Night Average Sound Level** (L_{dn}), a 24–hour average sound level, with a 10–decibel penalty added to sound levels occurring at night between 10:00 p.m. and 7:00 a.m.

walls and windows (closed) of Project buildings, interior noise levels protective of worker/customer welfare would be attained and this impact would be ***less than significant***.

After Project construction, the only noise source that could permanently change the noise exposure circumstance of nearby noise-sensitive uses is the additional motor vehicle traffic it would put on local roadways. However, about 60% of the motor vehicles that would use Project facilities daily would already be using I-580 or the entrance/exit ramps (i.e., designated "pass-by" trips by the Project traffic analysis, which is very conservative; the actual proportion could be as much as 95%) and so would not have a net new impact on local noise levels. The remaining Project-related new local motor vehicles using I-580 would be such a small fraction of the total daily freeway volume that their incremental noise impact would be essentially zero. Incremental noise generated by Project-related net new vehicles using the entrance/exit ramps and connecting local roadways would be ***less than significant*** because there are no noise-sensitive land uses adjacent to or near them.

The Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to estimate the maximum and average outdoor noise levels during Project construction that the closest residence would experience, as presented in **Table 10**. Project construction activities would not expose the closest existing residential uses outdoor noise levels higher than existing levels. Project construction noise impacts would be ***less than significant***.

TABLE 10: MODELED CONSTRUCTION NOISE LEVELS AT THE CLOSEST RESIDENTIAL USES TO THE PROJECT SITE

Receptor	Distance from Construction Activity (feet)	Maximum Construction Daytime Noise Level (dB)	Average Construction Daytime Noise Level (dB)
Closest Residence to Project site	1000	58	56

Source: Federal Highway Administration, Roadway Construction Noise Model (RCNM).

b) Would the project generate excessive ground-borne vibration or ground-borne noise levels?

Just as vibrating objects radiate sound through the air, if they are in contact with the ground they also radiate acoustical energy through the ground. If such an object is massive enough and/or close enough to an observer, the ground vibrations can be perceptible and, if the vibrations are strong enough (as measured in vibration decibels, abbreviated VdB), they can cause annoyance to the observer and/or damage to buildings. Background ground vibration levels in most inhabited areas are usually 50 VdB or lower, well below the threshold of perception (i.e., typically about 65 VdB).

There are no policies or standards in the County Noise Element for avoiding/reducing structural damage or annoyance from vibration impacts. However, it is most common for government agencies to rely on assessment methodologies, impact standards and vibration-reduction strategies developed by the Federal Transit Agency (FTA) in *Transit Noise and Vibration Impact Assessment*. According to the FTA, limiting vibration levels to 94 VdB or less would avoid structural damage to wood and masonry buildings (which are typical of most residential structures), while limiting vibration levels to 80 VdB or less at residential locations would avoid significant annoyance to the occupants.

The most vibration-intensive piece of construction equipment is a pile driver, but no pile driving will be required for the Project. Other types of construction equipment are far less vibration-intensive. Heavily loaded trucks or tracked earth-moving machinery could pose a damage or annoyance threat if they would

regularly and often come within 25 feet or 100 feet, respectively, of a vibration-sensitive receptor during construction. But the closest existing residential uses to the Project site are about 1000 feet or more distant. Thus, the Project's construction vibration impact severity would be ***less than significant***.

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

The Project site is about 14 miles east of the Livermore Municipal Airport and 9 miles northeast of Tracy Municipal Airport. Noise contour maps in the Livermore *Noise Element* and *San Joaquin County General Plan Background Report* show that aircraft operational noise at the Project site is less than 55 dBA L_{dn}. Therefore, aircraft noise impacts would be ***less than significant***.

14. POPULATION AND HOUSING Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No 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)?				x
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				x

Discussion

a, b) The proposed Project would be located on an undeveloped site in an agricultural area. The Project would not extend services or infrastructure. The proposed Project would not add any housing to the rural, vacant parcels adjoining it, nor would any housing be demolished. Therefore, there would be ***no impact*** on population or housing, and no mitigation is required.

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

Discussion

a-e). Construction of the proposed gas station and convenience store and landscaping has been reviewed by the Alameda County Fire Department for compliance with fire code requirements related to fire-resistive detailing and defensible space. No unusual fire-safety conditions would be created by its construction. The project would include a 20,000-gallon fire-fighting water tank with a direct connection for fire trucks.

The site would be developed with conventional security measures, including, lighting, and burglar alarm systems. The Project would not generate a need for increased fire protection services from CalFire or Alameda County Fire Department, nor police protection services from the Alameda County Sheriff's Department.

The proposed Project would not generate any public-school students and therefore not affect schools.

The Project would not affect any parks or parklands as there are none on or near the site; nor would it generate additional park users because it would not develop or induce housing.

The effect on fire, police and emergency response services would be ***less than significant***, and there would be ***no impact*** on schools, parks or other public facilities.

16. RECREATION Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) 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?				x
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				x

Discussion

a, b) The nearest park is Brushy Peak Regional Preserve, operated on a reservation basis by the Livermore Area Regional Parks District, about eight miles east of the proposed Project site. The California Aqueduct Bikeway crosses Grant Line Road approximately half a mile north of the site.

The Project would have ***no impact*** on existing local or regional parks, or be expected to increase use of nearby park facilities.

16. TRANSPORTATION Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, pedestrian and bicycle facilities?				x
b) Conflict or be inconsistent with the criteria for analyzing transportation impacts as specified in Section 15064.3 (b) of the CEQA Guidelines?				x
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				x
d) Result in inadequate emergency access?				x

Background

Access to and from the site would be via Interstate I-580 freeway and Grant Line Road. I-580 is an east-west freeway connecting the cities of Oakland and Richmond to the west near San Francisco Bay and Tracy to the east and has four travel lanes in each direction adjoining the Project site. West Grant Line Road extends west from central Tracy in San Joaquin County to its terminus in Alameda County at the I-580 interchange bordering the Project site. Grant Line Road is a two-lane rural arterial road providing access to properties south of I-580 at this interchange and between I-580 and the vast rural area along Grant Line Road, Midway Road and Altamont Pass Road in the easternmost area of Alameda County.

The interchange at I-580 and Grant Line Road is non-signalized with stop-sign control at the off-ramps in both east and westbound directions. South Grant Line Road terminates at a cul-de-sac approximately 500 feet south of I-580. The posted speed limit on Grant Line Road north of the freeway is 50 mph. The observed traffic speed was about 30 mph on Grant Line Road near the Project site but was above 45 mph north of the freeway.

At the end of Grant Line Road, there are two private access roads leading to agricultural (grazing) uses, southeast of the cul-de-sac. The area surrounding the site on either side of Grant Line Road is mostly rural, vacant, and unimproved with no businesses, residences, and structures. There is little traffic on South Grant Road south of the freeway except for traffic from commuters during the peak periods using that section of South Grant Line Road as an informal park-and-ride facility, and infrequent ranch-related traffic. Due to congestion on I-580 over Altamont Pass east of the interchange, the unincorporated community of Mountain House and residential development in Tracy in San Joaquin County which are accessible via Grant Line Road and Midway Road about two miles north and east from this interchange, evening peak hour traffic volumes through the interchange can be very high and exceed the capacity of the stop sign for left turns from the eastbound offramp to northbound Grant Line Road.

Field observations in 2017 indicated that in the morning by 7:00 a.m., both sides of South Grant Line Road south of the freeway were fully occupied with more than 120 parked vehicles (counts conducted shortly after 9 a.m.). By 6:00 p.m. most parked cars were gone, with fewer than 20% of the parked cars remaining. The proposed Project would eliminate an estimated eight to ten parallel parking spaces for casual carpool commuters along the Project frontage of the cul-de-sac.

Discussion

a. The site is not served by transit, contains no designated bike routes, is not in an area that would be accessed by pedestrians, and is at the end of an existing roadway. A review of the County's 2019 Bicycle and Pedestrian Master Plan did not identify any policies or proposed bicycle or pedestrian improvements applicable to the project area. Bicycles and pedestrians are not permitted on I-580. Therefore, the proposed project would have ***no impact*** on transit, roadway, pedestrian, or bicycle plans, programs, or ordinances.

b. TJKM Transportation Consultants reviewed the vehicle-miles-traveled (VMT) requirements for the project and determined that the project is exempt from CEQA's VMT analysis requirements[7]. Specifically, for VMT analysis, as Alameda County has not adopted formal SB743 guidelines, the Office of Planning and Research (OPR) technical advisory on evaluating transportation impacts in CEQA was consulted. Specific exemptions exist for non-residential retail projects where a VMT analysis is not required. The retail projects exemption in the OPR guidelines states:

- New retail development typically redistributes shopping trips rather than creating new trips, estimating the total change in VMT (i.e., the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project's transportation impacts.
- Many cities and counties define local-serving and regional-serving retail in their zoning codes. Lead agencies may refer to those local definitions when available, but should also consider any project-specific information, such as market studies or economic impacts analyses that might bear on customers' travel behavior. Because lead agencies will best understand their own communities and the likely travel behaviors of future project users, they are likely in the best position to decide when a project will likely be local-serving. Generally, however, retail development including stores larger than 50,000 square feet might be considered regional-serving, and so lead agencies should undertake an analysis to determine whether the project might increase or decrease VMT.

The 10 Grant Line Road Service Station consists of a 5,812 square foot convenience store building with 12 fuel pumps. As the building is under the retail categorical exemption threshold of 50,000 square feet, this project poses a ***less than significant*** impact to VMT and no mitigation is required.

c. According to the project site plan (Figure 2), access to and from the site will be via two driveways at the existing curb cuts that serviced the previous gas station. Each driveway will be more than 40 feet wide, provide one inbound and one outbound lane, and would provide adequate access, including for fuel tanker trucks and for internal circulation. Driveways were previously evaluated by Pang Ho Associates in 2017 and found to be adequate for safety; the currently proposed driveways are in the same locations as those evaluated by PHA and are slightly wider. Therefore, there would be ***no impact*** due to unsafe geometry.

[7] TJKM, Inc. Memo from Chris Kinzel, TJKM, to Hamid Amini, October 28, 2022.

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

a, b) As described in Section 3, Cultural Resources, above, the site is unlikely to contain any cultural resources, It has been graded, developed with previous gas station facilities including subsurface tanks, and over-excavated to remediate contaminated soils on the site. Therefore, the proposed project is unlikely to affect any tribal cultural resources, and this impact would *be **less than significant***. However, the County has initiated consultation with applicable tribes, and any tribal cultural resources identified in that consultation will be addressed in the Final Initial Study.

19. UTILITIES AND SERVICE SYSTEMS Would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: 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?				x
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			x	
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?			x	
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?			x	
e) Comply with federal, state, and local statutes and regulations related to solid waste?				x

Discussion

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?

Wood Rogers reviewed both the water yield and quality from the on-site well [8]. From previous water quality reports provided for the well, the primary constituents that were elevated included iron, chloride and total dissolved solids. Wood Rodgers recommended confirmation water quality analytical tests to confirm the previously reported data. In addition, and due to historic cleanup of groundwater at the project site, total petroleum hydrocarbons (TPH) were recommended to be analyzed. During the 72-hour pump test in March 2022, groundwater samples were collected and tested for water quality contaminants. Table 9 provides water quality data for the primary constituents of concern for groundwater samples collected on both July 2020 and the March 2022 sampling.

Table 9: Water Quality for Well 2

	Analyte						
	TPH Gasoline	**Total Hardness**	**Iron**	**Manganese**	**Chloride**	**Specific Conductance**	**Total Dissolved Solids**
Units	**µg/L**	**mg/L**	**µg/L**	**µg/L**	**mg/L**	**µS/cm**	**mg/L**
MCL	**760**	**-**	**300[1]**	**50**	**250[1]**	**1,600[1]**	**500[1]**
7/8/2020	N/A	224	750	230	4,200	12,000	7,800
3/25/2022	313	220	3,040	470	3,310	11,800	6,380

[1]Secondary Drinking Water Standard (aesthetic based)

[8] Wood Rogers, *Memorandum, 10 Grant Line Road Pump Test Analysis*, from Sean Spaeth, Certified Hydrogeologist, to Mr. Mohammed Amini, Global Petroleum, Inc. July 7, 2022.

The water quality data indicate that groundwater produced from the Production Well contains extremely high total dissolved salts, manganese, and iron, above each respective MCL.

DWR Bulletin No. 118-2, 1974, indicates the water within the bedrock in the site vicinity is usually poor and is unsuitable for most beneficial use. The groundwater in the area is characterized by high concentrations of dissolved solids (sodium, chloride, nitrate, sulfate, and boron).

The constituents of concern shown in Table 9 are also found in the existing monitoring wells onsite. Water quality data from the domestic wells located off Jess Ranch Road are reported to have elevated concentrations of total dissolved solids, likely impacting taste. Groundwater quality, as tested, does not meet the State of California drinking water regulations and will require treatment prior to human consumption.

Wood Rogers (July 2022) noted that there are available water treatment options that are applicable to the constituents of concern. At least two water treatment processes will be required to sufficiently treat the groundwater for potable purposes. Site planning will need to account for sufficient area for a groundwater treatment system and associated water storage tanks. The proposed water tanks would be capable of storing water for the groundwater treatment system operations as well as the water capacity requirements for the proposed gas station and store. This is discussed in detail in the Utilities and Service Systems section of this document, Item b.

The first stage of water treatment would likely be granular activated carbon filtration process (GAC). The next treatment could incorporate reverse osmosis, ion exchange, anion exchange, reduction or coagulation precipitation. The final design for treatment for potable water to be used at the gas station/convenience store would be reviewed and approved by the State Water Resources Control Board, Division of Drinking Water (DDW) prior to construction. A drinking water permit must be obtained from the Division of Drinking Water to serve water to the public. Water quality would be a ***potentially significant impact*** that would be reduced to a ***less-than-significant*** level by compliance with DDW requirements and obtaining the DDW permit, as required in Mitigation Measure UTIL-1.

The Project engineers estimate that an expected peak-day flow of 1000 gallons per day (gpd) of sewage would be generated by the project, with an average flow of less than 700 gpd. The project proposes two subsurface 1,200-gallon septic tanks and one subsurface 10,000-gallon holding tank for project wastewater. Wastewater would be pumped weekly to a truck for off haul and treatment. The septic system design has been submitted to the Alameda County Public Health Department for their review and approval. Therefore the project would have ***a less-than-significant*** impact to wastewater treatment providers.

Natural gas and electric services would be provided by Pacific Gas & Electric Company; and telephone service by SBC. The project's energy use is discussed in the Energy section of this IS; the project energy demand also would be minimal (i.e., similar to a few houses). Therefore this impact would be ***less than significant***.

Storm drainage issues are described in Section 8, Hydrology and Water Quality, of this Initial Study; the new storm drain facilities on the Project site would be limited to the site and immediately adjacent areas and stormwater runoff from the project site would be treated in a bioswale on-site, and therefore would not have environmental effects beyond the directly adjacent area. This impact would be l***ess than significant.***

> **Mitigation Measure UTIL-1.** Prior to issuance of a Building Permit, the project shall submit the final design for treatment for potable water to be used at the gas station/convenience store for reviewed and approved by the State Water Resources Control Board, Division of Drinking Water (DDW). The DWW Drinking Water Permit shall be provided to the County Building Department

prior to issuance of the Building Permit.

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

Water services would be furnished through treated well water from an on-site well that was constructed in 2018 to serve development of a service station and convenience store at the site (see Hydrology and Water Quality section for a further discussion of the well). As described in the Hydrology and Water Quality section, Item 10 b, a water well was drilled in 2018 and can safely provide around 22,000 gallons/month.

Water demand can be considered in terms of average daily demand (ADD), maximum daily demand (MDD) or peak hour demand (PHD). MDD is normally 2 x ADD, this would be on a holiday weekend when the average number of patrons who stop for gas is twice the normal amount. Considering the highest usage of 21,692 gallons per month and assuming the worst case of the least number of days in the month which is February then the project would have an ADD of 774.71 gallons per day (or 775 gpd). This equates to 0.54 gallons per minute (gpm); with the 2.0 multiplier for MDD, demand would be 1.08 gpm Applying the 1.5 x safety factor to the MDD (which is industry standard) results in a required supply of 1.61 gpm. Therefore, the 2 gpm anticipated capacity appears to be adequate from a supply standpoint.

Water storage tanks would be necessary to maintain year-round water capacity requirements for the proposed gas station and store. The water tanks would be in addition to and separate from the groundwater treatment system water tanks. The applicant's engineer has recommended a hydropneumatics potable water storage tank with a capacity of approximately 5,000 gallons to provide potable water storage. This tank would be undergrounded. The ultimate tank design and capacity would be designed to be acceptable to DDW (see Mitigation Measure UTIL-1, above).

A separate 20,000-gallon, above-ground firefighting water supply tank also would be constructed on the site, however, once filled, it would not be tapped unless needed for firefighting purposes, so does not factor into daily demand calculations. The location of this tank is shown on Figure 2, above.

As described in the Hydrology and Water Quality section, above, this would be adequate to serve project needs assuming pre-treatment for water quality contaminants. Therefore this impact would be ***less than significant.***

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?

Sewage would be addressed through directing the sewage to a holding tank that will be periodically emptied and trucked off for disposal through a sewage removal service. The Project would require sewage use similar to one or two single-family houses, which would not be substantial. The project would not be connected to a wastewater treatment provider, so would not have a significant impact on any such provider. This impact would be l***ess than significant.***

d, e) 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?

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

Refuse disposal would be furnished by Waste Management Inc., and presumably be disposed of at the Altamont Landfill, which has adequate capacity. Therefore, this impact would be l***ess than significant.***

20. WILDFIRE If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				x
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?				x
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?				x
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?				x

Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

As discussed in the Transportation section of this IS, the Project would be at the end of a road and would not impair emergency response. Therefore, the project would have ***no impact***.

b, c) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

The project site is mapped as Moderate by the California Department of Forestry and Fire Protection (CalFire) as shown on the Alameda County Fire Department's Fire Hazard Severity Zone interactive map)[9].

The project would be located in a readily-accessible site adjacent to a major freeway with onramps nearby, and would not involve any housing. Therefore, it would not expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, nor would any associated fire protection infrastructure be required. In addition, a fire truck hose hook-up would be provided on the fire-fighting water supply tank.

The proposed Project is not at the interface between urbanized development and wildlands, but is in the midst of rangelands and windfarms, but borders Interstate Highway I-580. Grassland fires have occurred periodically alongside the freeway due to careless motorists discarding unextinguished cigarette butts or vehicle malfunction, and therefore some potential exists for a grass fire adjacent to the site. However, the

9 https://acgov.acgov.org/fire/EmergencyPreparedness/hazardlocator.page?

site is separated from the grass closest to the freeway by the east-bound on-ramp, which would also provide access for fire-fighting apparatus. There would be ***no impact*** associated with wildland fires.

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?

As described in the Hydrology and Water Quality, and Geology and Soils sections of this IS, the project site is not subject to, nor would it contribute to, potentially significant downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, the project would have ***no impact***.

21. MANDATORY FINDINGS OF SIGNIFICANCE	YES: Potentially Significant Impact	NO: Less Than Significant With Mitigation	NO: Less Than Significant Impact	NO: No Impact
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?		x		
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.)		x		
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		x		

Discussion

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?

The Project would have potentially significant effects on biological resources. Mitigation measures are identified in this IS to reduce those impacts to less-than-significant levels. The project would not have the potential to eliminate any examples of California's history or prehistory, as it is a previously disturbed, vacant site. This impact would be ***significant but mitigable*** with measures identified in this IS.

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.)**

CEQA Guidelines (Section 15355[b]) defines cumulative impacts as those resulting from closely related past, present, and reasonably foreseeable Projects. CEQA Guidelines (Section 15125[a]) also defines the analytical baseline as the conditions on the ground at the time that the Initial Study is prepared. Impacts of past projects are generally considered as part of these baseline conditions. A typical CEQA analysis adds the Project and future cumulative development to this baseline.

A review of Alameda County's Current Development Projects website (November 1, 2022) (https://www.acgov.org/cda/planning/landuseprojects/currentprojects.htm) identified one potential project that has been proposed near the project site that may have overlapping environmental effects. That project proposes 12 units of farmworker housing in six buildings, and two single family homes (one for the landowner and one for the farmworker housing caretaker) on a parcel immediately adjacent to the Project site. The County is currently reviewing the application for that project. Another project in the project area

is the Alameda Grant Line Solar 1 project, which involves the construction of a photovoltaic power system on a 23-acre parcel on grant Line Road and Great valley Parkway, just north of I-580. The project was approved in December 2022. Because of the distance of this facility from the proposed project and the lack of operational impacts, overlapping impacts are anticipated to be minimal.

The two adjacent projects (the proposed project and the farmworker housing) would contribute incrementally to impacts to biological, hydrologic, air quality, and greenhouse gas impacts, however, because both projects are relatively small and because the proposed project would include mitigation measures that would minimize its impacts, the project's impacts would be less than cumulatively considerable, and the combined impacts of the two projects would be **less than significant**.

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

As described in the Air Quality, Noise, and Hazards discussions in this IS, the project, with mitigation, would not have the potential to adversely affect human beings, either directly or indirectly. These impacts would be ***significant but mitigable*** with measures identified in this IS.

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F. REPORT PREPARATION

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G. MITIGATION MEASURES TO BE INCLUDED IN THE PROJECT AND AGREED TO BY THE PROJECT SPONSOR AND ALL SUBSEQUENT PROPERTY OWNERS AND PERMITTEES

The following mitigation measures identified in this IS/MND are required to reduce potentially significant impacts of the proposed Project to a "Less Than Significant" or "No Impact" level. These mitigation measures shall be made conditions of approval for the Project. For every mitigation measure, the Permittee will be responsible for implementation actions, schedule, funding and compliance with performance standards, unless otherwise stated in the measure.

Mitigation BIO-1a. A qualified biologist will conduct preconstruction surveys for CTS and CRLF no more than 14 days prior to the start of groundbreaking or other general construction activities that could affect CTS and CRLF. The survey will identify upland CTS and CRLF habitat within the project footprint, including burrows which could serve as refugia for the species. The survey will occur prior to the installation of exclusion fencing along the Project footprint boundary.

c. If burrows are discovered, they will be flagged or otherwise marked, and avoided by at least 50 ft. If burrows cannot be avoided by 50 ft, they will be inspected and excavated by a qualified biologist in accordance with a Relocation Plan, which will establish procedures for burrow excavation and CTS and CRLF relocation to outside of the Project footprint

d. For any work occurring during the wet season (approximately November 1 through May 31, the period of likely adult CTS migration to and from aquatic habitat to breed), burrow excavation must be completed prior to the onset of rain.

Following completion of the burrow survey, a letter report shall be prepared describing the survey methodology, results, and requesting concurrence that the Project will not result in take of CTS or CRLF if none are discovered.

Mitigation BIO-1b. An exclusionary fence surrounding the proposed construction zone shall be installed to reduce the potential for construction-related mortality of either species. Fencing will delineate the footprint of ground disturbance, staging and vehicle access, and prevent CTS and CRLF encroachment to this area. Fencing will include one-way funnels placed at 250ft regular intervals to allow potentially trapped CTS and CRLF to leave the Project footprint, but not reenter it. Fencing will measure at least 3 ft tall and be buried at least 6 inches below the ground.

e. Exclusion fence will be installed no later than 48 hours following burrow excavation (or, the preconstruction survey determining lack of burrows).

f. A qualified biologist shall accompany the exclusion fence construction crew to ensure that no CTS are killed or injured during fence installation.

g. A qualified biologist or work crew members shall conduct weekly inspections of the exclusion fence and maintain/repair the fence when necessary. This will be conducted by the Designated Biologist or a worker who has received the worker awareness training.

h. Exclusion fence shall be removed immediately upon completion of Project activities.

Mitigation BIO-1c. The Project manager and the initial construction workers shall attend a CRLF and CTS information session conducted for the site by the biological monitor. This session should

cover identification of the species and procedures to be followed if an individual is found on site, as well as biology and habitat needs of this species. Construction workers shall sign a form stating that they attended the program and understand all protection measures for the CTS and CRLF. This session can coincide with the comparable information session for protected bird species described in Biological Mitigation 3d.

Mitigation BIO-1d. If materials are stored on-site or on adjacent land, pipes, culverts and similar materials greater than four inches in diameter shall be stored so as to prevent covered wildlife species from using these as temporary refuges, and these materials shall be inspected each morning for the presence of animals prior to being moved.

Mitigation BIO-1e. If formal consultation with the USFWS and with the California Department of Fish and Game is required to mitigate for loss of 1.03 acre of upland habitat, mitigation for impacts to CTS and CRLF may include land preservation at another site to compensate for habitat loss. The USFWS and/or the CDFW may require up to 3.5 acres as compensation. Final compensation requirements and mitigation ratios for the proposed Project would be determined through consultation with these agencies. Mitigation credits may be purchased instead, or a conservation area and management plan established, prior to any ground disturbing activities, including grading, in the Project area.

Mitigation BIO-2. Prior to the start of construction, a qualified biologist will conduct a pedestrian preconstruction survey for western pond turtle. The survey will be conducted no more than 24 hours prior to the start of ground-disturbing work, and will include walking the work area limits and interior and investigating all areas that could be used by the species. If western pond turtle individuals are found, the biologist will relocate them to suitable habitat outside the disturbance area and far enough away that they would not be expected to return.

Mitigation BIO-3. In order to protect potential nests of short-eared owl, northern harrier and California horned lark, as well as for the Western burrowing owl, grading of the site would be best conducted outside their nesting season, which occurs approximately between February 1 and August 15. If this is infeasible and groundbreaking needs to occur within the breeding season, a qualified biologist shall conduct a pre-construction nesting bird survey on the site within one week of initialization of construction activities. If no nesting birds are observed no further action is required and grading may occur within one week of the survey to prevent "take" of individual birds that may have begun nesting after the survey.

If nests of any of these or other species protected under the Migratory Bird Treaty Act are encountered, a 500-foot buffer shall be established around the nest site(s), and no grading or construction activity should occur within the buffer zone until it is determined by a qualified biologist that the young have fledged, or until after the nesting season.

Mitigation BIO-4a. If Project ground disturbance is scheduled to take place during non-breeding season (September 1 through January 31), the Project proponent shall conduct preconstruction surveys for Western burrowing owls. The surveys should be conducted within the Project impact area and a 150-foot-wide buffer. If suitable burrows are found, Phase III burrowing owl surveys, census, and mapping using qualified biologists would be conducted in accordance with the survey protocol. Any burrowing owls found during preconstruction surveys to be occupying the Project site shall be evicted by passive relocation as described in the California Department of Fish and Game *Staff Report on Burrowing Owls* (CDFW 1995).

Mitigation BIO-4b. If ground disturbance is scheduled to occur during the nesting season (February 1 to August 31), a qualified biologist shall conduct a pre-construction nesting burrowing owl survey following CDFW protocols prior to ground disturbance. Any active nests shall not be disturbed until the young have fledged.

Mitigation BIO-4c. If construction is interrupted and then resumes later after 9 months or a longer period, a pre-construction nesting burrowing owl survey following CDFW protocols shall be performed again and prior to resumption of construction activities in any season.

Mitigation BIO-4d. The Project superintendent/manager and the initial construction workers shall attend an information session conducted by the designated monitor on the subject of protected bird species. This session shall cover identification of the species and procedures to be followed if an individual is found on site, as well as biology and habitat needs of this species. Construction workers shall sign a form stating that they attended the program and understand all protection measures for the protected birds.

Mitigation BIO-5. A pre-construction survey for American badger shall be conducted concurrent with surveys for the San Joaquin kit fox (Mitigation 4a) to determine its likelihood of using any burrows on the Project site as dens. These shall be collapsed after excavation and determination of current use. An exclusion fence shall be installed around the Project site perimeter to prevent badgers from entering the site to avoid any additional construction impacts. Implementation of this mitigation would offset the impacts to this species to a level of insignificance. Mitigation measures 4a-e for San Joaquin kit fox would also benefit American badger, so as to reduce impacts to habitat loss to a level of insignificance.

Mitigation BIO-6a. An exclusionary fence surrounding the proposed construction zone shall be required to reduce the potential for construction-related mortality of SJKF.

Mitigation BIO-6b. A biological monitor shall inspect the site weekly for SJKF to ensure that mitigation and habitat protection measures are properly implemented.

Mitigation BIO-6c. The Project construction superintendent/manager and the initial construction workers shall attend a San Joaquin kit fox information session conducted by the site biological monitor. This session shall cover identification of the species and procedures to be followed if an individual is found on site, as well as biology and habitat needs of this species. This session can coincide with comparable sessions identified for protected bird species described in mitigation for CTS and CRLF. Construction workers shall sign a form stating that they attended the program and understand all protection measures for the San Joaquin kit fox.

Mitigation BIO-6d. If suitable on-site den habitat for the SJKF is determined during the preconstruction survey, additional mitigations for impacts to SJKF could include land preservation at another site to compensate for habitat loss. Final compensation requirements and mitigation ratios for the proposed Project would be established through consultation with the USFWS. The USFWS and/or CDFW may require 1 to 3 acres as compensation. If this were to be demonstrated, mitigation credits could be purchased instead, or a conservation area and management plan established, prior to any ground disturbing activities.

Mitigation BIO-7. To reduce effects of light on special status species in the general area, lighting effects should be minimized by the following methods:

h) Eliminate all bare bulbs and any lighting pointing upward;

i) Use only the minimum amount of light needed for safety – use minimum intensity needed;
j) Use narrow spectrum bulbs such as sodium vapor lights to lower the range of species affected by lighting;
k) Shield, canter or cut lighting to ensure that light reaches only areas needing illumination;
l) Use embedded road lights to illuminate the roadway;
m) Use timers or motion sensors to turn off lights when vehicular and human activity is at low; and
n) Use fences to shield adjacent habitats from lights and light reflection from the Project site

Mitigation BIO-8. The potential spread of invasive plant species into adjacent areas should be minimized by:

c) Surveying the Project site and mark off the location of broadleaved pepperweed and yellow star thistle. Within this area all living and dead pepperweed and yellow star thistle plants will be removed, as well as the upper 6 inches of soil within the area of these plants and placed in heavy-duty, 3 mil or thicker, black contractor quality plastic clean-up bags. The bags will be securely tied and transport from the site to an appropriate disposal location;

b) Seeding disturbed areas on the edge of the site with a native grassland mix applied in conjunction with mulch and tackifier as soon as grading activities are completed; and

c) Using rice straw or weed-free straw as mulch to discourage the introduction and establishment of additional invasive plant species.

Mitigation HAZ-1. The service station will require submittal and approval of the Hazardous Materials Business Plan (HMBP) by Alameda County Environmental Health (EH), per Chapter 6.95 of the CA Health and Safety Code. The HMBP shall address the location, type, quantity, and health risks of the petroleum products and other hazardous materials that would be used and/or generated by the Project and to comply with both the County's Hazardous Waste Generator Program and Underground Storage Tank Program. (Alameda County EH, 2011). This would reduce the impact to a less-than-significant level.

Mitigation Measure HYDRO-1. Pursuant to the Alameda County Clean Water Program and the Grading Ordinance, in order to comply with the Clean Water Act and the NPDES Permit, the Project Sponsor or Permittee shall file a Storm Water Pollution Prevention Plan prior to development of the property. The applicant shall also submit a drainage plan and grading plan showing a) where the property will drain to after development; b) how water from the site will be treated before it leaves the site to avoid contaminants flowing off-site; and c) how the water will be handled off-site. These reports must be submitted for review and approval by the Public Works Director prior to Grading Permit approval.

Mitigation Measure HYDRO-2. To resolve any potential impacts from increased sedimentation and erosion, the Permittee shall prepare a Sedimentation Control Plan for approval by the Grading Supervisor that includes various methods to reduce erosion during construction. This Plan shall be submitted and approved prior to issuance of Grading Permits. The Permittee shall implement the Plan requirements as approved by the Grading Supervisor.

Mitigation Measure HYDRO-3. The Permittee shall comply at all times with the Alameda County Watercourse Protection Ordinance (Chapter 13.12).

Mitigation Measure HYDRO-4. Energy dissipaters and small in-swale detention ponds should be included in the Storm Water Pollution Prevention Plan and be designed and constructed so that they do not provide a suitable breeding place for mosquitoes.

Mitigation Measure HYDRO-5. The energy dissipaters shall be designed and constructed so that they will not become filled with sediment or be undercut by flows in the unnamed tributary.

Mitigation Measure HYDRO-6. Grading shall be prohibited during the rainy season (October 15 – April 15) to mitigate soil loss and sediment transport to Sulfur Creek unless appropriate erosion control measures are in place and approved by the Director of Public Works.

Mitigation Measure UTIL-1. Prior to issuance of a Building Permit, the project shall submit the final design for treatment for potable water to be used at the gas station/convenience store for reviewed and approved by the State Water Resources Control Board, Division of Drinking Water (DDW). The DWW Drinking Water Permit shall be provided to the County Building Department prior to issuance of the Building Permit.

H. AGREEMENT BY PROJECT SPONSOR

The Project Sponsor, acting on behalf of all present and future property owners and Permittees, understands the mitigation measures set forth above and agrees to be bound by them if they are adopted as a result of Project approval. Monitoring reports shall be provided to the Planning Director and Director of Public Works at appropriate stages in the development process.

_____ _____

Project Sponsor's Signature Date

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Project Sponsor's Printed Name and Title