COUNTY OF SUTTER
MITIGATED NEGATIVE DECLARATION

PROJECT TITLE: Project #U23-0030 (Sangha)

PROJECT SPONSORS: Project Applicant/Owner:
Sangha Family '22 Trust
Bains Revocable Living Trust
c/o Jaskaran Sangha
1055 Oswald Rd
Yuba City, CA 95991

PROJECT LOCATION: 8709 S George Washington Blvd, Yuba City, CA 95993; On the west side of S George Washington Blvd / State Hwy 113, south of Tudor Rd and north of Thompson Rd, within the unincorporated area of Sutter County, south of Yuba City

ASSESSOR'S PARCEL NO: 25-030-004

PROJECT DESCRIPTION: A request for a Use Permit to establish a large general truck yard with a maximum of 76 truck/trailer parking spaces on 5± acres in the AG (Agriculture) District.

An Initial Study has been conducted by the Environmental Control Officer of the County of Sutter. The Environmental Control Officer finds that this project will not have a significant effect on the environment. The Initial Study is available for public review at the Sutter County Development Services Department, 1130 Civic Center Boulevard, Suite A, Yuba City, California. (Phone: 530-822-7400)

STATEMENT OF REASONS TO SUPPORT FINDING
OF MITIGATED NEGATIVE DECLARATION

Staff has conducted an Initial Study for this project, which revealed that the proposed project could have a significant impact on the environment; however, the recommended mitigation measures would reduce the possible impacts to a less than significant level.

NHP — 7/9/2024

Neal Hay
Director of Development Services
Environmental Control Officer

Date

INITIAL STUDY AND ENVIRONMENTAL REVIEW CHECKLIST

California Environmental Quality Act (CEQA)

PROJECT INFORMATION

1. **Project Title:** Project #U23-0030 (Sangha)

2. **Lead Agency Name and Address:** Sutter County, Development Services Department
   Planning Division
   1130 Civic Center Blvd, Yuba City, CA 95993

3. **Contact Person and Phone Number:** Arwen Wacht, Principal Planner
   530-822-7400; awacht@co.sutter.ca.us

4. **Project Sponsor's Name And Address:** Project Applicant/Owner:
   Sangha Family '22 Trust
   Bains Revocable Living Trust
   c/o Jaskaran Sangha
   1055 Oswald Rd, Yuba City, CA 95991

   Project Engineer:
   Kyle Sanchez, MHM Inc.
   1204 E Street, Marysville, CA 95901

5. **Project Location:** 8709 S George Washington Blvd, Yuba City, CA 95993
   APN: 25-030-004

6. **General Plan Designation:** Agriculture, 80-acre minimum (AG-80)

7. **Zoning:** Agriculture (AG) District

8. **Description of Project:** The project site consists of one 5±acre parcel with three existing structures on the property (a 2,150± square foot former restaurant / office, a wayside stand, and a greenhouse). The site layout plan indicates the applicant proposes to keep the former restaurant / office building and remove the wayside stand, greenhouse, and a number of trees and shrubs from the property. A site visit found that all three buildings are still in place.

   The project applicant seeks to obtain approval of a Use Permit from Sutter County (County) for development of a large general truck yard with a maximum of 76 truck/trailer parking spaces on 5± acres in the AG (Agriculture) District. The proposal does not include any other truck-related services beyond parking, such as truck repair, fueling, or supplies.

   The truck yard would provide 76 truck parking spaces, each approximately 70 feet long by 12 feet wide. The spaces would be located along the northern and southern boundaries of the project site. Curb stops would be provided at each truck parking space to prevent trucks from damaging fences or landscaping. The truck yard would be paved with chip seal, consistent with County requirements. A slatted, chain-link fence approximately six feet in height would be placed along the northern, southern, western and a portion of the eastern boundaries of the project site. The existing 2,150± square foot former restaurant building on the project site would remain, though the applicant proposed to remove the existing greenhouse and wayside

stand on the property. Although a restroom within the building could be available for drivers, due to the site being located within a floodplain, the applicant is proposing to provide double portable bathroom trailer for 24-hour access. The applicant is proposing to maintain the remaining building for office use for the proposed truck yard.

The main hours of operation will be from 8:00 a.m. to 5:00 p.m., Monday through Saturday, but the site will remain open 24-hours a day, 7 days a week with security on-site. The number of employees on-site during peak hours is five (5) and there will be a maximum of twenty (20) transportation refrigeration units (reefers) on the proposed site at any one time. However, only five will be running up to two hours a day at a time, then the next five (5) will run and only during the summer. Some of the truck drivers would park their personal automobile at the site, while others would be dropped off. The proposal will be conditioned to restrict transport refrigerated units (TRUs) to the southwest side of the truck yard, to reduce noise impacts on residences to the east.

A proposed landscaping plan is shown in Appendix A. Large trees would be planted along the eastern boundaries adjacent to the parking spaces. Trees along the automobile parking spaces would be planted within a five-foot strip; trees along the State Highway 113 frontages would be planted within a larger 15-foot landscape area. Low-water plants would be used. Trees would be irrigated with a root watering system and a supplemental surface bubbler. Any shrubs and groundcover would be irrigated with low-volume, point source drip/bubblers to provide water to the plant root zone. Site irrigation would be controlled by a “smart” controller with weather sensing capabilities. An existing onsite well would provide irrigation water.

A proposed photometric plan is also shown in Appendix A. The project proposes eight pole lights with LED fixtures and a maximum height of 25 feet to be installed in the parking areas. Three additional LED lighting fixtures would be mounted, at a maximum height of 20 feet, on the exterior walls of the existing building that would remain standing. Luminaires would be shielded and directed to prevent light spillage onto adjacent properties and road right-of-way.

Access to the project site would be provided from State Highway 113 by a driveway approximately 47 feet in width. The new driveway, which would be ungated, would be constructed in accordance with the standards of the California Department of Transportation (Caltrans).

The project applicant has indicated that Surface Transportation Assistance Act (STAA) trucks would be parked at the project site. STAA trucks are typically truck-tractors with sleeper units and a trailer that when combined exceed the 65-foot "California Legal" threshold. Large general truck yards may only be established in the AG District with approval of a use permit and when located immediately adjacent to a State Highway or designated STAA T or S-route. An existing STAA route has been established along State Highway 113.

Water, wastewater, and electrical services would be provided by existing facilities on or adjacent to the project site. Portable, trailer-mounted portable restrooms will be available on the project site and a minimum of one hand-washing station per restroom will also be provided. Restroom facilities will be maintained daily by the applicant’s property manager. Four 55-gallon trash receptacles would be placed on the project site, including adjacent to the truck parking areas, as required by County Zoning Code (1500-05-030 (B)(2)(m)).

9. **Surrounding Land Uses and Setting:** The project site is located within the unincorporated portion of Sutter County, between the rural community of Robbins and the incorporated city

of Yuba City. The roughly rectangular, 5-acre site is identified by Assessor's Parcel Number 25-030-004 and is bound by South George Washington Boulevard / State Highway 113 and agricultural land to the east, agricultural land to the west and south, and agricultural truck repair and residences to the north.

SURROUNDING LAND USE DESIGNATIONS & LAND USES			
Direction	**General Plan**	**Zoning**	**Existing Land Use(s)**
North	Agriculture 80 (AG-80)	Agriculture (AG)	Agricultural Truck/Equipment Repair & Residences
South	Agriculture 80 (AG-80)	Agriculture (AG)	Agricultural Land
East	Agriculture 80 (AG-80)	Agriculture (AG)	Agricultural Land & Residence
West	Agriculture 80 (AG-80)	Agriculture (AG)	Agricultural Land

The project site currently houses a former restaurant, wayside stand, and greenhouse, has a Sutter County General Plan land use designation as Agriculture, 80-acre minimum (AG-80), and the current zoning is Agriculture (AG) district.

10. Other public agencies whose approval is required (e.g., permits, financing, approval, or participation agreement):

- Sutter County – Development Services Department: Grading Permit, Building Permits (change of use and any future construction or improvements), Encroachment Permit, and Well & Septic Permits
- State of California, Department of Transportation (Caltrans): Encroachment Permit

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

No requests for consultation have been received by the County.

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. Where checked below the topic with a potentially significant impact will be addressed in an environmental impact report.

☐ Aesthetics	☐ Agriculture / Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance
☐ None	☒ None with Mitigation Incorporated	

DETERMINATION

On the basis of this initial evaluation:

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

Applicant Mitigation Agreement:

CEQA allows a project proponent to make revisions to a project, and/or to agree and comply with, mitigation measures that reduce the project impacts such that the project will not have a significant effect on the environment. CEQA Guidelines Section 15064.

As the applicant/representative for this proposed project, I hereby agree to implement the proposed mitigation measures and mitigation monitoring program identified within this document.

Jaskaran Sangha — 7-9-24
Jaskaran Sangha
Applicant/Property Owner
Date

Arwen Wacht — 07/09/2024
Arwen Wacht
Principal Planner
Date

NHP — 7/9/2024
Neal Hay
Director of Development Services
Environmental Control Officer
Date

1.1 AESTHETICS

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics.				
Except as provided in Public Resources Code Section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Responses:

a) **No impact.** The Sutter County General Plan does not identify any scenic vista on the subject property, and there are no scenic vistas proximate to the project site. The General Plan Technical Background Report identifies geographic features such as the Sutter Buttes, Feather River, Sacramento River, and Bear River as scenic resources within the County. This project is not located within the Sutter Buttes Overlay Zone and is not located in the immediate vicinity of the Bear River, Feather River, or Sacramento River. As a result, this project would have no impact on scenic vistas.

b) **No impact**. As there are not scenic highways located in Sutter County, no impact is anticipated.

c) **Less than significant impact.** The proposed project is located in a non-urbanized area and will not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project site was previously used as a wayside stand, and prior to that as a restaurant and does not have any substantial visual character. The surrounding area is largely rural and agricultural. While truck parking is not a typical land use associated with the area, it is consistent with prevalent agricultural activities that use trucks such as agricultural product processing plants.

The County's Zoning Code contains specific requirements for screening for large general truck yards proposed within the AG District [Zoning Code Section 1500-05-030(E)(3)(o)]. These requirements specify that facilities shall be screened from view through concrete masonry unit walls or chain-link fencing with privacy slats, having a minimum privacy rating of 90 percent or greater, and landscaping. These requirements also specify that facilities shall comply with the

applicable requirements of Zoning Code Table 1500-07-3 (Commercial and Employment Design Checklist), which includes requirements for landscaping and screening. The screening to be provided for the proposed project would include six-foot-tall fencing with slats. This fencing would reduce the visibility of the parking area from State Hwy 133, the main public view area.

The proposed landscaping would also reduce the visibility of the parking area, as well as enhance the visual quality of the site entrance. The County's Commercial and Employment Districts contain specific design requirements for landscaping, which are designed in part to improve the appearance of a site and create a cohesive look (Zoning Code Section 1500-07-050 E). These requirements would apply to large general truck yards such as this project and are a supplemental requirement of the Use Permit. The applicant has submitted a landscaping plan (see Appendix A), which demonstrates compliance with Zoning Code requirements for landscaping. Landscaping is required to be installed in accordance with the landscape plan prior to use of the site for truck/trailer and vehicle parking and shall be continuously irrigated and maintained; these requirements will be included as proposed project conditions.

The existing visual characteristics of the site consist of three vacant structures, wood fencing, and grasses and weeds. As this project complies with the design requirements of the Zoning Code Design Checklist and is consistent with the General Plan designation of the property, this project is not anticipated to substantially degrade the existing visual character or quality of the site or its surroundings; in fact, the project would likely improve the visual character of the site with the removal of weeds and the addition of view-obstructing fencing and landscaping. A less-than-significant impact is anticipated, and the overall project impacts are considered beneficial.

d) **Less than significant impact.** Existing lighting is mainly limited to exterior lighting of nearby residences and businesses. The project would add new lighting to a site that currently has none. This has the potential to cause indirect illumination of nearby residences, including the one adjacent to and east of the project site, at a level that could disturb the sleep of residents.

The County's Zoning Code contains specific requirements for exterior lighting for large general truck yards proposed within the AG District (Zoning Code Section 1500-05-030 E. 3. d.). These requirements specify that light pole and fixture height shall not exceed twenty-five feet (25') and that truck parking areas shall incorporate motion activated lighting that shall not spill onto adjoining properties. These requirements also specify that exterior lighting shall be provided consistent with Zoning Code Table 1500-07-3 (Commercial and Employment Design Checklist). These requirements specify that luminaires be oriented and shielded to direct the light downward onto the property and not spill onto adjacent properties or road rights-of-way. The requirements also specify illumination requirements for parking lots and driveways and require that a point-by-point exterior lighting (photometric) plan be submitted to demonstrate compliance with the lighting standards.

Pole-mounted LED light fixtures are proposed around the perimeter of the new parking area, as illustrated in the photometric plan (see Appendix A). All new lighting would meet County lighting requirements, including shielding and pole heights. Outdoor lighting is required to be installed in accordance with the lighting plan prior to use of the site for truck/trailer and vehicle parking, which would be included as a proposed project condition. The photometric plan demonstrates compliance with County lighting requirements, and it shows that project lighting would only minimally increase illumination levels at the adjacent residence to the east. As a result, it is not anticipated this project would create a new source of substantial light or glare in this area. A less-than-significant impact is anticipated.

(County of Sutter, General Plan 2030 Technical Background Report. 2008)
(County of Sutter, Zoning Code. 2023)
(California Department of Transportation (Caltrans), State Scenic Highway Program: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways)

1.2 AGRICULTURE AND FOREST RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
II. Agricultural Resources. In determining whether agricultural impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would this project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

Responses:

a) **Less than significant impact**. The proposed project will not 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 a non-agricultural use. The U.S. Soil Conservation Service Soil Survey of Sutter County identifies the soils occurring on this project site as Liveoak Sandy Clay Loam, 0 to 2 percent slopes, which can be considered prime soil when it is being irrigated. None of the 5-acre site is currently being cultivated or irrigated. The site is not designated as prime farmland, it is considered other land on the 2023 Sutter County Important Farm-Land Map prepared by the California Resources Agency. A loss of farmland is not anticipated as the site is not identified as farmland has not been cultivated for agriculture nor irrigated for several years. A less than significant impact is anticipated.

b) **Less than significant impact**. This project would not conflict with existing zoning for agricultural uses or a Williamson Act contract. The project site is zoned Agriculture (AG). However, the proposed project is a permitted use in the AG District with a Use Permit. The project site is not encumbered by a Williamson Act contract. A less-than- significant impact is anticipated.

c) **No impact.** The project site and surrounding area does not contain forest land or timberland, and this project is located in the Sacramento Valley, a non-forested region. No impact is anticipated.

d) **No impact**. This project would not result in the loss of forest land or conversion of forest land to a non-forest use because of its location within Sutter County. Sutter County is located on the valley floor of California's Central Valley, and, as such, does not contain forest land. No impact is anticipated.

e) **Less than significant impact.** The project will not involve other changes in the existing environment which could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. The property is not being irrigated or cultivated as agricultural land. Other properties in the vicinity are used agriculturally, residentially or developed with a business type use.

This proposal is for Use Permit for development of a large general truck yard with a maximum of 76 truck/trailer parking spaces on 5± acres in the AG (Agriculture) District. If approved, agricultural operations in the vicinity (orchards) and agricultural processing facilities can continue as they have historically with few incompatibilities anticipated because public uses do not present the same incompatibilities as residential uses can have with agricultural uses. The County's Agricultural Commissioner has reviewed the project and determined that buffering of the project from adjacent agricultural lands is not necessary. A less than significant impact is anticipated.

(California Dept. of Conservation, Farmland Mapping and Monitoring Program. 2018)
(County of Sutter, General Plan Draft Environmental Impact Report. 2008)
(County of Sutter, Zoning Code. 2023)

1.3 AIR QUALITY

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
III. 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:				
a) Conflict with, or obstruct implementation of, the applicable air quality plan?	☐	☒	☐	☐
b) Violate any air quality standard or contribute substantially to an existing, or projected, air quality violation?	☐	☐	☒	☐
c) 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 threshold for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Responses:

a) **Less than significant impact with mitigation incorporation.** This project would not conflict with or obstruct implementation of an applicable air quality plan. Both the federal and State governments have established ambient air quality standards, based on their respective Clean Air Acts, for various air pollutants identified as "criteria" air pollutants. The federal Clean Air Act identifies six criteria pollutants: reactive organic gases (ROG), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide, lead, and particulate matter less than 10 micrometers in diameter (PM_{10}), a subset of which is particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$). The California Clean Air Act identifies these six federal criteria pollutants, along with four others.

Under both Clean Air Acts, air basins are classified as being in "attainment" or "nonattainment" of these ambient air quality standards, or they are "unclassified". Any air district that has been designated as a nonattainment area relative to federal and/or State ambient air quality standards for ozone, carbon monoxide (CO), sulfur dioxide or nitrogen dioxide is required to prepare and submit a plan for attaining and maintaining the standards for which it is in nonattainment.

The project site is within the boundaries of the Feather River Air Quality Management District (FRAQMD), which covers Sutter and Yuba Counties. The FRAQMD is either in attainment of or unclassified for all federal and State ambient air quality except for federal standards for ozone and particulate matter less than 10 micrometers in diameter (PM_{10}). Portions of Sutter County are also in nonattainment of State standards for ozone. The FRAQMD, in cooperation with other air districts in the northern Sacramento Valley, has prepared the Northern Sacramento Valley

Planning Area Air Quality Attainment Plan for the attainment of State ozone standards. Plans have also been prepared for the attainment of federal ozone and PM_{10} standards.

To determine air quality impacts resulting from the proposed project, the applicant hired Environmental Permitting Specialists to prepare an air quality analysis. A copy of this analysis is included as Appendix B to this Initial Study, and the analysis is being reviewed by FRAQMD. The air quality analysis describes existing air quality in the project area and the surrounding region, details the associated regulatory setting, and presents an analysis of potential impacts of air pollutant emissions from project construction and operation on air quality. The significance of the impacts was determined using emission thresholds established by FRAQMD for ROG and NO_x, the main ingredients for ozone, as well as for PM_{10}. Table 1 below shows the FRAQMD significance thresholds. These thresholds have been established only for the criteria pollutants for which FRAQMD is in nonattainment status.

TABLE 1
FRAQMD SIGNIFICANCE THRESHOLDS AND PROJECT EMISSIONS

	ROG	NO_x	PM_{10}
Significance Thresholds (pounds/day)[1]	**25**[2]	**25**[2]	**80**
Construction Emissions (pounds/day)	0.63	5.53	0.89
Exceeds threshold?	*No*	*No*	*No*
Operational Emissions (pounds/day)	1.66	2.96	4.20
Exceeds threshold?	*No*	*No*	*No*

[1] Applies to both construction and operational emissions.
[2] Construction emissions not to exceed 4.5 tons per year.

Short-Term Construction Impacts

Construction activities for the proposed project would emit criteria air pollutants from a variety of activities, including operation of heavy equipment and use of worker vehicles, vendor trucks, and hauling trucks. Emissions of ozone precursors (ROG and NO_x) are primarily generated by mobile sources and largely vary as a function of vehicle trips per day and the type, quantity, intensity, and frequency of heavy-duty, off-road equipment used. Typically, a large portion of construction-related ROG emissions results from the application of asphalt on to parking areas, and the application of architectural coatings. Construction-related fugitive dust emissions of PM_{10} would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather.

As part of the air quality analysis for the project, construction emissions were estimated using the California Emissions Estimate Model (CalEEMod) computer model Version 2020.4.0. Estimated construction emissions for the proposed project are reported and compared to the FRAQMD thresholds of significance in Table 1 above. As shown in Table 1, emissions of NO_x, ROG, and PM_{10} generated during construction of the proposed project would not exceed FRAQMD thresholds of significance. Therefore, project construction activities would not interfere with the implementation of air quality attainment plans for ozone or PM_{10}. Project construction impacts on air quality would be less than significant.

Long-Term Operational Impacts

The proposed project would result in long-term operational emissions, as it would generate an increase in the number of trucks that would travel to and from the site on a regular basis. The air quality analysis used the EMFAC 2021 computer model to estimate vehicle exhaust emissions and data from the California Air Resources Board (CARB) to estimate fugitive road dust emissions. The results of this analysis are summarized and compared to the FRAQMD operational thresholds of significance in Table 1 above. As shown in Table 1, total project operational emissions would not exceed the FRAQMD thresholds of significance for emissions of ROG, NO_x, or PM_{10}. Therefore, project operations would not interfere with the implementation of air quality attainment plans for ozone or PM_{10}.

Since the proposed project has an operational phase, the project is characterized by FRAQMD as a Type 1 project. According to the FRAQMD indirect source review guidelines, if operational emissions of a Type 1 project do not exceed the thresholds of significance, it is recommended that the project proponent implement the Standard Mitigation Measures. These include the implementation of a Fugitive Dust Control Plan to control dust emissions during construction activities. The project would implement the following mitigation measure, which requires the application of the FRAQMD Standard Mitigation Measures.

> **Mitigation Measure No. 1 (Air Quality):** IMPLEMENT FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT (FRAQMD) STANDARD MITIGATION MEASURES. The project applicant shall implement the following FRAQMD-recommended Standard Mitigation Measures for projects that do not exceed construction or operational thresholds of significance.
>
> a) Implement an approved Fugitive Dust Control Plan prior to any on-site grading, landscaping, or construction activities. The applicant shall submit the fugitive dust control plan to the FRAQMD for review and approval. A copy of the approved plan shall be submitted to the Development Services Department.
>
> b) Construction equipment exhaust emissions shall not exceed FRAQMD Regulation III, Rule 3.0, Visible Emissions limitations (40 percent opacity or Ringlemann 2.0).
>
> c) The contractor shall be responsible to ensure that all construction equipment is properly tuned and maintained prior to and for the duration of onsite operation.
>
> d) Limit idling time to 5 minutes as this saves fuel and reduces emissions in accordance with 13 California Code of Regulations (CCR) Chapter 10 Section 2485 and 13 CCR Chapter 9 Article 4.8 Section 2449.
>
> e) Utilize existing power sources (e.g., line power) or clean fuel generators rather than temporary power generators.
>
> f) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.

g) Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, may require California Air Resources Board (CARB) Portable Equipment Registration with the State or a local district permit. The owner/operator shall be responsible for arranging appropriate consultation with CARB or FRAQMD to determine registration and permitting requirements prior to equipment operation at the site.

Mitigation Measure No. 2 (AQ): Fugitive Dust Control – Best Available Mitigation Measures: The applicant shall comply with the following mitigation measures to address potential impacts to air quality:

a) All grading operations on a project should be suspended when winds exceed 20 miles per hour or when winds carry dust beyond the property line despite implementation of all feasible dust control measures.

b) Construction sites shall be watered as directed by the Department of Public Works or Air Quality Management District and as necessary to prevent fugitive dust violations.

c) An operational water truck should be onsite, at all times. Apply water to control dust as needed to prevent visible emissions violations and offsite dust impacts.

d) Onsite dirt piles or other stockpiled particulate matter should be covered, wind breaks installed, and water and/or soil stabilizers employed to reduce windblown dust emissions. Incorporate the use of approved non-toxic soil stabilizers according to manufacturer's specifications to all inactive construction areas.

e) All transfer processes involving a free fall of soil or other particulate matter shall be operated in such a manner as to minimize the free fall distance and fugitive dust emissions.

f) Apply approved chemical soil stabilizers according to the manufacturers' specifications, to all-inactive construction areas (previously graded areas that remain inactive for 96 hours) including unpaved roads and employee/equipment parking areas.

g) To prevent track-out, wheel washers should be installed where project vehicles and/or equipment exit onto paved streets from unpaved roads. Vehicles and/or equipment shall be washed prior to each trip. Alternatively, a gravel bed may be installed as appropriate at vehicle/equipment site exit points to effectively remove soil buildup on tires and tracks to prevent/diminish track-out.

h) Paved streets shall be swept frequently (water sweeper with reclaimed water recommended; wet broom) if soil material has been carried onto adjacent paved, public thoroughfares from the project site.

i) Provide temporary traffic control as needed during all phases of construction to improve traffic flow, as deemed appropriate by the Department of Public Works and/or Caltrans and to reduce vehicle dust emissions. An effective measure is to enforce vehicle traffic speeds at or below 15 mph.

j) Reduce traffic speeds on all unpaved surfaces to 15 miles per hour or less and reduce unnecessary vehicle traffic by restricting access. Provide appropriate training, onsite enforcement, and signage.

k) Reestablish ground cover on the construction site as soon as possible and prior to final occupancy, through seeding and watering.

l) Disposal by Burning: Open burning is yet another source of fugitive gas and particulate emissions and shall be prohibited at the project site. No open burning of vegetative waste (natural plant growth wastes) or other legal or illegal burn materials (trash, demolition debris, et. Al.) may be conducted at the project site. Vegetative wastes should be chipped or delivered to waste to energy facilities (permitted biomass facilities), mulched, composted, or used for firewood. It is unlawful to haul waste materials offsite for disposal by open burning.

m) A copy of the approved Fugitive Dust Control Plan approved by FRAQMD shall be submitted to the Planning Division prior to development commencing.

Because this project would not generate emissions above FRAQMD's thresholds of significance for construction and operational activities and would implement the relevant mitigation described above, a less-than-significant impact on air quality is anticipated.

b) **Less than significant with mitigation incorporation.** This project would not result in a net increase of any criteria pollutant. The focus of the analysis is related to the ground-level ozone and PM_{10}, for which FRAQMD is in non-attainment. $PM_{2.5}$, CO, and SO_2 were not a component of the analysis, since FRAQMD does not have numerical thresholds of significance for these pollutants, and in any case FRAQMD is in attainment of standards for these pollutants. This project's cumulative impacts regarding air quality are discussed in the Mandatory Findings of Significance Section of this checklist.

c) **Less than significant impact.** This project would not result in a net increase of any criteria pollutant. The focus of the analysis is related to the ground-level ozone and PM_{10}, for which FRAQMD is in non-attainment. $PM_{2.5}$, CO, and SO_2 were not a component of the analysis, since FRAQMD does not have numerical thresholds of significance for these pollutants, and in any case FRAQMD is in attainment of standards for these pollutants. This project's cumulative impacts regarding air quality are discussed in the Mandatory Findings of Significance Section of this checklist.

Neither construction nor operation of the proposed project would generate emissions that would exceed the FRAQMD thresholds of significance, and the project would implement the FRAQMD recommended Standard Mitigation Measures. Therefore, the project would not result in a significant net increase of criteria air pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. A less- than-significant impact is anticipated.

d) **Less than significant impact.** This project would not expose sensitive receptors to substantial pollutant concentrations. Potential sensitive receptors include the adjacent residences east of the project site. As discussed in a) above, project construction and operational emissions would not exceed FRAQMD significance thresholds. As such, the nearby sensitive receptors would not be exposed to substantial amounts of pollutant emissions, especially when Mitigation Measure No. 1 is implemented.

The project would generate emissions of diesel particulate matter (DPM), which is considered a toxic air contaminant that could lead to increased cancer risk with prolonged exposure. DPM emissions would be generated by the operation of off-road construction equipment (e.g., excavators, loaders, cranes, graders) during construction and on-road diesel heavy duty vehicles and TRUs.

The Environmental Permitting Specialists analysis for the project included a screening level risk analysis that evaluated the potential health risks to nearby residences of the estimated DPM operational emissions. Construction DPM emissions were not considered, as construction work is estimated to take only 30 days, and measurable health risks from DPM emissions occur only with prolonged exposure. The emission rate of exhaust PM_{10} estimated by CalEEMod, with a few refinements, is considered a surrogate for DPM. Annual DPM operational emissions generated by the project were estimated at 0.1417 pounds per year.

Toxic air contaminant emissions are considered significant if the emissions lead to a cancer risk of 10 cancers per million people and the Non-Cancer Hazard Index is 1.0. The analysis found that for the closest distance to the project site (0 to 100 meters), the cancer risk would be approximately 0.508 per million – well below the significance threshold for cancer risk. The Non-Cancer Hazard Index at 0 to 100 meters would be approximately 0.0001, also well below the significance threshold.

In summary, construction and operational emissions from the proposed project would not generate substantial criteria pollutant emissions, nor would it generate DPM emissions that would pose a substantial health risk to sensitive receptors – the nearby residences. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations and the impact is considered less than significant.

e) **Less than significant impact.** This project would not result in other emissions, such as those leading to odors) adversely affecting a substantial number of people. FRAQMD has identified various types of facilities that are known sources of odors, including wastewater treatment plants, sanitary landfills, painting/coating operations, food processing facilities, and green waste and recycling operations. The proposed project would not include operation of any of the types of odor-generating facilities. Therefore, the project would not be anticipated to generate odors that would affect a substantial number of people, and the impact would be less than significant.

(Environmental Permitting Specialists, Draft Analysis of Impacts to Air Quality and Greenhouse Gas from Proposed Truck Yard, Yuba City, California. 2022)
(Feather River Air Quality Management District, Indirect Source Review Guidelines. 2010)
(County of Sutter, General Plan 2030. 2011)

1.4 BIOLOGICAL RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. Biological Resources.				

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of a native wildlife nursery site?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Responses:

a) **Less than significant impact.** The California Natural Diversity Database (CNDDB) is a positive-sighting database managed by CDFW. According to the CNDDB, there are no candidate, sensitive, or special status species identified as potentially occurring on-site or in the immediate area. The nearest species identified are located in close proximity to the Gilsizer Slough, East Borrow, and Sutter Bypass, located approximately 1.2 and 1.6 miles from the project site. In addition, the USFWS Critical Habitat Mapper indicated no critical habitat for any species listed under the federal Endangered Species Act within the project site and vicinity.

The project site has been previously developed. Such sites are generally of limited use to wildlife due to the level of disturbance and typically are devoid of native plant species or habitat. There

are no waterways or wetlands on the project site that may provide habitat for listed species. The land uses occurring in the project area are not conducive to wildlife use. Therefore, a less-than-significant impact is anticipated.

b) **No impact.** This project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. There are no streams or rivers in the immediate project vicinity. No riparian habitat or other sensitive natural community exists onsite or near the property; only orchard land has been identified on nearby lands. Therefore, no impact is anticipated.

c) **No impact.** The project will not have a substantial adverse impact on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. The property was previously developed with several buildings and does not contain any wetlands or waterways. Therefore, no impact is anticipated.

d) **No impact.** This project would not 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 a native wildlife nursery site because the area is predominantly developed. The project is not anticipated to significantly interfere with wildlife movement since the site has no trees other than ornamentals, which are not considered desirable nesting sites for migratory birds. The property is not located near any rivers or streams that would provide fish movement corridors or riparian vegetation for nesting. No impact is anticipated.

e) **No impact.** This project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, because Sutter County has not adopted such policies or ordinances. There are no oak trees located on the property, so no impact is anticipated.

f) **No impact.** The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan because no such plans are applicable to this project site. As a result, no impacts are anticipated.

(County of Sutter, General Plan Draft Environmental Impact Report. 2008)
(County of Sutter, General Plan Technical Background Report. 2008
(U.S. Fish and Wildlife Service, Critical Habitat Mapper, 2022)
(U.S. Fish and Wildlife Service, National Wetlands Inventory, 2022)

1.5 CULTURAL RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources.				
Would the project:				

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Responses:

a-d) **Less than significant with mitigation incorporated**. The proposed project would not cause a substantial adverse change in the significance of a historical resource or archaeological resource pursuant to California Environmental Quality Act (CEQA) Guidelines §15064.5. In Section 4.6 of the General Plan Technical Background Report, Figure 4.6-1 does not list the property as being a historic site. The site is not listed on the National Register of Historic Places. There are no unique features or historical resources located on the project site. The project site is not located within the vicinity of the Bear River, Sacramento River, or Feather River, where archaeological resources are more likely to occur. There is no evidence on the project site indicating that historical or archaeological resources exist.

The project site has been developed. Since the property has been extensively disturbed to varying depths due to past development, it is unlikely that any intact cultural resources exist. However, it is conceivable that currently unknown cultural resources may be encountered during project construction. A mitigation measure is proposed that sets forth procedures to be followed should any cultural resources be encountered.

> **Mitigation Measure No. 3 (Cultural Resources):** If archaeological resources are discovered on the project site, potential ground disturbing activities within 100 feet of the find shall be halted immediately and the Development Services Department shall be notified. A qualified archaeologist shall examine the find and evaluate its significance. The archaeologist shall recommend measures needed to reduce effects on the cultural resource in a written report to the County. The County shall be responsible for implementing the report recommendations.

The proposed project is not expected to disturb any human remains, including those interred outside of dedicated cemeteries. The property is not located near a cemetery. The project site is not located within the vicinity of the Bear River, Sacramento River, or Feather River, where burials are more likely to occur.

California Health and Safety Code §7050.5 states that when human remains are discovered, no further site disturbance can occur until the County Coroner has made the necessary findings as

to the origin of the remains and their disposition pursuant to Public Resources Code Section 5097.98. If the remains are recognized to be those of a Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours.

Public Resources Code §5097.98 states that whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner, it shall immediately notify the most likely descendent from the deceased Native American. The descendants may inspect the site and recommend to the property owner a means for treating or disposing the human remains. If the Commission cannot identify a descendent, or the descendent identified fails to make a recommendation, or the landowner rejects the recommendation of the descendent, the landowner shall rebury the human remains on the property in a location not subject to further disturbance.

To mitigate potential impacts, the following mitigation measure is proposed to prevent disturbance of human remains should they be encountered.

> **Mitigation Measure No. 4 (Cultural Resources):** California Health and Safety Code §7050.5 states that when human remains are discovered, no further site disturbance can occur until the County Coroner has made the necessary findings as to the origin of the remains and their disposition pursuant to Public Resources Code §5097.98. If the remains are recognized to be those of a Native American, the County Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall initiate the process of contacting the most likely descendant and the disposition of the remains, pursuant to Public Resources Code §5097.98.

(County of Sutter, General Plan Technical Background Report. 2008)
(National Park Service, National Register of Historic Places. 2021)

1.6 ENERGY

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

Responses:

a-b) **Less than significant impact.** The proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation or conflict with or obstruct a state or

local plan for renewable energy or energy efficiency. This project proposes a truck yard that would provide truck and automobile parking. No new buildings are proposed.

Overall, the project would not require the creation of a new source of energy generation. Construction of the parking area would require the consumption of diesel and gasoline to power construction equipment and delivery trucks. As stated in the air quality analysis completed for this project, the project would take 30 days to construct. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency, combined with state regulations limiting engine idling times, would further reduce transportation fuel demand during project construction. There are no unusual project characteristics or construction processes that would be more energy-intensive than are used for comparable activities, and no equipment would be used that would not conform to current emissions standards and related fuel efficiencies. For these reasons, it is expected that fuel consumption associated with project construction would not be any more inefficient, wasteful, or unnecessary than similar development projects of this nature within Sutter County.

This project does not require, and would not utilize, a substantial amount of energy due to the limited use of the site as a parking area for trucks, trailers, and automobiles. Proposed outdoor lighting at the project site would be required to comply with the energy requirements of the State Building Codes, including the California Energy Code (Part 6 of Title 24) related to lighting design and installation, luminaire, and lighting controls. The energy efficiency standards of the State of California are some of the most stringent in the nation. As a result, the project would not result in a wasteful, inefficient, or unnecessary consumption of energy resources, and a less-than-significant impact is anticipated.

1.7 GEOLOGY AND SOILS

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils				
Would the project:				
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 Zone 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?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on a geological 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Responses:

a-i) **No impact.** This project would not directly or indirectly cause potential substantial adverse effects from rupture of a known earthquake fault. The project site is not located in an Alquist-Priolo Earthquake Fault Zone, and the project would involve minor grading activities that would not exacerbate existing seismic hazards in the region. No impact is anticipated.

a-ii,-iii) **Less than significant impact**. This project would not directly or indirectly cause potential substantial adverse effects from strong seismic ground shaking or seismic- related ground failure, including liquefaction. Figure 5.1-1 in the General Plan Technical Background Report does not identify any active earthquake faults, as defined by the California Mining and Geology Board, in Sutter County. The faults identified in Sutter County include Quaternary faults in the northern section of the County within the Sutter Buttes and a pre-Quaternary fault in the southeastern corner of the County just east of where Highway 70 enters the County. Although both faults have the potential for seismic activity, they are listed as non-active faults. Therefore, the potential for earthquakes or liquefaction is unlikely, and a less-than-significant impact is anticipated.

a-iv) **No impact.** This project would not directly or indirectly cause potential substantial adverse effects from landslides. The project site is relatively level with no significant slopes. The project is not located in the Sutter Buttes, the only area identified by the General Plan Technical Background Report as having landslide potential. Therefore, the potential for landslides is unlikely, and no impact is anticipated.

b) **Less than significant impact with mitigation incorporated.** This project would not result in substantial soil erosion or the loss of topsoil. According to the U.S. Department of Agriculture (USDA) Soil Conservation Service Soil Survey of the County, on-site soils consist solely of Liveoak Sandy Clay Loam, 0 to 2 percent slopes. This soil is unlikely to be susceptible to erosion, because runoff is very slow, and the hazard of water erosion is slight. The General Plan Technical Background Report indicates that soils with a 0 to 9 percent slope have only slight erodibility.

However, site grading has the potential to result in soil erosion due to loosened soils. Any grading or site improvements shall be done per an approved plan and in accordance with Sutter County Development Standards. The plan shall be reviewed and approved by the Director of Development Services prior to the start of construction.

Since the project size is more than one acre, the applicant is required to prepare a Storm Water Pollution Prevention Plan (SWPPP) and obtain a National Pollution Discharge Elimination System (NPDES) General Construction Permit through the Regional Water Quality Control Board (RWQCB) to ensure that soil is not released in storm water from the project site. To ensure that a less-than-significant impact occurs, the following mitigation measure is included.

> **Mitigation Measure No. 5 (Geology and Soils):** STORM WATER QUALITY PROTECTION – DURING CONSTRUCTION.
>
> SWPPP - Prior to the start of construction, the applicant shall prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to be executed through all phases of grading and project construction. The SWPPP shall incorporate Best Management Practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized. These measures shall be consistent with the County's Improvement Standards and Land Grading and Erosion Control Ordinance and the requirements of the National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. The SWPPP shall be submitted to the County for review and to the Central Valley Regional Water Quality Control Board (RWQCB) as required by the NPDES General Permit in effect during construction. During construction, the applicant shall implement actions and procedures established to reduce the pollutant loadings in storm drain systems. The project applicant shall implement BMPs in accordance with the SWPPP and the County's Improvement Standards. The project applicant(s) shall submit a state storm water permit Waste Discharger Identification number for each construction project.
>
> NPDES GENERAL CONSTRUCTION PERMIT – Since the project size is more than one acre, prior to construction the applicant shall file a Notice of Intent with the Central Valley RWQCB to obtain coverage under the California State Water Resources - General Construction Activity Storm Water Permit. Permits are issued by the State Water Resources Control Board, which can provide all information necessary to complete and file the necessary documents. Applicant shall comply with the terms of the General Construction Permit, the County's ordinances, and the NPDES Waste Discharge Requirements for the Sutter County Phase II NPDES Permit.
>
> **Mitigation Measure No. 6 (G&S):** NPDES GENERAL CONSTRUCTION PERMIT - In order to mitigate erosion and sediment control problems on the project site, the project shall comply with the County's Land Grading and Erosion Control Ordinance. If the project size is more than one acre, a Notice of Intent (NOI) must be filed to obtain coverage under the California State Water Resources General Construction Activity Storm Water Permit. Permits are issued by the State Water Resources Control Board, which can provide all information necessary to complete and file the necessary documents. Applicant shall comply with the terms of the General Construction Permit, the County's ordinances, and the NPDES Waste Discharge Requirements for the Sutter County Municipal Storm Sewer Discharges.

c) **Less than significant impact.** This project is not located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. As stated above in b), soils at the site have a 0 to 2 percent slope with only a slight hazard of water erosion. The General Plan Technical Background Report indicates that soils with a 0 to 9 percent slope have slight erodibility. Also, as stated in a-iv), the project site has no landslide potential. A less-than-significant impact is anticipated.

d) **Less than significant impact.** According to the USDA Soil Conservation Service Soil Survey of the County, Liveoak Sandy Clay Loams have a high shrink-swell potential. All future construction is required to comply with the adopted California Building Code, specifically Chapter 18 for soils conditions and foundation systems, to address potential expansive soils that may require special foundation design, a geotechnical survey, and engineering for foundation design. The Building Inspection Division would implement these standards as part of any future building permit process. A less-than-significant impact is anticipated.

e) **No impact.** The project proposes to either use a restroom within the existing onsite building or a portable double restroom trailer. All onsite wastewater disposal systems in Sutter County are permitted in accordance with Sutter County Code Chapter 700 and must comply with all provisions specified therein. These provisions include repairing or replacing any failing onsite systems should such failures occur. No impact is anticipated.

(County of Sutter, General Plan Technical Background Report. 2008)
(USDA Soil Conservation Service, Sutter County Soil Survey. 1988)
(USDA Natural Resources Conservation Service, Custom Soil Survey, Sutter County. 2022)

1.8 GREENHOUSE GAS EMISSIONS

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Greenhouse Gas Emissions.				
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

a) **Less than significant impact.** This project would not generate additional greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment. The Sutter County Climate Action Plan (CAP) was prepared and adopted in 2010 as part of the General Plan to ensure compliance with AB 32, also known as the Global Warming Solutions Act. Sutter County's CAP includes a GHG inventory, an emission reduction target, and reduction measures to reach the target. The CAP also includes screening tables used to assign points for GHG mitigation measures. Projects that achieve 100 points or more do not need to quantify GHG emissions and are assumed to have a less than significant impact. Sutter County's

screening tables apply to all project sizes. Small projects with little or no proposed development and minor levels of GHG emissions typically cannot achieve the 100-point threshold.

Since the adoption of the CAP, further analysis to determine if a project can be too small to provide the level of GHG emissions reductions expected from the screening tables or alternative emissions analysis methods has been performed. In June 2016, Sutter County adopted new GHG Pre-Screening Measures to be applied to new projects. Sutter County has concluded that projects generating less than 3,000 metric tons of carbon dioxide equivalent (CO2e) would not require further GHG emissions analysis and are assumed to have a less-than-significant impact. The Environmental Permitting Specialists air quality analysis for the project (see Appendix B) indicates that GHG emissions from project vehicle traffic – the only source for such emissions – would be approximately 0.12 metric tons CO_{2e} per year. This is well below the threshold of 3,000 metric tons CO_{2e} per year. Based on this evaluation, the project would not generate GHG emissions that would have a significant impact on the environment. A less-than-significant impact is anticipated.

b) **Less than significant impact**. This project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. As noted, Sutter County has adopted a CAP that screens projects based on a threshold of 3,000 metric tons CO2e per year. As noted in a) above, this project would not generate emissions that exceed this threshold. Therefore, this project would be consistent with the County CAP. A less-than-significant impact is anticipated.

With the above mitigation measure, a less than significant impact is anticipated.

(County of Sutter, General Plan Technical Background Report. 2008)
(County of Sutter, General Plan 2030 Climate Action Plan. 2011)
(County of Sutter, Greenhouse Gas Pre-Screening Measures for Sutter County. June 28, 2016.)
(Environmental Permitting Specialists, Draft Analysis of Impacts to Air Quality and Greenhouse Gas from Proposed Truck Yard, Yuba City, California. 2022)

1.9 HAZARDS AND HAZARDOUS MATERIALS

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hazards/Hazardous Materials.				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Responses:

a-b) **Less than significant impact.** This project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or the creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The project is a truck parking area; therefore, it is not expected to use or discharge hazardous materials other than fuel and oil contained within the vehicles themselves. The only hazardous materials concerns would be related to small-scale fuel and oil spills from vehicles, which are ordinarily minor and would not lead to substantial contamination of soils or water.

The Development Services Environmental Health Division is the Certified Unified Program Agency (CUPA) for Sutter County, with responsibility for monitoring all uses involving the storage and handling of hazardous materials. The CUPA would require any business that uses, generates, processes, produces, treats, stores, emits, or discharges a hazardous material in quantities at or exceeding 55 gallons, 500 pounds, or 200 cubic feet (compressed gas) at any one time during a year to submit a Hazardous Materials Business Plan. The primary purpose of the plan is to provide readily available information regarding the location, type, and health risks of hazardous materials to emergency response personnel, authorized government officials, and the public. The project is not expected to handle hazardous materials in an amount that would require submittal of a Hazardous Materials Business Plan.

All activities and uses must comply with State and County laws and regulations pertaining to the handling and disposal of all hazardous or acutely hazardous materials. The discharge of fuels,

oils, other petroleum products, detergents, cleaners, chemicals, or compost materials to the surface of the ground or to drainage ways on or adjacent to the site is prohibited. The State of California has adopted U.S. Department of Transportation regulations for the movement of hazardous materials originating within the state and passing through the state; State regulations are contained in CCR Title 26. Compliance with these regulations is anticipated to lead to a less-than-significant impact.

c) **No impact**. This project would not 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 existing or proposed schools within one-quarter mile of the project site. The closest existing active school is Barry Elementary School, located approximately five miles northeast of the project site. Therefore, no impact is anticipated.

d) **No impact**. This project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to California Government Code §65962.5. A review of State hazardous material site databases found no records for the project site or immediate vicinity. As a result, the project would not create a hazard to the public or the environment; therefore, no impact is anticipated.

e-f) **No impact**. This project is not 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; therefore, this project would not result in a safety hazard or excessive noise for people residing or working in the project area. The nearest public airport is the Yuba County Airport, which is located approximately 7.5 miles northeast of the project site. Due to the project's distance from this facility, no impact is anticipated.

g) **Less than significant impact.** This project would not impact the implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan because the project site has adequate frontage on State Highway 113 and would not impede any emergency response or evacuation at or near the site. This proposed project does not pose a unique or unusual use or activity that would impair the effective and efficient implementation of an adopted emergency response or evacuation plan. A less-than-significant impact is anticipated.

h) **Less than significant impact.** This project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. The General Plan indicates the Sutter Buttes and the "river bottoms," or those areas along the Sacramento, Feather, and Bear Rivers within the levee system, are susceptible to wildfires, since much of the areas inside the levees are left in a natural state, thereby allowing combustible fuels to accumulate over long periods of time. The project site is not located in the Sutter Buttes or "river bottom" areas. The project vicinity consists of active agricultural uses and has existing fire protection services. Therefore, a significant risk of loss, injury, or death associated with wildland fires as a result of the proposed project is not anticipated, and impacts are considered less than significant.

(County of Sutter, General Plan Technical Background Report. 2008)
(California Department of Toxic Substances Control, Hazardous Waste and Substances Site List (Cortese List). 2024)

1.10 HYDROLOGY AND WATER QUALITY

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Hydrology and Water Quality.				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially deplete ground water supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin	☐	☐	☒	☐
c) Substantially alter the existing drainage patter 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. Substant Result in a substantial erosion or siltation on- or off-site:	☐	☒	☐	☐
ii. Create Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☒	☐	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☒	☐	☐
iv. Impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Responses:

a) **Less than significant impact.** This project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. This project proposes the construction and operational use of a 5-acre truck parking yard. Since the total land area of the project would exceed one acre, the applicant is required to obtain coverage under the State Construction General Permit, under the NPDES program (Mitigation Measure No. 5). This program requires implementation of erosion control measures designed to avoid significant erosion. The NPDES construction permit requires implementation of a SWPPP

that includes storm water best management practices to control runoff, erosion, and sedimentation from the site. This would minimize potential construction impacts on water quality.

This project is not expected to violate water quality standards or waste discharge requirements. Compliance with applicable requirements would minimize the project's potential impact to water quality. No additional mitigation is necessary, and a less than significant impact is anticipated.

b) **Less than significant impact.** This project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. The project is a truck parking yard, and as such is not expected to increase use of water other than for the proposed landscaping. As described in the Project Description, the landscaping would use low-water plants and irrigation systems considered water-efficient. Under the Commercial and Employment Design Checklist, landscaping shall comply with the current Model Water Efficient Landscaping Ordinance prepared by the California Department of Water Resources, as required by the California Water Conservation in Landscaping Act (Government Code Section 65591 et seq.). The landscaping is not expected to use a substantial amount of groundwater. A less-than-significant impact is anticipated.

c-i, -ii, -iii) **Less than significant impact with mitigation incorporated.** The project will not substantially impact the existing drainage pattern of the site or area, or cause siltation on- or off-site, or alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. This proposed project will not substantially alter the drainage in the area because there are no streams in the area that would be altered by the project. However, it is anticipated that grading and paving of the site will occur and may result in some degree of alteration. Any significant disturbance of the property will require the review and approval of a grading permit, which may result in additional conditions regarding drainage specific to development that is not proposed at this time. Mitigation Measures 5 and 6 carried forward from Section VI Geology and Soils will help to ensure that future development of the project site does not significantly alter drainage and a less than significant impact will occur.

> **Mitigation Measure No. 7 (Hydrology and Water Quality):** DRAINAGE STUDY. Prior to issuance of a grading permit or encroachment permit, the applicant shall obtain approval from the Director of a drainage study that reflects final design conditions for the proposed project per County Standards. The Drainage Study shall be completed and stamped by a Professional Engineer and determined by the County to be comprehensive, accurate, and adequate (SCIS Section 9).
>
> **Mitigation Measure No. 8 (Hydrology and Water Quality):** PRIVATE DRAINAGE IMPROVEMENTS. Prior to commercial use of the site, the applicant shall construct private onsite drainage ditches/basins that provide storm water retention/detention per a County-approved drainage study for this project. Owner shall limit maximum discharge rates, where applicable, to pre-project "existing" conditions for peak 10- and 100-year storms per an approved on-site drainage study for the project. The drainage ditches/basins shall not be connected to the roadside swales. The applicant must obtain a grading permit from the County prior to any grading for storm water retention/detention ditches or basins. The applicant shall provide an as-built drawing of the drainage improvements that is stamped and signed by a licensed Engineer verifying that what was constructed complies with the approved plan for the site.

Mitigation Measure No. 9 (Hydrology and Water Quality): PRIVATE DRAINAGE FACILITIES MAINTENANCE AGREEMENT. The property owner shall enter into an agreement with Sutter County committing the property owners and all successors-in-interest to maintain the private drainage facilities (including on-site peak flow attenuation basins) in perpetuity in a manner to preserve storage capacity, drainage patterns, ultimate discharge points and quantities, and water quality treatment controls for stormwater discharges as identified in the drainage study and approved by Sutter County.

Mitigation Measure No. 10 (Hydrology and Water Quality): GRADING AND CONSTRUCTION. All impacts to the site must be mitigated in the project area or lands acquired for mitigation by the project. Any Grading or Site Improvements shall be done per an approved plan and in accordance with Sutter County Development Standards. Plans shall be reviewed and approved for construction by the Director of Development Services prior to the start of construction.

c-iv) **Less than significant impact.** The project site is located within Flood Zone A according to Flood Insurance Rate Maps No. 0603940600E and 0603940700E, dated December 2, 2008, issued by the Federal Emergency Management Agency (FEMA). Flood Zone A is one of the Special Flood Hazard Areas that consist of areas subject to inundation by the 1- percent-annual-chance flood event (the "100-year flood"). The applicant shall comply with all provisions of the Sutter County Floodplain Management Ordinance and FEMA regulations, which will be included as a project condition. FEMA does not restrict parking of trucks or vehicles in Special Flood Hazard Areas. However, the applicant would be required to notify tenants who intend to use the site for truck/vehicle parking of the potential flood depths that may cause flood damage to their trucks/vehicles; this would be implemented as a project condition. With incorporation of these conditions, a less-than- significant impact is anticipated.

The project will not 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 because there are no existing public or private stormwater drainage systems present, and drainage must be retained on-site. Any development other development on the 5±acre property would require review and approval of the proposed development's design as a separate application. This may result in additional conditions regarding drainage specific to development that is not proposed at this time. With the incorporation of Mitigation Measures 3 and 4 the proposed system will be established meeting County standards, and the project will not create substantial amounts of polluted runoff. No additional mitigation is necessary, and a less than significant impact is anticipated.

d) **Less than significant impact**. This project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. The proposed parking area is not anticipated to risk the release of pollutants due to project inundation in a flood hazard area. No new building construction is proposed. As noted in Section IX, Hazards and Hazardous Materials, no hazardous materials of significant quantities would be stored on the project site. It is possible that trucks on the site may release motor vehicle fuels and fluids if a flood occurs. However, such releases would be minimal and are not expected to cause a significant impact to water quality. There is no anticipated impact to this project site resulting from tsunamis and seiches because the land is not located adjacent to or near any water bodies of sufficient size to create such situations. A less-than-significant impact is anticipated.

e) **No Impact.** This project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. There are no currently adopted water quality control plans covering the project site. The County, along with other agencies, has prepared the Sutter Subbasin Groundwater Sustainability Plan that covers most of Sutter County, including the project site. The project is not expected to interfere with implementation of the Groundwater Sustainability Plan, particularly since the project would not generate substantial new water demand. No impact is anticipated.

(County of Sutter, General Plan 2030 Technical Background Report. 2008)
(Federal Emergency Management Administration, Flood Insurance Rate Maps, 2015)
(Sutter Subbasin Groundwater Management Coordination Committee, Groundwater Sustainability Plan for the Sutter Subbasin, 2022)

1.11 LAND USE AND PLANNING

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning				
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Responses:

a) **No impact.** The project will not physically divide an established community because the site is located outside all incorporated cities and their spheres of influence, however, the project site is located within the rural community of Sutter identified by the General Plan. The project site is located in a rural area dominated by agriculture, businesses, and rural residential homesites. No impact is anticipated.

b) **Less than significant impact.** This project would not conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, because the General Plan does not consider the site to be within a hazardous or biologically sensitive area. The County has not adopted any land use plan, policy, or regulation for the purpose of avoiding or mitigating a specific environmental effect that affects this project. Where necessary, mitigation has been incorporated into the project and no additional mitigation measures are necessary. A less-than-significant impact is anticipated.

(County of Sutter, General Plan 2030. 2011)
(County of Sutter, General Plan Technical Background Report. 2008)
(County of Sutter, Zoning Code. 2024)

1.12 MINERAL RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Mineral Resources.				
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Responses:

a-b) **No impact.** This project would not 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 or 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. Neither the General Plan nor the State of California Division of Mines and Geology Special Publication 245 lists the project site as having any substantial mineral deposits of a significant or substantial nature. The project site is not located in the vicinity of any existing surface mines. No impact is anticipated.

(California Department of Conservation, Division of Mines and Geology, Special Report 245: Mineral Land Classification: Concrete Aggregate in the Greater Sacramento Area Production-Consumption Region. 2018)
(County of Sutter, General Plan Technical Background Report. 2008)

1.13 NOISE

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. Noise.				
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne noise levels?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) For a project located within the vicinity or a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

Responses:

a) **Less than significant with mitigation incorporated.** To determine noise impacts from the proposed project, the project applicant hired Saxelby Acoustics LLC to prepare an environmental noise assessment. A copy of this assessment is included in Appendix C of this initial study. The noise assessment describes characteristics of noise, the existing noise setting, and the regulatory context, and it presents an analysis of potential noise impacts from project construction and operation activities.

Construction Noise

Construction noise associated with the project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities, as well as construction vehicle traffic on area roadways. During construction, exterior noise levels could negatively affect sensitive land uses in the vicinity of the construction site. Nearby noise-sensitive land uses consist of residences located to the north and northeast of the project site.

To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptor in the project vicinity in order to evaluate the potential health- related effects (physical damage to the ear) from construction noise, Saxelby Acoustics calculated the construction equipment noise levels using the Federal Highway Administration (FHWA) Roadway Construction Noise Models and compared them against the construction-related noise level threshold established in the *Caltrans Noise Analysis Protocol* prepared in 2020 by the California Department of Transportation, which would increase criteria of 12dBA applied to existing residential receptors in the project vicinity. For the purposes of the analysis, the lowest, more conservative threshold of 85 dBA L_{eq} established by the Criteria is used as an acceptable threshold for construction noise at the nearby sensitive receptors. L_{eq} is the equivalent, or average, sound level, which corresponds to a steady- state, A-weighted decibel (dBA) sound level containing the same total energy as a time varying signal over a given time period. The results of the analysis indicated that the potential construction equipment that could be used on the project site would not exceed the 85-dBA at the adjacent residential property.

Project construction would result in additional traffic on adjacent roadways over the period that construction occurs. According to the Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol (2013), doubling of traffic on a roadway is required to result in an increase of 3 dB (outside of the laboratory, a 3-dBA change is considered a just- perceivable difference). Per Caltrans traffic counts, the segment of SR 113 adjacent to the project site currently accommodates an average daily traffic count of 3,500 vehicles. Project construction would not

result in a doubling of traffic, and therefore its contribution to existing traffic noise would not be perceptible. Additionally, it is noted that construction is temporary, and these trips would cease upon completion of construction work.

Per Policy N 1.6 of the County's General Plan, all project-related noise-generating construction activities within 1,000 feet of noise-sensitive uses (i.e., residential uses, daycares, schools, convalescent homes, and medical care facilities) are limited to daytime hours between 7:00 a.m. and 6:00 p.m. on weekdays, 8:00 a.m. and 5:00 p.m. on Saturdays, and prohibited on Sundays and holidays unless permission for the latter has been applied for and granted by the County. To ensure compliance with General Plan Policy N 1.6, the following mitigation measure is proposed. Compliance with this mitigation measure would make construction noise impacts less than significant.

> **Mitigation Measure No. 11 (Noise):** During construction, the applicant shall ensure that all project related noise-generating construction activities are limited to daytime hours between 7:00 a.m. and 6:00 p.m. on weekdays, 8:00 a.m. and 5:00 p.m. on Saturdays, and are prohibited on Sundays and holidays unless permission for the latter has been applied for and granted by the County.

Project Operational Noise

Operations of the proposed project would increase ambient noise levels in the immediate vicinity, primarily through off-site traffic noise and on-site parking of trucks and trailers. The noise assessment analyzed noise impacts of off-site project traffic on nearby residences, based on trip generation rates in the Traffic Impact Analysis conducted by Wood Rodgers, Inc. (see Table 4 of Appendix D). According to the Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol (2013), doubling of traffic on a roadway would result in an increase of 0.1 dB - a barely perceptible increase. Per Caltrans traffic counts, the segment of State Highway 113 west of the State Highway 99 intersection accommodates an average daily traffic count of 3,500 vehicles. The Traffic Operational Assessment estimated that the project would generate approximately 145 daily vehicle trips, including trucks. Based on this, the project would not result in a doubling of traffic volume; thus, its contribution to existing traffic noise would not be perceptible.

The main stationary operational noise associated with the project would be activities including internal heavy duty truck circulation/ parking lot activity (i.e., people talking, car door opening and closing and stereo music) and backup beepers from heavy duty trucks. On-site project operations were calculated using the SoundPLAN 3D noise model. The results indicated that noise levels from on-site activities would range from 38 to 58 dBA L_{eq}. The loudest noise levels would occur at the nearest noise-sensitive receptor – the residence to the north. The Sutter County Noise Level Standards from Stationary Sources is 55 dBA L_{eq} during daytime activities (7:00 a.m.-10:00 p.m.) and 45 dBA L_{eq} for nighttime activities (10:00 p.m.-7:00 a.m.). Therefore, the noise level at the nearest noise sensitive receptor would at times exceed the County's daytime and nighttime noise standards.

However, the project site currently experiences an ambient noise level of 55 dBA at 680 feet from the centerline of South George Washington Boulevard / State Highway 113 as a result of roadway traffic. Thus, the noise-sensitive receptors in the project vicinity already experience noise levels exceeding the predicted on-site project noise sources, and the project's contribution to the noise environment would not be readily perceivable. Additionally, the modeled noise levels were identified as a worst-case scenario. Not all events taking place on the project site

would generate as much noise as predicted. The Saxelby Acoustics study concluded that project operational noise would not occur at a level requiring mitigation.

b) **Less than significant impact.** Increases in groundborne vibration levels attributable to the project would be primarily associated with short-term construction-related activities involving equipment. Construction on the project site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. General Plan Policy N 1.7 requires new development to minimize impacts of continuous vibration on adjacent uses during construction, based on criteria established by the County.

The Saxelby Acoustics study analyzed potential construction and operational impacts related to groundborne vibrations, using Caltrans standards to determine significance of impacts. Due to the temporary nature of construction activities, the County thresholds for Land Use Category 2, residences and buildings where people normally sleep, of 80 vibration decibels (VdB) for infrequent events was used in the Saxelby Acoustics analysis. Consistent with Federal Transit Administration recommendations for calculating vibration generated from construction equipment, construction vibration was measured from the center of the Project Site. The nearest structure of concern to the construction site is the residence located north of the project site, approximately 300 feet from the site center. The highest vibration decibel at 50 feet generated from construction equipment is approximately 45 dB. As ground vibration diminishes in magnitude with increases in distance, the Saxelby Acoustics analysis concluded that the residence would not be negatively affected. In any case, vibration from construction equipment would cease after the anticipated 30-day construction period ends.

Project operations would not include the use of any stationary equipment that would result in excessive vibration levels. Therefore, the project would not result in groundborne vibration impacts during operations. Overall, vibration impacts would be less than significant.

c) **Less than significant impact.** This project is not located within the vicinity of a public airport or public use airport; as noted in Section IX, Hazards and Hazardous Materials, the nearest public airports are the Sutter County and the Yuba County Airports, located approximately nine (9) miles northeast of the project site.

Two private airstrips are located approximately 1.5 miles east and southeast of the project site. However, as the proposed project is a truck yard with no permanent onsite employees, noise from airstrip operations would have no adverse effect. A less-than-significant impact is anticipated.

(County of Sutter, General Plan 2030. 2011)
(County of Sutter, General Plan Technical Background Report. 2008)
(Saxelby Acoustics LLC, Environmental Noise Assessment, Sangha Truck Yard, Sutter County, California. 2023)
(Wood Rodgers, Inc., Sangha Truck Yard, Sutter County, CA: Traffic Impact Analysis. 2023)

1.14 POPULATION AND HOUSING

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population and Housing				
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Responses:

a) **Less than significant impact.** This project would not induce substantial unplanned population growth in an area, directly or indirectly. No residential use is proposed with this project, so there would be no direct population impacts. The project applicant indicated that a maximum of five employees would work at the project site. Therefore, the project would not induce substantial indirect population growth. The amount of population growth in the area would be negligible, and a less-than-significant impact is anticipated.

b) **No impact.** This project would not displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere, as there are no existing residents or housing on the project site. The proposed project would not expand beyond the property boundaries; therefore, it would not displace any housing or people outside these boundaries. No impact is anticipated.

(County of Sutter, General Plan 2030 Technical Background Report. 2008)

1.15 PUBLIC SERVICES

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services.				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Responses:

a-i) **Less than significant impact.** Fire protection services for the project vicinity are provided by Sutter County Fire Services. The project site is in County Service Area F. The nearest fire station is the Oswald-Tudor station (Station 8), located at 1280 Barry Road at the southeast corner of State Highway 99 and Barry Road slightly more than five miles northeast of the project site. Response time would not be affected by the proposed project. Existing County roads would provide adequate transportation routes to reach the project site in the event of a fire. The project is a truck yard that would provide parking spaces only; no new buildings are proposed. Because of this, the construction of new fire facilities would not be required to provide adequate service to this project. A less-than-significant impact is anticipated.

a-ii) **Less than significant impact.** Law enforcement services for unincorporated portions of Sutter County are provided by the Sutter County Sheriff's Department, and traffic investigation services are provided by the California Highway Patrol. Response time would not be affected by the proposed project. Existing State Highways and County roads would provide adequate transportation routes to reach the project site in the event of an emergency. Because of this, the construction of new facilities would not be required to provide adequate law enforcement service to this project. A less-than-significant impact is anticipated. Traffic impacts are discussed in the Transportation section of this Initial Study.

a-iii) **No impact.** This project would not have a significant impact on schools because this project would not generate additional demand for school services. No new buildings or residences are proposed with this project, so no new students would be generated. No impact is anticipated.

a-iv) **No impact.** This project would not have a significant impact upon parks because it would not generate a need for additional park land or create an additional impact upon existing parks in the region. This project would not result in any new residences which require park services; therefore, this project would not have a significant impact on parks countywide. No impact is anticipated.

a-v) **No impact.** This project is not anticipated to impact other public facilities because the project would not result in the need for additional or new public facilities. No new buildings or residences are proposed with this project that would generate a demand for other public services. No impact is anticipated.

(County of Sutter, General Plan 2030 Technical Background Report. 2008)
(County of Sutter, Zoning Code 2024)

1.16 RECREATION

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

Responses:

a-b) **No impact.** This project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. This project would not result in residential development, which would generate demand for recreational facilities such that new or expanded facilities would be required. There are no existing neighborhood or regional parks in the project vicinity that would be potentially affected. No impact is anticipated.

(County of Sutter, General Plan 2030 Technical Background Report. 2008)

1.17 TRANSPORTATION

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. Transportation.				
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in inadequate emergency access?	☐	☐	☒	☐

Responses:

a) **Less than significant with mitigation incorporated.** This project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. This property is in a rural area approximately six miles south of the southernmost incorporated limits of Yuba City and its sphere of influence. The project area is not served by mass transit or bicycle paths, and no sidewalks have been installed. Given the rural nature of the area, personal vehicles would be the most likely form of transportation.

The Sutter County General Plan establishes the County's Level of Service (LOS) policy for County roads. LOS is a qualitative measure of traffic flow ranging from A to F, with A representing best conditions. Policy M 2.5 is to develop and manage the County roadway segments and intersections to maintain LOS D or better during peak hours, and LOS C or better at all other times. The County LOS standards apply to all County roadway segments and intersections, unless otherwise addressed in an adopted specific plan or community plan.

A Traffic Impact Analysis was prepared for the project by Wood Rodgers. A copy of this assessment is included in Appendix D of this Initial Study and was reviewed by Caltrans. The Traffic Impact Analysis documents the existing traffic setting, applicable regulations, project travel characteristics, project operational analysis under proposed project and cumulative conditions, and project impacts under CEQA.

For this project, the Traffic Operational Assessment estimated a total of 148 daily truck trips and 87 daily automobile trips that would be generated by the project, for a total of 232 daily trips. This estimate was based on trip generation rates used for three truck parking facilities on Tudor Road and Garden Highway. The assessment did not indicate that any changes to LOS would occur that would cause nearby roads or intersections to operate below County LOS standards.

Since the project anticipates use by STAA trucks, it is expected that Caltrans would require the project applicant to coordinate with Sutter County to process a STAA Terminal Designation application. Because of this, the following mitigation measure is recommended:

> **Mitigation Measure No. 12 (Transportation):** Prior to commercial use of the site and prior to use of this facility by Surface Transportation Assistance Act (STAA) trucks, the California Vehicle Code requires that the access route and facility meet Terminal Access (TA) classification requirements. The applicant can initiate the TA application process by submittal of a written request for TA evaluation to both the Sutter County Development Services Department and the Caltrans District Truck Coordinator. All expenses for TA evaluation, engineering, and improvements required to make the access route and facility meet TA classification requirements shall be borne by the applicant.

Mitigation Measure No. 13 (Transportation): The applicant shall construct improvements to the entrance to the site that connects to State Route 113 with the use of STAA Truck Turning Templates. Improvements shall be constructed to allow for:

- The turning of STAA Trucks into and out of the site without crossing into oncoming traffic.
- The Entrance shall allow for two trucks to pass on site without causing a backup onto State Route 113.
- The Entrance shall be paved to meet Caltrans Specifications and Sutter County Improvement Standards for an Industrial/Commercial Standard.
- The applicant must obtain an encroachment permit from Caltrans prior to any work in the State Route 113 right-of-way.

b) **Less than significant impact.** This project would not conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b). This section of CEQA states that vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts. VMT refers to the amount and distance of automobile travel attributable to a project. The Governor's Office of Planning and Research's (OPR's) Technical Advisory for VMT assessment clarifies that "the term 'automobile' refers to on-road passenger vehicles, specifically cars and light trucks." It does not include heavy-duty trucks, although VMT for these vehicles could be included for modeling convenience and ease of calculation.

This section also states VMT exceeding an applicable threshold of significance may indicate a significant impact. The County has not adopted a threshold of significance for VMT. Sutter County has not yet adopted guidelines or policies for dealing with VMT. Therefore, the VMT impact assessment in the project traffic analysis uses the guidance in OPR's Technical Advisory.

OPR guidance states that retail uses less than 50,000 square feet can typically be defined as local-serving. The existing office on at the proposed truck yard, would be less than 50,000 square feet and would provide a local option for customers to store trucks, reducing the need for patrons to make longer-distance or out-of-direction trips to the next-closest truck storage yard. Based on these attributes, the project may be presumed to be local-serving and produce a less than significant VMT impact.

c) **Less than significant.** The project proposes access from State Highway 113. The impacts of a project to safety on Caltrans facilities remains an issue of significance. Under current practice, safety impacts on state facilities are typically considered within the context of queuing on off-ramps and in turn lanes at intersections, truck turning requirements, and the need for alternative traffic control devices. Queuing that spills over from a turn lane or extends along an off-ramp to the mainline freeway could represent significant safety issues. Intersections where truck paths leave the pavement or encroach into opposing lanes are a safety issue. Operation of an intersection with inappropriate traffic control devices would also represent a potential safety issue. The Traffic Operational Assessment analyzed four issues related to site access and internal circulation, sight distance, pedestrian, bicycle and transit facilities, and safety analysis. All four assessment issues were reviewed and found to be less than significant.

For a 55-mph design speed, an entering heavy truck turning left onto eastbound State Highway 113 would require 1,015 feet of corner sight distance looking right, and 925 feet looking left. The alignment of State Highway 113 in this area is level and straight. As a result, the view measured 15 feet from the edge of the travel way across the Caltrans right of way would satisfy corner sight distance requirements in both directions.

d) **Less than significant impact.** The project would not result in inadequate emergency access. No impacts indicating inadequate access for emergency vehicles were identified by the Traffic Operational Assessment. This project would be required to comply with all County roadway safety, emergency access, and design standards. A less-than-significant impact is anticipated.

(County of Sutter, Development Services, General Plan Technical Background Report. 2008)
(County of Sutter, Development Services, General Plan 2030. 2011)
(Governor's Office of Planning and Research, Technical Advisory on Evaluating Transportation Impacts in CEQA. 2018)
(Wood Rodgers, Sangha Truck Yard Traffic Impact Analysis (TIA). 2023)

1.18 TRIBAL CULTURAL RESOURCES

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Tribal Cultural Resources.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in 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:	☐	☐	☒	☐
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☐	☒	☐

Responses:

a.i-ii) **Less than significant impact with mitigation incorporated.** In September of 2014, the California Legislature passed Assembly Bill (AB) 52, which added provisions to the Public Resources Code regarding the evaluation of impacts on tribal cultural resources under CEQA, and consultation requirements with California Native American tribes. The County initiated AB 52 consultation through the distribution of letters to seven (7) Native American tribes for review of the project. None of the tribes expressed any concerns or requested consultation with the County regarding the project. Therefore, a less than significant impact is anticipated.

1.19 UTILITIES AND SERVICE SYSTEMS

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

Responses:

a) **Less than significant impact.** This project would not 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. This project would require no new water service, wastewater treatment service, natural gas, or telecommunications facilities. Electric power needs would be satisfied by tying into existing utilities provided at the site.

In comment letter received from PG&E on April 24, 2024, the proposed improvements do not appear to directly interfere with existing PG&E facilities or impact easement rights. No impact is anticipated.

Existing and proposed drainage facilities shall be used by the project. The applicant is required to obtain coverage under the State Construction General Permit, which requires implementation of a SWPPP that includes best management practices to control runoff, erosion, and sedimentation from the site. No additional mitigation is needed, and a less than significant impact is anticipated.

b) **Less than significant impact.** This project would not place a significant demand on water supplies. As stated in the Hydrology and Water Quality section, this project is not anticipated to generate any significant water demand other than for landscaping and handwashing at portable stations, the latter to have water brought to the site. No wells or other water facilities would be installed. A less-than-significant impact is anticipated.

c) **No impact.** This project would not result in a determination by a 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. This project is not located in an area that is served by a wastewater treatment provider. As noted in the Project Description, trailer-mounted portable restrooms will be available on the project site. A minimum of one hand-washing station per restroom will also be provided. Restroom facilities will be maintained daily by the applicant's property manager. Therefore, a demand would not be placed on a local sanitary sewer system, and no impact is anticipated.

d-e) **Less than significant impact.** Solid waste from this project would be disposed of through the local waste disposal company in a sanitary landfill in Yuba County which has sufficient capacity to serve this project. Disposal of project solid waste into that facility would comply with all federal, state, and local statutes and regulations related to solid waste. As a result, a less-than-significant impact is anticipated.

(County of Sutter, Development Services. General Plan Technical Background Report. 2008)

1.20 WILDFIRE

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Wildfire.				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Response:

a-d) **No impact.** There are no state responsibility areas in Sutter County. A California Department of Forestry and Fire Protection map indicates no fire hazard severity zones have been designated on the project site or in the vicinity. The project would not be subject to any wildfire hazards. No impacts are anticipated.

(California Department of Forestry and Fire Protection, Sutter County Draft Fire Hazard Severity Zones in LRA, 2007)

1.21 MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. Mandatory Findings of Significance.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Responses:

a) **Less than significant with mitigation incorporated.** No environmental effects were identified in the initial study which indicate this project would have the ability 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. Mitigation Measure No. 2, proposed in the Cultural Resources section, would protect possible disturbance of human remains should they be encountered.

b) **Less than significant impact.** The project site is in an area where other truck yard projects have been proposed. One project originally proposed three truck yards: two along Garden Highway and one on Tudor Road, all east of State Highway 99. The Tudor Road site currently has an approved application that has not been effectuated. However, the cumulative impact analysis would focus on the proposed project and the other three truck yards.

A study analyzing the potential cumulative impacts of truck yard development, primarily along the State Highway 99 corridor south of Yuba City, was conducted for the County by ESA. The study identified six areas of potential cumulative environmental impacts: air quality, health risk from emissions, hydrology, lighting, noise, and traffic. The potential cumulative impacts of the proposed project on each of these issues is presented below.

Air Quality: Data from air quality studies indicate that operational emissions of the proposed project and the three other truck yards would not exceed the established FRAQMD thresholds of significance for criteria pollutants. Future attainment of federal and State ambient air quality standards is a function of successful implementation of the applicable attainment plans. Consequently, the application of significance thresholds for criteria pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Since none of the proposed truck yards are anticipated to exceed the FRAQMD significance thresholds, they may be considered to have not cumulatively considerable regarding attainment of air quality plans.

Health Risk: Exposure of sensitive receptors to potential health risks are a localized impact and typically are not considered cumulative in character. Air quality analyses for this project and one of the truck yard projects along Garden Highway both concluded that there would be no significant health risks from operations.

Hydrology: As with health risks, hydrologic impacts are localized in character and typically do not have cumulative effects. As noted in the Hydrology and Water Quality section, the proposed project would not exacerbate existing drainage and runoff conditions on the project site. One of the projects along Garden Highway would have a drainage system that would capture any runoff

generated. In addition, mitigation measures described in Section X, Hydrology and Water Quality, would reduce the potential cumulative effects of the project.

Lighting: Lighting impacts are localized in character and typically do not have cumulative effects. As noted in Section I, Aesthetics, the County's Zoning Code contains specific requirements for exterior lighting for large general truck yards proposed within the AG District. The project would not make a cumulative contribution to lighting impacts.

Noise: The County analysis found that the construction of yards would not likely result in impacts from construction noise or vibration. This is confirmed by noise analyses conducted for the proposed project and for one of the proposed Garden Highway truck yards. Operational noise from proposed new truck yards could result from truck maneuvering and operation of TRUs; however, these impacts could be reduced through a combination of measures, including designation of TRU operational areas at each site and/or construction of noise barriers sufficient to block the line of sight between truck yards and receptors. These measures have been proposed for this project and for one of the Garden Highway projects. Traffic from truck yards would not significantly increase noise levels along local roadways.

Traffic: The relative cumulative traffic effects of the proposed project and the other proposed projects in the vicinity were assessed within the context of future traffic volumes and General Plan LOS thresholds. All study area roadways (Garden Highway and Tudor Road) are forecast to continue to operate within the General Plan's LOS C limit with and without the project.

As discussed in Section XVII, Transportation, the proposed project meets the criteria of a "small project" as defined in the OPR Technical Advisory. A small project is considered to not make a significant contribution to VMT; as such, the project would not have a significant cumulative effect on VMT in the area.

Based on the information provided above, and with the mitigation measures proposed in this IS/MND, this project's contribution to cumulative impacts is anticipated to be less than significant.

c) **Less than significant impact.** No environmental effects which would cause substantial adverse effects on human beings either directly or indirectly were identified in the initial study.

(ESA, Sutter County Truck Yard Study Technical Report. 2021)
(Wood Rodgers, Sangha Truck Yard Traffic Impact Analysis (TIA) 2023)

Environmental Reference Materials

1. County of Sutter, Development Services. 2011. *General Plan 2030*

2. County of Sutter, Development Services. 2008. *General Plan Technical Background Report*

3. County of Sutter, Development Services. 2008. *General Plan 2030 Environmental Impact Report*

4. County of Sutter, Development Services. 2016. *Zoning Code*

5. County of Sutter, Office of Emergency Services. 2022. *Sutter County Operational Area Emergency Operations Plan.*

6. County of Sutter, Office of Emergency Services. 2021. *Sutter County 2021 Local Hazard Mitigation Plan Update.*

7. California Department of Conservation. *2018. Farmland Mapping and Monitoring Program.*

8. California Department of Conservation, Division of Mines and Geology. 1999 (Revised 2018). *Special Publication 42: Earthquake Fault Zones / Fault Rupture Hazard Zones in California*

9. California Department of Conservation, Division of Mines and Geology. 2018. *Special Report 245: Mineral Land Classification: Concrete-Grade Aggregate in the Greater Sacramento Area Production-Consumption Region*

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11. California Department of Transportation (Caltrans). *State Scenic Highway Program: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways*

12. California Department of Toxic Substances Control, 2024. *Hazardous Waste and Substances Site List (Cortese List).*

13. California Governor's Office of Planning and Research. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA.

14. California Resources Agency. 2020. *Sutter County Map of Farmlands of Statewide Importance*

15. Feather River Air Quality Management District. 2010. *Indirect Source Review Guidelines*

16. Feather River Air Quality Management District. 2021. *Northern Sacramento Valley Planning Area 2021 Triennial Air Quality Attainment Plan*

17. Federal Emergency Management Agency. 2015. *Flood Insurance Rate Maps*

18. Institute of Traffic Engineers. Seventh edition, 2003. *Trip Generation*

19. National Park Service. *2021. National Register of Historic Places.*

20. Natural Resources Conservation Service. 1988. *Sutter County Soil Survey*

21. Natural Resources Conservation Service. 1992. *Field Office Official List of Hydric Soil Map Units for Sutter County, California*

22. Sacramento Area Council of Governments. 2019. *SACOG and Airport Land Use Compatibility Plans*

23. Sutter Subbasin Groundwater Management Coordination Committee. 2022. *Groundwater Sustainability Plan for the Sutter Subbasin.*

24. United States Geological Survey Quadrangles

25. U. S. Department of Housing and Urban Development. *The Noise Guidebook*

26. U.S. Fish and Wildlife Service. 2022. *Critical Habitat Mapper.*

27. U.S. Fish and Wildlife Service. 2022. *National Wetlands Inventory.*

28. USDA Soil Conservation Service. 1988. *Sutter County Soil Survey*.

29. USDA Natural Resources Conservation Service. 2022. *Custom Soil Survey*.

XXII. MITIGATION MONITORING PROGRAM – Project #U23-0030 (Sangha)

Mitigation Measure	Timing	Monitoring Agency
1.3 AIR QUALITY		
Mitigation Measure No. 1 (Air Quality): IMPLEMENT FEATHER RIVER AIR QUALITY MANAGEMENT DISTRICT (FRAQMD) STANDARD MITIGATION MEASURES. The project applicant shall implement the following FRAQMD-recommended Standard Mitigation Measures for projects that do not exceed construction or operational thresholds of significance. ● Implement the Fugitive Dust Control Plan prior to any on-site grading, landscaping, or construction activities. The applicant shall submit the fugitive dust control plan to the FRAQMD for review and approval. A copy of the approved plan shall be submitted to the Development Services Department. ● Construction equipment exhaust emissions shall not exceed FRAQMD Regulation III, Rule 3.0, Visible Emissions limitations (40 percent opacity or Ringlemann 2.0). ● The contractor shall be responsible to ensure that all construction equipment is properly tuned and maintained prior to and for the duration of onsite operation. ● Limit idling time to 5 minutes – saves fuel and reduces emissions in accordance with 13 California Code of Regulations (CCR) Chapter 10 Section 2485 and 13 CCR Chapter 9 Article 4.8 Section 2449. ● Utilize existing power sources or clean fuel generators rather than temporary power generators. ● Develop traffic plans to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites. ● Portable engines and portable engine-driven equipment units used at the project work site, with	Prior to construction activities/Ongoing	FRAQMD/ Development Services

Mitigation Measure	Timing	Monitoring Agency
the exception of on-road and off-road motor vehicles, may require California Air Resources Board (CARB) Portable Equipment Registration with the State or a local district permit. The owner/operator shall be responsible for arranging appropriate consultation with CARB or FRAQMD to determine registration and permitting requirements prior to equipment operation at the site.		
Mitigation Measure No. 2 (AQ): Fugitive Dust Control – Best Available Mitigation Measures: The applicant shall comply with the following mitigation measures to address potential impacts to air quality: a. All grading operations on a project should be suspended when winds exceed 20 miles per hour or when winds carry dust beyond the property line despite implementation of all feasible dust control measures. b. Construction sites shall be watered as directed by the Department of Public Works or Air Quality Management District and as necessary to prevent fugitive dust violations. c. An operational water truck should be onsite, at all times. Apply water to control dust as needed to prevent visible emissions violations and offsite dust impacts. d. Onsite dirt piles or other stockpiled particulate matter should be covered, wind breaks installed, and water and/or soil stabilizers employed to reduce windblown dust emissions. Incorporate the use of approved non-toxic soil stabilizers according to manufacturer's specifications to all inactive construction areas. e. All transfer processes involving a free fall of soil or other particulate matter shall be operated in such a manner as to minimize the free fall distance and fugitive dust emissions. f. Apply approved chemical soil stabilizers according to the manufacturers' specifications, to all-inactive construction areas (previously graded areas that remain inactive for 96 hours) including unpaved roads and employee/equipment parking areas. g. To prevent track-out, wheel washers should be installed where project vehicles and/or equipment exit onto paved streets from unpaved roads.	During Construction	FRAQMD

Mitigation Measure	Timing	Monitoring Agency
Vehicles and/or equipment shall be washed prior to each trip. Alternatively, a gravel bed may be installed as appropriate at vehicle/equipment site exit points to effectively remove soil buildup on tires and tracks to prevent/diminish track-out. h. Paved streets shall be swept frequently (water sweeper with reclaimed water recommended; wet broom) if soil material has been carried onto adjacent paved, public thoroughfares from the project site. i. Provide temporary traffic control as needed during all phases of construction to improve traffic flow, as deemed appropriate by the Department of Public Works and/or Caltrans and to reduce vehicle dust emissions. An effective measure is to enforce vehicle traffic speeds at or below 15 mph. j. Reduce traffic speeds on all unpaved surfaces to 15 miles per hour or less and reduce unnecessary vehicle traffic by restricting access. Provide appropriate training, onsite enforcement, and signage. k. Reestablish ground cover on the construction site as soon as possible and prior to final occupancy, through seeding and watering. l. Disposal by Burning: Open burning is yet another source of fugitive gas and particulate emissions and shall be prohibited at the project site. No open burning of vegetative waste (natural plant growth wastes) or other legal or illegal burn materials (trash, demolition debris, et. Al.) may be conducted at the project site. Vegetative wastes should be chipped or delivered to waste to energy facilities (permitted biomass facilities), mulched, composted, or used for firewood. It is unlawful to haul waste materials offsite for disposal by open burning. m. A copy of the approved Fugitive Dust Control Plan approved by FRAQMD shall be submitted to the Planning Division prior to development commencing.		
1.5 CULTURAL RESOURCES		
Mitigation Measure No. 3 (Cultural Resources): If archaeological resources are discovered on the project site, potential ground disturbing activities within 100 feet of the find shall be halted immediately and the	During construction activities	Construction personnel

Mitigation Measure	Timing	Monitoring Agency
Development Services Department shall be notified. A qualified archaeologist shall examine the find and evaluate its significance. The archaeologist shall recommend measures needed to reduce effects on the cultural resource in a written report to the County. The County shall be responsible for implementing the report recommendations.		
Mitigation Measure No. 4 (Cultural Resources): California Health and Safety Code §7050.5 states that when human remains are discovered, no further site disturbance can occur until the County Coroner has made the necessary findings as to the origin of the remains and their disposition pursuant to Public Resources Code §5097.98. If the remains are recognized to be those of a Native American, the coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall initiate the process of contacting the most likely descendant and the disposition of the remains pursuant to Public Resources Code §5097.98.	During construction activities	Construction personnel
1.7 GEOLOGY AND SOILS		
Mitigation Measure No. 5 (Geology and Soils): STORM WATER QUALITY PROTECTION – DURING CONSTRUCTION. SWPPP - Prior to the start of construction, the applicant shall prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to be executed through all phases of grading and project construction. The SWPPP shall incorporate Best Management Practices (BMPs) to ensure that potential water quality impacts during construction phases are minimized. These measures shall be consistent with the County's Improvement Standards and Land Grading and Erosion Control Ordinance and the requirements of the National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities. The SWPPP shall be submitted to the County for review and to the Central Valley Regional Water Quality Control Board (RWQCB) as required by the NPDES General Permit in effect during construction. During construction, the applicant shall implement actions and procedures established to reduce the pollutant loadings in storm drain systems. The project applicant shall implement BMPs in	Prior to the start of construction and during construction	RWQCB/ Development Services Engineering Division

Mitigation Measure	Timing	Monitoring Agency
accordance with the SWPPP and the County's Improvement Standards. The project applicant(s) shall submit a state storm water permit Waste Discharger Identification number for each construction project. NPDES GENERAL CONSTRUCTION PERMIT –Since the project size is more than one acre, prior to construction the applicant shall file a Notice of Intent with the Central Valley RWQCB to obtain coverage under the California State Water Resources - General Construction Activity Storm Water Permit. Permits are issued by the State Water Resources Control Board, which can provide all information necessary to complete and file the necessary documents. Applicant shall comply with the terms of the General Construction Permit, the County's ordinances, and the NPDES Waste Discharge Requirements for the Sutter County Phase II NPDES Permit.		
Mitigation Measure No. 6 (G&S): NPDES GENERAL CONSTRUCTION PERMIT - In order to mitigate erosion and sediment control problems on the project site, the project shall comply with the County's Land Grading and Erosion Control Ordinance. If the project size is more than one acre, a Notice of Intent (NOI) must be filed to obtain coverage under the California State Water Resources General Construction Activity Storm Water Permit. Permits are issued by the State Water Resources Control Board, which can provide all information necessary to complete and file the necessary documents. Applicant shall comply with the terms of the General Construction Permit, the County's ordinances, and the NPDES Waste Discharge Requirements for the Sutter County Municipal Storm Sewer Discharges.	Prior to the start of construction and during construction	RWQCB/ Development Services Engineering Division
1.10 HYDROLOGY AND WATER QUALITY		
Mitigation Measure No. 7 (Hydrology and Water Quality): DRAINAGE STUDY. Prior to issuance of a grading permit or encroachment permit, the applicant shall obtain approval from the Director of a drainage study that reflects final design conditions for the proposed project per County Standards. The Drainage Study shall be completed and stamped by a Professional Engineer and determined by the County to be comprehensive, accurate, and adequate (SCIS Section 9).	Prior to issuance of a grading permit	Development Services Engineering Division

Mitigation Measure	Timing	Monitoring Agency
Mitigation Measure No. 8 (Hydrology and Water Quality): PRIVATE DRAINAGE IMPROVEMENTS. The applicant shall construct private onsite drainage ditches/basins that provide storm water retention / detention per a County Approved Drainage Study for this Project. Owner shall limit maximum discharge rates, where applicable, to pre-project "existing" conditions for peak 10- and 100-year storms per an approved onsite drainage study for the project. The drainage ditches/basins shall not be connected to the roadside swales. The applicant must obtain a grading permit from the County prior to any grading for storm water retention / detention ditches or basins. The applicant shall provide an as-built drawing of the drainage improvements, that is stamped and signed by a licensed Engineer verifying that what was constructed complies with the approved plan for the site.	Prior to commercial use of the site	Development Services Engineering Division
Mitigation Measure No. 9 (Hydrology and Water Quality): PRIVATE DRAINAGE FACILITIES MAINTENANCE AGREEMENT. The property owner shall enter into an agreement with Sutter County committing the property owners and all successors-in-interest to maintain the private drainage facilities (including on-site peak flow attenuation basins) in perpetuity in a manner to preserve storage capacity, drainage patterns, ultimate discharge points and quantities, and water quality treatment controls for stormwater discharges as identified in the drainage study and approved by Sutter County.	Prior to commercial use of the site	Development Services Engineering Division
Mitigation Measure No. 10 (Hydrology and Water Quality): GRADING AND CONSTRUCTION. All impacts to the site must be mitigated in the project area or lands acquired for mitigation by the project. Any Grading or Site Improvements shall be done per an approved plan and in accordance with Sutter County Development Standards. Plans shall be reviewed and approved for construction by the Director of Development Services prior to the start of construction.	Prior to start of construction and during construction	Development Services Engineering Division
1.13 NOISE		
Mitigation Measure No. 11 (Noise): During construction, the applicant shall ensure that all project related noise-generating construction activities are limited to daytime hours between 7:00 a.m. and 6:00 p.m. on weekdays, 8:00 a.m. and 5:00 p.m. on	Upon start of construction activities	Development Services

Mitigation Measure	Timing	Monitoring Agency
Saturdays, and are prohibited on Sundays and holidays unless permission for the latter has been applied for and granted by the County.		
1.17 TRANSPORTATION		
Mitigation Measure No. 12 (Transportation): Prior to commercial use of the site and prior to use of this facility by Surface Transportation Assistance Act (STAA) trucks, the California Vehicle Code requires that the access route and facility meet Terminal Access (TA) classification requirements. The applicant can initiate the TA application process by submittal of a written request for TA evaluation to both the Sutter County Development Services Department and the Caltrans District Truck Coordinator. All expenses for TA evaluation, engineering, and improvements required to make the access route and facility meet TA classification requirements shall be borne by the applicant.	Prior to commercial use and prior to use of the site by STAA trucks	Development Services/Caltrans
Mitigation Measure No. 13 (Transportation): The applicant shall construct improvements to the entrance to the site that connects to State Route 113 with the use of STAA Truck Turning Templates. Improvements shall be constructed to allow for: ● The turning of STAA Trucks into and out of the site without crossing into oncoming traffic. ● The entrance shall allow for two trucks to pass on site without causing a backup onto State Route 113. ● The entrance shall be paved to meet Caltrans Specifications and Sutter County Improvement Standards for an Industrial/Commercial Standard. ● The applicant must obtain an encroachment permit from Caltrans prior to any work in the State Route 113 right-of-way.	Prior to the use of the site by STAA trucks.	Development Services/Caltrans

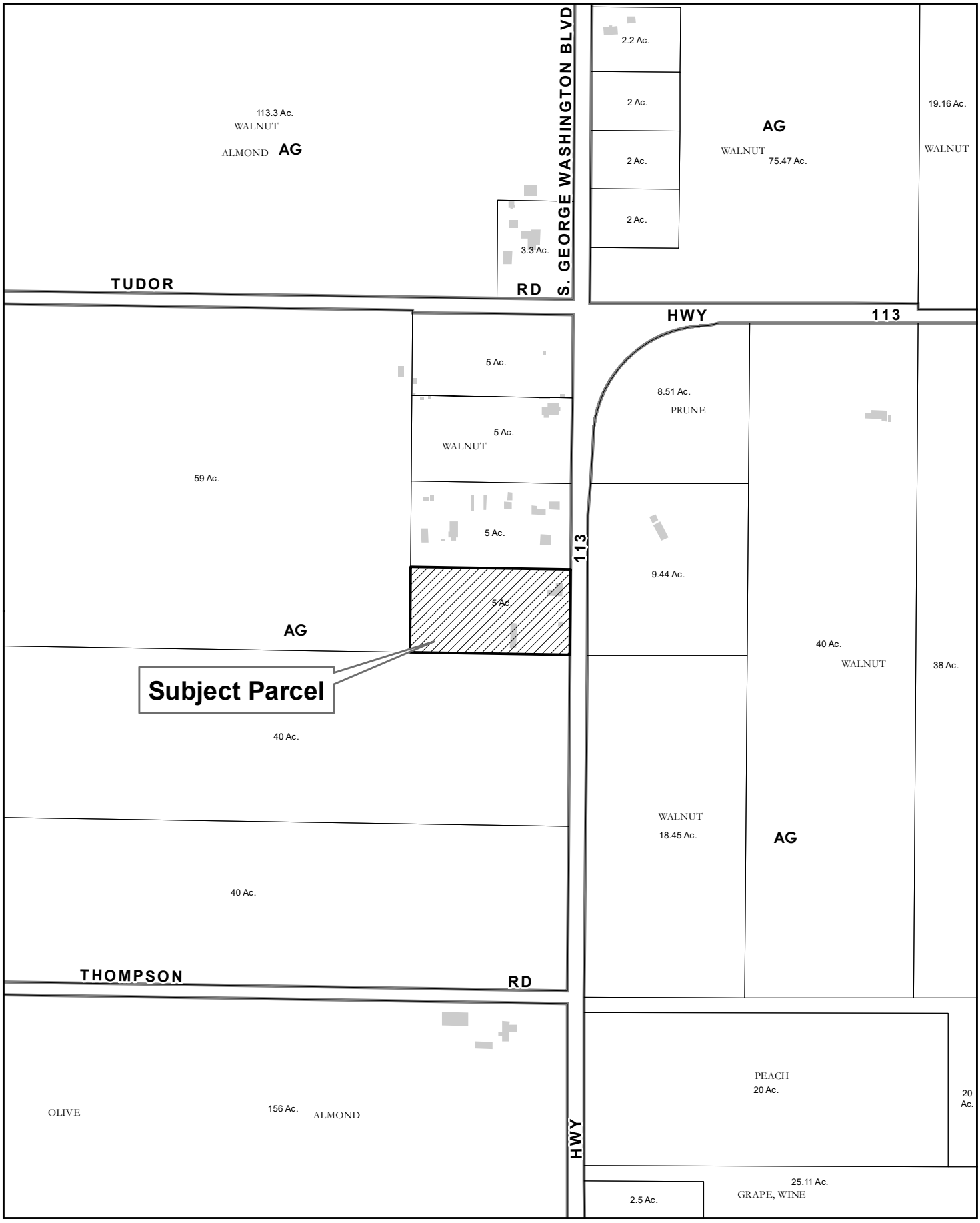
Attachments

1. Appendix A - U23-0030 Exhibits
2. Appendix B - Air Quality and Greenhouse Gas Analysis
3. Appendix C - Noise Study
4. Appendix D - Traffic Impact Analysis

APPENDIX A

U23-0030 EXHIBITS

- STUDY SKETCH
- STUDY SKETCH - AERIAL
- PROJECT PLANS
- LANDSCAPE PLAN
- PHOTOMETRIC PLAN



U23-0030

Structure

0 150 300 600 900 1,200 Feet

prepared by
SUTTER COUNTY DEVELOPMENT SERVICES DEPARTMENT

U23-0030

Structure

0 150 300 600 900 1,200 Feet

prepared by
SUTTER COUNTY DEVELOPMENT SERVICES DEPARTMENT

INDEX OF SHEETS

SHEET NO.	DRAWING NO.	DRAWING TITLE
1	T-1	TITLE SHEET, LOCATION & VICINITY MAP
2	L-1	SITE SURVEY & LEGEND
3	PD-1	LAYOUT & PAVEMENT DELINEATION PLAN
4	E-1	ENGINEERED FILL PLAN
5	G-1	GRADING PLAN
6	DT-1	CONSTRUCTION DETAILS
7	WPCD-1	WATER POLLUTION CONTROL DRAWINGS

SANGHA TRUCK
PROJECT PLANS FOR CONSTRUCTION OF
NEW TRUCK YARD AT 8709 S. GEORGE WASHINGTON BLVD
IN SUTTER COUNTY
TO BE SUPPLEMENTED BY CALTRANS STANDARD PLANS DATED 2018

DEVELOPER:

JASKARAN SANGHA
SANGHA TRUCK AND TRAILER REPAIR
1055 OSWALD AVENUE
YUBA CITY, CALIFORNIA 95991
PHONE: (530) 816-9000

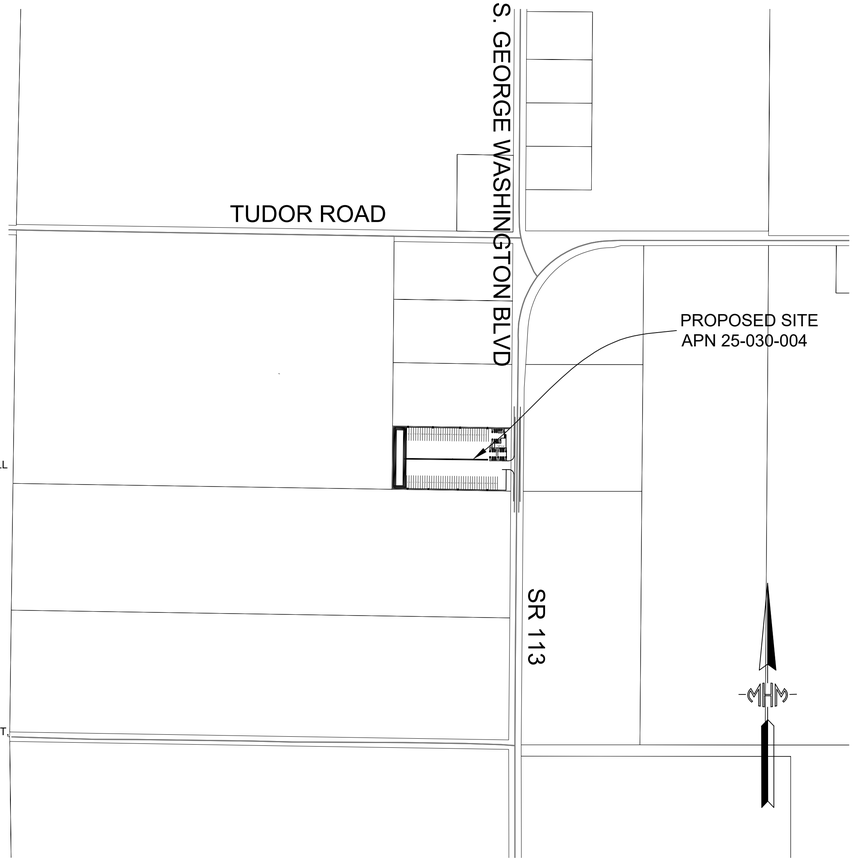
PROJECT CONSULTANTS:

1. CIVIL ENGINEER:
MHM INCORPORATED
1204 E STREET, P.O. BOX B
MARYSVILLE, CALIFORNIA 95901
PHONE: (530) 742-6485
FAX: (530) 742-5639

2. LAND SURVEYORS:
MHM INCORPORATED (ATTN ROGER HANLIN)
1204 E STREET, P.O. BOX B
MARYSVILLE, CALIFORNIA 95901
PHONE: (530) 742-6485
FAX: (530) 742-5639

CALL BEFORE YOU DIG
48 HOURS
CALL "USA" TOLL FREE
1-800-227-2600

UNDERGROUND SERVICE ALERT
THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TWO (2) WORKING DAYS PRIOR TO GRADING OR DIGGING



0 200' 400' 800' 1,600'
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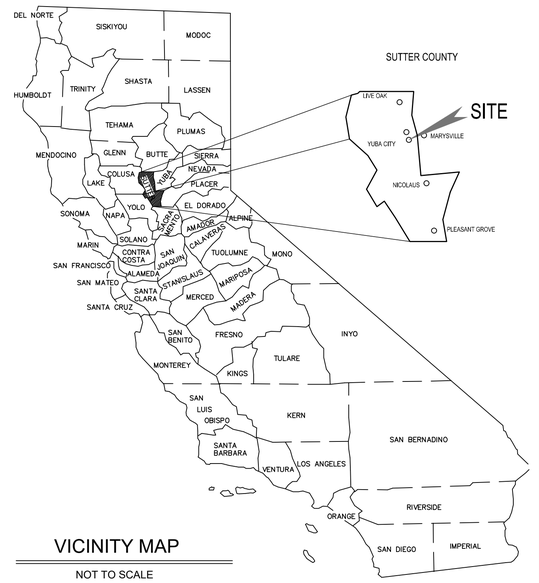

VICINITY MAP
NOT TO SCALE

MHM INCORPORATED, PLATINUM EXPRESS, OR SUTTER COUNTY SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

NOTE: THE CONTRACTOR SHALL POSSESS THE FOLLOWING CONTRACTOR LICENSE(S) AT THE TIME THIS CONTRACT IS AWARDED:

A. GENERAL ENGINEERING

3. ALL GRADING, SITE PREPARATION, PLACING AND COMPACTING OF FILL SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS AND UNDER THE CONTROL OF THE SOILS ENGINEER. RECOMMENDATIONS OF THE SOILS REPORT SHALL BE STRICTLY ADHERED TO.

4. DUST CONTROL: AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION, THE CONTRACTOR WHEN HE OR HIS SUBCONTRACTORS ARE OPERATING EQUIPMENT ON THE SITE, SHALL PREVENT THE FORMATION OF ANY AIRBORNE NUISANCE BY WATERING AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFINE DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN ACTIVITIES OR HIS SUBCONTRACTOR'S ACTIVITIES IN PERFORMING THE WORK UNDER HIS CONTRACT, AND SHALL BE RESPONSIBLE FOR ANY CITATIONS, FINES OR CHARGES RESULTING FROM DUST NUISANCE.

5. ANY ABANDONED UNDERGROUND PIPELINES EXPOSED DURING GRADING SHALL BE REMOVED OR ADEQUATELY PLUGGED.

6. ROUND CUT SLOPES TO BLEND IN WITH THE NATURAL GROUND CONTOUR.

7. PRIOR TO COMMENCING ANY GRADING ON THE SITE, CONTRACTOR SHALL MARK THE EXTERIOR BOUNDARIES CORNER WITH A 4x4 POST WITH THE TOP 3 FEET PAINTED RED. BOUNDARY MARKERS SHALL BE MAINTAINED UNDISTURBED THROUGHOUT THE GRADING OPERATION.

8. PROTECTIVE FENCING AND/OR BARRIERS SHALL BE PROVIDED WHEN NECESSARY TO PROTECT ADJACENT PROPERTIES DURING GRADING OPERATION.

9. SITE GRADING SHALL BE DONE TO A TOLERANCE OF 0.10± FEET IN GENERAL SITE AREAS. SITE PAVING AND HARDSCAPE AREAS SHALL BE DONE TO A TOLERANCE OF 0.05± FEET.

10. CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.

11. CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR PUBLIC WORKS, AMBULANCE, POLICE, AND FIRE DEPARTMENTS.

12. THE OWNER HAS TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT. ALL EROSION CONTROL MEASURES SHOWN SHALL BE INCLUDED IN THE BASE BID FOR THIS PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL BMPS. A COPY OF THE SWPPP SHALL BE KEPT ON-SITE AT ALL TIMES DURING CONSTRUCTION. A NOTICE OF INTENT (N.O.I.) WILL BE FILED BY THE OWNER AND APPROVED BY THE STATE WATER RESOURCES CONTROL BOARD BEFORE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES THAT WILL RESULT IN DISTURBANCE OF ONE (1) ACRE, OR GREATER, OF TOTAL LAND AREA.

13. ALL EXISTING ELEVATIONS ARE AS MEASURED IN THE FIELD UNLESS OTHERWISE NOTED.

14. HOURS OF GRADING OPERATION SHALL BE FROM 7:00 A.M. TO 6:00 P.M. MONDAY THROUGH FRIDAY, 8:00 A.M. TO 5:00 PM ON SATURDAY, WITH NO WORK ON SUNDAY AND LEGAL HOLIDAYS. NO WORK OF ANY KIND, INCLUDING MOVEMENT OF EQUIPMENT ON OR OFF THE SITE OR WARMING UP OF EQUIPMENT IS PERMITTED OUTSIDE OF THESE HOURS OF OPERATION.

15. ALL CUT AND FILL SLOPES AT THE BOUNDARY LINE SHALL BE CONSTRUCTED IN SUCH A MANNER THAT ADJACENT FENCES WILL NOT BE DAMAGED. NO CONSTRUCTION WILL BE PERMITTED WITHIN 6 INCHES OF FENCES UNLESS OTHERWISE INDICATED ON THE PLANS.

16. ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE COMPLETE SATISFACTION OF THE LOCAL AGENCY'S ENGINEER AT THE CONTRACTOR'S EXPENSE.

17. WHERE AN EXCAVATION FOR A TRENCH AND/OR STRUCTURE IS FIVE FEET DEEP OR MORE, THE CONTRACTOR SHALL CONFORM TO O.S.H.A. REQUIREMENTS AND SHALL PROVIDE A COPY OF THE APPROVED O.S.H.A. PERMIT AND SHORING DETAILS AND CALCULATIONS PREPARED BY A CALIFORNIA-LICENSED STRUCTURAL ENGINEER TO THE CITY ENGINEER.

18. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO SUTTER COUNTY TECHNICAL SPECIFICATIONS AND/OR THE 2018 CALTRANS STANDARD SPECIFICATIONS AND PLANS AND ALL RECOMMENDED MANUFACTURER'S SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN AND USE ALL APPLICABLE ADDENDUMS. CONSTRUCTION LAYOUT SHALL CONFORM TO THE DIMENSIONS SHOWN ON THE SITE PLAN SHEET C3.

19. UTILITY RELOCATION REQUIRED FOR THE CONSTRUCTION OF THESE FACILITIES WILL BE PERFORMED BY THE UTILITY COMPANY, UNLESS OTHERWISE NOTED.

20. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK AND PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK.

21. PRIOR TO THE START OF WORK THE CONTRACTOR SHALL HAVE APPROVED PLANS IN HIS POSSESSION AND SHALL GIVE AMIT DHUGGA 48 HOURS NOTICE PRIOR TO COMMENCING WORK.

22. THE CONTRACTOR SHALL CONSTRUCT ALL IMPROVEMENTS TO THE LINES AND GRADES SHOWN ON THE PLANS. ANY DEVIATION FROM THE PLANS SHALL REQUIRE THE APPROVAL OF AMIT DHUGGA.

23. AN ENCROACHMENT PERMIT MUST BE OBTAINED FOR ALL WORK WITHIN THE STREET RIGHT-OF-WAY AND MUST BE IN THE POSSESSION OF THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTACT SUTTER COUNTY FOR PERMIT.

24. NO GUARANTEE IS IMPLIED AS TO THE EXISTING UTILITIES EXACT LOCATION OR THAT OTHER UTILITIES MAY EXIST WHICH ARE NOT SHOWN.

25. ANY EXISTING WELLS TO BE ABANDONED SHALL BE ABANDONED IN ACCORDANCE WITH AND PERMITTED BY SUTTER COUNTY ENVIRONMENTAL HEALTH DEPARTMENT.

26. NO SITE MATERIALS CAN BE STORED WITHIN THE COUNTY RIGHT-OF-WAY.

UTILITY REPRESENTATIVES

UTILITY	AGENCY	CONTACT	PHONE NUMBER
FIRE PROTECTION	SUTTER COUNTY FIRE	JOHN SHALOWITZ	(530) 822-4575
GAS	PACIFIC GAS & ELECTRIC	STAFF	(530) 634-6576
ELECTRICITY	PACIFIC GAS & ELECTRIC	JOSH DEADMORE	(530) 634-6405
TELEPHONE	AT&T	LEE NIETO	(916) 484-2384
CABLE TELEVSION	COMCAST	BRANDON STOKES	(530) 332-5993
WATER	SUTTER COUNTY	NEAL HAY	(530) 822-7400
SEWER	SUTTER COUNTY	JEFF WILLIAMS	(530) 822-7400
STORM DRAINAGE	SUTTER COUNTY	PUBLIC WORKS	(530) 822-7400
	UNDERGROUND SERVICE ALERT		(800) 227-2600

AUTHORIZED FOR CONSTRUCTION BY:

NEAL HAY, P.E.
DIRECTOR OF DEVELOPMENT SERVICES
COUNTY OF SUTTER
RCE 55634 EXP 12-31-24

DATE

SUBMITTED BY:

PREPARED UNDER THE SUPERVISION OF

Kyle Sanchez

MHM INCORPORATED
KYLE SANCHEZ, P.E.
R.C.E.# 93438 EXP. 06-30-24

2-14-24
DATE

DATE OF TOPOGRAPHIC SURVEY: 2-01-23
DATE OF PLANS: 12-7-23
WDID NO. XXXXXXXX

REGISTERED PROFESSIONAL ENGINEER — KYLE A. SANCHEZ — No. C93438 — CIVIL — STATE OF CALIFORNIA

REV.	DATE	BY	APPR.	DESCRIPTION

DESIGNED BY: KAS
DRAWN BY: KAS
CHECKED BY: JSM
JOB NO.: 23-118
FILE NAME: 23118MAST

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

M·H·M ENGINEERS & SURVEYORS SINCE 1892
ENGINEERING-SURVEYING
1204 "E" STREET
MARYSVILLE, CALIF. 95901-0053
Ph: (530)742-6485/Fax(530)742-5639

JASKARAN SANGHA
NEW TRUCK YARD
8709 S GEORGE WASHINGTON BLVD
APN 025-030-004

TITLE SHEET, LOCATION & VICINITY MAP

T-1
DATE: 2/13/2024
SHEET 1 SHEETS 7

LEGEND

	EXISTING	PROPOSED
SURVEY MONUMENT/BENCH MARK	▲	▲
UTILITY POLE		
STREET LIGHT		
GUY WIRE AND ANCHOR		
CONSTRUCTION CENTERLINE		25
TOP OF CANAL EMBANKMENT		
TOE OF CANAL		
STORM DRAIN	12"SD	12"SD
SANITARY SEWER	12"SS	12"SS
WATER MAIN	8"W	8"W
SEWER FORCE MAIN	20"FM	20"FM
GAS MAIN	UG	
UNDERGROUND TELEPHONE	UT	
OVERHEAD ELECTRIC	OE	
FENCE	-X-X-X-	-X-X-X-
SPOT ELEVATION	X (E) 25.0	x 25.0
CONTOUR LINE	25	
ASSESSOR'S PARCEL NO.	25-025-254	
PROPERTY LINE		
TREE		TO BE REMOVED
BUILDING		TO BE REMOVED
TEST PIT LOCATION		
IRRIGATION CONTROLLER		
TRANSMISSION LINE TOWER		
DITCH FLOWLINE		
WATER SERVICE		
SEWER SERVICE		
POSTAL CBU		
FIRE HYDRANT		
WATER MAIN BLOW-OFF		
STORM DRAIN MANHOLE		
DRAINAGE INLET		
HANDICAP RAMP		
SANITARY SEWER MANHOLE		
CURB TRANSITION		
TRAFFIC CALMING DEVICE		
MASONRY BLOCK WALL		

0 15' 30' 60' 120'

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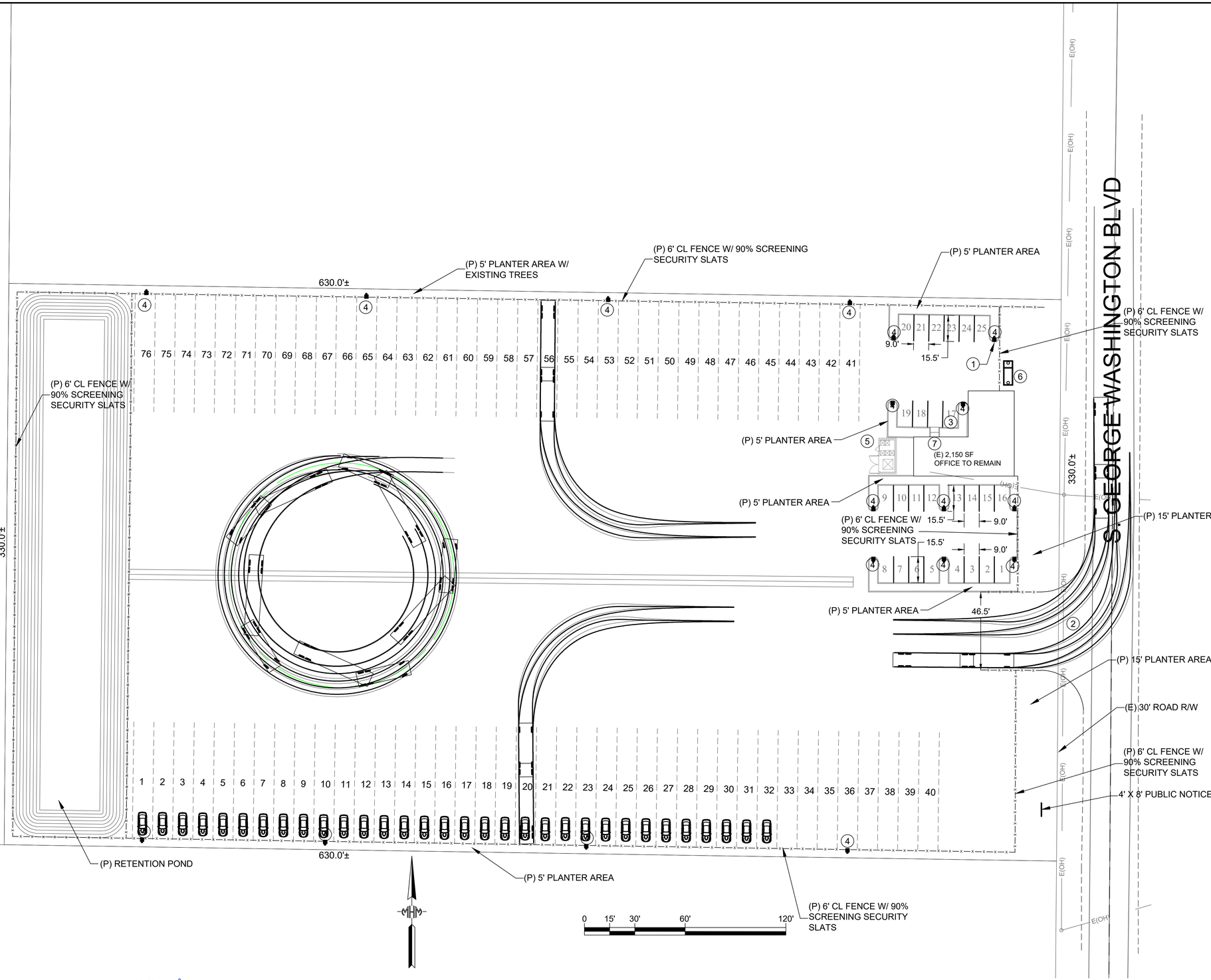
JASKARAN SANGHA
NEW TRUCK YARD
8709 S GEORGE WASHINGTON BLVD
APN 025-030-004

SITE LAYOUT

L-1
DATE: 2/13/2024
SHEET 2 | SHEETS 7



PARKING :

PROJECT PROVIDED:

REQUIRED NUMBER OF CAR PARKING STALLS =
30 TRUCKS / 1.5 + 2*2,150/1000 = 25

TOTAL NUMBER OF CAR PARKING STALLS =
25 STALLS (INCLUDING 1 ACCESSIBLE PARKING STALL)

PARKING DIMENSIONS:

STANDARD STALL SIZE = 9' X 15.5' AND 9' X 18'

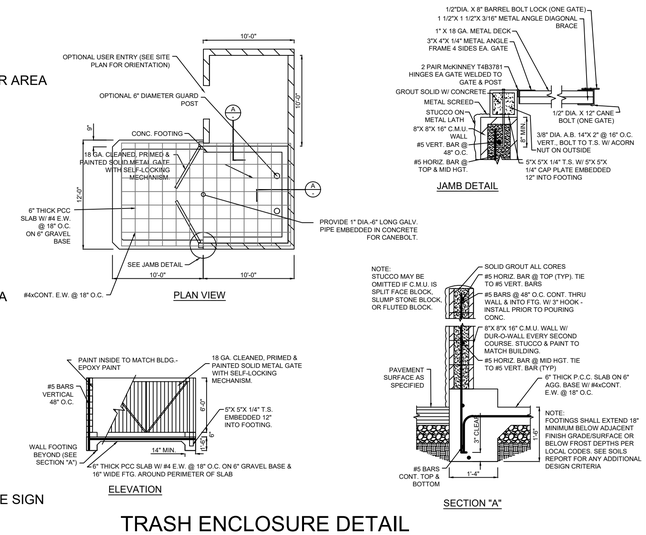
STALL DRIVE ISLE = 27'

STANDARD TRUCK STALL SIZE = 12' X 70'

CURB STOPS USED AT BACK OF STALLS FOR TRUCK AND PASSENGER VEHICLES FOR PROTECTION OF FENCE, LANDSCAPING, AND BUILDINGS

CONSTRUCTION NOTES:

1. CONSTRUCT 6" PCC CURB PER COUNTY DETAIL H-2 ON SHEET C6
2. CONSTRUCT COMMERCIAL DRIVEWAY PER COUNTY DETAIL H-12 ON SHEET C6
3. ACCESSIBLE PARKING STALL
4. SITE LIGHTING WITH MOTION CONTROL
5. TRASH ENCLOSURE W/ 4 YD DUMPSTER AND 5 65-GALLON TRASH RECEPTACLES
6. INSTALL NEW HOLDING TANK FOR SEPTIC SYSTEM
7. CASE F ADA RAMP (SEE SHT DT-1 FOR MORE DETAILS)



TRASH ENCLOSURE DETAIL

REGISTERED PROFESSIONAL ENGINEER
KYLE A. SANGHA
No. 093438
CIVIL
STATE OF CALIFORNIA

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JASKARAN SANGHA
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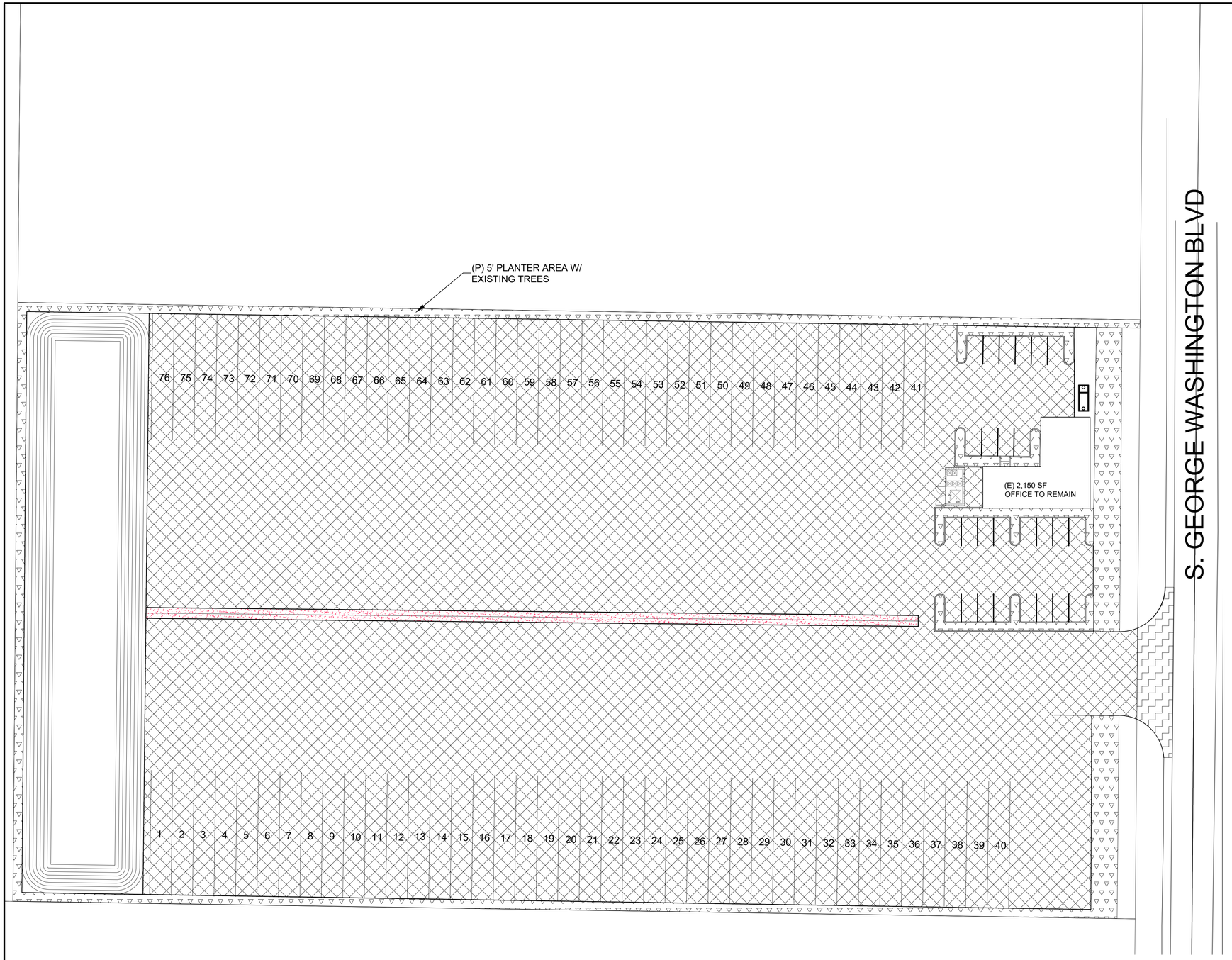
APN 025-030-004

LAYOUT AND PAVEMENT DELINEATION PLAN

PD-1
DATE: 2/13/2024
SHEET 3 SHEETS 7



PERFORMANCE GRADE DOUBLE-LAYER CHIP SEAL 167,080 SF
3/8" AGGREGATE WITH PG GRADED ASPHALT-POLYMER BINDER ON 12" CL. 2 A.B. ON 12" COMPACTED SUBGRADE (90% RELATIVE COMPACTION)

ASPHALT CONCRETE (AC) (COUNTY RIGHT-OF-WAY) (3,460 SF)
1/2" TYPE A 5" AC ON 18" CL 2 A.B. ON 12" COMPACTED SUBGRADE (95% RELATIVE COMPACTION) (T.I. 10.0, R-VALUE=20)

PLANTERS (12,105 SF)
PREPARE ORIGINAL GROUND SURFACE AS SPECIFIED. PLACE ENGINEERED FILL (NATIVE OR IMPORTED) WHERE NECESSARY TO ACHIEVE SUBGRADE ELEVATIONS. PLACE 8 INCHES OF TOPSOIL (NATIVE OR IMPORTED) TO FINISH GRADES SHOWN.

PORTLAND CEMENT CONCRETE VALLEY GUTTER (5,520 SF)
8" CONCRETE VALLEY GUTTER ON 8" CLASS 2 A.B. OVER 6" COMPACTED SUBGRADE (95% RELATIVE COMPACTION). (MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 3000 PSI)

PORTLAND CEMENT CONCRETE PAVEMENT (PCCP)
6" THICK WITH #4 REBAR 18" O.C. EW ON 10" CLASS 2 A.B. OVER (SECTION & SUBGRADE TO MIN. 95% RELATIVE COMPACTION) (MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 3,000 PSI) USED AS AN ALTERNATIVE A.C. SECTION.

0 15' 30' 60' 120'

KYLE A. SANGHA
No. C93438
REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA

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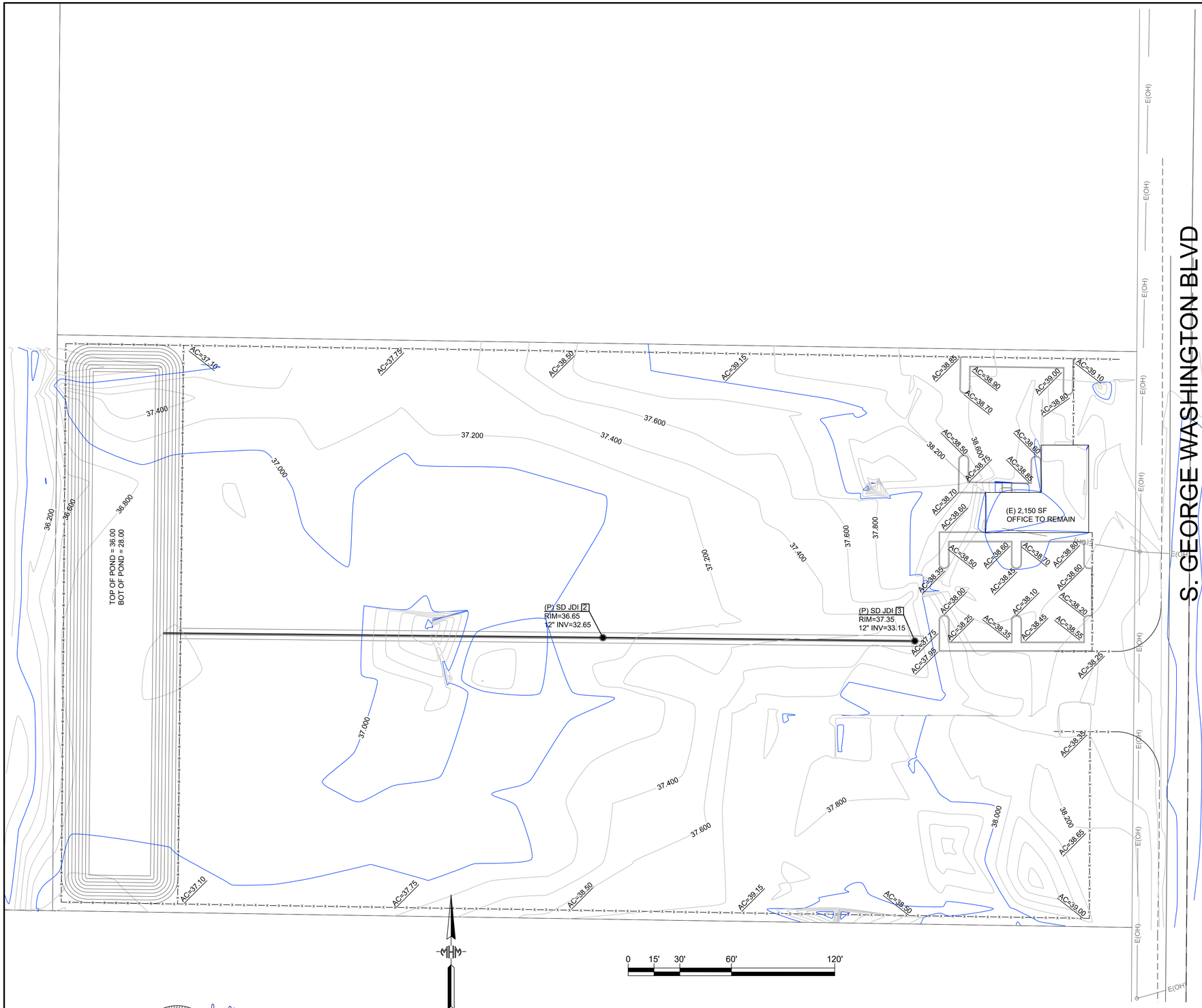
ENGINEERED FILL PLAN

E-1
DATE: 2/13/2024
SHEET 4
SHEETS 7



STORM SEWER CONSTRUCTION NOTES

1. CONNECT TO EXISTING STORM DRAIN IN ACCORDANCE WITH COUNTY STANDARDS.
2. CONSTRUCT 18" STORM DRAIN JUNCTION DROP INLET PER DETAIL D-7 (ON SHT. 06) WITH A 1' SUMP AND A 6' VALLEY GUTTER 8" THICK WITH #4 BARS 18" OC EW.
3. CONSTRUCT 18" STORM DRAIN DROP INLET PER DETAIL D-7 (ON SHT. 06) WITH A 1' SUMP AND A 6' VALLEY GUTTER 8" THICK WITH #4 BARS 18" OC EW.

STORM SEWER SYSTEM GENERAL NOTES

1. ALL STORM SEWER SHALL BE CONSTRUCTED OF REINFORCED CONCRETE PIPE, SDR -35 PVC PLASTIC PIPE, OR SMOOTH WALLED HDPE PLASTIC PIPE (ALL PIPE WITH IN THE CITY RIGHT OF WAY SHALL BE RCP).
2. PRIOR TO PAVING, THE CONTRACTOR SHALL VACUUM TEST ALL STORM SEWER MANHOLES TO ENSURE NO LEAKAGE WILL OCCUR. TEST RESULTS SHALL BE PROVIDED TO THE CITY.

EARTHWORK SUMMARY

ESTIMATED QUANTITY OF EXCAVATION (COMPACTED CUBIC YARDS):	7,220 CU. YDS.
ESTIMATED QUANTITY OF EMBANKMENT (COMPACTED CUBIC YARDS):	935 CU. YDS.
ESTIMATED QUANTITY OF MATERIAL REMOVED FROM SITE (COMPACTED CUBIC YARDS):	6,285 CU. YDS.

THE ABOVE LISTED QUANTITIES REFLECT THE ENGINEER'S ESTIMATE OF THE VOLUMES OF MATERIAL CUT AND FILLED. THESE QUANTITIES ARE FOR DESIGN AND BONDING PURPOSES ONLY.

THE CONTRACTOR IS RESPONSIBLE FOR COMPUTING HIS OWN QUANTITIES FOR CONTRACT PURPOSES.

EARTHWORK ADJUSTMENTS ARE BASED ON DATA OBTAINED FROM THE SOILS AND GEOLOGY REPORT. FIELD CONDITIONS DURING CONSTRUCTION MAY VARY, RESULTING IN ACTUAL EARTHWORK QUANTITIES DIFFERENT FROM THOSE SHOWN ABOVE. THE ABOVE QUANTITIES DID NOT CONSIDER LIME TREATMENT.

GRADE ADJUSTMENTS MAY BE REQUIRED DURING CONSTRUCTION TO ACHIEVE A BALANCED DESIGN.

NO ADJUSTMENTS HAVE BEEN MADE TO QUANTITIES ABOVE FOR SHRINKAGE OR SWELL, THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN ADJUSTMENTS BASED ON THE GEOTECHNICAL REPORT RECOMMENDATIONS.

ANY MATERIAL EXPORTED USING COUNTY ROADWAYS SHALL BE SUBJECT TO COUNTY EXPORT FEE.

REGISTERED PROFESSIONAL ENGINEER — KYLE B. JONES — No. C93438 — CIVIL — STATE OF CALIFORNIA

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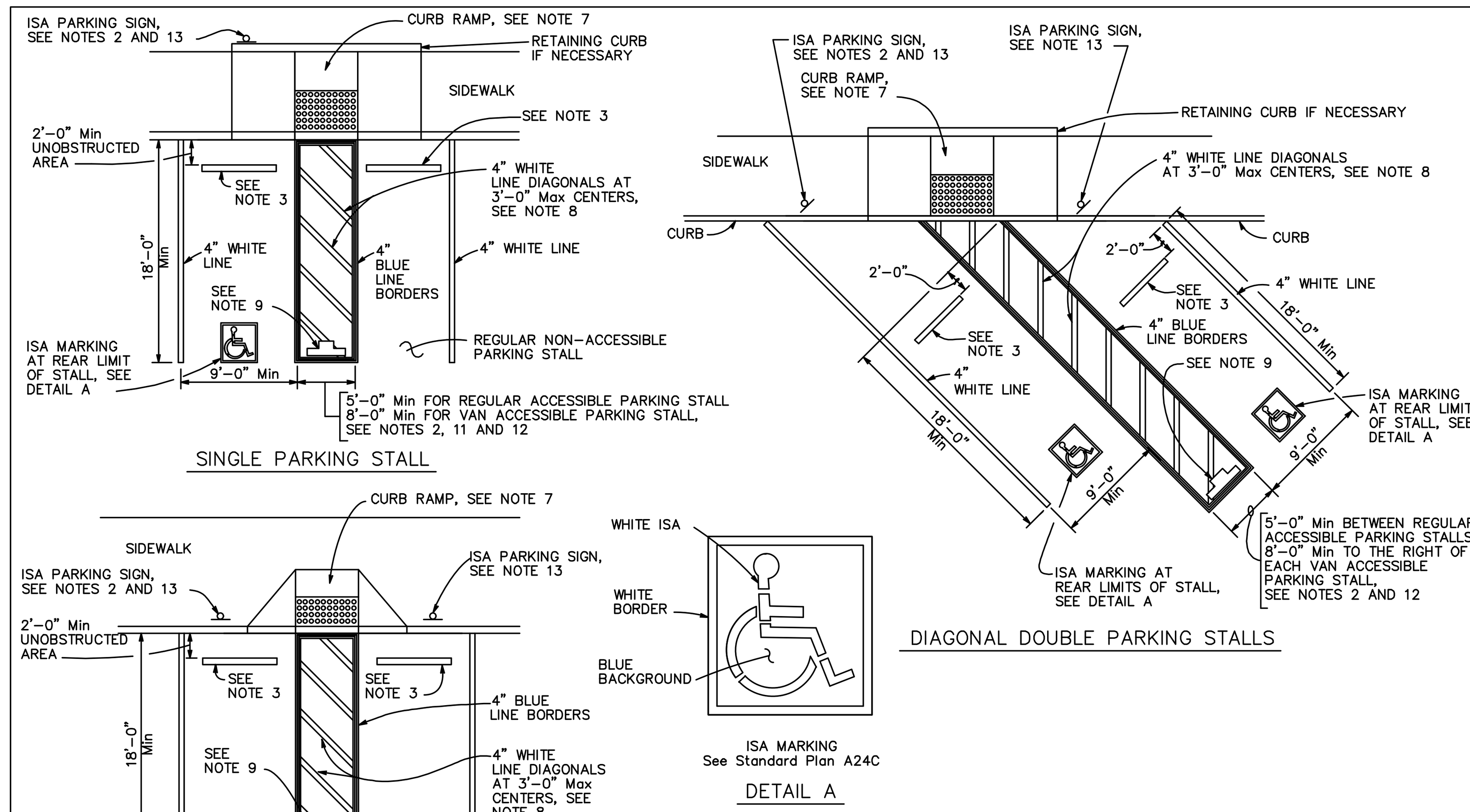
APN 025-030-004

GRADING PLAN

G-1
DATE: 2/13/2024
SHEET 5 | SHEETS 7



OFF-STREET PARKING SIGNS
(Parking lot or garage)
See Note 6

TABLE A

TOTAL NUMBER OF PARKING SPACES PROVIDED IN PARKING FACILITY	MINIMUM NUMBER OF REQUIRED ACCESSIBLE PARKING SPACES
1–25	1
26–50	2
51–75	3
76–100	4
101–150	5
151–200	6
201–300	7
301–400	8
401–500	9
501–1000	2 PERCENT OF TOTAL
1001 AND OVER	20 PLUS 1 FOR EACH 100 OR FRACTION THEREOF OVER 1000

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. Accessible parking spaces serving a particular building shall be located on the shortest accessible route of travel from adjacent parking to an accessible entrance. In parking facilities that do not serve a particular building, accessible parking shall be located on the shortest accessible route of travel to an accessible pedestrian entrance of the parking facility.
2. One in every six accessible off-street parking stalls, but not less than one, shall be served by an accessible aisle of 8'-0" minimum width and shall be signed van accessible. The R7-8b sign shall be mounted below the R99B (CA) plaque or the R99C (CA) sign.
3. In each parking stall, a curb or parking bumper shall be provided if required to prevent encroachment of vehicles over the required width of walkways. Parking stalls shall be so located that persons with disabilities are not compelled to wheel or walk behind parked vehicles other than their own. For more parking bumper requirements, see the Standard Specifications.
4. Parking spaces and access aisles shall be level with surface slopes not exceeding 1.5% in all directions.
5. Table A shall be used to determine the required number of accessible parking stalls in each parking lot or garage.
6. Where Plaque R99B (CA), Sign R99C (CA) or Sign R7-8b are installed, the bottom of the sign or plaque panel shall be a minimum of 7'-0" above the surrounding surface.
7. Curb ramps shall conform to the details shown on Standard Plan A88A.
8. Blue paint, instead of white may be used for marking accessibility aisles in areas where snow may cause white markings to not be visible.
9. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high and located so that it is visible to traffic enforcement officials. See Standard Plan A90B for details of the "NO PARKING" pavement marking.
10. A R100B (CA) sign shall be posted in a conspicuous place at each entrance to off-street parking facilities or immediately adjacent to and visible from each stall. The sign shall include the address where the towed vehicle may be reclaimed and the telephone number of the local traffic law enforcement agency.
11. Where a single (non-van) accessible parking space is provided, the loading and unloading access aisle shall be on the passenger side of the vehicle as the vehicle is going forward into the parking space.
12. Where a van accessible parking space is provided, the loading and unloading access aisle shall be 8'-0" wide minimum, and shall be on the passenger side of the vehicle as the vehicle is going forward into the parking space.
13. Accessible Parking Only Sign shall be Sign R99C (CA) or Sign R99 (CA) with Plaque R99B (CA).

LEGEND

ISA = International Symbol of Accessibility

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ACCESSIBLE PARKING
OFF-STREET

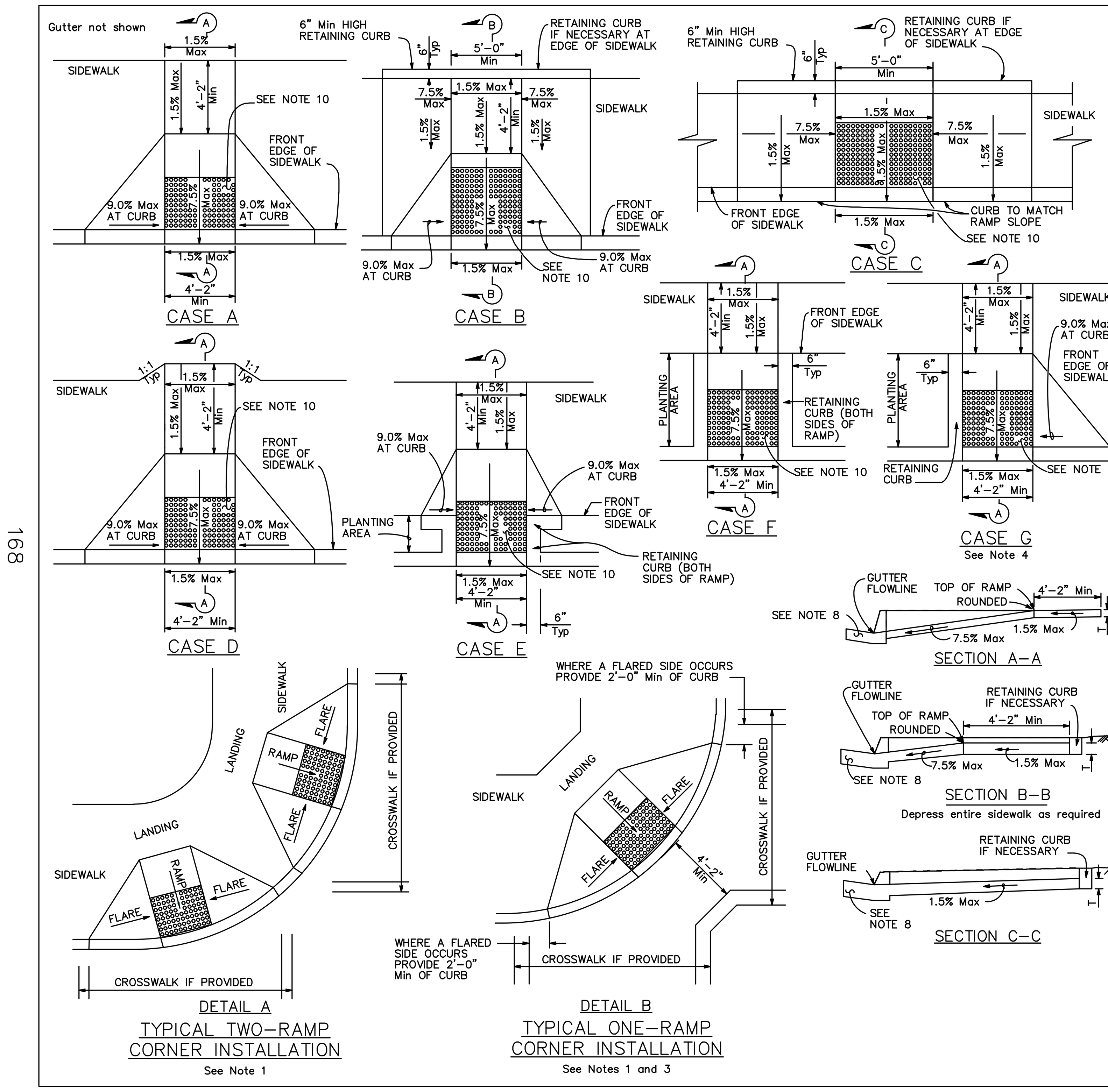
NO SCALE

A90A

2018 STANDARD PLAN A90A

152

1-29-18



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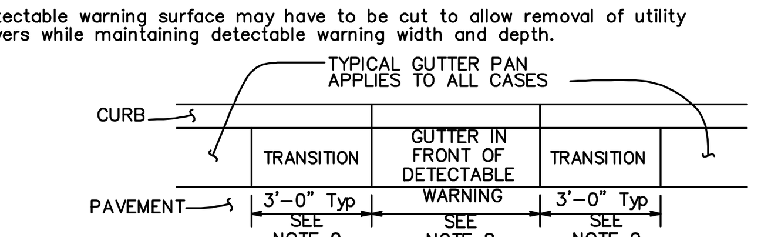
NOTES: See Note 10

1. As site conditions dictate, Case A through Case G curb ramps may be used for corner installations similar to those shown in Detail A and Detail B. The case of curb ramps used in Detail A do not have to be the same. Case A through Case G curb ramps also may be used at mid block locations, as site conditions dictate. For specific site condition configuration, including the conform to existing sidewalk, see Project Plans.
2. If distance from curb to back of sidewalk is too short to accommodate ramp and 4'-2" platform (landing) as shown in Case A, the sidewalk may be depressed longitudinally as in Case B or C or may be widened as in Case D.
3. When ramp is located in center of curb return, crosswalk configuration must be similar to that shown for Detail B.
4. As site conditions dictate, the retaining curb side and the flared side of the Case G ramp shall be constructed in reversed position.
5. The ramp portion of the curb ramp is a typical rectangle, unless modified in the Project Plans.
6. Side slope of ramp flares vary uniformly from a maximum of 9.0% at curb to conform with longitudinal sidewalk slope adjacent to top of the ramp, except in Case C and Case F.
7. The adjacent surfaces at transitions at curb ramps to walks, gutters, and streets shall be at the same level.
8. Counter slopes of adjoining gutters and road surfaces immediately adjacent to and within 24 inches of the curb ramp shall not be steeper than 1V:20H (5.0%). Gutter pan slope shall not exceed 1" of depth for each 2'-0" of width.
9. Transition gutter pan slope from 1" of depth for each 2'-0" of width to match typical gutter pan slope per Standard Plan A87A.
10. The detectable warning surface will be a rectangle as shown at back of curb, unless modified in the Project Plans. Curb ramps shall have a detectable warning surface that extends the full width and 3'-0" depth of the ramp. Detectable warning surfaces shall extend the full width of the ramp except a maximum gap of 1 inch is allowed on each side of the ramp. Detectable warning surfaces shall conform to the requirements in the Standard Specifications.
11. Sidewalk and ramp thickness, "T", shall be 31/2" minimum.
12. Utility pull boxes, manholes, vaults and all other utility facilities within the boundaries of the curb ramp will be relocated or adjusted to grade by the owner prior to, or in conjunction with, curb ramp construction.
13. Detectable warning surface may have to be cut to allow removal of utility covers while maintaining detectable warning width and depth.



GUTTER PAN TRANSITION

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

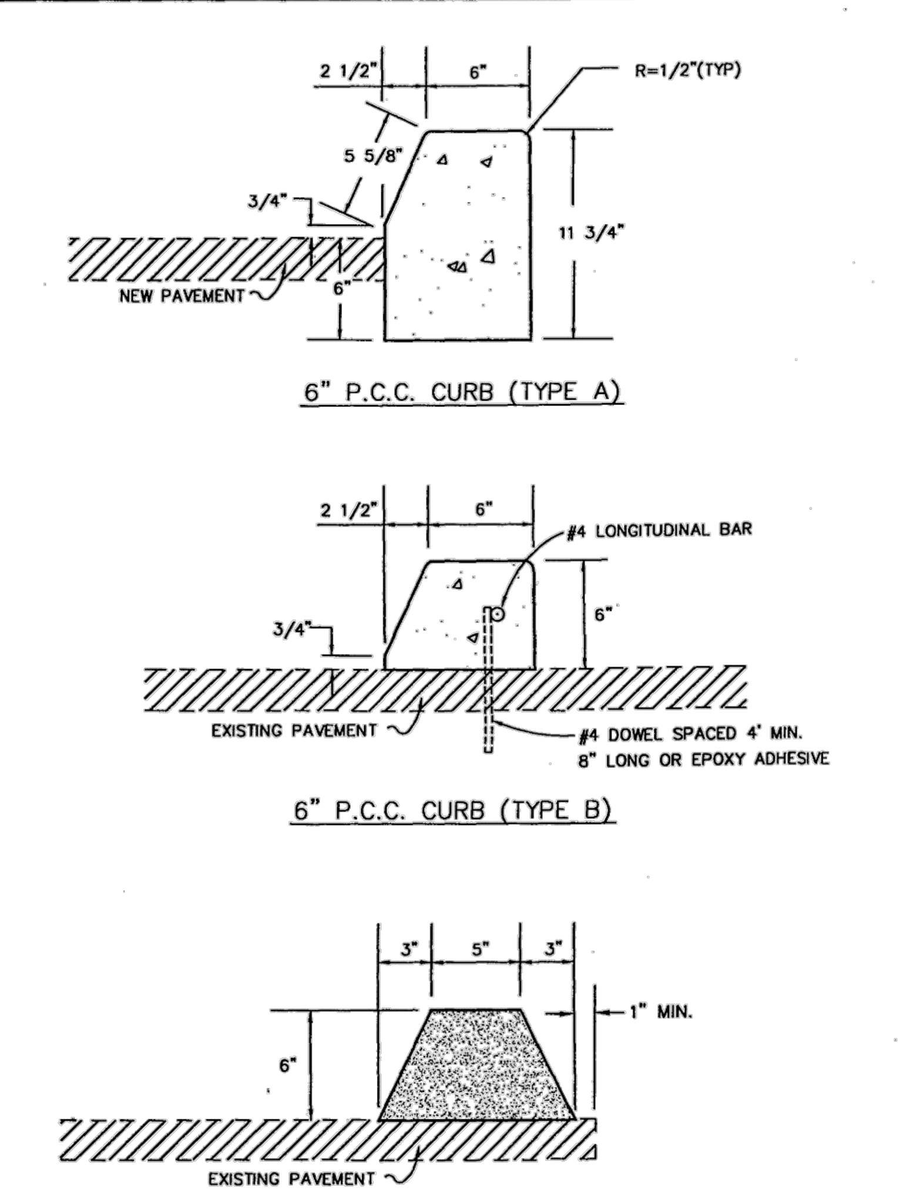
CURB RAMP DETAILS

NO SCALE

A88A

2023 STANDARD PLAN A88A

168



COUNTY OF SUTTER	
BARRIER CURB	
APPROVED 2/14/06	DATE
SCALE : NONE DRN : PSO	DWG NO. H-2

DATE	REVISIONS	BY
11/8/05		K.X.

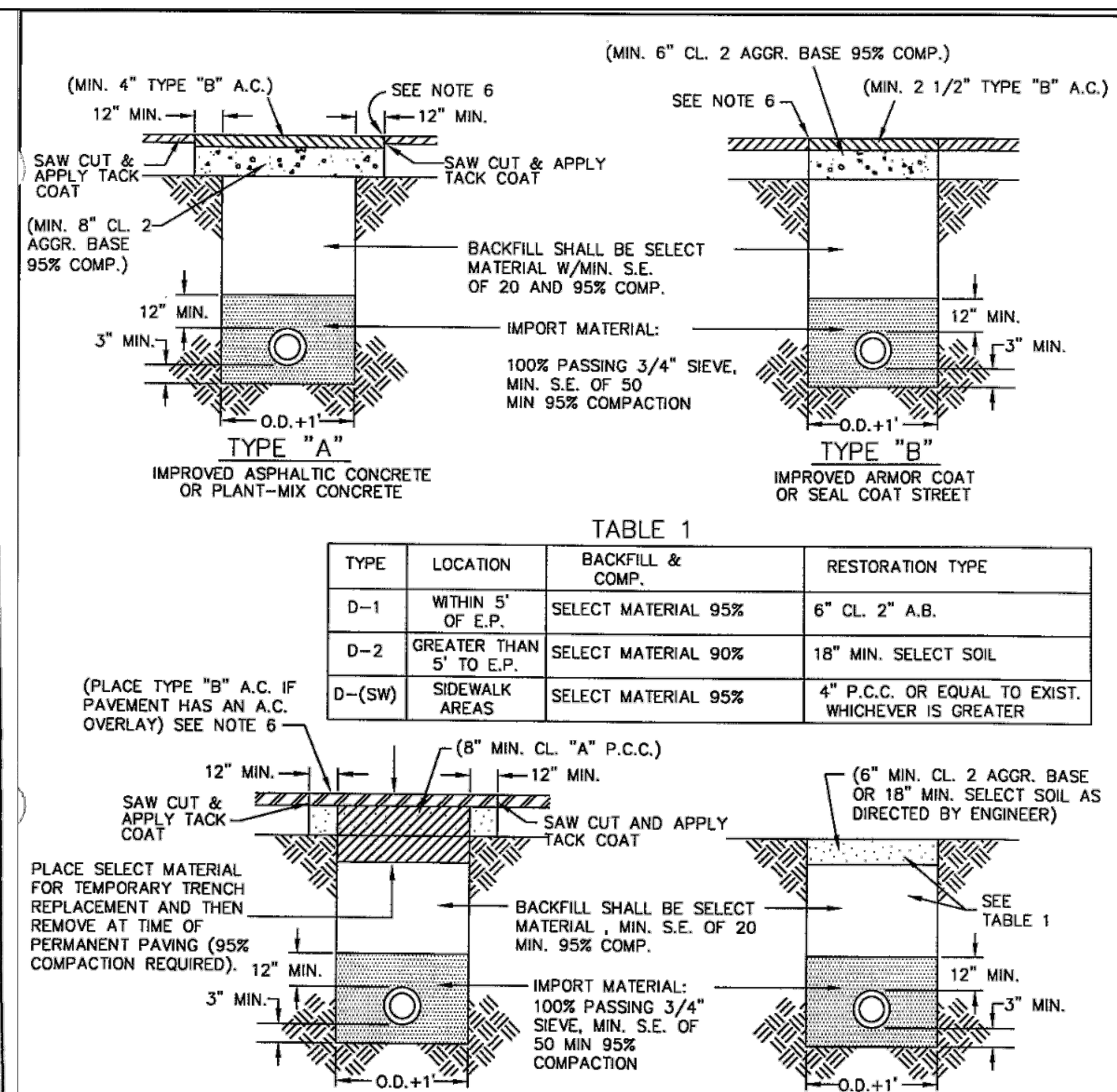


TABLE 1

TYPE	LOCATION	BACKFILL & COMP.	RESTORATION TYPE
D-1	WITHIN 5' OF E.P.	SELECT MATERIAL 95%	6" CL. 2" A.B.
D-2	GREATER THAN 5' TO E.P.	SELECT MATERIAL 90%	18" MIN. SELECT SOIL
D-(SW)	SIDEWALK AREAS	SELECT MATERIAL 95%	4" P.C.C. OR EQUAL TO EXIST. WHICHEVER IS GREATER

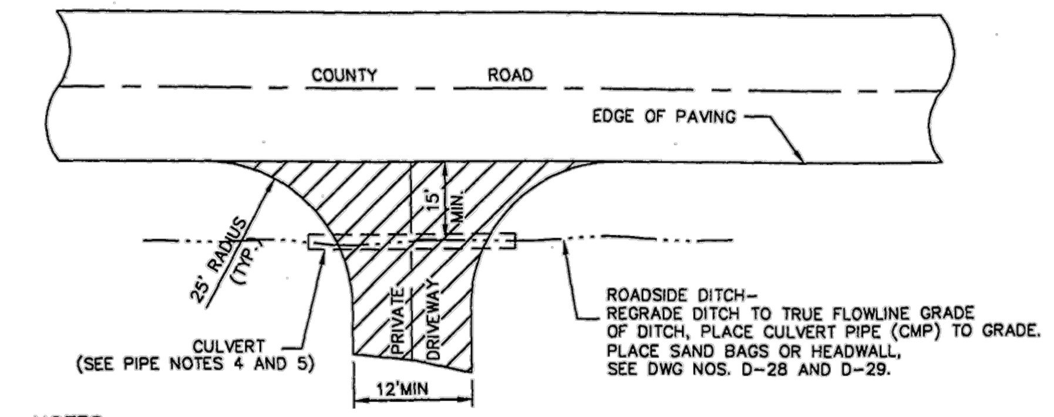
NOTES:

1. Type "A". "B" & "C" trenches require (2) two cuts: first cut initial trench width then 30 days after work has been completed it shall be saw cut 12" wider both sides.
2. Type "A", "B" & "C" trenches require placement and maintenance of temporary pavement (sc-800 cold mix) for a minimum of 30 days prior to permanent paving.
3. Structural thickness shown is minimum allowable. Other thickness of structural sections may be required by director if existing structural section exceeds these minimums.
4. All trench work 5' and deeper shall have approved trench sloping or shoring plan.
5. Paving surface at trench joints shall be sealed with asphalt emulsion 4" each side of joint after final compaction of asphalt concrete. Sealant shall be sanded as necessary to prevent traffic pickup.
6. Contact Sutter County Public Works (822-7450) 24 hrs. prior to trenching.
7. Contractor shall provide S.E. (Sand Equivalent) test Results for backfill and bedding material from geotech lab.
8. All trenches in the public R/W shall be either properly backfilled or sealed w/steel plates at the end of each working day.

COUNTY OF SUTTER	
TYPE I TRENCH RESTORATION	
APPROVED 2/14/06	DATE
SCALE : NONE DRN : PSO	DWG NO. H-28

DATE	REVISIONS	BY
6/22/04		K.X.

Mar. 24, 1999 - 14:20:06 DWG Name: R:\develop\SUT0202\Std-Det\Sutter\H-12.dwg Updated By: RLehutsky

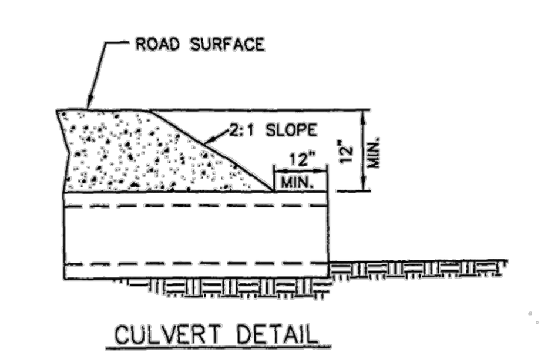


NOTE:

1. Pipe shall be placed slightly below existing grade or at a grade specified by the County Road Department.
2. Pipe sections shall be joined together securely to prevent infiltration.
3. Used pipe is unacceptable.
4. Pipe diameter shall be 12" minimum.
5. Pipe placement shall be 100' maximum in length. Any pipe placement more than 100' in length shall install a DI or leave 5' gap between.

NOTES:

1. Prior to new paving, edge of existing paving at County road is to have a neat, straight, vertical sawcut to tie into.
2. Prior to placing asphalt concrete the sawcut edge is to have a SS-1 tack coat applied.
3. The driveway approach section shall be a minimum of 2 1/2" asphalt concrete on 4" Class II aggregate base rock for residential approaches and 4" asphalt concrete on 6" Class II aggregate base rock for commercial drive approaches. Asphalt concrete shall consist of AR4000, 1/2" maximum aggregate asphalt concrete. Base rock shall be compacted to 95%.
4. Asphalt concrete placement at County road is to be a flush butt joint. Placed to sawcut edge of road and sloped away from road.
5. Finish grade is to slope away from County road at a minimum 2% fall, 5% maximum fall.
6. Paving surface at butt joints shall be sealed with SS-1 emulsion 4" each side of joint after final compaction of asphalt concrete. Sealant shall be sanded as necessary to prevent traffic pick up.
7. All work shall conform to the Standard Specifications of the State of California, Department of Transportation, current edition.
8. Public Works shall be notified 24 hours after permit issue and prior to any work performed. Phone Number 822-7450
9. No additional drainage water direct to County right of way.
10. Appropriate agencies shall be contracted/notified of work prior to any work start for necessary utility permits and USA notification (1-800-227-2600) and markings by permittee/owner.

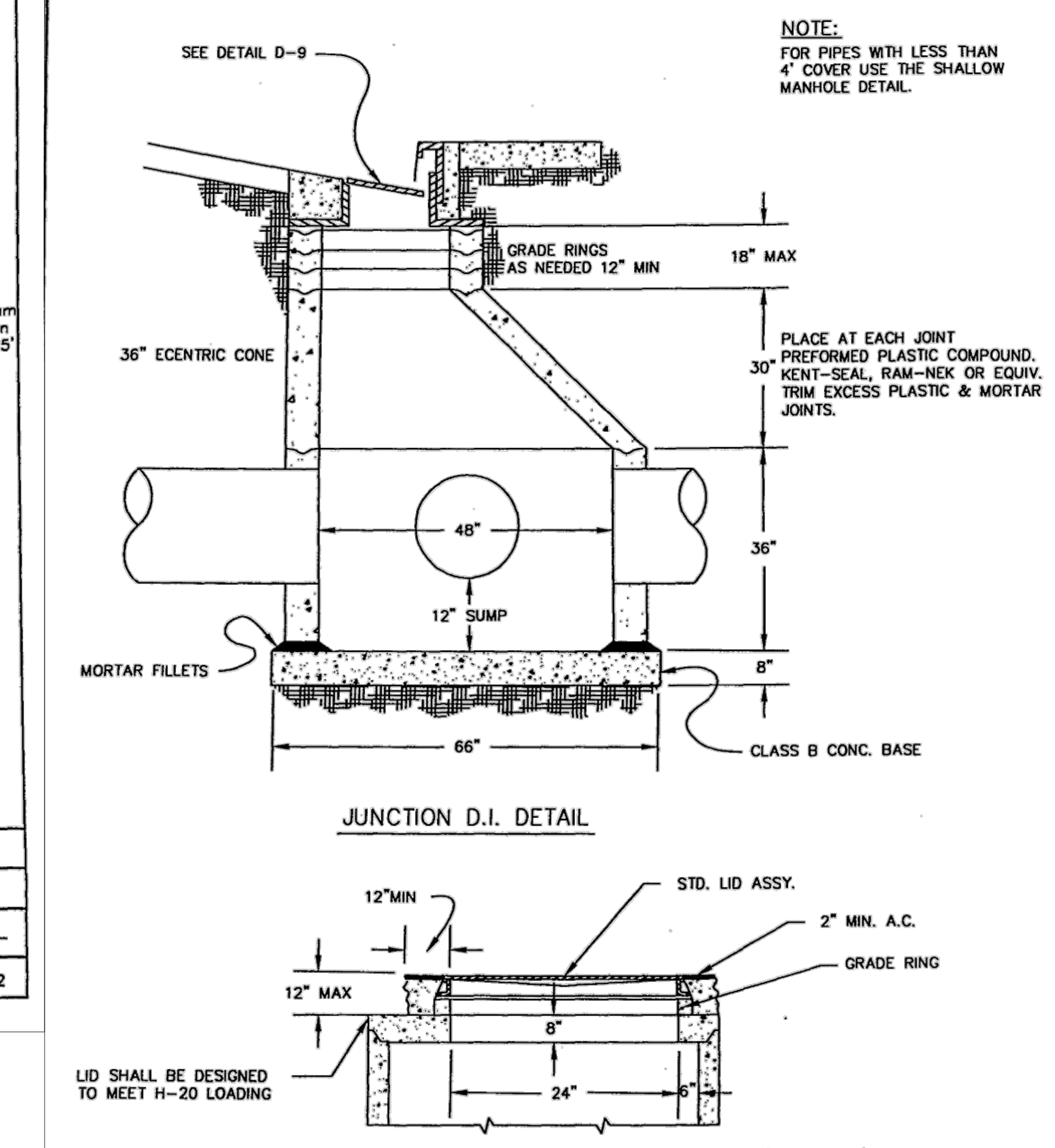


CULVERT DETAIL

COUNTY OF SUTTER	
DRIVEWAY CONNECTION	
APPROVED 2/14/06	DATE
SCALE : NONE DRN : PSO	DWG NO. H-12

DATE	REVISIONS	BY
11/3/05		K.X.

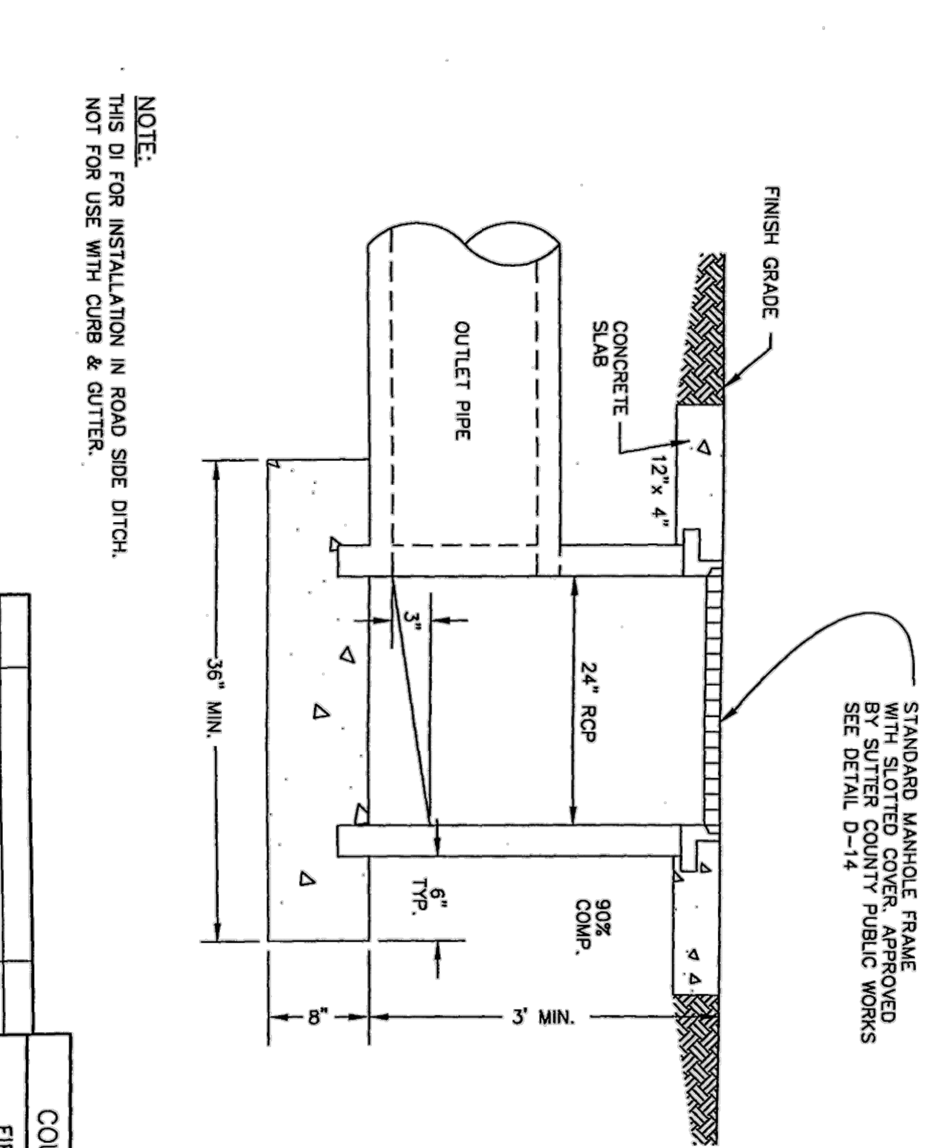
NOTE:
FOR PIPES WITH LESS THAN 4' COVER USE THE SHALLOW MANHOLE DETAIL.



COUNTY OF SUTTER	
DRAINAGE INLET	
APPROVED 2/14/06	DATE
SCALE : NONE DRN : PSO	DWG NO. D-7

DATE	REVISIONS	BY
6/11/04		K.X.

NOTE:
THIS DI FOR INSTALLATION IN ROAD SIDE DITCH. NOT FOR USE WITH CURB & GUTTER.



COUNTY OF SUTTER
FIELD DROP INLET
APPROVED 2/14/06
SCALE: NONE DRN: PSO
DWG NO. D-4
8/20/04 K.X.
DATE REVISIONS BY

REGISTERED PROFESSIONAL ENGINEER
KYLE SANCHEZ
No. C93438
CIVIL
STATE OF CALIFORNIA

REV.	DATE	BY	APPR.	DESCRIPTION

DESIGNED BY: KAS
DRAWN BY: KAS
CHECKED BY: JSM
JOB NO.: 23-118
FILE NAME: 23118MAST

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

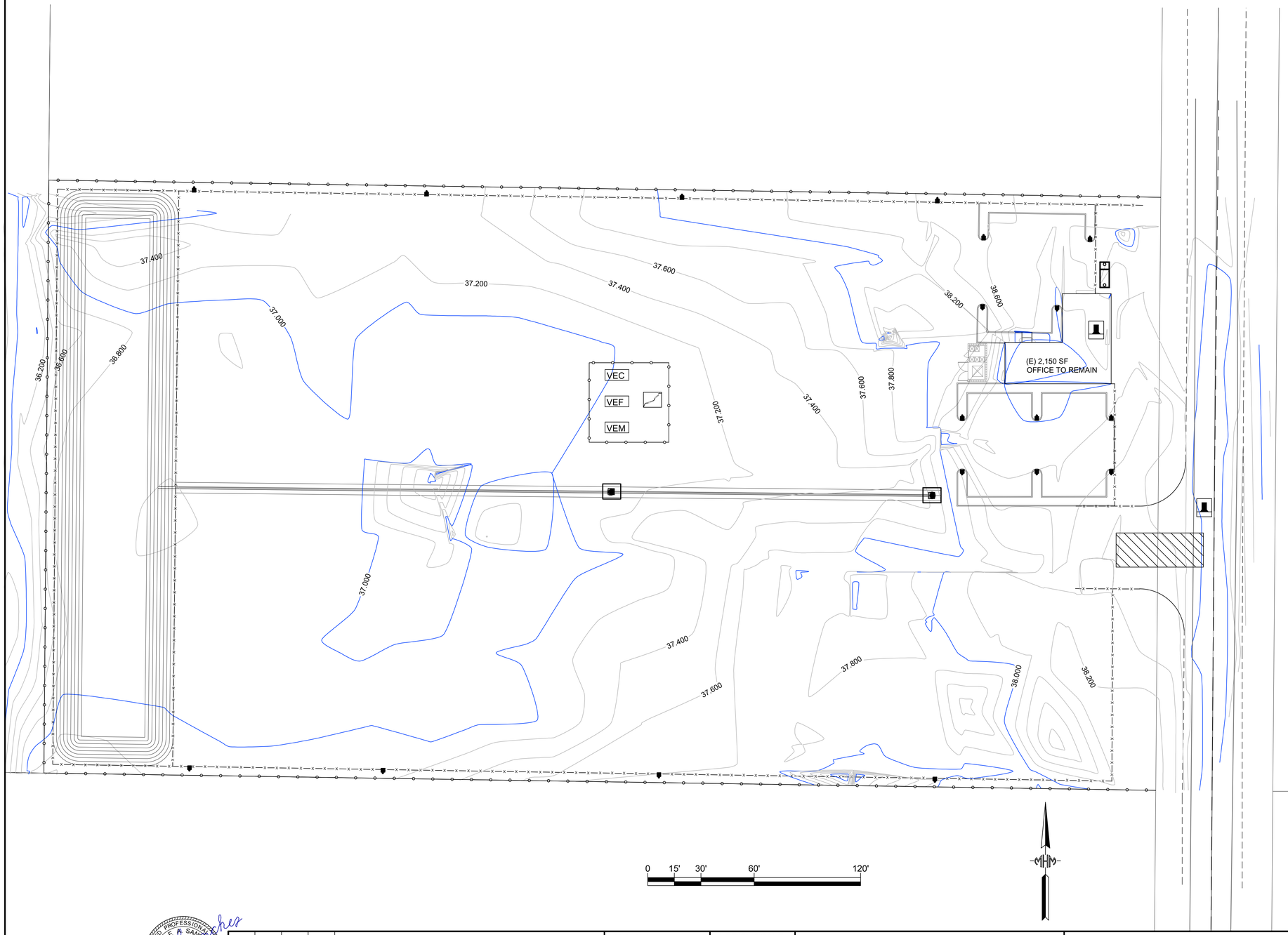
M·H·M
ENGINEERS & SURVEYORS SINCE 1892

ENGINEERING-SURVEYING
1204 "E" STREET
MARYSVILLE, CALIF. 95901-0053
Ph: (530)742-6485/Fax(530)742-5639

JASKARAN SANGHA
NEW TRUCK YARD
8709 S GEORGE WASHINGTON BLVD
APN 025-030-004

CONSTRUCTION DETAILS

DT-1
DATE: 2/13/2024
SHEET 6
SHEETS 7



NOTES:

1.) CONTRACTOR SHALL KEEP THE SITE CLEAN UTILIZING "GOOD HOUSEKEEPING" PRACTICES DESCRIBED IN THE PROJECT "STORM WATER POLLUTION PREVENTION PLAN" (SWPPP).

2.) CONCRETE WASTE SHALL NOT BE DISPOSED OF TO THE CITY STORM DRAIN SYSTEM AT ANY TIME. ALL CONCRETE WASTE SHALL BE DISPOSED OF IN CONTRACTOR DESIGNATED CLEAN OUT AREAS AND IN CONFORMANCE WITH THE SWPPP. WASHED OUT CONCRETE SHALL BE ALLOWED TO DRY AND REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROPRIATE LOCATION.

3.) CONTRACTOR SHALL DESIGNATE A PERSON(S) TO CHECK THE SITE ON A DAILY BASIS. THE REPRESENTATIVE SHALL CHECK ALL EROSION CONTROL DEVICES AFTER EACH RAIN EVENT AND PRIOR TO ANY FORECASTED RAIN. THE SITE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE PRIOR TO OCTOBER 1 AND READY FOR ANY STORM DURING THE WINTER AND SPRING.

4.) CONTRACTOR SHALL KEEP AN INSPECTION AND MAINTENANCE LOG IN ACCORDANCE WITH THE SWPPP.

5.) THIS EROSION CONTROL PLAN AND SWPPP SHALL BE KEPT ONSITE AT ALL TIMES DURING CONSTRUCTION.

6.) THE STABILIZED CONSTRUCTION ENTRANCE(S) SHALL BE INSPECTED MONTHLY AND AFTER EACH RAINFALL. GRAVEL MATERIAL SHALL BE REPLACED WHEN SURFACE VOIDS ARE VISIBLE WITH 1' MIN - 3" MAX. WASHED ROCK.

7.) ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL THE DISTURBED AREAS ARE STABILIZED. UNFORESEEN SITUATIONS MAY ARISE DURING CONSTRUCTION AND CHANGES TO THIS EROSION CONTROL PLAN SHALL BE MADE TO MEET THE FIELD CONDITIONS. THE CHANGES SHALL BE APPROVED IN ADVANCE OF BEING IMPLEMENTED BY THE CITY OF YUBA CITY.

8.) IN AREAS WHERE SOIL IS EXPOSED, PROMPT REPLANTING WITH NATIVE COMPATIBLE DROUGHT-RESISTANT VEGETATION SHALL BE PERFORMED. NO AREAS SHALL BE LEFT EXPOSED THROUGHOUT THE WINTER.

9.) TRACKED SEDIMENT FROM THE SITE SHALL BE CLEANED DAILY USING A STREET SWEEPER. ALL SOLID WASTE SHALL BE PICKED UP AND DISPOSED OF IN THE PROPER MANNER.

10.) WHEN WINDS EXCEED 20 MPH ALL GRADING OPERATIONS SHALL STOP

11.) IN THE EVENT OF RAIN OR HEAVY WINDS, ALL STOCKPILES SHALL BE COVERED.

LEGEND

- SILT FENCE, SC-1
- STABILIZED CONSTRUCTION ENTRANCE, TC-1
- VEC — VEHICLE & EQUIPMENT CLEANING, NS-8
- VEF — VEHICLE & EQUIPMENT FUELING, NS-9
- VEM — VEHICLE & EQUIPMENT MAINTENANCE, NS-10
- STORM DRAIN INLET PROTECTION , SC-10
- STREET SWEEPING AND VACUUMING , SC-7
- CONCRETE WASTE MANAGEMENT , WM-8

REFER TO SWPPP PLANS FOR FURTHER DETAILS

KYLE A. SANCHEZ — No. C93438 — REGISTERED PROFESSIONAL ENGINEER — CIVIL — STATE OF CALIFORNIA

REV.	DATE	BY	APPR.	DESCRIPTION

DESIGNED BY: KAS
DRAWN BY: KAS
CHECKED BY: JSM
JOB NO.: 23-118
FILE NAME: 23118MAST

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
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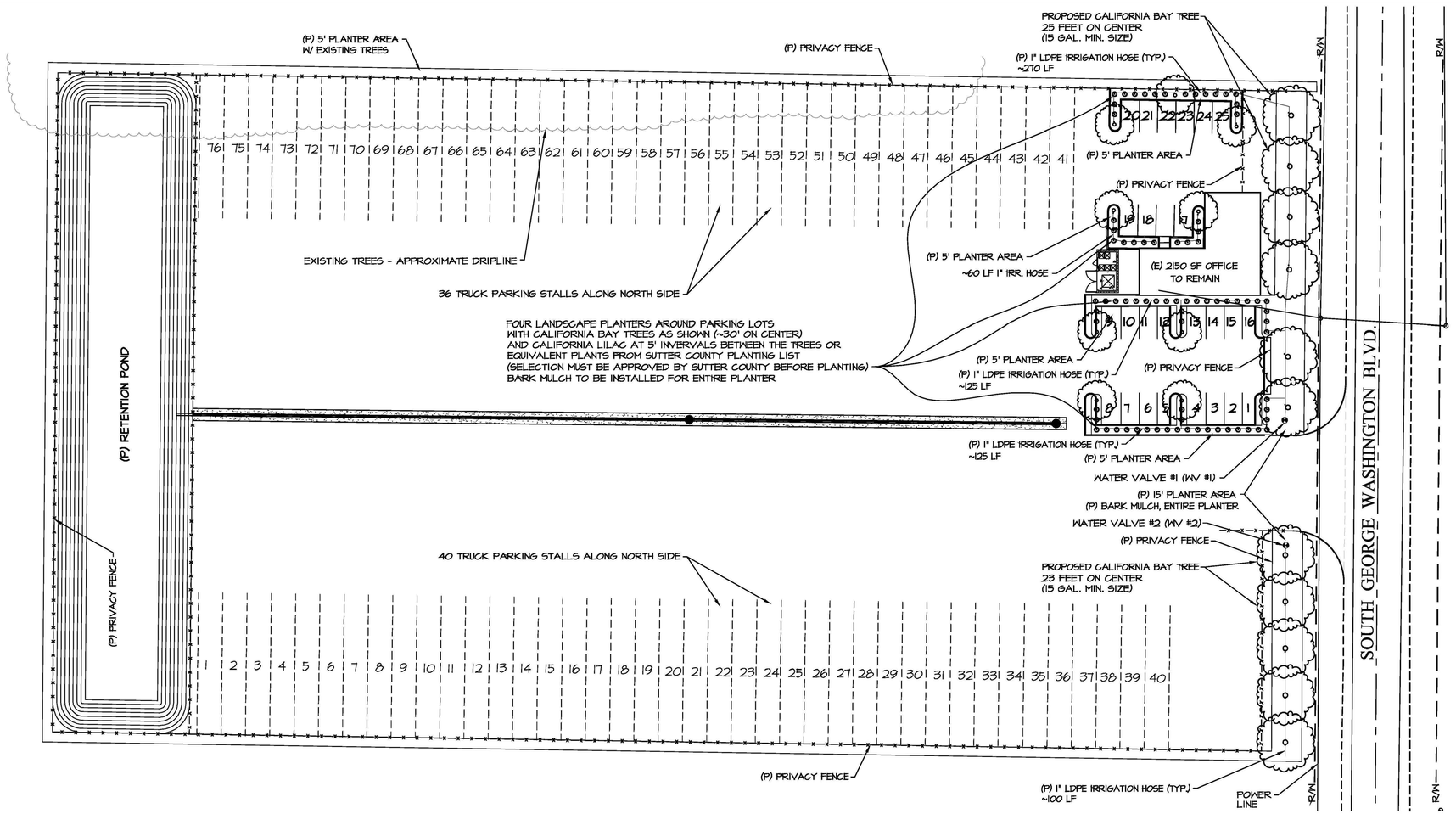
JASKARAN SANGHA
NEW TRUCK YARD
8709 S GEORGE WASHINGTON BLVD
APN 025-030-004

WATER POLLUTION CONTROL DRAWING

WPCD-1
DATE: 2/13/2024
SHEET 7 | SHEETS 7



LEGEND

- EDGE OF PAVEMENT
- PROPERTY LINE (APPROXIMATE LOCATION)
- CENTERLINE OF ROAD
- PROPOSED 1" IRRIGATION HOSE (APPROX. 680 LF TOTAL)
- *WV#* WATER VALVE WITH VALVE NUMBER (RAINBIRD 3/4" BACKFLOW PREVENTER AND ORBIT #62056 AUTOMATIC TIMER WITH RAIN SENSOR, OR EQUIVALENT BACKFLOW PREVENTER AND TIMER WITH RAIN SENSOR, INSTALLED AT EACH VALVE LOCATION)
- 1 GALLON PER HOUR EMITTER WITH CHECK VALVE - ONE PER PLANT
- PROPOSED CALIFORNIA LILAC
- PROPOSED CALIFORNIA BAY TREE (UMBELLARIA CALIFORNICA)

N

1" = 30'

0 15' 30' 60' 120'

PROJECT INFORMATION

PROJECT ADDRESS:	8709 SOUTH GEORGE WASHINGTON BLVD.
TOTAL LANDSCAPE AREA:	5,107 SQUARE FEET
PROJECT TYPE:	PRIVATE TRUCK PARKING YARD
WATER SUPPLY:	EXISTING PRIVATE WELL

LANDSCAPE DOCUMENTATION PACKAGE CHECKLIST

X 1 - PROJECT INFORMATION - THIS SHEET
X 2 - WATER EFFICIENT LANDSCAPE WORKSHEET - THIS SHEET
X 3 - SOIL MANAGEMENT REPORT - THIS SHEET
X 4 - LANDSCAPE DESIGN PLAN - THIS SHEET
X 5 - IRRIGATION DESIGN PLAN - THIS SHEET
X 6 - GRADING DESIGN PLAN - THIS SHEET

OWNER/APPLICANT: JASKARAN SANGHA
1055 OSWALD ROAD
YUBA CITY, CA 95991

I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE ORDINANCE AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE GRADING DESIGN PLAN.

SIGNATURE _____ DATE _____

IRRIGATION SCHEDULE

ZONE	VALVE	DAYS/WEEK	STARTS/DAY	MINUTES/START
1	WV #1	3	3	60
2	WV #2	3	3	60

WATER BUDGET

MONTH	PERCENT	MONTH	PERCENT	MONTH	PERCENT
JANUARY	18.1	MAY	79.2	SEPTEMBER	65.3
FEBRUARY	29.2	JUNE	100	OCTOBER	44.4
MARCH	38.9	JULY	98.6	NOVEMBER	16.7
APRIL	61.1	AUGUST	84.7	DECEMBER	12.5

HYDROZONE INFORMATION TABLE

ZONE	VALVE	WATER USE	IRRIGATION METHOD	AREA (SF)	% OF LANDSCAPED AREA
1	WV #1	LOW	DRIP	3,981	80%
2	WV #2	LOW	DRIP	1,126	80%

WATER BUDGET CALCULATION

MAXIMUM APPLIED WATER ALLOWANCE (MAWA) = 103,508 GALLONS PER YEAR
MAWA = (ETo)x(0.62)x[(0.7xLA)+(0.3xSLA)]
MAWA = 46.7x0.62x[(0.7x5107 SF)+(0.3x0 SF)]

ESTIMATED TOTAL WATER USE (ETWU) = 32,859 GALLONS PER YEAR (31.7% OF MAWA)
ETWU = (ETo)x(0.62)x[((PFxHA)/IE)+SLA]
ETWU = 46.7x0.62x[((PFxHA)/IE)+SLA]

HYDROZONE TABLE FOR CALCULATING ETWU

ZONE	WATER USE	PLANT FACTOR	AREA (SF)	IRRIGATION EFFICIENCY	CALCULATION FOR ETWU	ETWU (GALLONS)
1	LOW	0.2	4739	90%	46.7x0.62x[(0.2x3981/0.9]	25,614
2	LOW	0.2	5138	90%	46.7x0.62x[(0.2x1126/0.9]	7,245
					TOTAL ETWU =	32,859

SOIL MANAGEMENT

AN AMENDMENT SUCH AS COMPOST SHOULD BE ADDED TO THE PLANTERS CONTAINING THE CALIFORNIA BAY TREE TREES, AND BARK MULCH SHALL BE ADDED TO ALL PLANTERS.

LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE

ALL COMPONENTS OF IRRIGATION SYSTEM SHALL BE INSPECTED MONTHLY AND ANY REPAIRS OR ADJUSMENTS SHALL BE PERFORMED AS NEEDED.

ALL IRRIGATION EQUIPMENT REPAIRS SHALL BE DONE WITH THE ORIGINALLY INSTALLED COMPONENTS OR THEIR EQUIVALENTS.

IRRIGATION SYSTEMS SHALL BE MAINTAINED, AND MANAGED TO MEET OR EXCEED AN AVERAGE LANDSCAPE IRRIGATION EFFICIENCY OF 0.71

THE PLANTERS CONTAINING CALIFORNIA BAY TREES SHALL BE INSPECTED MONTHLY AND ANY WEEDS SHALL BE REMOVED MULCH SHALL BE REPLENISHED AS NEEDED.

PRELIMINARY
NOT FOR CONSTRUCTION

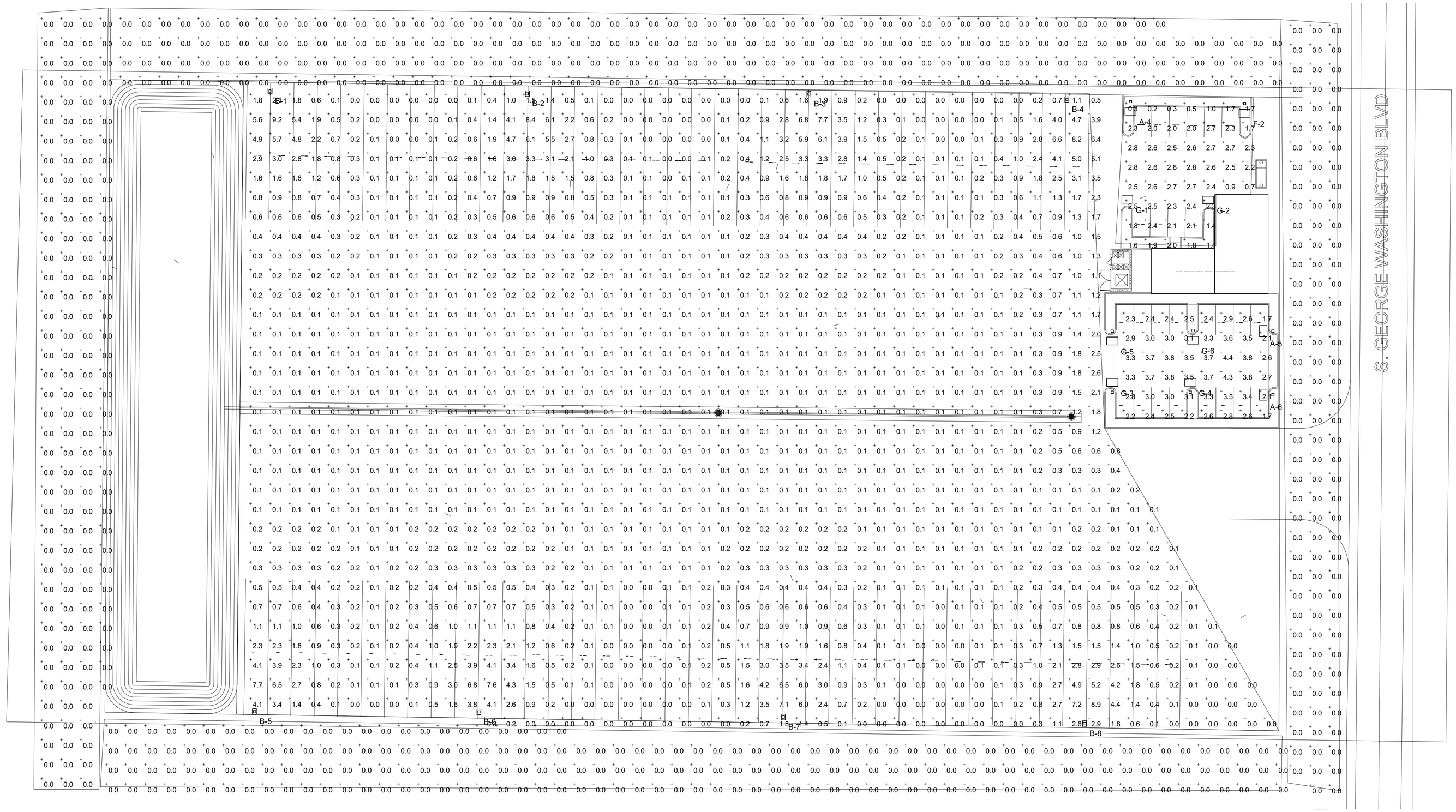
REVISIONS	Date
WIDENED PLANTERS TO 15 FT. ALONG FRONTAGE	JAN. 7, 2024

PREPARED BY:
NICHOLAS JOHNSTON, CIVIL ENGINEER
PE #19811

WATER EFFICIENT LANDSCAPE PLAN
SANGHA TRUCK YARD
AP# 25-030-004
8709 SOUTH GEORGE WASHINGTON BLVD.

Job No. 23-SANGHA | Date OCTOBER 26, 2023 | Drawn By NJOHNSTON

Sheet No. 1 Of 1



Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power	Polar Plot
	A		3	Lithonia Lighting	DSXD LED P1 50K 80CRI BLC3	D-Series Size 0 Area Luminaire P1 Performance Package 5000K CCT 80 CRI Type 3 Extreme Backlight Control	1	3213	1	33.21	
	F		1	Lithonia Lighting	DSXD LED P1 50K 80CRI LCCO	D-Series Size 0 Area Luminaire P1 Performance Package 5000K CCT 80 CRI Left Corner Cutoff Extreme Backlight Control	1	3242	1	33.21	
	G		6	Lithonia Lighting	DSXD LED P1 50K 80CRI TSLG	D-Series Size 0 Area Luminaire P1 Performance Package 5000K CCT 80 CRI Type 5 Low G Rating	1	4626	1	33.21	
	B		8	Lithonia Lighting	RSXF1 LED P4 50K AWFD FV	RSXF Flood Fixture Size 1 P4 Lumen Package 5000K CCT Type AWFD Distribution with FV Shield	1	10740	1	133.1431	

Luminaire Locations

		Location						Aim		
No.	Label	X	Y	Z	MH	Orientation	Tilt	X	Y	Z
5	A	617.63	187.67	18.00	18'	270.00	0.00	616.63	187.67	0.00
6	A	617.63	155.02	18.00	18'	270.00	0.00	616.63	155.02	0.00
1	B	103.28	310.84	18.00	18'	180.00	45.00	103.28	298.11	5.27
2	B	235.22	309.46	18.00	18'	180.00	45.00	235.22	296.73	5.27
3	B	379.61	309.28	18.00	18'	180.00	45.00	379.61	296.55	5.27
4	B	511.97	306.49	18.00	18'	180.00	45.00	511.97	293.76	5.27
5	B	95.34	-7.53	18.00	18'	0.00	45.00	95.34	5.20	5.27
6	B	210.38	-7.71	18.00	18'	0.00	45.00	210.38	5.02	5.27
7	B	366.50	-10.33	18.00	18'	0.00	45.00	366.50	2.40	5.27
8	B	521.05	-13.73	18.00	18'	0.00	45.00	521.05	-1.00	5.27
2	F	603.04	304.42	18.00	18'	180.00	0.00	603.04	303.42	0.00
1	G	542.90	250.26	18.00	18'	0.00	0.00	542.90	251.26	0.00
2	G	584.43	249.93	18.00	18'	0.00	0.00	584.43	250.93	0.00
3	G	535.25	156.30	18.00	18'	0.00	0.00	535.25	157.30	0.00
4	G	575.30	156.32	18.00	18'	0.00	0.00	575.30	157.32	0.00
5	G	535.26	187.61	18.00	18'	180.00	0.00	535.26	186.61	0.00
6	G	576.60	187.96	18.00	18'	180.00	0.00	576.60	186.96	0.00
4	A	544.56	305.42	18.00	18'	180.00	0.00	544.56	304.42	0.00

PRITCHARD ELECTRIC CO.
6849 SUTTER AVE.
SUTTER, CA 95982
530.701.1022

JEFFPRITCHARD1022
@GMAIL.COM

LICENSED ELECTRICAL CONTRACTOR
PRITCHARD ELECTRIC
CLASSIFICATION C-10
LICENSE NO 679599
STATE OF CALIFORNIA

DocuSigned by:
Jeff Pritchard
666AD4E7EBAB4E5...

Jeff Pritchard
Pritchard Electric Co
Lic # 679599

REVISIONS	BY
12/26/23	JCP

PARKING LOT PHOTOMETRIC PLAN

JAS SANGHA
SOUTH GEORGE WASHINGTON

Pritchard Electric Company
Electrical Contractors
6849 Sutter Ave
Sutter, CA 95982
TEL: 530-701-1022

DATE: 10/14/23
SCALE: 1" = 30'
DRAWN: JEFF PRITCHARD
JOB:
SHEET E1
OF SHEETS

APPENDIX B

AIR QUALITY AND GREENHOUSE GAS ANALYSIS

Draft Analysis of Impacts to Air Quality and Greenhouse Gas from Proposed Truck Parking Yard

Yuba City, California

August 31, 2023

Prepared For:
Jaskaran Sangha
1055 Oswald Road
Yuba City, CA 95991

Prepared By:
Environmental Permitting Specialists
7068 Riverside Boulevard
Sacramento, CA 95831
Contact: Ray Kapahi, Principal
Tel: 916-687-8352
Ray.Kapahi@gmail.com

TABLE OF CONTENTS

SECTION 1: INTRODUCTION

Environmental Permitting Specialists (EPS) has prepared an analysis to evaluate impacts to air quality, greenhouse gas (GHG) and public health risks associated with the proposed truck yard in Sutter County. The proposed truck parking yard is located at 8709 George Washington Boulevard, Yuba City. This analysis has been prepared in support of an environmental review being conducted by the Planning Department at Sutter County.

The project, is located on South Washington Boulevard (also known as SR 113) South of Tudor Road (Figure 1-1). It would occupy approximately 4.8 acres and has been assigned APN 025-030-004. A total of 101 parking spaces (76 truck/trailer + 25 cars) are proposed (Figure 1-2). This project provides additional parking for operations at the Applicant's existing truck repair facility located at 1055 Oswald Road in Yuba City.

The site has an existing office building that will remain at the site. There are two agricultural buildings at the site that would be removed. Trucks would travel from the yard to nearby arterial roads and highways such as Routes 99, 113 and I-5. While the yard will be open 365 days per year, typical operating hours would be 7 am to 5pm, 5 days per week.

Construction at the site would involve grading and removal of the two agricultural buildings and some trees, fence and brush and grass. This would be followed by site work, paving etc. Construction is expected to begin by the Spring of 2024 and would be completed in 90 days. The following impacts are evaluated:

Project Phase	Air Quality	Public Health	Greenhouse Gas
Construction	x	x	
Operational (Occupancy)	x	x	x

The overall approach used in this analysis is to quantify the emission rates of regulated air pollutants for the construction and occupancy phases and then compare the emission rates with thresholds of significance established by the Feather River Air Quality Management District (FRAQMD). The project is considered to have potentially significant environmental impact if any of the emission rates exceed the thresholds of significance established by FRAQMD. The thresholds of significance are discussed in Section 3.

This report is divided into 4 main sections. Immediately following this Introduction, the project emissions are discussed in Section 2. The Project impacts are discussed in Section 3. The report concludes with a discussion of the significance of the project's impacts on air quality, public health and GHG (Section 4). Technical details and calculations are provided in the Appendix.

Figure 1-1

Vicinity Map

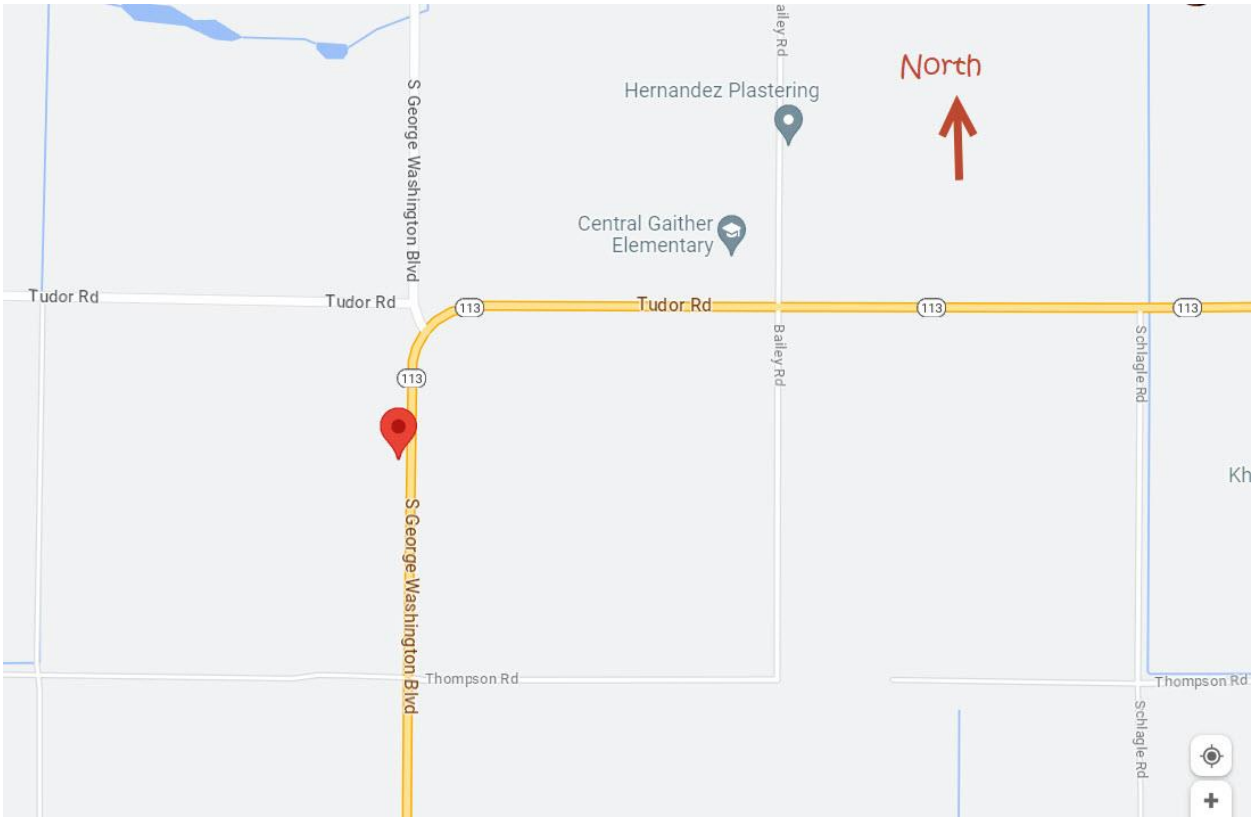
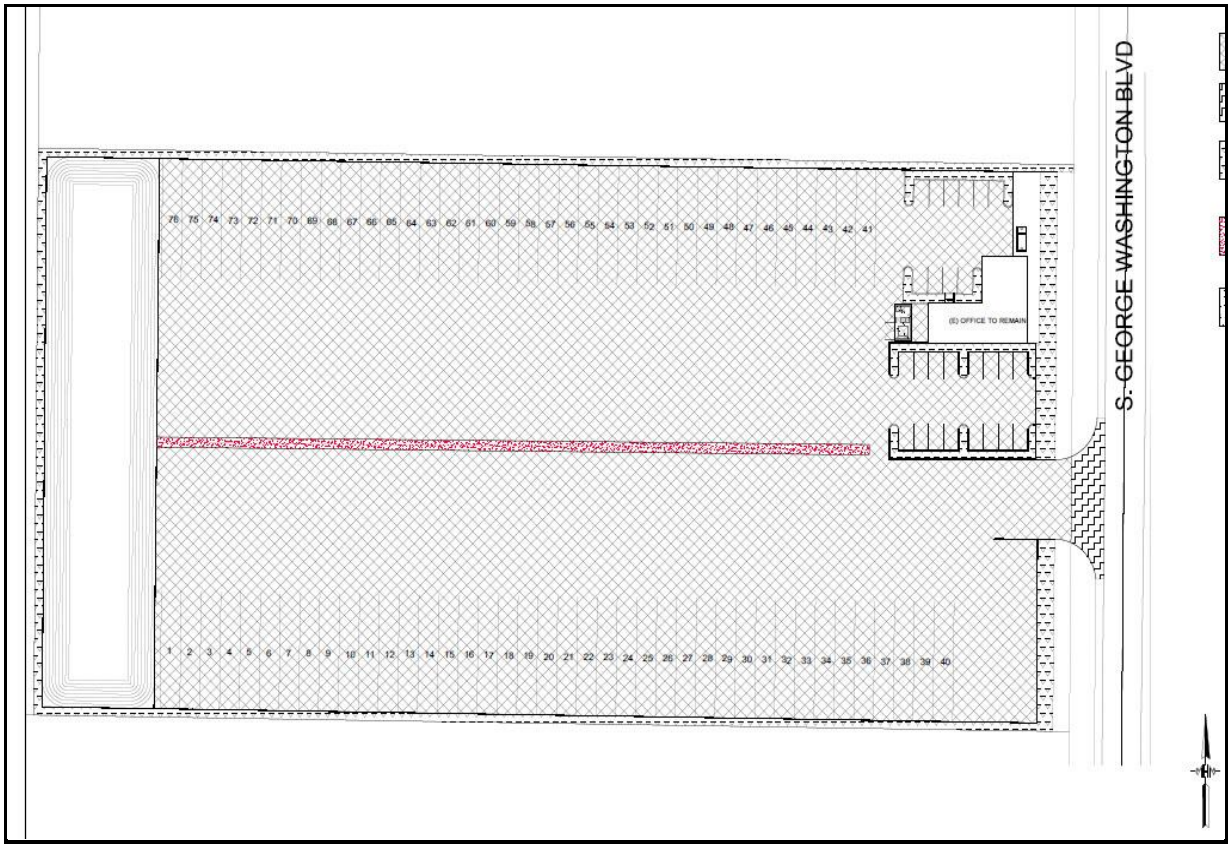


Figure 1-2
Site Map
(Source: MHM Engineering Surveying)



SECTION 2: PROJECT EMISSIONS

The construction and operation of the parking yard would release a variety of emissions. These can be divided into three categories:

A. Criteria air emissions
   - Oxides of nitrogen (NOx)
   - Carbon monoxide (CO)
   - Volatile organic compounds (VOCs)
   - Oxides of sulfur (SOx)
   - Fine particulate matter (PM-10)
   - Ultra-fine particulate matter (PM-2.5)

B. Emissions of toxic air contaminants
   - Primarily diesel particulate matter (DPM, same as exhaust PM-10))

C. Emissions of greenhouse gases
   - Carbon dioxide (CO_2)
   - Methane (CH_4)
   - Nitrous Oxide (N_2O_2)

2.1 Construction Emissions

As noted in the Introduction, construction would consist of demolition, grading and site work. Demolition involves removal of:

- Two existing buildings
- Agricultural well
- Fence
- PG&E pole
- Trees (12)

After demolition, the site would be graded and the yard would use "Chip Seal" instead of asphalt or concrete for the parking area. Use of chip seal requires minimal site preparation that is required when paving with asphalt or concrete. It is ideal for low traffic areas, such as a parking lot.

Since the site already has an office building, no new structures would be built. In addition, since the site already has electric service, there will be minimal need for gasoline powered electric generators. The site has its own water well and a septic so no City or County services are required for water or wastewater disposal.

The emission rates were calculated using the California Emissions Estimator Model (CalEEMod) developed by the California Air Pollution Control Officers Association. Version 2022.1.1.7 of this model was used to calculate the emissions. The results are summarized in Table 2-1.

Table 2-1
Maximum Daily Emissions – Construction Phase

Pollutant	Pounds per day	Tons per year
ROG	0.63	0.03
NOx	5.53	0.13
CO	7.59	0.19
SO2	0.01	<0.005
PM10	0.89	0.02
PM2.5	0.33	0.01
CO2 /GHG	1,168	27.0
Toxic Emissions (PM10E) (diesel exhaust)		

A copy of the CalEEMod emissions reports is provided in Appendix 1. Electronic copies are available on request.

2.2 Operational Emissions

Operational emissions are primarily from truck and auto travel to and from the yard. A traffic study was completed by Wood Rogers (July 27, 2023) to quantify the daily number of truck and automobile trips. The study concluded the project would generate 232 trips per day (87 auto trips + 145 truck trips). Trip length is estimated to equal 25 miles or less since all the trips would involve local travel from the current truck repair facility on Oswald Road and from employee travel. Excerpts of the traffic report are provided in Appendix 2.

Table 2-2
Maximum Daily GHG Emissions – Operational Phase

Pollutant	Pounds per day	Tons per year
ROG	1.66	0.22
NOx	2.96	0.46
CO	23.5	2.62
SO2	0.05	0.01
PM10	4.20	0.58
PM2.5	1.11	0.15
CO2 /GHG	0.72	0.12

SECTION 3: SIGNIFICANCE OF PROJECT IMPACTS

The emissions presented in Section 2 for criteria air pollutants are compared with mass emission thresholds established by the FRAQMD and Sutter County.

3.1 Significance Criteria

The significance criteria are summarized below.

FRAQMD MASS EMISSIONS THRESHOLDS OF SIGNIFICANCE

	NO_x	ROG	PM_{10}
Construction	25ppd, not to exceed 4.5tpy[a]	25ppd, not to exceed 4.5tpy[a]	80ppd
Operation	25ppd	25ppd	80ppd

NOTES:

a NO_x and ROG construction emissions may be averaged over the life of the project, but may not exceed 4.5 tpy. tpy=tons per year; ppd=pounds per day

SOURCE: Feather River Air Quality Management District (FRAQMD), 2010. *Indirect Source Review Guidelines; Chapter 3: Thresholds of Significance*. June 7, 2020. Available at https://www.fraqmd.org/files/658e76309/Chapter+3.pdf. Accessed September 2, 2020.

In addition, Sutter County had adopted significance criteria on June 28, 2016 that applies to annual GHG emissions. These criteria specified a threshold of 3,000 metric tonnes of carbon dioxide equivalents [MT CO_2(e)]. Projects with annual GHG emissions below 3,000 MT CO_2(e) are considered to have negligible impacts individually and cumulatively. In addition, the County developed pre-screening tables to streamline GHG impacts for various types of projects.

For toxic air, the significance criteria are follows:

Cancer Risk:	Maximum 10 cancers/million
Non-Cancer Hazard Index:	Maximum 1.0

3.2 Project Impacts

3.2.1 Criteria Pollutant Emissions

The project's short-term operating emissions and a comparison with the significance thresholds are summarized in Table 3-1.

Table 3-1
Comparison of Daily Construction Emissions with Thresholds of Significance

Pollutant	Emissions		Threshold of Significance		Impact Significant?
	(lbs/day)	*(tons/yr)*	*(lbs/day)*	*(tons/yr)*	
NOx	5.53	0.13	25	4.5	No
ROG	0.63	0.03	25	4.5	No
PM-10	0.89	0.02	80	N/A	No

N/A: Not Applicable. No Threshold Established

The project's long-term operating emissions and a comparison with the significance thresholds are summarized in Table 3-2.

Table 3-2
Comparison of Daily Operational Emissions with Thresholds of Significance

Pollutant	Emissions		Threshold of Significance		Impact Significant?
	(lbs/day)	*(tons/yr)*	*(lbs/day)*	*(tons/yr)*	
NOx	2.96	N/A	25	N/A	No
ROG	1.66	N/A	25	N/A	No
PM-10	4.20	N/A	80	N/A	No

N/A: Not Applicable. No Threshold Established

3.1.2 GHG Emissions

The County has issued a series of "Pre-Screening Tables" for GHG emissions. These tables identify the expected level of impact from GHG emissions for various types of projects. For parking facilities (Land Use Category: 1500-03-110) , the impacts are considered less than significant. The project is "Screened-Out" and a detail GHG analysis is not needed. See below.

1500-03-110 Transportation, Communication, and Utilities Use Types		
A. Aerial Services	1. Airports and Landing Strips 2. Heliports	Pre-Screened Out
B. Community Facilities and Services	1. Community Facilities and Services, Major 2. Community Facilities and Services, Intensive	Analyze Using CAP(Both Land Use Types)
C. Intermodal Transportation Services		Analyze Using CAP
D. Parking Facilities		Pre-Screened Out

Ref: ESA (2016) "Greenhouse Gas Pre-Screening Measures for Sutter County". Adopted by Board of Supervisors June 28, 2016.

3.1.2 Emissions of Toxic Air Contaminants

For toxic air pollutants, the main TAC is diesel exhaust particulate matter (DPM). DPM is regulated as a carcinogen by the FRAQMD and the California Air Resources Board. The emission rates of exhaust PM-10 are considered a surrogate for DPM.

Construction Phase

For the construction phase, DPM were reported in the CalEEMod emissions report as 0.01 tons per year or 20 pounds per year. These appear as PM10E in the CalEEMod report.

Given the very low level of DPM emissions, a detailed health risk assessment is not warranted. Therefore, a screening level risk analysis was completed. A screening level risk analysis provides a conservative estimate of potential health risks. A "cancer risk score" is calculated for various distances from the project site. If the cancer risk score is above 10 at the nearest home, then the risk is considered significant and then a more detailed health risks analysis is prepared.

The results of the screening level risk analysis are shown in Table 3-3. The cancer risk score is given for various distances (in meters). The nearest residence is 670 meters (2,198 feet) to the East. The cancer risk score at this distance is 0.508. This is well below the score of 10 considered significant. There are no short-term health standards for DPM. These results indicate that exposure to on-site DPM would not result in a significant impact to public health.

Table 3-3
Screening Level Cancer Risk Score (Construction Phase)

Name	Prioritization Calculator			
Applicability	Use to provide a Prioritization score based on the emission required in yellow areas, output in gray			
Author or updater	Ray Kapahi	*Last Update*	August 2	
Facility:	Sangha Truck Yard			
ID#:	Yuba City			
Project #:	Annual DPME Emissions = 20 lbs/yr			
Unit and Process#				
Operating Hours hr/yr	8,760.00			
Receptor Proximity and Proximity Factors	Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100 1.000	4.62E+01	6.85E-02	0.00E+00	4.62E+01
100≤R<250 0.250	1.16E+01	1.71E-02	0.00E+00	1.16E+01
250≤R<500 0.040	1.85E+00	2.74E-03	0.00E+00	1.85E+00
500≤R<1000 0.011	5.08E-01	7.53E-04	0.00E+00	5.08E-01
1000≤R<1500 0.003	1.39E-01	2.05E-04	0.00E+00	1.39E-01
1500≤R<2000 0.002	9.24E-02	1.37E-04	0.00E+00	9.24E-02
2000<R 0.001	4.62E-02	6.85E-05	0.00E+00	4.62E-02
	Enter the unit's CAS# of the substances emitted and their amounts.			
0				
Substance	CAS#	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)
Diesel engine exhaust, particulate matter (Diesel PM)	9901	2.00E+01		2.28E-03
				0.00E+00

Operational Phase

For the operational phase, the main source of DPM is associated with truck idling at the yard. Based on 145 truck trips per day (52,925 trips per year) and assuming 15 minutes of tuck idle time, annual emissions of DPM are calculated and shown in Table 3-4. Annual DPM emissions are estimated to equal 0.1417 pounds per year.

Table 3-4
Calculation of On-site DPM Emissions from Truck Idling Operational Phase
Based on 145 truck Trips per Day

IDLING EMISSIONS TRUCKS	Units	
Trucks Trips	*per year*	52,925
Idle Time per Truck (min)	*min*	15
Total Annual Idle Time (all trucks)	*min*	793,875
	hrs	13,231
Emission Factor for Truck Idling (Note 1)	*(grams/hr)*	0.00486
Idling Emissions All Trucks	*(grams/yr)*	64.3478
	(lbs/yr)	0.1417
Idling Truck DPM Emissions	*(lbs/yr)*	0.1417

Note 1. Idle emission factor based on EMFAC 2021 for CY 2024.

Based on the analysis shown for the construction phase, the cancer risk score associated truck idling during the operational phase is also well below 10.

SECTION 4: CONCLUSIONS

On the basis on the air quality analysis completed for the proposed truck parking yard, EPS concludes that impacts to air quality, public health and greenhouse gas emissions are less than significant.

This conclusion is based on calculating the daily and annual emissions during the construction and operational phases and comparing these emissions with thresholds of significance adopted by the FRAQMD. The County of Sutter has not formally adopted any thresholds of significance. The County relies on the thresholds adopted by the FRAQMD.

SECTION 5: REFERENCES

CalEEMod (2020): California Emissions Estimator Model. Information available at: http://www.caleemod.com/

CAPCOA (2008). CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to CEQA. January 2008.

CARB Title 17 Section 95812 (c)(1).

CCAPCD (2021): Colusa County Air Pollution Control District Rules and Regulations. Available at: https://www.countyofcolusa.org/836/Rules-and-Regulations

EMFAC 2021: Emission Factor Model. Available at: https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-modeling-tools-emfac-software-and

EPA (2009) Federal Register 56272-73, October 30, 2009

Sutter County (2016): "Greenhouse Gas Pre-Screening Measures for Sutter County". Adopted by the Board of Supervisors June 28, 2016.

APPENDIX 1

CalEEMod Emissions report

Sangha Truck Yard Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sangha Truck Yard
Construction Start Date	1/1/2024
Operational Year	2024
Lead Agency	Sutter County Planning
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	39.6
Location	39.000118154343966, -121.67344072154052
County	Sutter
City	—
Air District	Feather River AQMD
Air Basin	Sacramento Valley
TAZ	309
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.18

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Other Non-Asphalt Surfaces	2.29	Acre	2.29	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.63	5.53	7.59	0.01	0.28	0.61	0.89	0.26	0.08	0.33	—	1,168
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.94	1.87	3.45	< 0.005	0.09	0.29	0.38	0.09	0.03	0.12	—	542
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.19	0.71	1.04	< 0.005	0.03	0.07	0.10	0.03	0.01	0.04	—	163
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03	0.13	0.19	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	27.0

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—

2024	0.63	5.53	7.59	0.01	0.28	0.61	0.89	0.26	0.08	0.33	—	1,168
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.32	1.87	3.45	< 0.005	0.09	0.29	0.38	0.09	0.03	0.12	—	542
2025	6.94	1.80	2.25	< 0.005	0.08	0.05	0.13	0.07	0.01	0.09	—	335
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.09	0.71	1.04	< 0.005	0.03	0.07	0.10	0.03	0.01	0.04	—	163
2025	0.19	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.66
Annual	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.02	0.13	0.19	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	27.0
2025	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.66	2.96	23.5	0.05	0.06	4.15	4.20	0.05	1.06	1.11	0.72	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.52	3.47	18.1	0.05	0.06	4.15	4.20	0.05	1.06	1.11	0.72	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.19	2.53	14.4	0.04	0.04	3.14	3.18	0.04	0.80	0.84	0.72	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.22	0.46	2.62	0.01	0.01	0.57	0.58	0.01	0.15	0.15	0.12	—

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.63	2.94	23.5	0.05	0.06	4.15	4.20	0.05	1.06	1.11	—	5,605
Area	0.03	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Energy	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.3
Water	—	—	—	—	—	—	—	—	—	—	0.00	NaN
Waste	—	—	—	—	—	—	—	—	—	—	0.72	2.50
Total	1.66	2.96	23.5	0.05	0.06	4.15	4.20	0.05	1.06	1.11	0.72	NaN
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.50	3.46	18.1	0.05	0.06	4.15	4.20	0.05	1.06	1.11	—	5,132
Area	0.03	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.3
Water	—	—	—	—	—	—	—	—	—	—	0.00	NaN
Waste	—	—	—	—	—	—	—	—	—	—	0.72	2.50
Total	1.52	3.47	18.1	0.05	0.06	4.15	4.20	0.05	1.06	1.11	0.72	NaN
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.16	2.52	14.4	0.04	0.04	3.14	3.18	0.04	0.80	0.84	—	4,065
Area	0.03	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Energy	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.3
Water	—	—	—	—	—	—	—	—	—	—	0.00	NaN
Waste	—	—	—	—	—	—	—	—	—	—	0.72	2.50
Total	1.19	2.53	14.4	0.04	0.04	3.14	3.18	0.04	0.80	0.84	0.72	NaN
Annual	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.21	0.46	2.62	0.01	0.01	0.57	0.58	0.01	0.15	0.15	—	673
Area	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.19
Water	—	—	—	—	—	—	—	—	—	—	0.00	NaN
Waste	—	—	—	—	—	—	—	—	—	—	0.12	0.41
Total	0.22	0.46	2.62	0.01	0.01	0.57	0.58	0.01	0.15	0.15	0.12	NaN

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.80	2.87	< 0.005	0.08	—	0.08	0.07	—	0.07	—	437
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.22	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.7
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.73
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.58	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.70	1.82	< 0.005	0.09	—	0.09	0.09	—	0.09	—	285
Dust From Material Movement	—	—	—	—	—	0.27	0.27	—	0.03	0.03	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.10	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	16.4
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.71
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	5.50	7.00	0.01	0.28	—	0.28	0.26	—	0.26	—	1,079
Dust From Material Movement	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.33	0.42	< 0.005	0.02	—	0.02	0.02	—	0.02	—	65.1
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8
Dust From Material Movement	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.60	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—

3.9. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	1.84	2.02	< 0.005	0.09	—	0.09	0.09	—	0.09	—	284
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.78
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.29
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.29	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—

3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	1.77	1.98	< 0.005	0.08	—	0.08	0.07	—	0.07	—	284
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.56
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.09
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.03	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—

3.13. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.94	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.19	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	—

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	5.69
Total	—	—	—	—	—	—	—	—	—	—	—	5.69
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	5.69
Total	—	—	—	—	—	—	—	—	—	—	—	5.69
Annual	—	—	—	—	—	—	—	—	—	—	—	—

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.94
Total	—	—	—	—	—	—	—	—	—	—	—	0.94

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.6
Total	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.6
Total	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.25
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.25

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.01	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Total	0.03	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.01	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—
Total	0.03	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Total	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	NaN
Total	—	—	—	—	—	—	—	—	—	—	0.00	NaN
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	NaN
Total	—	—	—	—	—	—	—	—	—	—	0.00	NaN
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	NaN
Total	—	—	—	—	—	—	—	—	—	—	0.00	NaN

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.72	2.50
Total	—	—	—	—	—	—	—	—	—	—	0.72	2.50
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.72	2.50
Total	—	—	—	—	—	—	—	—	—	—	0.72	2.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.12	0.41
Total	—	—	—	—	—	—	—	—	—	—	0.12	0.41

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2024	2/29/2024	5.00	44.0	—
Site Preparation	Site Preparation	3/1/2024	3/30/2024	5.00	21.0	—
Grading	Grading	4/1/2024	4/30/2024	5.00	22.0	—
Building Construction	Building Construction	2/13/2024	12/17/2024	5.00	220	—
Paving	Paving	12/18/2024	1/1/2025	5.00	10.0	—
Architectural Coating	Architectural Coating	1/2/2025	1/16/2025	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	4.00	84.0	0.37
Demolition	Other Construction Equipment	Gasoline	Average	1.00	4.00	3.00	0.48
Site Preparation	Graders	Diesel	Average	1.00	4.00	148	0.41
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	10.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	2.50	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT

Grading	—	—	—	—
Grading	Worker	7.50	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.00	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	5.00	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	0.00	0.00	5,985

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	5.25	0.00	—
Grading	—	—	11.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.29

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	2.29	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	232	100	0.00	65,700	5,800	2,500	0.00	1,642,500

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	5,985

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Other Non-Asphalt Surfaces	10,086	204	0.0330	0.0040	42,194

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Other Non-Asphalt Surfaces	0.00	NaN

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Other Non-Asphalt Surfaces	1.33	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	29.7	annual days of extreme heat
Extreme Precipitation	3.90	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	1	1	4
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	52.0
AQ-PM	25.1
AQ-DPM	26.9

Drinking Water	61.7
Lead Risk Housing	60.5
Pesticides	94.7
Toxic Releases	15.6
Traffic	6.19
Effect Indicators	—
CleanUp Sites	31.2
Groundwater	52.5
Haz Waste Facilities/Generators	85.1
Impaired Water Bodies	91.9
Solid Waste	80.1
Sensitive Population	—
Asthma	24.2
Cardio-vascular	65.3
Low Birth Weights	64.2
Socioeconomic Factor Indicators	—
Education	70.6
Housing	8.04
Linguistic	51.1
Poverty	79.9
Unemployment	89.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	29.01321699

Employed	7.4554087
Median HI	37.89298088
Education	—
Bachelor's or higher	38.95803927
High school enrollment	100
Preschool enrollment	10.45810343
Transportation	—
Auto Access	43.30809701
Active commuting	7.583728988
Social	—
2-parent households	81.71435904
Voting	71.42307199
Neighborhood	—
Alcohol availability	97.0101373
Park access	5.62042859
Retail density	0.667265495
Supermarket access	6.287694084
Tree canopy	71.05094315
Housing	—
Homeownership	47.94045939
Housing habitability	76.41473117
Low-inc homeowner severe housing cost burden	83.7033235
Low-inc renter severe housing cost burden	91.83882972
Uncrowded housing	42.30719877
Health Outcomes	—
Insured adults	42.12755037
Arthritis	0.0

Asthma ER Admissions	85.4
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	34.8
Cognitively Disabled	5.2
Physically Disabled	5.2
Heart Attack ER Admissions	36.5
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	88.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	24.2
Elderly	23.9
English Speaking	41.0

Foreign-born	14.2
Outdoor Workers	2.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	98.6
Traffic Density	2.9
Traffic Access	0.0
Other Indices	—
Hardship	69.9
Other Decision Support	—
2016 Voting	72.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	69.0
Healthy Places Index Score for Project Location (b)	30.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Per project design and specifications
Construction: Off-Road Equipment	No building construction. No paving. Will use chip seal for the parking are paving. Minimal concrete/asphalt Paving. Tree removal will use portable gasoline fueled chain saws. See site map.
Construction: Off-Road Equipment EF	Emission factor for chain saws based on Off Road EFs for Other Construction Equipment 15 hp or less for CY 2024.
Operations: Energy Use	Per project specifications and design
Operations: Solid Waste	Based on CalEEMod Default Tables Appendix G Table G-36 for a 1,500 sq foot office building

APPENDIX 2

Excerpts of the Traffic Study

Memorandum

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

To: Jaskaran Sangha

From: Mario Tambellini, PE, TE
Pranesh Tarikere, PE

Date: July 27, 2023

Subject: **Sangha Truck Yard Traffic Impact Analysis (TIA)**

INTRODUCTION

This memorandum has been prepared to present the results of a traffic impact analysis (TIA) for the proposed Sangha Truck Yard Project (Project) located in Sutter County, California (County). The Project would develop a new truck yard located on one parcel located at 8709 S. George Washington Boulevard, also known as State Route (SR) 113, south of Tudor Road. The Project location is shown in **Figure 1**. The Project site, identified as APN 025-030-004, currently includes an approximately 2,200 square foot office building that would remain with development of the Project, and orchards and two agricultural buildings that would be removed. There is an existing industrial site located directly north of the Project site. This TIA includes the following:

- Project trip generation and distribution
- Intersection and roadway operations analysis
- Internal circulation and emergency access to Project site
- Site access analysis, including sight distance and truck turns at the Project Driveway
- Discussion of Project impact on traffic operations and other multimodal facilities
- Vehicle Miles Traveled (VMT) qualitive analysis

PROJECT DESCRIPTION

The Project proposes to construct a 4.75-acre Truck and Trailer Repair with 76 truck/trailer stalls, 25 employee parking stalls, and an existing 2,130 sq foot office. Project access would be provided via a proposed driveway on S. George Washington Boulevard (State Route 113) located approximately 900 feet south of the intersection of S. George Washington with SR 113 /Tudor Road. The *Sutter County 2030 General Plan* designates the site as Agricultural. The Project site plan is included in **Attachment A**.

ANALYSIS SCENARIOS AND STUDY FACILITIES

Intersections and roadway segments were studied under the following scenarios:

- Existing Conditions (roadway segment only)
- Existing Plus Project Conditions
- Cumulative Conditions (roadway segment only)
- Cumulative Plus Project Conditions

As shown in **Figure 1**, the following intersection was included in this analysis:

1. S. George Washington Boulevard & Proposed Project Driveway

The following roadway segment was analyzed in this TIA:

1. North of 8709 S. George Washington Boulevard

The locations of the above study intersection and roadway segment are shown in **Figure 1**.

Project Location and Study Vicinity

Sangha Truck Yard TIA
Sutter County, CA
July 2023

Figure 1

WOOD RODGERS

\\woodrodgers.loc\ProductionData\Jobs\4000-s\4741001_Sangha_Truck_Yard\GIS\Tasks\Fig_1_Location_and_Facilities_Map.mxd 7/26/2023 2:02:27 PM nscappaticci

ANALYSIS METHODOLOGY

INTERSECTION LEVEL OF SERVICE

Synchro 11 software and Highway Capacity Manual, 6th Edition (HCM 6th Edition) methodology was used to determine intersection delay and LOS operations under Existing weekday AM and PM peak hour conditions. **Table 1** shows the capacities and LOS thresholds for the study intersections of the Project.

Table 1. HCM 6th Edition Intersection LOS Thresholds

Level of Service	Description	Intersection Control Delay (seconds/vehicle)	
		Unsignalized	Signalized
A	Free-flow conditions with negligible to minimal delays.	delay ≤ 10.0	delay ≤ 10.0
B	Good progression with slight delays.	10.0 < delay ≤ 15.0	10.0 < delay ≤ 20.0
C	Relatively higher delays.	15.0 < delay ≤ 25.0	20.0 < delay ≤ 35.0
D	Somewhat congested conditions with longer but tolerable delays.	25.0 < delay ≤ 35.0	35.0 < delay ≤ 55.0
E	Congested conditions with significant delays.	35.0 < delay ≤ 50.0	55.0 < delay ≤ 80.0
F	Jammed or grid-lock type operating conditions.	delay > 50.0	delay > 80.0
Source: HCM 6th Edition Exhibit 19-8 and 20-2.			

HCM 6th Edition reports were generated to determine the delay and LOS at the study intersections in *Synchro 11* software.

ROADWAY SEGMENTS

Roadway segment LOS has been calculated based on Table 6.14-1 of the *Sutter County General Plan EIR* (February 2011). **Table 2** shows the capacities and LOS thresholds for the study roadway segment classifications within the City.

Table 2. LOS Based on Daily Traffic Thresholds

Classification	Lanes	Control	Daily Traffic Volume at Level of Service:		
			C	D	E
Rural	2	Undivided	7,000-10,600	10,600-16,400	16,400-25,200
Notes: *[1] Source: Table 6.16-6 of the Sutter County 2011 General Plan EIR*					

SIGNAL WARRANTS

California Manual on Uniform Traffic Control Devices (CA MUTCD) Peak Hour Signal Warrant #3 was used to evaluate the potential need for installation of a traffic signal at unsignalized study intersection. Peak Hour Signal Warrant #3 (70% Factor) was used for the unsignalized intersection of S. George Washington Boulevard (SR 113) & Proposed Project Driveway, as S. George Washington Boulevard has a posted speed limit of 55 miles per hour (mph) at this intersection.

CA MUTCD Peak Hour Signal Warrant #3 is currently unmet at the study intersection for all scenarios.

LEVEL OF SERVICE CRITERIA

As stated in *Sutter County 2030 General Plan* Policy M 2.5, the County currently utilizes LOS D as the minimum acceptable LOS threshold for all roadways and intersections during the AM and PM peak periods.

ANALYSIS VOLUMES

EXISTING TRAFFIC COUNTS

Weekday Average Daily Traffic (ADT) counts were collected on Tuesday, June 13, 2023. AM and PM Peak Hour Volumes are based on the peak hour between 7:00 AM to 9:00 AM and between 4:00 PM to 6:00 PM. Traffic data count sheets are included in **Attachment B**. **Figure 2** shows the Existing Plus Project conditions lane geometrics and control, and **Figure 3** shows the Existing conditions traffic volumes.

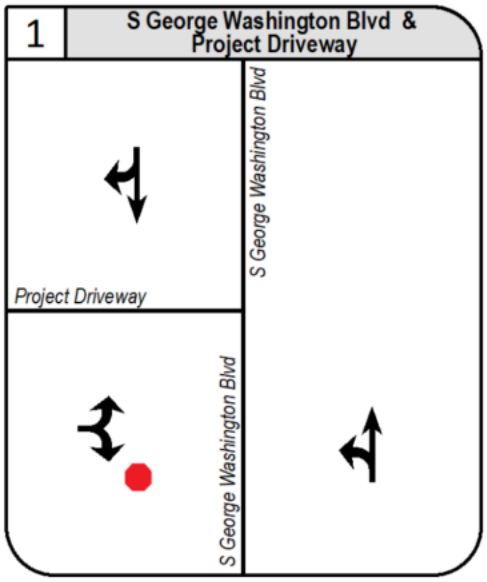


Figure 2. Existing Plus Project Lane Geometrics and Control

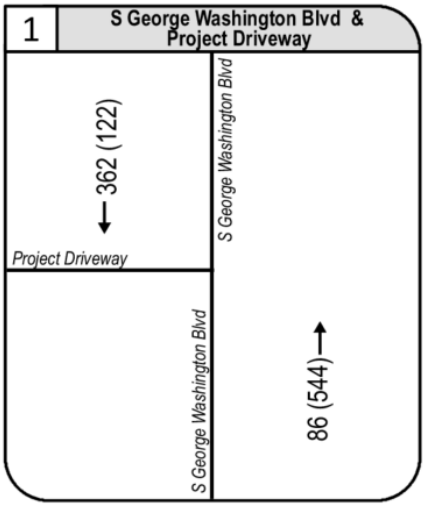


Figure 3. Existing Conditions Traffic Volumes – AM(PM)

PROJECT TRIP GENERATION

Due to the unique nature of the Project site, trip generation was estimate based on similar truck yard facilities in Sutter County. Project trip data for Project site is as follows:

Sangha Truck Yard: This facility would exist on the site that fronts S. George Washington Boulevard and is projected to have 25 passenger car stalls and 76 truck/trailer stalls. The site would be primarily used for truck storage.

Table 3 provides truck and passenger car rates based on data found in the *Three Truck Parking Facilities on Tudor Road and Garden Highway Traffic Impact Analysis* (KD Anderson & Associates, Inc., June 24, 2022), which estimates truck and passenger car traffic for three similar truck yard sites in Sutter County.

Table 3. Trip Generation Rates

Land Use	Rate Unit	Trip Type	Weekday Daily Trip Rate/ Unit[1]	Weekday AM Peak Hour Rate/Unit[1]			Weekday PM Peak Hour Rate/Unit[1]		
				Total	In	Out	Total	In	Out
Truck Storage Yard Facility	Trucks Parking Spaces	Trucks	0.76	0.06	50%	50%	0.06	50%	50%
		Passenger Cars	1.15	0.09	50%	50%	0.09	50%	50%

Notes:
[1]Trip rates based on the Three Truck Parking Facilities on Tudor Road and Garden Highway Traffic Impact Analysis (KD Anderson & Associates, Inc., June 24, 2022)

As the County does not currently have a standard passenger car equivalent (PCE) factor, the Sacramento County standard PCE factor of 2.5 was applied to all Project truck trips. All Project trips included in this analysis are assumed to be in PCE's. **Table 4** provides the Project trip generation in PCE's.

Table 4. Project Trip Generation

Land Use	Units	Quantity[1]	Type	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Truck Parking Facility	Truck Spaces	76	Trucks	58	2	2	4	2	2	4
			Trucks (PCE = 2.5)[3]	**148**	**5**	**5**	**10**	**5**	**5**	**10**
			Passenger Cars	**87**	**4**	**3**	**7**	**4**	**3**	**7**
			Total	**232**	**9**	**8**	**17**	**9**	**8**	**17**

Notes:
[1]Quantity provided by Project Applicant in Project Description.
[2]Conservatively assumed all employees arrive during AM peak hour and leave during PM peak hour.
[3]PCE = Passenger Car Equivalent Factor = 2.5
[4] Estimated daily trips for the Truck Storage Yard Facility are generally consistent with trip generation rates used in the Three Truck Parking Facilities on Tudor Road and Garden Highway TIA (KD Anderson & Associates, Inc., June 24, 2022) of 1.91 trips per space, which was based on traffic counts at a truck parking area in Yuba City.

As illustrated in **Table 4**, the proposed Project is anticipated to generate a total of 232 daily trips, 17 AM peak hour trips (9 inbound, 8 outbound), and 17 PM peak hour primary trips (9 inbound, 8 outbound) under typical weekday traffic demand conditions. Of the total trips, 148 daily trips are estimated to represent PCE truck trips with 5 AM peak hour PCE truck trips and 5 PM peak hour PCE truck trips.

Project trips would be assigned to the surrounding roadway network based on the following distribution, which was developed based on Project characteristics, existing travel patterns, and knowledge of the area:

- Project Trips
    - 70% AM/ 20% PM to/from S. George Washington Boulevard north of the proposed Project.
    - 30% AM/ 80% PM to/from S. George Washington Boulevard south of the proposed Project.

Project trip distribution is also shown in **Figure 1**. Note that existing counts showed that trucks and passenger car generally have the same peak hour distribution. The Project trip assignment is presented in **Figure 4**. Project trips are added to Existing volumes to obtain Existing Plus Project peak hour volumes, which are shown in **Figure 5**.

APPENDIX C

NOISE STUDY

Environmental Noise Assessment

Sangha Truck Yard

Sutter County, California

August 14, 2023

Project #230517

Prepared for:

Sangha Truck and Trailer Repair
1055 Oswald Road
Yuba City, CA 95991

Prepared by:

Saxelby Acoustics LLC

Luke Saxelby, INCE Bd. Cert.
Principal Consultant
Board Certified, Institute of Noise Control Engineering (INCE)

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INTRODUCTION

The Sangha Truck Yard project is located in Sutter County, California. The project includes the construction of a new truck yard. The project will be bordered by agricultural space in all directions and residential land use to the east and north. The project is bordered by South George Washington Boulevard on the east side of the site.

Figure 1 shows the project site plan. **Figure 2** shows an aerial photo of the project site.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

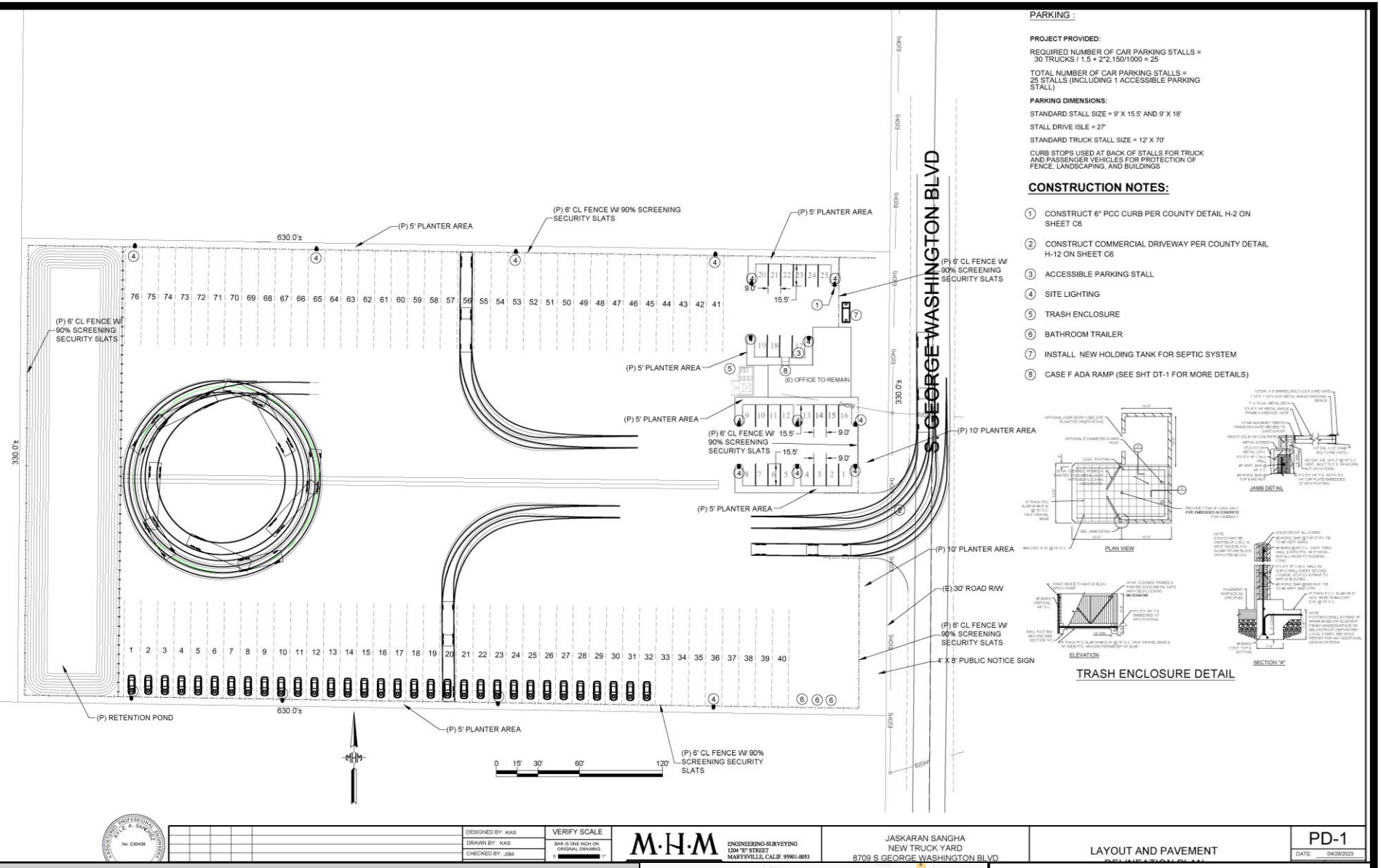
Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.



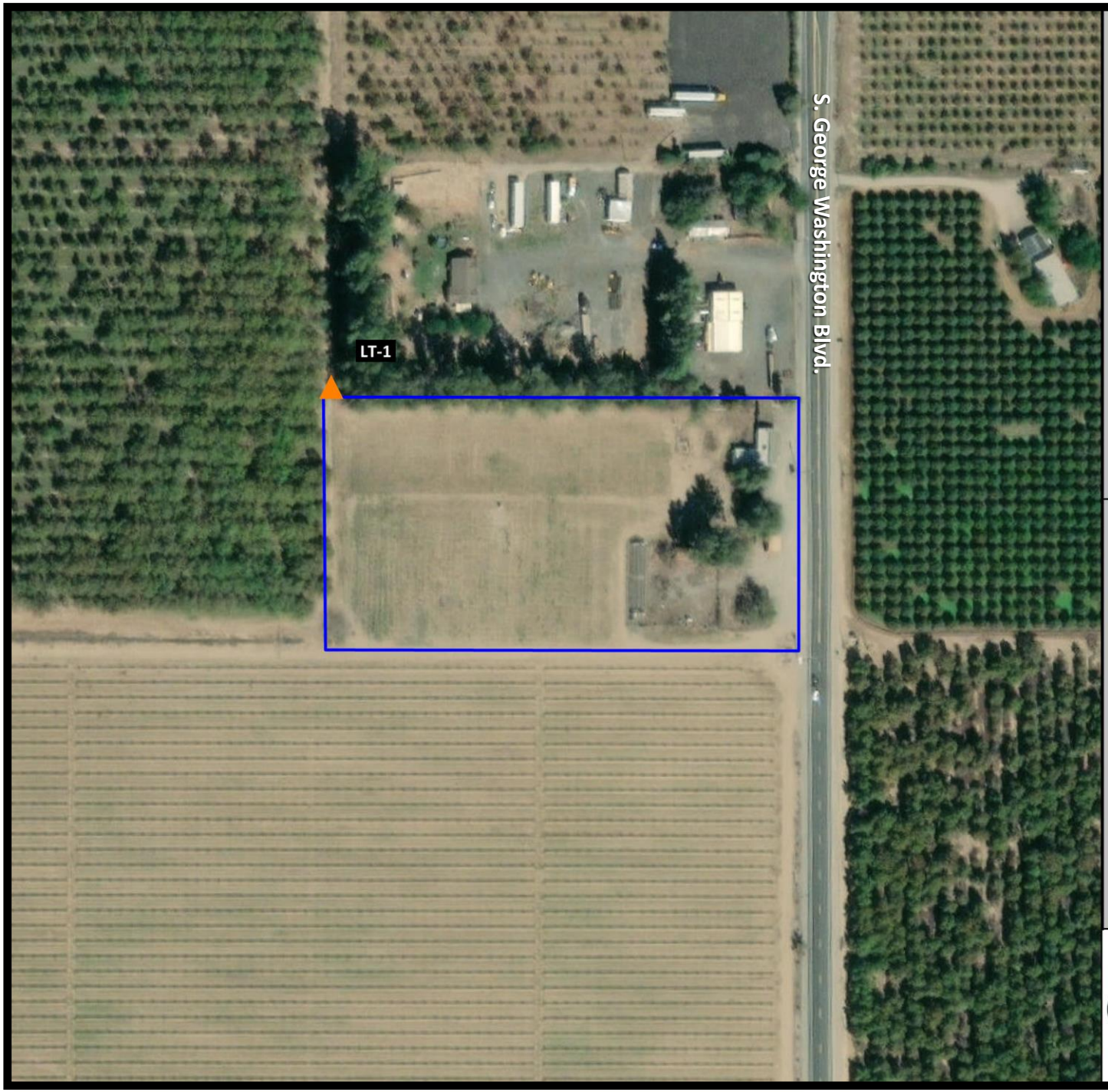
Sangha Truck Yard

Sutter County, California

Figure 1

Project Site Plan

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration



Sangha Truck Yard

Sutter County, California

Figure 2

Noise Measurement Sites

Legend

- Project Site
- Noise Measurement Site - Long Term

50 ft 150 ft 250 ft 350 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 08/10/2023

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The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60-dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (DNL or L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

TABLE 1: TYPICAL NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regards to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE AND VIBRATION ENVIRONMENTS

EXISTING NOISE RECEPTORS

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise-sensitive biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. In the vicinity of the project site, sensitive land uses include agricultural spaces in all directions and residential land use to the east and north. The project is bordered by South George Washington Boulevard.

EXISTING GENERAL AMBIENT NOISE LEVELS

The existing noise environment in the project area is primarily defined by traffic on S. George Washington Blvd and farming equipment from nearby farming operations. To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at one location on the project site. The noise measurement location is shown on **Figure 2**. A summary of the noise level measurement survey results is provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period.

Larson Davis Laboratories (LDL) model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE 2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

Location	Date	L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
LT-1: 680 ft. to CL of S. George Washington Blvd.	6/7/2023	55	54	48	68	46	41	59

- *All values shown in dBA*
- *Daytime hours: 7:00 a.m. to 10:00 p.m.*
- *Nighttime Hours: 10:00 p.m. to 7:00 a.m.*
- *Source: Saxelby Acoustics, 2023.*

FUTURE TRAFFIC NOISE ENVIRONMENT AT OFF-SITE RECEPTORS

OFF-SITE TRAFFIC NOISE IMPACT ASSESSMENT METHODOLOGY

To assess noise impacts due to project-related traffic increases on the local roadway network, traffic noise levels are predicted at sensitive receptors for existing and future, project and no-project conditions.

Existing and Cumulative noise levels due to traffic are calculated using the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA RD-77-108). The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. To predict traffic noise levels in terms of L_{dn}, it is necessary to adjust the input volume to account for the day/night distribution of traffic.

Project trip generation volumes were provided by the project traffic engineer (Wood Rodgers, Inc. 2023), truck usage and vehicle speeds on the local area roadways were estimated from field observations. The predicted increases in traffic noise levels on the local roadway network for Existing and Cumulative conditions which would result from the project are provided in terms of L_{dn}.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. In some locations sensitive receptors may not receive full shielding from noise barriers or may be located at distances which vary from the assumed calculation distance.

Tables 3 and 4 summarizes the modeled traffic noise levels at the nearest sensitive receptors along each roadway segment in the Project area. **Appendix C** provides the complete inputs and results of the FHWA traffic modeling.

TABLE 3: PREDICTED TRAFFIC NOISE LEVEL AND PROJECT-RELATED TRAFFIC NOISE LEVEL INCREASES

Roadway	Segment	Predicted Exterior Noise Level (dBA L_{dn}) at Closest Sensitive Receptors		
		Existing No Project	Existing + Project	Change
S. George Washington Blvd.	South of Project Driveway	53.7	53.8	0.1
S. George Washington Blvd.	North of Project Driveway	51.0	51.0	0.0

TABLE 4: CUMULATIVE TRAFFIC NOISE LEVEL AND PROJECT-RELATED TRAFFIC NOISE LEVEL INCREASES

Roadway	Segment	Predicted Exterior Noise Level (dBA L_{dn}) at Closest Sensitive Receptors		
		Cumulative No Project	Cumulative + Project	Change
S. George Washington Blvd.	South of Project Driveway	54.1	54.2	0.1
S. George Washington Blvd.	North of Project Driveway	51.4	51.4	0.0

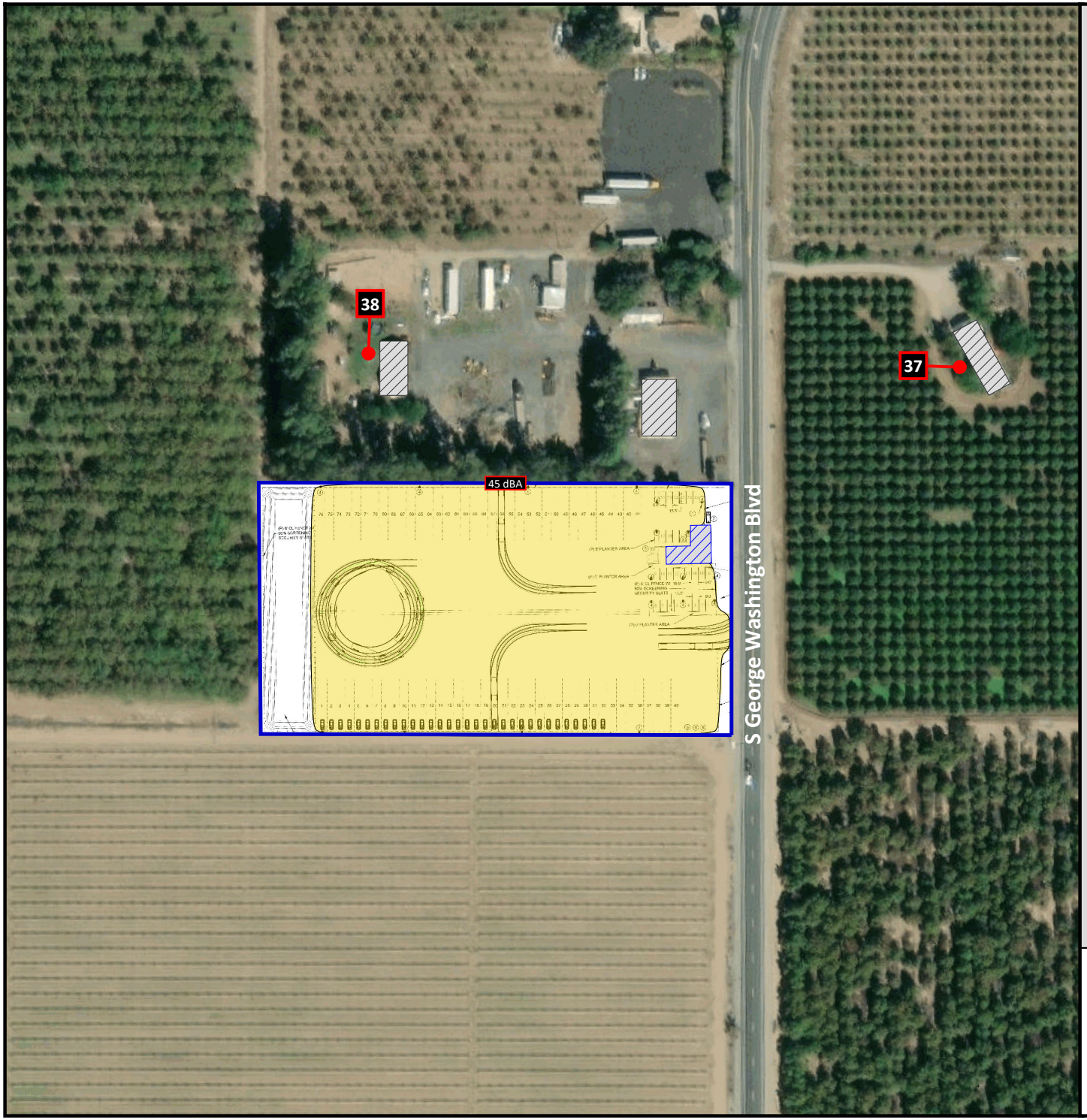
Based upon **Tables 3 and 4** data, the proposed project is predicted to result in an increase in a maximum traffic noise level increase of 0.1 dBA.

EVALUATION OF PROJECT OPERATIONAL NOISE ON EXISTING SENSITIVE RECEPTORS

Project site traffic circulation is considered to be the primary noise source for this project. The following is a list of assumptions used for the noise modeling. The data used is based upon a combination of manufacturer's provided data and Saxelby Acoustics data from similar operations.

On-Site Circulation: The project is projected to generate 145 daily trips with 87 passenger car trips and 58 heavy truck tricks (Wood Rodgers, Inc). Parking lot movements are predicted to generate a sound exposure level (SEL) of 71 dBA SEL at 50 feet for cars and 85 dBA SEL at 50 feet for trucks. Nighttime traffic outside of the AM or PM peak hour is estimated to be approximately 1/4 of daytime trips during nighttime hours (10:00 p.m. to 7:00 a.m.). Saxelby Acoustics data.

Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed amenities, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation. **Figure 3** shows the noise level contours resulting from operation of the project.



Sangha Truck Yard

Sutter County, California

Figure 3

Project Noise Contours
Leq,d, dB(A)

Noise Level, dB(A)	
45 <	<= 50
50 <	<= 55
55 <	<= 60
60 <	

Legend

- Project Building
- Existing Building
- Project Site

Scale 1:200

0 40 80 160 240 320 feet

N

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CONSTRUCTION NOISE ENVIRONMENT

During the construction of the proposed project, noise from construction activities would temporarily add to the noise environment in the project vicinity. As shown in **Table 5**, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet.

TABLE 5: CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Maximum Level, dBA at 50 feet
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: Roadway Construction Noise Model User's Guide. Federal Highway Administration. FHWA-HEP-05-054. January 2006.

CONSTRUCTION VIBRATION ENVIRONMENT

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. **Table 6** shows the typical vibration levels produced by construction equipment.

TABLE 6: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)	Peak Particle Velocity at 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: Transit Noise and Vibration Impact Assessment Guidelines. Federal Transit Administration. May 2006.

REGULATORY CONTEXT

FEDERAL

There are no federal regulations related to noise that apply to the Proposed Project.

STATE

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, indicate that a significant noise impact may occur if a project exposes persons to noise or vibration levels in excess of local general plans or noise ordinance standards, or cause a substantial permanent or temporary increase in ambient noise levels. CEQA standards are discussed more below under the Thresholds of Significance section.

LOCAL

Sutter County General Plan

The Sutter County General Plan Noise Element establishes acceptable noise levels for residential uses affected by transportation and stationary noise sources. The relevant criteria are reproduced below:

TABLE 7: NOISE LEVEL STANDARDS FOR NEW NON-TRANSPORTATION SOURCES

Noise Level Descriptor	Daytime (7 am to 10 pm)	Nighttime (10 pm to 7 am)
Hourly L_{eq}, dB	50	45
Maximum Level, dB	70	65

Source: Sutter County General Plan Noise Element Table 7

Sutter County Municipal Code

1500-21.5-050 Exterior Noise Standards

The noise standards shown in Table 1500-21.5-1 (**Table 8** below), unless otherwise specified in this Article, shall apply to all noise sensitive exterior areas within Sutter County.

TABLE 8: EXTERIOR NOISE STANDARDS

Noise Level Descriptor	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Hourly L_{eq}, dBA	55	45
Maximum Level, dBA	70	65

Source: Table 1500-21.5-1 of Sutter County Municipal Code

A. Exterior Noise Violation. It is unlawful for any person at any location within the County to create any noise which causes the noise levels on a noise sensitive receiving property, when measured in the designated exterior noise measurement location, to exceed the noise standards specified in Table 1500-21.5-1.

B. Impulsive, Simple and Pure Tone Noise. Each of the noise limits specified in Table 1500-21.5-1 shall be reduced by 5 dBA for recurring impulsive noise, simple or pure tone noise, or for noises consisting of speech or music.

C. Ambient Noise Level. Noise level standards, which are up to five 5 dBA less than those specified in Table 1500-21.5-1 may be imposed, based upon determination of existing low ambient noise levels in the vicinity of the receiving property.

D. Application. The exterior noise level standard shall be applied to the property line of the receiving property (as measured no more than one foot or as close as practicable inside the property line).

(Ord. No. 1661, § 17, 6-11-2019)

1500-21.5-070 Exceptions to Noise Standards

The following activities shall be exempted from the provisions of this Article:

B. *Construction.* Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property or public works project located within 1,000 feet of noise-sensitive uses (i.e., residential uses, daycares, schools, convalescent homes, and medical care facilities), provided such activities take place between:

- 7:00 a.m. to 6:00 p.m. on Weekdays
- 8:00 a.m. to 5:00 p.m. on Saturdays

Construction is prohibited on Sundays and legal holidays unless permission has been applied for and granted by the County.

(Ord. No. 1661, § 17, 6-11-2019)

Summary of Sutter County Regulatory Context

Table 7 shows the acceptable noise levels that may be generated by stationary noise sources.

The Sutter County Municipal Code establishes noise level criteria for the County. Section 1500-21.5-050 establishes penalties for noises which are impulsive, tonal, or repetitive as well as low existing ambient noise environments. Section 1500-21.5-070 establishes exceptions to the noise ordinance for various activities including construction.

CRITERIA FOR ACCEPTABLE VIBRATION

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. **Table 9**, which was developed by Caltrans, shows the vibration levels which would normally be required to result in damage to structures. The vibration levels are presented in terms of peak particle velocity in inches per second.

Table 9 indicates that the threshold for architectural damage to structures is 0.20 in/sec p.p.v. A threshold of 0.20 in/sec p.p.v. is considered to be a reasonable threshold for short-term construction projects.

TABLE 9: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/second	in/second		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Transportation Related Earthborne Vibrations. Caltrans. TAV-02-01-R9601. February 20, 2002.

IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. Significance criteria for noise impacts are drawn from CEQA Guidelines Appendix G (Items XI [a-c]).

Would the project:

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

b. Generate excessive groundborne vibration or groundborne noise levels?

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

The proposed project is not located within two miles of a public or private airport, therefore item "c" is not discussed any further in this study.

Noise Level Increase Criteria for Long-Term Project-Related Noise Level Increases

The California Environmental Quality Act (CEQA) guidelines define a significant impact of a project if it "increases substantially the ambient noise levels for adjoining areas." Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project noise conditions. **Table 10** is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn}.

TABLE 10: SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE

Ambient Noise Level Without Project, L_{dn}	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON).

Based on the **Table 10** data, an increase in the traffic noise level of 5 dB or more would be significant where the pre-project noise levels are less than 60 dB L_{dn}, or 3 dB or more where existing noise levels are between 60 to 65 dB L_{dn}. Extending this concept to higher noise levels, an increase in the traffic noise level of 1.5 dB or more may be significant where the pre-project traffic noise level exceeds 65 dB L_{dn}. The rationale for the **Table 10** criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

Temporary Construction Noise Impacts

With temporary noise impacts (construction), identification of "substantial increases" depends upon the duration of the impact, the temporal daily nature of the impact, and the absolute change in decibel levels. Per the Sutter County Municipal Code, construction activities operating between 7:00 a.m. and 6:00 p.m. Monday through Friday and 8:00 a.m. and 5:00 p.m. on Saturdays, which create a noise disturbance at the property boundary of a residence are prohibited and would be considered a significant impact.

The County has not adopted any formal standard for evaluating temporary construction noise which occurs within allowable hours. For short-term noise associated with Project construction, Saxelby Acoustics recommends use of the Caltrans increase criteria of 12 dBA (Caltrans Traffic Noise Protocol, 2020), applied to existing residential receptors in the project vicinity. This level of increase is approximately equivalent to a doubling of sound energy and has been the standard of significance for Caltrans projects at the state level for many years. Application of this standard to construction activities is considered reasonable considering the temporary nature of construction activities.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

Impact 1: ***Would the project generate 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?***

Traffic Noise Increases at Off-Site Receptors

The FICON guidelines specify criteria to determine the significance of traffic noise impacts. Where existing traffic noise levels are greater than 65 dB L_{dn}, a +1.5 dB L_{dn} increase in roadway noise levels will be considered significant. According to **Tables 3 and 4**, the maximum increase is traffic noise at the nearest sensitive receptor is predicted to be 0.1 dBA. Therefore, impacts resulting from increased traffic noise would be considered ***less-than-significant***, and no mitigation is required.

Operational Noise at Existing Sensitive Receptors

As shown on **Figure 3**, the project is predicted to expose nearby residences to noise levels up to 38 dBA, L_{eq} during both daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours. The predicted project noise levels would meet the San Joaquin County Development Code noise standard for non-transportation noise sources of 45 dBA, $L_{eq.}$

It should be noted that maximum noise levels generated by the residential HVAC units and on-site vehicle circulation are predicted to be 20 dBA, or less, than the average (L_{eq}) values. The Sutter County maximum (L_{max}) nighttime noise level standard is 65 dBA L_{max}, which is 20 dBA higher than the L_{eq} standard. Therefore, where average noise levels are in compliance with the L_{eq} standards, maximum noise levels will also meet the County's standards. Based upon the predicted average noise levels of 38 dBA, the maximum noise levels will be 58 dBA and comply with the City maximum standards.

This is a ***less-than-significant*** impact, and no mitigation is required.

Construction Noise

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. As indicated in **Table 5,** activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. Construction activities would also be temporary in nature and are anticipated to occur during normal daytime working hours.

The Sutter County Municipal Code exempts construction noise from the noise ordinance between the hours of 7:00 a.m. and 6:00 p.m. on Weekdays and 8:00 a.m. and 5:00 p.m. on Saturdays (excluding holidays) provided that either no individual piece of equipment shall produce noise levels greater than 83 dBA at 25 feet or noise levels outside the property plane are less than 86 dBA. As shown in **Table 5**, construction equipment that may be used in the development of the project has the potential to exceed 83 dBA at 25 feet. However, the majority of project construction would occur away from the property boundary, therefore limiting noise levels at the property plane to below 86 dBA.

Caltrans defines a significant increase due to construction noise as an increase of 12 dBA over existing ambient noise levels; Saxelby Acoustics used this criterion to evaluate increases due to construction noise associated with the project. As shown in **Table 5**, construction equipment is predicted to generate noise levels of up to 90 dBA L_{max} at 50 feet. Construction noise is evaluated as occurring at the center of the site to represent average noise levels generated over the duration of construction across the project site. The nearest residential uses are located approximately 300 feet as measured from the center of the project site. At this distance, maximum construction noise levels would be up to 74 dBA. The average daytime maximum noise level in the vicinity of the sensitive receptors was measured to be 68 dBA. Therefore, project construction would not cause an increase of greater than 12 dBA over existing ambient noise levels.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration and would occur during daytime hours.

Although construction activities are temporary in nature and would occur during normal daytime working hours, construction-related noise could result in sleep interference at existing noise-sensitive land uses in the vicinity of the construction if construction activities were to occur outside the normal daytime hours. Therefore, impacts resulting from noise levels temporarily exceeding the threshold of significance due to construction would be considered ***potentially significant***.

Mitigation Measure

1(a) The County shall establish the following as conditions of approval for any permit that results in the use of construction equipment:

- Construction activities (excluding activities that would result in a safety concern to the public or construction workers) shall be limited to between the hours of 7:00 a.m. and 9:00 p.m. Monday through Friday and 10:00 a.m. and 6:00 p.m. on Saturdays, Sundays and holidays.
- Construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.
- When not in use, motorized construction equipment shall not be left idling for more than 5 minutes.

- Stationary equipment (power generators, compressors, etc.) shall be located at the furthest practical distance from nearby noise-sensitive land uses or sufficiently shielded to reduce noise-related impacts.

Timing/Implementation: Implemented prior to approval of grading and/or building permits.
Enforcement/Monitoring: Sutter County Community Development Services Department.

Implementation of mitigation measures 1(a) would help to reduce project operational and construction-generated noise levels. With mitigation, this impact would be considered ***less-than-significant***.

Impact 2: Would the project generate excessive groundborne vibration or groundborne noise levels?

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

The **Table 7** data indicate that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located further than 26 feet from typical construction activities. At distances greater than 26 feet construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours.

This is a **less-than-significant** impact and no mitigation is required.

Impact 3: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

There are no airports within two miles of the project vicinity. Therefore, this impact is not applicable to the proposed project.

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Appendix A: Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

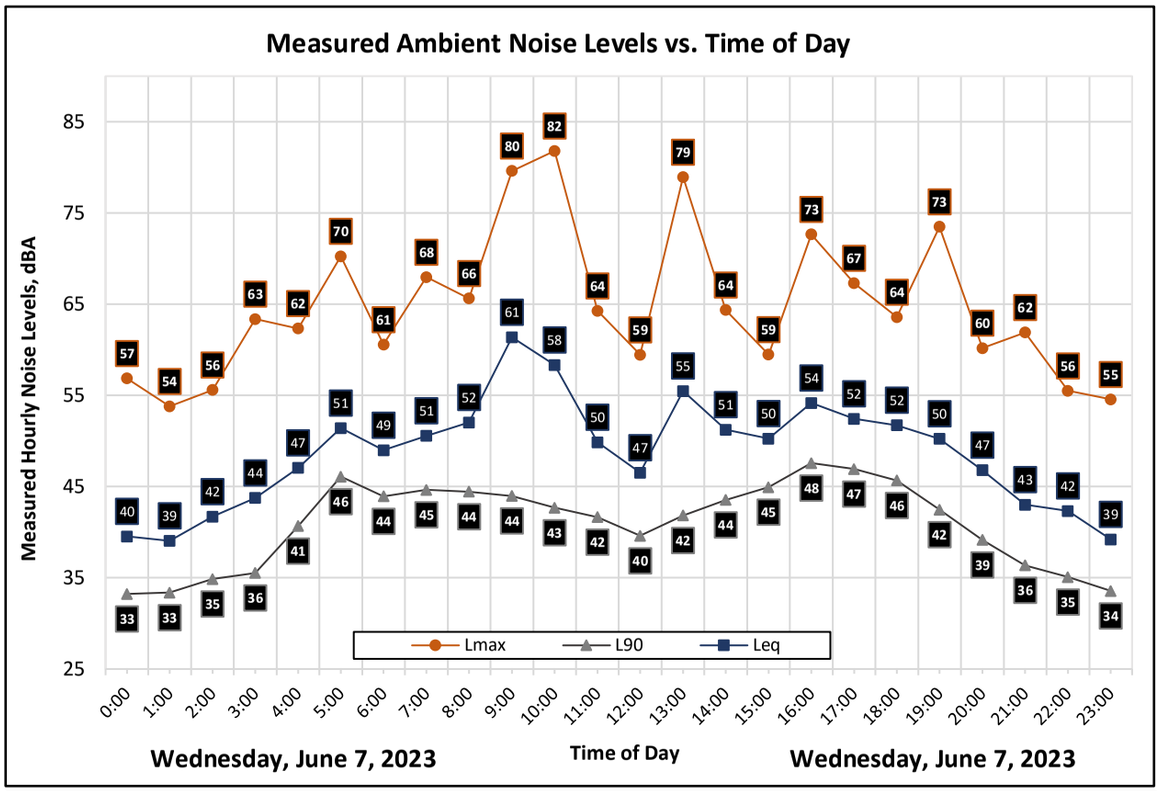
Appendix B: Continuous Ambient Noise Measurement Results

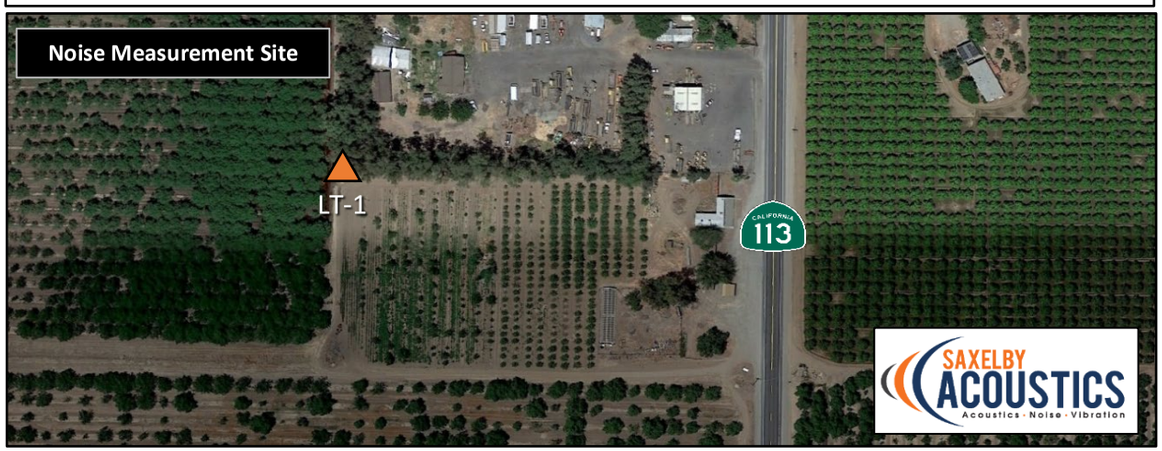
Appendix B1: Continuous Noise Monitoring Results

Site: LT-1
Project: Sangha Truck Yard
Meter: LDL 820-5
Location: North Western Project Boundary
Calibrator: CAL200
Coordinates: (39.0005186, -121.6743776)

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Wednesday, June 7, 2023	0:00	40	57	35	33
Wednesday, June 7, 2023	1:00	39	54	35	33
Wednesday, June 7, 2023	2:00	42	56	38	35
Wednesday, June 7, 2023	3:00	44	63	40	36
Wednesday, June 7, 2023	4:00	47	62	46	41
Wednesday, June 7, 2023	5:00	51	70	50	46
Wednesday, June 7, 2023	6:00	49	61	48	44
Wednesday, June 7, 2023	7:00	51	68	49	45
Wednesday, June 7, 2023	8:00	52	66	49	44
Wednesday, June 7, 2023	9:00	61	80	50	44
Wednesday, June 7, 2023	10:00	58	82	48	43
Wednesday, June 7, 2023	11:00	50	64	47	42
Wednesday, June 7, 2023	12:00	47	59	45	40
Wednesday, June 7, 2023	13:00	55	79	46	42
Wednesday, June 7, 2023	14:00	51	64	49	44
Wednesday, June 7, 2023	15:00	50	59	49	45
Wednesday, June 7, 2023	16:00	54	73	52	48
Wednesday, June 7, 2023	17:00	52	67	51	47
Wednesday, June 7, 2023	18:00	52	64	51	46
Wednesday, June 7, 2023	19:00	50	73	48	42
Wednesday, June 7, 2023	20:00	47	60	44	39
Wednesday, June 7, 2023	21:00	43	62	41	36
Wednesday, June 7, 2023	22:00	42	56	40	35
Wednesday, June 7, 2023	23:00	39	55	37	34

Statistics	Leq	Lmax	L50	L90
Day Average	54	68	48	43
Night Average	46	59	41	37
Day Low	43	59	41	36
Day High	61	82	52	48
Night Low	39	54	35	33
Night High	51	70	50	46
Ldn	55	Day %		92
CNEL	55	Night %		8





Appendix C: Traffic Noise Calculation Inputs and Results

Appendix C-1
FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 230517
Description: Sangha Truck Yard - Existing
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	S. George Washington	South of Project Driveway	6,660	92	0	8	1.0%	1.0%	45	240	0	91	42	20	53.7
2	S. George Washington	North of Project Driveway	6,660	92	0	8	1.0%	1.0%	45	170	-5	91	42	20	51.0

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Appendix C-2

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 230517
Description: Sangha Truck Yard - Existing Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	S. George Washington	South of Project Driveway	6,790	92	0	8	1.0%	1.0%	45	240	0	93	43	20	53.8
2	S. George Washington	North of Project Driveway	6,700	92	0	8	1.0%	1.0%	45	170	-5	92	43	20	51.0

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Appendix C-3

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 230517
Description: Sangha Truck Yard - Cumulative
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	S. George Washington	South of Project Driveway	7,330	92	0	8	1.0%	1.0%	45	240	0	97	45	21	54.1
2	S. George Washington	North of Project Driveway	7,330	92	0	8	1.0%	1.0%	45	170	-5	97	45	21	51.4

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Appendix C-4

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 230517
Description: Sangha Truck Yard - Cumulative Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	S. George Washington	South of Project Driveway	7,460	92	0	8	1.0%	1.0%	45	240	0	98	46	21	54.2
2	S. George Washington	North of Project Driveway	7,370	92	0	8	1.0%	1.0%	45	170	-5	98	45	21	51.4

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

APPENDIX D

TRAFFIC IMPACT ANALYSIS

Memorandum

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

To: Jaskaran Sangha

From: Mario Tambellini, PE, TE
Pranesh Tarikere, PE

Date: July 27, 2023

Subject: **Sangha Truck Yard Traffic Impact Analysis (TIA)**

INTRODUCTION

This memorandum has been prepared to present the results of a traffic impact analysis (TIA) for the proposed Sangha Truck Yard Project (Project) located in Sutter County, California (County). The Project would develop a new truck yard located on one parcel located at 8709 S. George Washington Boulevard, also known as State Route (SR) 113, south of Tudor Road. The Project location is shown in **Figure 1**. The Project site, identified as APN 025-030-004, currently includes an approximately 2,200 square foot office building that would remain with development of the Project, and orchards and two agricultural buildings that would be removed. There is an existing industrial site located directly north of the Project site. This TIA includes the following:

- Project trip generation and distribution
- Intersection and roadway operations analysis
- Internal circulation and emergency access to Project site
- Site access analysis, including sight distance and truck turns at the Project Driveway
- Discussion of Project impact on traffic operations and other multimodal facilities
- Vehicle Miles Traveled (VMT) qualitive analysis

PROJECT DESCRIPTION

The Project proposes to construct a 4.75-acre Truck and Trailer Repair with 76 truck/trailer stalls, 25 employee parking stalls, and an existing 2,130 sq foot office. Project access would be provided via a proposed driveway on S. George Washington Boulevard (State Route 113) located approximately 900 feet south of the intersection of S. George Washington with SR 113 /Tudor Road. The *Sutter County 2030 General Plan* designates the site as Agricultural. The Project site plan is included in **Attachment A**.

ANALYSIS SCENARIOS AND STUDY FACILITIES

Intersections and roadway segments were studied under the following scenarios:

- Existing Conditions (roadway segment only)
- Existing Plus Project Conditions
- Cumulative Conditions (roadway segment only)
- Cumulative Plus Project Conditions

As shown in **Figure 1**, the following intersection was included in this analysis:

1. S. George Washington Boulevard & Proposed Project Driveway

The following roadway segment was analyzed in this TIA:

1. North of 8709 S. George Washington Boulevard

The locations of the above study intersection and roadway segment are shown in **Figure 1**.

Project Location and Study Vicinity

Sangha Truck Yard TIA

Sutter County, CA

July 2023

Figure 1

WOOD RODGERS

\\woodrodgers.loc\ProductionData\Jobs\4000-s\4741001_Sangha_Truck_Yard\GIS\Tasks\Fig_1_Location_and_Facilities_Map.mxd 7/26/2023 2:02:27 PM nscappaticci

ANALYSIS METHODOLOGY

INTERSECTION LEVEL OF SERVICE

Synchro 11 software and Highway Capacity Manual, 6th Edition (HCM 6th Edition) methodology was used to determine intersection delay and LOS operations under Existing weekday AM and PM peak hour conditions. **Table 1** shows the capacities and LOS thresholds for the study intersections of the Project.

Table 1. HCM 6th Edition Intersection LOS Thresholds

Level of Service	Description	Intersection Control Delay (seconds/vehicle)	
		Unsignalized	Signalized
A	Free-flow conditions with negligible to minimal delays.	delay ≤ 10.0	delay ≤ 10.0
B	Good progression with slight delays.	10.0 < delay ≤ 15.0	10.0 < delay ≤ 20.0
C	Relatively higher delays.	15.0 < delay ≤ 25.0	20.0 < delay ≤ 35.0
D	Somewhat congested conditions with longer but tolerable delays.	25.0 < delay ≤ 35.0	35.0 < delay ≤ 55.0
E	Congested conditions with significant delays.	35.0 < delay ≤ 50.0	55.0 < delay ≤ 80.0
F	Jammed or grid-lock type operating conditions.	delay > 50.0	delay > 80.0
Source: HCM 6th Edition Exhibit 19-8 and 20-2.			

HCM 6th Edition reports were generated to determine the delay and LOS at the study intersections in *Synchro 11* software.

ROADWAY SEGMENTS

Roadway segment LOS has been calculated based on Table 6.14-1 of the *Sutter County General Plan EIR* (February 2011). **Table 2** shows the capacities and LOS thresholds for the study roadway segment classifications within the City.

Table 2. LOS Based on Daily Traffic Thresholds

Classification	Lanes	Control	Daily Traffic Volume at Level of Service:		
			C	D	E
Rural	2	Undivided	7,000-10,600	10,600-16,400	16,400-25,200
Notes: *[1] Source: Table 6.16-6 of the Sutter County 2011 General Plan EIR*					

SIGNAL WARRANTS

California Manual on Uniform Traffic Control Devices (CA MUTCD) Peak Hour Signal Warrant #3 was used to evaluate the potential need for installation of a traffic signal at unsignalized study intersection. Peak Hour Signal Warrant #3 (70% Factor) was used for the unsignalized intersection of S. George Washington Boulevard (SR 113) & Proposed Project Driveway, as S. George Washington Boulevard has a posted speed limit of 55 miles per hour (mph) at this intersection.

CA MUTCD Peak Hour Signal Warrant #3 is currently unmet at the study intersection for all scenarios.

LEVEL OF SERVICE CRITERIA

As stated in *Sutter County 2030 General Plan* Policy M 2.5, the County currently utilizes LOS D as the minimum acceptable LOS threshold for all roadways and intersections during the AM and PM peak periods.

ANALYSIS VOLUMES

EXISTING TRAFFIC COUNTS

Weekday Average Daily Traffic (ADT) counts were collected on Tuesday, June 13, 2023. AM and PM Peak Hour Volumes are based on the peak hour between 7:00 AM to 9:00 AM and between 4:00 PM to 6:00 PM. Traffic data count sheets are included in **Attachment B**. **Figure 2** shows the Existing Plus Project conditions lane geometrics and control, and **Figure 3** shows the Existing conditions traffic volumes.

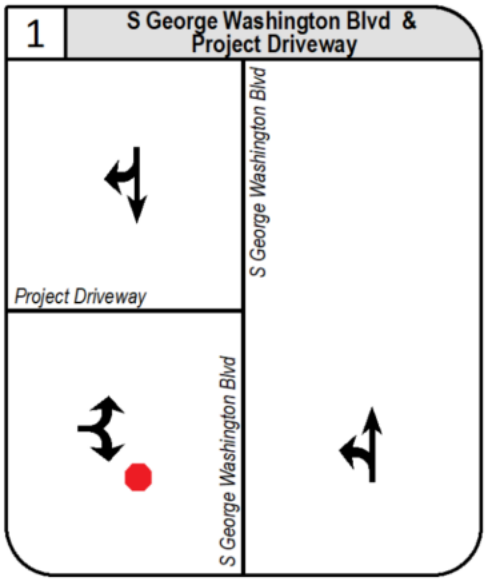


Figure 2. Existing Plus Project Lane Geometrics and Control

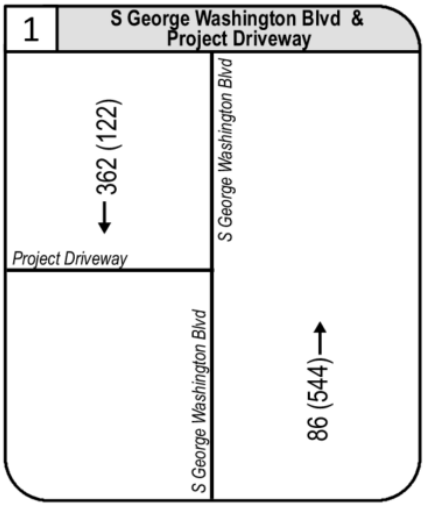


Figure 3. Existing Conditions Traffic Volumes – AM(PM)

PROJECT TRIP GENERATION

Due to the unique nature of the Project site, trip generation was estimate based on similar truck yard facilities in Sutter County. Project trip data for Project site is as follows:

Sangha Truck Yard: This facility would exist on the site that fronts S. George Washington Boulevard and is projected to have 25 passenger car stalls and 76 truck/trailer stalls. The site would be primarily used for truck storage.

Table 3 provides truck and passenger car rates based on data found in the *Three Truck Parking Facilities on Tudor Road and Garden Highway Traffic Impact Analysis* (KD Anderson & Associates, Inc., June 24, 2022), which estimates truck and passenger car traffic for three similar truck yard sites in Sutter County.

Table 3. Trip Generation Rates

Land Use	Rate Unit	Trip Type	Weekday Daily Trip Rate/ Unit[1]	Weekday AM Peak Hour Rate/Unit[1]			Weekday PM Peak Hour Rate/Unit[1]		
				Total	In	Out	Total	In	Out
Truck Storage Yard Facility	Trucks Parking Spaces	Trucks	0.76	0.06	50%	50%	0.06	50%	50%
		Passenger Cars	1.15	0.09	50%	50%	0.09	50%	50%

Notes:
[1]Trip rates based on the Three Truck Parking Facilities on Tudor Road and Garden Highway Traffic Impact Analysis (KD Anderson & Associates, Inc., June 24, 2022)

As the County does not currently have a standard passenger car equivalent (PCE) factor, the Sacramento County standard PCE factor of 2.5 was applied to all Project truck trips. All Project trips included in this analysis are assumed to be in PCE's. **Table 4** provides the Project trip generation in PCE's.

Table 4. Project Trip Generation

Land Use	Units	Quantity[1]	Type	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Truck Parking Facility	Truck Spaces	76	Trucks	58	2	2	4	2	2	4
			Trucks (PCE = 2.5)[3]	**148**	**5**	**5**	**10**	**5**	**5**	**10**
			Passenger Cars	**87**	**4**	**3**	**7**	**4**	**3**	**7**
			Total	**232**	**9**	**8**	**17**	**9**	**8**	**17**

Notes:
[1]Quantity provided by Project Applicant in Project Description.
[2]Conservatively assumed all employees arrive during AM peak hour and leave during PM peak hour.
[3]PCE = Passenger Car Equivalent Factor = 2.5
[4] Estimated daily trips for the Truck Storage Yard Facility are generally consistent with trip generation rates used in the Three Truck Parking Facilities on Tudor Road and Garden Highway TIA (KD Anderson & Associates, Inc., June 24, 2022) of 1.91 trips per space, which was based on traffic counts at a truck parking area in Yuba City.

As illustrated in **Table 4**, the proposed Project is anticipated to generate a total of 232 daily trips, 17 AM peak hour trips (9 inbound, 8 outbound), and 17 PM peak hour primary trips (9 inbound, 8 outbound) under typical weekday traffic demand conditions. Of the total trips, 148 daily trips are estimated to represent PCE truck trips with 5 AM peak hour PCE truck trips and 5 PM peak hour PCE truck trips.

Project trips would be assigned to the surrounding roadway network based on the following distribution, which was developed based on Project characteristics, existing travel patterns, and knowledge of the area:

- Project Trips
    - 70% AM/ 20% PM to/from S. George Washington Boulevard north of the proposed Project.
    - 30% AM/ 80% PM to/from S. George Washington Boulevard south of the proposed Project.

Project trip distribution is also shown in **Figure 1**. Note that existing counts showed that trucks and passenger car generally have the same peak hour distribution. The Project trip assignment is presented in **Figure 4**. Project trips are added to Existing volumes to obtain Existing Plus Project peak hour volumes, which are shown in **Figure 5**.

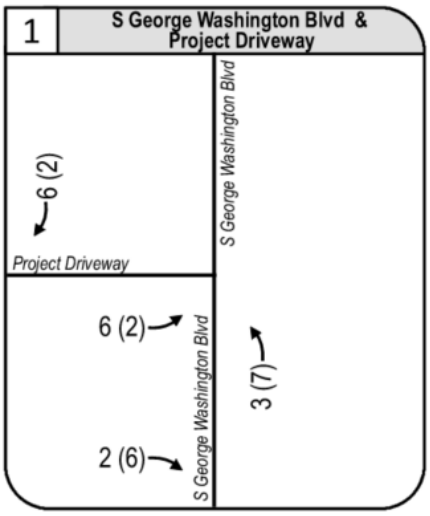


Figure 4. Project Only Trip Assignment – AM(PM)

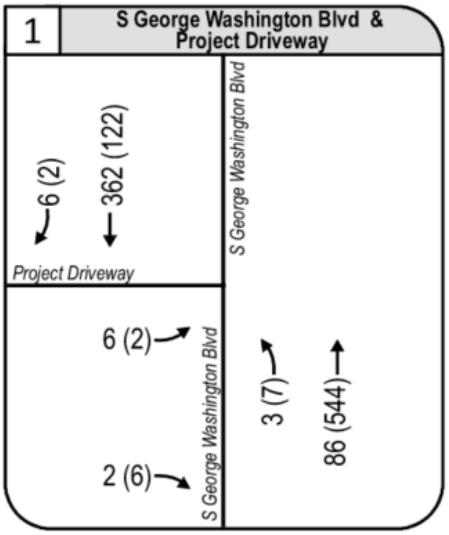


Figure 5. Existing Plus Project – AM(PM)

CUMULATIVE CONDITION VOLUMES

Cumulative (Year 2040) conditions traffic volumes are calculated based on the Sacramento Area Council of Governments (SACOG) SACSIM regional travel demand model forecasts for the segment of S. George Washington Boulevard south of Tudor Road.

The SACSIM model forecasts reflect land use assumptions made by its member agencies for development over the six county areas to the Year 2040. These assumptions rarely result in full buildout of individual areas but represent allocations of regional expectations for population and employment growth. An average yearly growth rate of 0.57% per year was determined to occur within the study area based on growth between base year 2016 and future year 2040 outputs from the SACSIM model. This growth rate was applied to Existing conditions traffic volumes at the Project Driveway location to obtain Cumulative conditions traffic volumes, shown in **Figure 6**. Project volumes were added to Cumulative conditions volumes to obtain Cumulative Plus Project conditions volumes, shown in **Figure 7**.

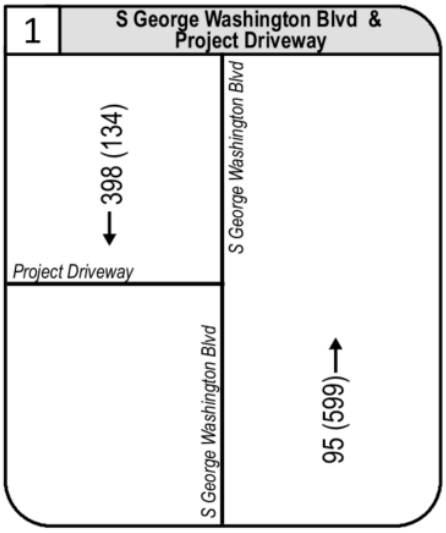


Figure 6. Cumulative Conditions Traffic Volumes – AM(PM)

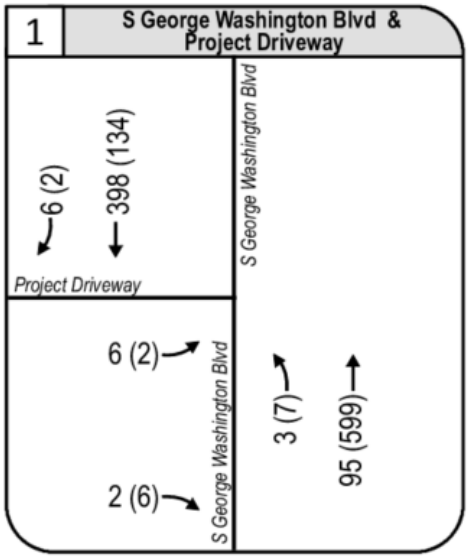


Figure 7. Cumulative Plus Project Traffic Volumes – AM(PM)

INTERSECTION OPERATIONS

Table 5 presents a summary of the S. George Washington Boulevard & Proposed Project Driveway LOS operations under all AM and PM peak hour conditions.

Table 5. Intersection Operations

Scenario	Control Type	LOS Criteria	AM		PM		Wrnt Met?[3]
			Delay (sec/veh)[2]	LOS	Delay (sec/veh)[2]	LOS	
Existing Plus Project	OWSC[1]	D	11.6	B	10.4	B	No
Cumulative Plus Project	OWSC[1]	D	12.0	B	10.7	B	No

Notes:
[1] OWSC = One-Way Stop-Controlled
[2] For OWSC, the worst approach/movement delay and LOS is reported.
[3] Wrnt Met? = Peak Hour Signal Warrant #3

As shown in **Table 5**, all intersections operate at acceptable LOS (LOS "D" or better) under all study conditions. Synchro software HCM 6th Edition intersection LOS output reports are included in **Attachment C** and CA MUTCD Peak Hour Signal Warrant #3 worksheets are included in **Attachment D**.

QUEUEING ANALYSIS

Vehicle queuing was analyzed at the study intersection for all stop-controlled movements and movements with turn pockets that the Project would add trips to. **Table 6** shows the available storage length and 95th percentile queues under all analysis scenarios. As shown in **Table 6**, all 95th percentile queues are anticipated to be accommodated by the existing available storage.

Table 6. Queueing Analysis Results

#	Intersection	Movement	Available Storage (ft)[1]	Peak Hour	95th Percentile Queue (ft)	
					Existing Plus Project	Cumulative Plus Project
1	S. George Washington Blvd & Proposed Project Driveway	EB	105'	AM	<20	<20
				PM	<20	<20
Notes: [1] Available storage represents the throat depth of the Project Driveway.						

ROADWAY SEGMENT OPERATIONS

Operations for the segment of S. George Washington Boulevard between the Project Driveway and Tudor Road was evaluated under all study scenarios. 24-hour ADT counts were collected for the study segment on Tuesday, June 13, 2023. ADT counts are included in **Appendix D**. 50% of daily Project trips were assumed to be distributed to S. George Washington Boulevard north of the Project Driveway, consistent with ADT counts on the segment. Cumulative conditions ADT was developed by applying a 0.57% per year growth rate to Existing conditions ADT. Existing and Existing Plus Project and Cumulative and Cumulative Plus Project conditions roadway LOS are shown in **Table 7** and **Table 8**, respectively.

Table 7. LOS Based on Daily Traffic Thresholds

Segment	Classification	Max. ADT for Acceptable LOS[1]	Project ADT (PCE)	Existing		Existing Plus Project	
				ADT	LOS	ADT	LOS
S. George Washington Boulevard north of the Project Driveway	Rural, 2-Lane, Undivided	16,400	116	6,495	C	6,611	C
Notes: [1] Source: Table 6.14-6 of the Sutter County 2011 General Plan EIR							

Table 8. LOS Based on Daily Traffic Thresholds

Segment	Classification	Max. ADT for Acceptable LOS[1]	Project ADT (PCE)	Cumulative		Cumulative Plus Project	
				ADT	LOS	ADT	LOS
S. George Washington Boulevard north of the Project Driveway	Rural, 2-Lane, Undivided	16,400	116	7,154	C	7,270	C
Notes: [1] Source: Table 6.14-6 of the Sutter County 2011 General Plan EIR							

As shown in **Table 7** and **Table 8**, the study roadway segments are projected to operate acceptably under all study conditions.

OPERATIONAL DEFICIENCIES AND IMPROVEMENTS

SITE ACCESS AND INTERNAL CIRCULATION

The Project would access S. George Washington Boulevard (SR 113) directly via the Project Driveway. Internal Project roadways would include space for trucks to turn around near the western end of the Project site. 25 Passenger car parking would be located adjacent to the existing office building and would include one accessible parking stall.

As shown in **Attachment A**, the Project Driveway would be approximately 47 feet wide with approximately 49-foot curb radii. The Caltrans Highway Design Manual (HDM) indicates that corner radii should accommodate the anticipated design vehicles. Large trucks are allowed on SR 113 under the Surface Transportation Assistance Act (STAA). Truck turn templates are included on the site plan in **Attachment A**. As shown in the exhibits, the design vehicle would be able to navigate ingress and egress movements at the driveways without conflicting with the driveway curb return or vehicles making opposing movements.

SIGHT DISTANCE EVALUATION

Corner sight distance for egress vehicles at Project Driveway at S. George Washington Boulevard was evaluated based on Chapter 400 of the Caltrans Highway Design Manual (HDM), which indicates a required corner sight distance of 1,015 feet for trucks turning left onto roadways with 55 mph design speeds and a required corner sight distance of 925 feet for trucks turning right onto roadways with 55 mph design speeds. Corner sight distances for the Project Driveway is illustrated in **Attachment E** and summarized in **Table 9**.

As shown in **Table 9**, sight distance at the Project Driveway is projected to meet minimum corner sight distance requirements.

Table 9. Project Driveway Corner Sight Distance

Driveway	Speed of Major Road	Required Sight Distance[1]	Available Sight Distance	Sight Distance Met?[2]
Left turn from Project Driveway onto S. George Washington Boulevard	**55 mph**	**1,015'**	**1,015'+'**	**Yes**
Right turn from Project Driveway onto S. George Washington Boulevard	**55 mph**	**925'**	**925'+**	**Yes**

Notes:
[1] Required corner sight distance based on Chapter 400 of the Caltrans HDM

PEDESTRIAN, BICYCLE, AND TRANSIT FACILITIES

The Project site is located in unincorporated Sutter County. Local transit is available via Dial-a-Ride services. There are no paved pedestrian sidewalks or bike lanes along S. George Washington Boulevard. The Project is not anticipated to cause a significant increase in pedestrian, bicycle, or transit demand in the study area that would put existing facilities over capacity. The Project would not adversely affect existing or proposed pedestrian, bicycle, or transit facilities in a way that would discourage their use.

SAFETY ANALYSIS

The Interim Local Development Intergovernmental Review (LDIGR) Safety Review Practitioners Guidance (Caltrans, December 18, 2020) establishes the safety review expectations for proposed land use projects that would affect Caltrans facilities in the context of the California Environmental Quality Act (CEQA) review process. LDIGR guidelines consist of a traffic safety review, including collision analysis. This section provides an evaluation of LDIGR components at the study roadway segment (SR 113 between Postmile SU 13.792 and SU 14.273).

Five years of collision data (October 1, 2017 – September 30, 2022) were obtained from the Caltrans Traffic Accident Surveillance and Analysis Systems (TASAS) for the study roadway segment on SR 113 to identify high collision locations and common collision characteristics.

Table 10 summarizes collision rates at the Caltrans study facilities by severity over the last five years and provides average rates for similar facilities throughout the state for comparison. The TASAS data indicated higher than average Fatal + Injury and Total (including property damage only (PDO) collisions) collision rates at the Caltrans study roadway segment on SR 113.

Table 10. Collision Rates for Caltrans Facilities (TASAS, 2017-2022)

Segment	Total No. of Collisions	Actual (per million			Average (per million		
		Fatal	Fatal + Injury	Total[1]	Fatal	Fatal + Injury	Total[1]
Sutter 113 PM 13.792/14.273	4	0.0	0.22	0.89	0.025	0.33	0.78
Notes: *[1]Includes PDO collisions*							

Table 11 summarizes the collisions at the Caltrans study facilities and describes the collision severity (fatal, injury, and PDO) and the collision type (head-on, sideswipe, rear end, broadside, hit object, overturned, vehicle/pedestrian, and other). The TASAS data indicated that a total of 4 collisions occurred at the Caltrans study facilities over the last five years. The most common collision types were Hit Object collisions, followed by Rear End and Sideswipe type collisions.

Table 11. Collision Severity and Type for Caltrans Facilities (TASAS, 2017 – 2022)

Segment	Total Collisions	Severity			Type		
		Fatal	Injury	PDO	Rear-End	Sideswipe	Hit Object
Sutter 113 PM 13.792/14.273	4	0	1	3	1	1	2

Table 12 shows the primary collision factors (PCFs) at each Caltrans study facility. The most common PCFs were speeding, improper turn, influence of alcohol, and other violations. It is unlikely that the addition of Project traffic would result in a significant change in collision rates at the Caltrans study facilities.

Table 12. Primary Collision Factors for Caltrans Facilities (TASAS, 2017 – 2022)

Segment	Total Collisions	PCF			
		Speeding	Improper Turn	Influence of Alcohol	Other Violations
Sutter 113 PM 13.792/14.273	4	1	1	1	1

VMT SCREENING ANALYSIS

Senate Bill 743 (SB 743), signed in 2013, required changes to CEQA guidelines on the measurement and identification of transportation impacts due to new projects in California. Revised CEQA Guidelines were adopted in 2018 which identified Vehicles Miles Traveled (VMT) as the most appropriate metric to evaluate transportation impacts. Statewide implementation of assessment of VMT as a metric of transportation impact occurred for all jurisdictions on July 1, 2020. The Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR Technical Advisory) (December 2018), contains technical recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures.

The County has not currently adopted VMT guidelines or thresholds. Therefore, this TIA evaluates Project VMT using recommendations and methodologies consistent with the OPR Technical Advisory. The OPR Technical Advisory contains the following guidance for project attributes that may be presumed to produce a less than significant VMT impact:

> *By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than-significant transportation impact.*

OPR guidance states that retail uses less than 50,000 square feet can typically be defined as local-serving. The existing office on the proposed Truck Yard would be less than 50,000 square feet and would provide a local option for customers to store trucks, reducing the need for patrons to make longer-distance or out-of-direction trips to the next-closest truck storage yard. Based on these attributes, the Project may be presumed to be local-serving and produce a less than significant VMT impact.

CONCLUSION

the proposed Project is anticipated to generate a total of 232 daily trips, 17 AM peak hour trips (9 inbound, 8 outbound), and 17 PM peak hour primary trips (9 inbound, 8 outbound) under typical weekday traffic demand conditions under typical weekday traffic demand conditions.

Intersection LOS at all study intersections was projected to be acceptable (LOS "D" or better) under all study scenarios. CA MUTCD Peak Hour Signal Warrant #3 is currently unmet at the unsignalized study intersection. All 95th percentile queues are anticipated to be accommodated by the existing available storage for all study scenarios.

The Project site plan shows that the Project driveway would accommodate ingress and egress design vehicle movements. Corner sight distance at the Project location was found to meet or exceed Caltrans requirements.

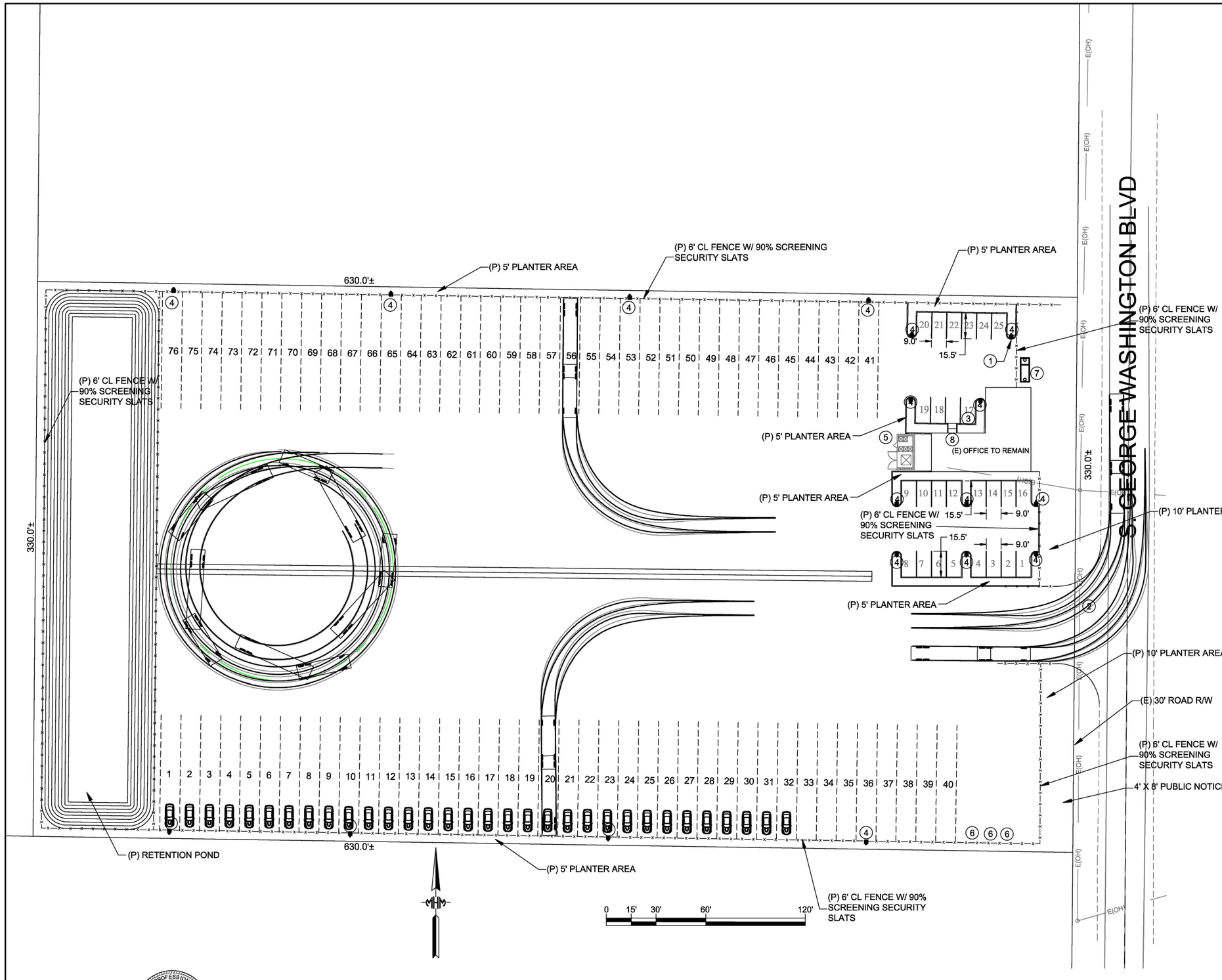
The Project is not expected to adversely affect any existing or proposed bicycle, transit, or pedestrian facilities.

Safety Analysis performed by analyzing five years of collision data (October 1, 2017 – September 30, 2022) obtained from the Caltrans Traffic Accident Surveillance and Analysis Systems (TASAS) for the study roadway segment on SR 113 to identify high collision locations and common collision characteristics. It was found to be unlikely that the addition of Project traffic would result in a significant change in collision rates at the Caltrans study facilities.

OPR guidance states that retail uses less than 50,000 square feet can typically be defined as local-serving. The existing office on the proposed Truck Yard would be less than 50,000 square feet and would provide a local option for customers to store trucks, reducing the need for patrons to make longer-distance or out-of-direction trips to the next-closest truck storage yard. Based on these attributes, the Project may be presumed to be local-serving and produce a less than significant VMT impact.

ATTACHMENT A

PROJECT SITE PLAN



PARKING :

PROJECT PROVIDED:

REQUIRED NUMBER OF CAR PARKING STALLS =
30 TRUCKS / 1.5 + 2*2,150/1000 = 25

TOTAL NUMBER OF CAR PARKING STALLS =
25 STALLS (INCLUDING 1 ACCESSIBLE PARKING STALL)

PARKING DIMENSIONS:

STANDARD STALL SIZE = 9' X 15.5' AND 9' X 18'

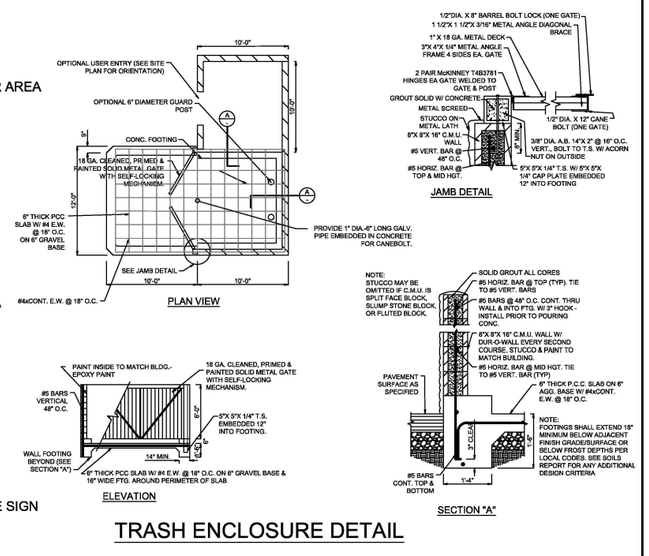
STALL DRIVE ISLE = 27'

STANDARD TRUCK STALL SIZE = 12' X 70'

CURB STOPS USED AT BACK OF STALLS FOR TRUCK AND PASSENGER VEHICLES FOR PROTECTION OF FENCE, LANDSCAPING, AND BUILDINGS

CONSTRUCTION NOTES:

1. CONSTRUCT 6" PCC CURB PER COUNTY DETAIL H-2 ON SHEET C6
2. CONSTRUCT COMMERCIAL DRIVEWAY PER COUNTY DETAIL H-12 ON SHEET C6
3. ACCESSIBLE PARKING STALL
4. SITE LIGHTING
5. TRASH ENCLOSURE
6. BATHROOM TRAILER
7. INSTALL NEW HOLDING TANK FOR SEPTIC SYSTEM
8. CASE F ADA RAMP (SEE SHT DT-1 FOR MORE DETAILS)



TRASH ENCLOSURE DETAIL

REGISTERED PROFESSIONAL ENGINEER
KYLE A. SANCHEZ
No. C93438
CIVIL
STATE OF CALIFORNIA

REV.	DATE	BY	APPR.	DESCRIPTION

DESIGNED BY: KAS
DRAWN BY: KAS
CHECKED BY: JSM
JOB NO.: 23-118
FILE NAME: 23118MAST

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 ▬ 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

M·H·M
ENGINEERS & SURVEYORS SINCE 1892
ENGINEERING-SURVEYING
1204 "E" STREET
MARYSVILLE, CALIF. 95901-0053
Ph: (530)742-6485/Fax(530)742-5639

JASKARAN SANGHA
NEW TRUCK YARD
8709 S GEORGE WASHINGTON BLVD
APN 025-030-004

LAYOUT AND PAVEMENT DELINEATION PLAN

PD-1
DATE: 04/28/2023
SHEET 3 | SHEETS 7

ATTACHMENT B

TRAFFIC COUNTS

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

SR 113 N/O 8709 S George Washington Blvd

Day: Tuesday
Date: 6/13/2023

City: Yuba City
Project #: CA23_070136_001

DAILY TOTALS	NB	SB	EB	WB	Total
	3,416	3,079	0	0	6,495

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	18		10		0	0	28		12:00	25		32		0	0	57	
0:15	7		2		0	0	9		12:15	33		24		0	0	57	
0:30	4		4		0	0	8		12:30	29		46		0	0	75	
0:45	5	34	1	17	0	0	6	51	12:45	32	119	36	138	0	0	68	257
1:00	10		1		0	0	11		13:00	48		29		0	0	77	
1:15	8		6		0	0	14		13:15	35		28		0	0	63	
1:30	2		0		0	0	2		13:30	49		41		0	0	90	
1:45	3	23	0	7	0	0	3	30	13:45	41	173	28	126	0	0	69	299
2:00	1		2		0	0	3		14:00	38		26		0	0	64	
2:15	6		2		0	0	8		14:15	38		42		0	0	80	
2:30	5		1		0	0	6		14:30	58		33		0	0	91	
2:45	4	16	0	5	0	0	4	21	14:45	48	182	40	141	0	0	88	323
3:00	1		4		0	0	5		15:00	52		25		0	0	77	
3:15	6		4		0	0	10		15:15	77		24		0	0	101	
3:30	2		4		0	0	6		15:30	88		44		0	0	132	
3:45	5	14	8	20	0	0	13	34	15:45	87	304	42	135	0	0	129	439
4:00	7		12		0	0	19		16:00	110		24		0	0	134	
4:15	3		19		0	0	22		16:15	121		26		0	0	147	
4:30	0		9		0	0	9		16:30	86		40		0	0	126	
4:45	5	15	23	63	0	0	28	78	16:45	169	486	23	113	0	0	192	599
5:00	2		41		0	0	43		17:00	146		33		0	0	179	
5:15	6		66		0	0	72		17:15	120		42		0	0	162	
5:30	8		77		0	0	85		17:30	109		24		0	0	133	
5:45	10	26	75	259	0	0	85	285	17:45	124	499	28	127	0	0	152	626
6:00	6		116		0	0	122		18:00	100		35		0	0	135	
6:15	9		138		0	0	147		18:15	97		36		0	0	133	
6:30	21		103		0	0	124		18:30	111		29		0	0	140	
6:45	22	58	83	440	0	0	105	498	18:45	92	400	26	126	0	0	118	526
7:00	22		102		0	0	124		19:00	79		23		0	0	102	
7:15	17		97		0	0	114		19:15	48		40		0	0	88	
7:30	24		88		0	0	112		19:30	58		20		0	0	78	
7:45	23	86	75	362	0	0	98	448	19:45	44	229	14	97	0	0	58	326
8:00	22		58		0	0	80		20:00	42		21		0	0	63	
8:15	34		77		0	0	111		20:15	40		14		0	0	54	
8:30	26		72		0	0	98		20:30	26		16		0	0	42	
8:45	20	102	52	259	0	0	72	361	20:45	29	137	9	60	0	0	38	197
9:00	24		46		0	0	70		21:00	22		9		0	0	31	
9:15	27		55		0	0	82		21:15	16		16		0	0	32	
9:30	33		54		0	0	87		21:30	25		12		0	0	37	
9:45	18	102	40	195	0	0	58	297	21:45	12	75	12	49	0	0	24	124
10:00	29		31		0	0	60		22:00	22		8		0	0	30	
10:15	18		56		0	0	74		22:15	12		12		0	0	24	
10:30	34		40		0	0	74		22:30	15		5		0	0	20	
10:45	30	111	28	155	0	0	58	266	22:45	14	63	9	34	0	0	23	97
11:00	34		37		0	0	71		23:00	8		7		0	0	15	
11:15	30		31		0	0	61		23:15	17		6		0	0	23	
11:30	28		36		0	0	64		23:30	8		7		0	0	15	
11:45	32	124	24	128	0	0	56	252	23:45	5	38	3	23	0	0	8	61
TOTALS		711		1910				2621	TOTALS		2705		1169				3874
SPLIT %		27.1%		72.9%				40.4%	SPLIT %		69.8%		30.2%				59.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,416	3,079	0	0	6,495

AM Peak Hour	10:30	6:00					6:15		PM Peak Hour	16:45	14:00					16:45		
AM Pk Volume	128	440					500		PM Pk Volume	544	141					666		
Pk Hr Factor	0.941	0.797					0.850		Pk Hr Factor	0.805	0.839					0.867		
7 - 9 Volume	188	621	0	0			809		4 - 6 Volume	985	240			0	0	1225		
7 - 9 Peak Hour	7:45	7:00					7:00		4 - 6 Peak Hour	16:45	16:30					16:45		
7 - 9 Pk Volume	105	362	0	0			448		4 - 6 Pk Volume	544	138			0	0	666		
Pk Hr Factor	0.772	0.887	0.000	0.000			0.903		Pk Hr Factor	0.805	0.821			0.000	0.000	0.867		

ATTACHMENT C

SYNCHRO HCM 6TH EDITION REPORTS

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	2	3	86	362	6
Future Vol, veh/h	6	2	3	86	362	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	3	93	393	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	496	397	400	0	-	0
Stage 1	397	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	533	652	1159	-	-	-
Stage 1	679	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	531	652	1159	-	-	-
Mov Cap-2 Maneuver	531	-	-	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	925	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1159	-	557	-	-
HCM Lane V/C Ratio	0.003	-	0.016	-	-
HCM Control Delay (s)	8.1	0	11.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	6	7	544	122	2
Future Vol, veh/h	2	6	7	544	122	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	7	8	591	133	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	741	134	135	0	-	0
Stage 1	134	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	384	915	1449	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	381	915	1449	-	-	-
Mov Cap-2 Maneuver	381	-	-	-	-	-
Stage 1	885	-	-	-	-	-
Stage 2	544	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1449	-	678	-	-
HCM Lane V/C Ratio	0.005	-	0.013	-	-
HCM Control Delay (s)	7.5	0	10.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	2	3	95	398	6
Future Vol, veh/h	6	2	3	95	398	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	2	3	103	433	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	546	437	440	0	-	0
Stage 1	437	-	-	-	-	-
Stage 2	109	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	499	620	1120	-	-	-
Stage 1	651	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	498	620	1120	-	-	-
Mov Cap-2 Maneuver	498	-	-	-	-	-
Stage 1	649	-	-	-	-	-
Stage 2	916	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1120	-	524	-	-
HCM Lane V/C Ratio	0.003	-	0.017	-	-
HCM Control Delay (s)	8.2	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	6	7	599	134	2
Future Vol, veh/h	2	6	7	599	134	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	7	8	651	146	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	814	147	148	0	-	0
Stage 1	147	-	-	-	-	-
Stage 2	667	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	347	900	1434	-	-	-
Stage 1	880	-	-	-	-	-
Stage 2	510	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	344	900	1434	-	-	-
Mov Cap-2 Maneuver	344	-	-	-	-	-
Stage 1	872	-	-	-	-	-
Stage 2	510	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1434	-	641	-	-
HCM Lane V/C Ratio	0.005	-	0.014	-	-
HCM Control Delay (s)	7.5	0	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

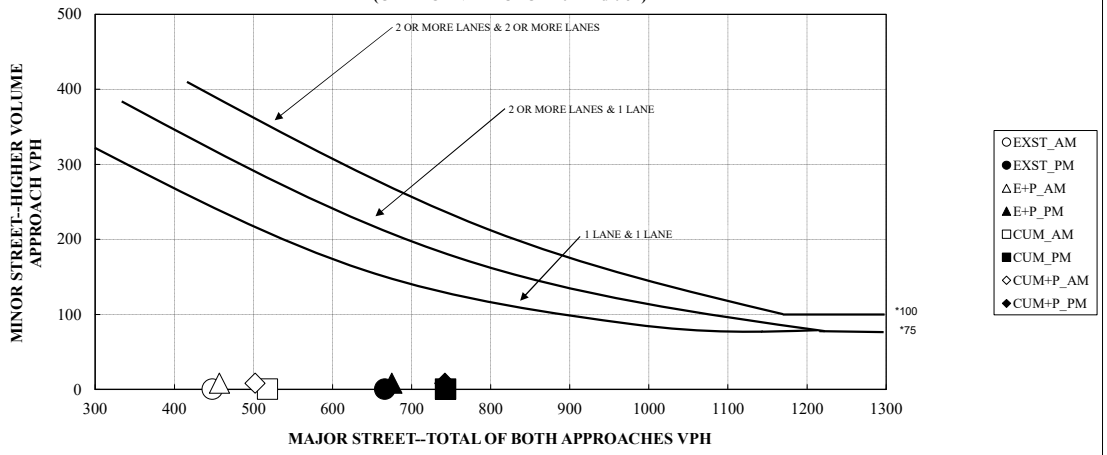
ATTACHMENT D

CA MUTCD PEAK HOUR SIGNAL WARRANT #3 WORKSHEET

CA SIGNAL WARRANT 3 ANALYSIS

SCENARIOS: "AM/PM PEAK HOUR" CONDITIONS

FIGURE 4C-4 WARRANT 3 PEAK HOUR (70% FACTOR)
(COMMUNITIES LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREETS)
(CALIFORNIA MUTCD 2014 Edition)



Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

SCENARIO	APPROACH(ES)		WARRANT MET?
	MAJOR	MINOR	
EXST_AM	448	0	NO
EXST_PM	666	0	NO
E+P_AM	457	8	NO
E+P_PM	675	8	NO
CUM_AM	518	0	NO
CUM_PM	743	0	NO
CUM+P_AM	502	8	NO
CUM+P_PM	742	8	NO

Note: Major approach is the total of both approaches. Minor approach is the highest of both approaches.

Date: **July 26, 2023** Intersection No.: **1**

Intersection: **S George Washington Blvd & Project Dwy**

Number of lanes on MAJOR street: **1**

Number of lanes on MINOR street: **1**

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

ATTACHMENT E

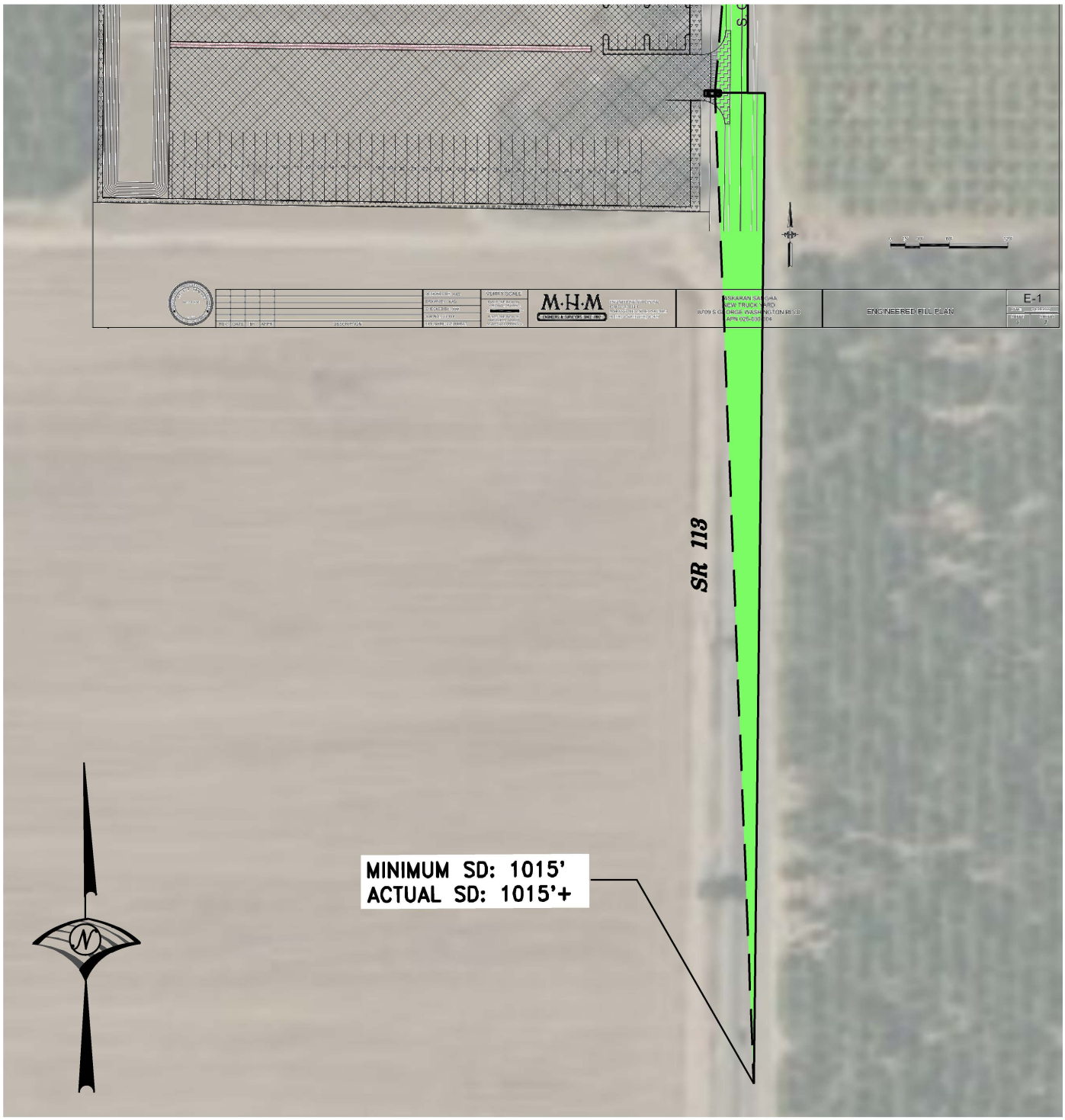
CORNER SIGHT DISTANCE EXHIBITS

CORNER SIGHT DISTANCE - LEFT TURN FROM STOP

SANGHA TRUCK YARD DRIVEWAY & SR 113

SUTTER COUNTY, CALIFORNIA

JULY, 2023



LEGEND

VISIBLE AREA

LINE OF SIGHT — —— —

150' 75' 0 150'

SCALE: 1" = 150'

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME
3301 C St, Bldg. 100-B Tel 916.341.7760
Sacramento, CA 95816 Fax 916.341.7767

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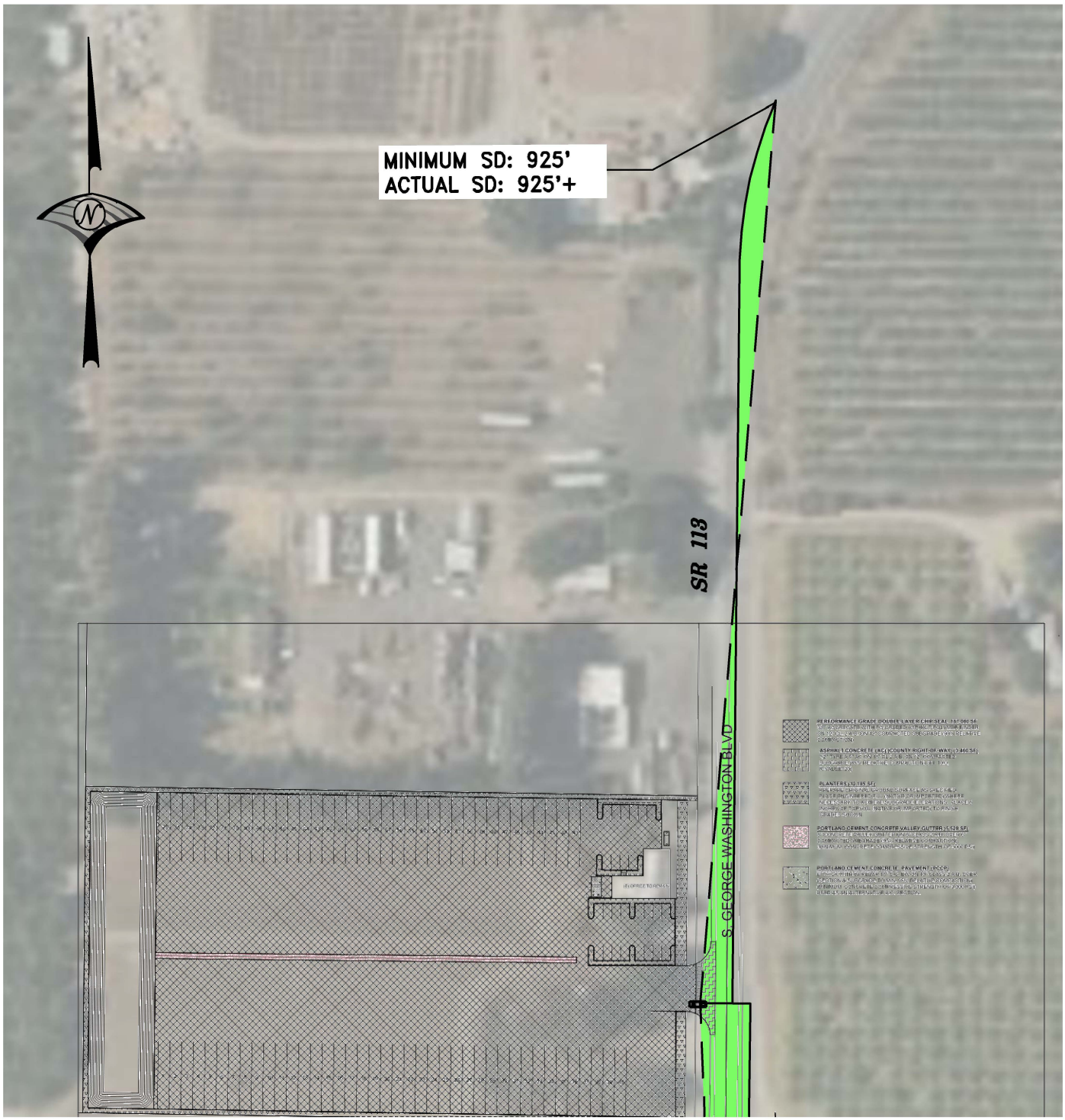
CORNER SIGHT DISTANCE - RIGHT TURN FROM STOP

SANGHA TRUCK YARD DRIVEWAY & SR 113

SUTTER COUNTY, CALIFORNIA

JULY, 2023



LEGEND

VISIBLE AREA

LINE OF SIGHT

150' 75' 0 150'

SCALE: 1" = 150'

WOOD RODGERS
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3301 C St, Bldg. 100-B Tel 916.341.7760
Sacramento, CA 95816 Fax 916.341.7767

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