

Yuba-70

Continuous Passing Lanes Project

YUBA COUNTY, CALIFORNIA

03-Yub-70 (PM 16.2/25.8)

03-3F283/0318000186

Draft Environmental Impact Report/ Environmental Assessment



**Prepared by the
State of California Department of Transportation**

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 U.S.C. 327 and the Memorandum of Understanding dated December 23, 2016 and executed by the Federal Highway Administration (FHWA) and Caltrans.

April 2020



General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), has prepared this Environmental Impact Report/Environmental Assessment (EIR/EA), which examines the potential environmental impacts of the alternatives being considered for the proposed project in Yuba County, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA). Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. The document will be available on the web at: <https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental-planning/d3-environmental-docs>
- Caltrans is committed to the safety and well-being of our community members, employees and their families. In light of the developments regarding COVID-19 and Governor Newsom's guidance regarding public gatherings, we are postponing open house events intended for community members to view displays, review and comment on environmental documents and speak with Caltrans staff members about the project. To keep the public informed, we will produce a video presentation about the project. Community members will be able to submit comments and questions via email or postal mail. Watch for the video on the Caltrans District 3 YouTube channel at: <https://bit.ly/2wX4Rfl>
- and/or send **written comments** to the Department by the deadline May 15, 2020:
- send comments via postal mail to:
California Department of Transportation
Environmental Management M3 Branch
703 B Street, Marysville, CA 95901
Attn.: Yuba 70 Passing Lanes Project
- send comments via email to: uba.70.passing.lanes.project@dot.ca.gov

What happens next:

After comments are received from the public and reviewing agencies, Caltrans, as assigned by the Federal Highway Administration (FHWA), may 1) give environmental approval to the proposed project, 2) do additional environmental studies, or 3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and construct all or part of the project.

Printing this document: To save paper, this document has been set up for two-sided printing (to print the front and back of a page). Blank pages occur where needed throughout the document to maintain proper layout of the chapters and appendices.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Cameron Knudson, Project Manager, Department of Transportation, 703 B Street; 530-218-1820 (Voice), or use the California Relay Service 1-800-735-2929 (TTY), 1-800-735-2929 (Voice), or 711.

Yuba-70 Continuous Passing Lanes Project
Yuba County, Postmiles 16.2/25.8

**DRAFT ENVIRONMENTAL IMPACT REPORT/
ENVIRONMENTAL ASSESSMENT**

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 U.S. Code 4332(2)(C)

THE STATE OF CALIFORNIA
Department of Transportation

March 26, 2020
Date

Suzanne Melim
Suzanne Melim
Acting Division Chief
North Region Environmental
California Department of Transportation
CEQA/NEPA Lead Agency

Summary

S.1 NEPA Assignment

California participated in the “Surface Transportation Project Delivery Pilot Program” (Pilot Program) pursuant to 23 United States Code (USC) 327, for more than 5 years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (Public Law 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the California Department of Transportation (Caltrans) entered into a Memorandum of Understanding (MOU) pursuant to 23 USC 327 (National Environmental Policy Act [NEPA] Assignment MOU) with the Federal Highway Administration (FHWA). The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016, for a term of 5 years. In summary, Caltrans continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to Caltrans under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

The proposed project is a joint project by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Caltrans is the lead agency under NEPA. Caltrans is also the lead agency under CEQA. In addition, FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, often a “lower level” document is prepared for NEPA. One of the most common joint document types is an Environmental Impact Report/Environmental Assessment (EIR/EA).

After receiving comments from the public and reviewing agencies, a Final EIR/EA will be prepared. Caltrans may prepare additional environmental and/or engineering studies to address comments. The Final EIR/EA will include responses to comments received on the Draft EIR/EA and will identify the preferred alternative. If the decision is made to approve the project, a Notice of Determination will be published for compliance with CEQA, and Caltrans will decide whether to issue a Finding of No Significant Impact

(FONSI) or require an Environmental Impact Statement (EIS) for compliance with NEPA. A Notice of Availability (NOA) of the FONSI will be sent to the affected units of federal, state, and local government, and to the State Clearinghouse in compliance with Executive Order 12372.

S.2 Introduction

Within the project limits of the safety project, EA 03-4F380, where one lane of through traffic is constructed in a given direction, this project, EA 03-3F283, will construct an additional 12-ft lane with an 8-ft shoulder to achieve a continuous passing lane in each direction throughout the project limits. The Clear Recovery Zone (CRZ) constructed under the safety project, EA 03-4F380, will be perpetuated in this project and having minimum width of 20-ft. The CRZ will incorporate side slopes 4:1 or flatter and remove any physical obstructions such as trees, utility poles, and other fixed objects. Roadside ditches will be constructed outside the CRZ. There are numerous school bus stops throughout the project limits; therefore, in designated locations the shoulder width will be increased to 14-ft to provide areas for school buses to pull over and give students safer access on and off the bus. Where needed, existing driveways along the corridor will be modified to conform to the widened highway. As warranted, driveway culverts will be replaced to convey drainage flows in the roadside ditches. In addition, there will be shifts in the horizontal alignment and adjustments to the vertical profile to minimize impacts on residences and utilities. Existing cross culverts will be replaced or extended as needed. Caltrans is the lead agency under both CEQA and NEPA.

S.3 Overview of Project Area

State Route (SR) 70 is an Interregional Road System Route and the primary north-south travel route through Yuba County. Yuba County is dominated by agricultural land and mountainous terrain and has experienced moderate growth over the last several decades, most of which is concentrated in Marysville. The proposed project would extend 9.6 miles on SR 70 (Post Mile 16.2 to 25.8) from Laurellen Road to Honcut Creek Bridge in Yuba County, California. SR 70 in Yuba County north of Marysville, is a two-lane rural highway through agricultural land. Figures 1 and 2 show the project location and project vicinity.

According to the Yuba County 2030 General Plan, all of the land surrounding the project area is designated as Natural Resources. The intent of the Natural Resources land use designation is to conserve and provide natural habitat, watersheds, scenic resources, cultural resources, recreational amenities, agricultural and forest resources, wetlands, woodlands, minerals, and other resources for sustainable use, enjoyment, extraction, and processing. Most of the land within the study area is zoned as Exclusive Agriculture Zone, and a few parcels are zoned as Agricultural Industrial, Agricultural/Rural Residential, and Rural Commercial.

The project vicinity contains several projects in the planning stages. These projects, which are listed in Table S-1, are within 2 miles of SR 70.

Table S-1. Planned Projects in the Vicinity of SR 70

Name and Address	Jurisdiction	Description	Status
SR 70 Simmerly Slough Bridge Replacement near Marysville	Yuba County	Replace bridge	Completion Year 2020
SR 70 widening, Segments 4 & 5	Yuba County	Widening of SR 70 from PM 16.2 to PM 25.8 from Laurellen Road to Honcut Creek Bridge north of Marysville	Completion Year 2021
SR 70 in and near Marysville, SR 70, from Marysville Underpass to north of Laurellen Road	Yuba County	Roadway rehabilitation	Completion Year 2021
Marysville Medical Arts District Transportation Development at 5th Street, from SR 70 to J Street, including the Medical Arts District. Also 2nd St.) from SR 70 to J Street, including the Medical Arts District.	Yuba County	Extend and realign	Completion Year 2025
Bridge Preventive Maintenance at various bridges in Yuba County	Yuba County	Conduct preventative maintenance	Completion Year 2022
SR 70 Corridor Improvements, Segments 1 and 2	Butte County	Widening and other improvements	Completion Year 2022
SR 70 Corridor Improvements Segment 3	Butte County	Widening and other improvements	Completion Year 2023
Rio d'Oro Specific Plan, approximately 11 miles north of the project area between Palermo Road to the south and Ophir Road to the north	Butte County	Residential, commercial, and developed parkland between Palermo Road to the south and Ophir Road to the north	Completion Year 2035
Highway Improvements to SR 70 in Marysville from PM 14.9 to PM 15.6	Yuba County	Highway improvements, bridge replacement, and undercrossings from 14 th Street to 0.1 mile south of Cemetery Road	Completion Year 2026
Camp Fire Debris Clean Up	Butte County	Truck trips from ongoing debris removal in Paradise, Butte County.	Ongoing
Hard Rock Casino	Yuba County	New casino and hotel development approximately 9 miles south of the project limits, on 40-Mile Road, between SR 70 and SR 65.	Completion Year 2019

S.4 Purpose and Need

Project Purpose

The purpose of this project is to achieve the ultimate facility as outlined in the 2014 Route 70 Transportation Concept Report (TCR). Improved travel times along the corridor will result in greater reliability and efficiency for the movement of goods, provide better connectivity between Yuba County and the Sacramento Valley, and support the overall economic viability of the Yuba County region. This project will address operational deficiencies in the corridor, but these alterations also improve the overall safety of travelers within the corridor.

Project Need

The project is needed because there are operational concerns along the corridor. Improved reliability of the SR 70 corridor is needed to prevent lost revenues of local industries due to accidents or operational deficiencies. Furthermore, improved travel times are needed to improve regional connectivity and the overall economic viability of the Yuba County region. An additional project need is based upon economic viability and goods movement along the corridor. The largest industries in the Yuba County area are "highway dependent," and require reliable access to and from SR 70. It has been observed that goods movement within the regional and local supply chain can be heavily affected by the highway conditions. With the conversion from a 3-lane to a 5-lane cross section a reduction of fatality and injury collisions would be expected.

S.5 Proposed Action

The project under consideration in this EIR/EA is a modification the existing lanes and shoulders. The project involves widening SR 70 between Laurellen Road and the Butte/Yuba County line to provide a five-lane cross-section within the full postmile limits; PM 16.2 – 25.8. Two 12-foot travel lanes and 8-foot shoulder would be provided in each direction with a 14-foot wide continuous center Two Way Left Turn Lane (TWLTL) bounded by a minimum 20-foot Clear Recovery Zone (CRZ). The CRZ will incorporate side slopes of 4:1 or flatter and necessitate removal of any physical obstructions such as trees, utility poles, and other fixed objects.

Additional project elements include the following:

- Construction of roadside ditches outside the CRZ.
- Construction of County-maintained road intersections to facilitate the movement of tractor trailers and farming equipment.
- Extension or replacement of existing cross culverts as needed.
- Replacement of driveway culverts to convey drainage flows to the roadside ditches, as warranted.
- Minor shifting of the vertical profile and horizontal alignment as needed.

- Modification of existing driveways along the corridor, where needed, to conform to the widened highway.
- Relocation of utilities.

Two build alternatives have been developed for the roadway improvements. Alternative 1 proposes the addition of a 14-foot-wide paved striped TWLTL. This TWLTL would create a refuge for drivers turning left in and out of traffic. At county-maintained roads and certain agriculture-related businesses, the TWLTL would be striped as a left-turn lane.

Alternative 2 would separate traffic with a paved 14-foot median and concrete barrier. Vehicles entering the highway from homes and businesses could only turn right onto SR 70 and signalized intersections will be placed periodically throughout the project to allow U-turns for change in direction of travel.

S.6 Joint California Environmental Quality Act/National Environmental Policy Act Documentation

The proposed project is subject to Federal, as State environmental review requirements because Caltrans proposes the use of Federal funds from FHWA and/or the project requires an approval from FHWA. Project documentation, therefore, has been prepared in compliance with both CEQA and NEPA. Under CEQA, Caltrans is the lead agency. FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the MOU dated December 23, 2016 and executed by FHWA and Caltrans. With NEPA Assignment, FHWA assigned and Caltrans assumed all of the USDOT Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions (CE) that FHWA assigned to Caltrans under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, quite often a "lower level" document is prepared for NEPA. One of the most common joint document types is an Environmental Impact Report/Environmental Assessment (EIR/EA).

After receiving comments from the public and reviewing agencies, a Final EIR/EA will be prepared. Caltrans may prepare additional environmental and/or engineering studies to address comments. The Final EIR/EA will include responses to comments received on the Draft EIR/EA and will identify the preferred alternative. If the decision is made to approve the project, a Notice of Determination will be published for compliance with CEQA, and Caltrans will decide whether to issue a Finding of No Significant Impact (FONSI) or require an Environmental Impact Statement for compliance with NEPA. A Notice of Availability (NOA) of the FONSI will be sent to the affected units of Federal,

State, and local government, and to the State Clearinghouse in compliance with Executive Order 12372.

S.7 Potential Environmental Consequences and Avoidance, Minimization and/or Mitigation Measures

Project impacts would occur in the following resource areas: farmlands, community impacts, traffic/transportation, visual/aesthetics, water quality, geology/soils, paleontology, hazardous waste and materials, air quality, noise, natural communities, plant species, animal species, endangered species, and invasive species. The project would not contribute to cumulatively considerable effects to the resources analyzed. Project effects under NEPA are discussed fully in Chapter 2, *Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures*. Table S-3, located at the end of this summary, summarizes the impacts of the project under NEPA. Chapter 3, *California Environmental Quality Act Evaluation*, addresses impacts under CEQA. Table S-4, which follows Table S-3, summarizes the significance of impacts under CEQA.

S.8 Coordination with Other Public Agencies

S.8.1 Notice of Preparation

A Notice of Preparation (NOP) was published on February 11, 2020. It was filed with the State Clearinghouse and sent to the appropriate elected officials, agencies, and interested parties. A copy of the NOP is included in Appendix D, *Notice of Preparation*.

S.8.2 Necessary Permits and Approvals

In addition to the completion of CEQA and NEPA documentation and project approvals by the lead and responsible agencies, the following permits, licenses, agreements, and certifications (PLACs) are required for project construction (Table S-2).

Table S-2. Permits and Approvals

Agency	Permit/Approval	Status
Central Valley Regional Water Quality Control Board	Section 401 Water Quality Certification	Not yet initiated
U.S. Army Corps of Engineers	Section 404 authorization for fill of waters of the United States	Not yet initiated
Sacramento Metropolitan Air Quality Management District	Formal notification prior to construction	Not yet initiated
California Department of Fish and Wildlife	Streambed Alteration Agreement	Not yet initiated

Table S-3. Comparison of Alternatives
Human Environment
Land Use

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Consistency with Yuba County General Plan	Consistent with policy	Consistent	Consistent	None required
Consistency with Sacramento Area Council of Governments Metropolitan Transportation Plan/Sustainable Communities Strategy	Not consistent	Consistent	Consistent	None required

Farmland

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Effects on farmland	No effect	5.64 acres of farmland would be acquired	9.72 acres of farmland would be acquired	None required

Human Environment Growth

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Potential to induce growth	No effect	While the proposed project would create additional capacity on SR 70, since the project would widen an existing roadway alignment it is not anticipated to provide access to new areas or change accessibility. Project-related growth is not anticipated to occur.	While the proposed project would create additional capacity on SR 70, since the project would widen an existing roadway alignment it is not anticipated to provide access to new areas or change accessibility. Project-related growth is not anticipated to occur.	None required

Community Impacts

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Effects on community character, population, and cohesion	No effect	The proposed project would not change the rural character of the study area because it would neither alter the zoning within the area, nor provide access to areas that are currently undeveloped.	The proposed project would not change the rural character of the study area because it would neither alter the zoning within the area, nor provide access to areas that are currently undeveloped.	None required
Effects on relocation and real property acquisition	No effect	3 mobile homes, 8 residential displacements and 2 nonresidential displacements would occur	3 mobile homes, 8 residential displacements and 3 nonresidential displacements would occur	None required
Effects on environmental justice populations	No effect	No effect due to lack of environmental justice populations residing in the study area and available data	No effect due to lack of environmental justice populations residing in the study area and available data	None required

Human Environment

Utilities/Emergency Services

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Effects on public and private utilities	No effect	Planned or accidental temporary service interruptions during relocation of utilities during construction	Planned or accidental temporary service interruptions during relocation of utilities during construction.	Coordination with utility service providers prior to, during, and after construction to minimize disruption of services to customers in the area
Effects on police, fire, and emergency service providers	Shoulders create unsafe passing conditions for emergency service providers	Temporary delays in access could disrupt normal operations and emergency services during construction; benefits include improved response times of emergency services	Temporary delays in access could disrupt normal operations and emergency services during construction; benefits include improved response times of emergency services	A Transportation Management Plan (TMP) would be developed for use during project construction. The TMP would utilize strategies described in Caltrans' Transportation Management Plan Guidelines (TMP Guidelines) (Caltrans 2015), selected in accordance with the scale and scope of the project. The TMP Guidelines identify the general categories of public information, motorist information, incident management, construction strategies, demand management, and alternate routes or detours; Any required closures would be coordinated with emergency service providers so as not to hinder emergency responses

Human Environment

Traffic and Transportation/Pedestrian and Bicycle Facilities

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Existing (2018) operations	6 highway segments would operate at a deficient LOS during PM and 4 highway segments during AM hours	3 segments would worsen operation	3 segments would worsen operation	None required
Opening Year (2023) operations	Operations would worsen during opening year, and LOS would remain the same.	At opening year the project will perform at a LOS A.	At opening year the project will perform a LOS A	None required
Horizon Year (2043) operations	Operations under the horizon year (2043) would worsen under the no-build alternative due to increasing traffic volumes. Compared to existing (2018) conditions, the AM peak hour conditions would have one segment worsening from LOS C to D in the northbound direction and one segment worsening from LOS D to E. The PM peak hour would have all segments worsening from LOS D to E.	Similar to opening year (2023) conditions, the roadway segments widened to four lanes would have LOS A conditions.	Similar to opening year (2023) conditions, the roadway segments widened to four lanes would have LOS A conditions.	None required

Human Environment

Visual/Aesthetics

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Effects on scenic resources, visual character, and visual quality	No effect	Removal of trees and mature shrubs will be higher in the beginning, but with replanting in and around the cleared zones, the vegetated character of the roadway would be re-established. Addition of the roadway widening will have a moderate impact on the scenic quality	Removal of trees and mature shrubs will be higher in the beginning, but with replanting in and around the cleared zones, the vegetated character of the roadway would be re-established. Addition of the roadway widening will have a moderate impact on the scenic quality	Replace or Relocate Site Features and Landscaping Affected by the Project Apply Minimum Lighting Standards

Cultural Resources

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Effects on cultural resources	No effect	Low potential for buried archaeological sites, with an increased potential in areas adjacent to drainages and creeks	Low potential for buried archaeological sites, with an increased potential in areas adjacent to drainages and creeks	Implement Plan to Address Discovery of Unanticipated Buried Cultural Resources or Human Remains

Human Environment Physical Environment

Hydrology and Floodplain

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Impact drainage, flood flows, and floodplain encroachment	No effect	New impervious surfaces would increase post-project flows compared to pre-project flows; Cross culverts for drainage would be replaced as necessary to provide improved drainage capacity; No significant floodplain encroachment	New impervious surfaces would increase post-project flows compared to pre-project flows; Cross culverts for drainage would be replaced as necessary to provide improved drainage capacity; No significant floodplain encroachment	Compliance with necessary permits and requirements from regulatory agencies; side slopes of 4H:1V or less for the CRZ, which would maintain pre-project sheet-flow drainage patterns; permanent best management practices (BMPs) will be evaluated

Water Quality

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Increased runoff from added impervious surfaces	No effect	Addition of new impervious surfaces	Addition of new impervious surfaces	The proposed project would be designed in accordance with NPDES Permit requirements

Water quality impacts during construction and operation	No effect	Potential for short-term discharges of sediments, oil, grease, and chemical pollutants into nearby storm drains or Honcut Creek generated during construction; Potential long-term impacts from increased impervious area, operation and maintenance activities	Potential for short-term discharges of sediments, oil, grease, and chemical pollutants into nearby storm drains or Honcut Creek generated during construction; Potential long-term impacts from increased impervious area, operation and maintenance activities	NPDES Construction General Permit Coverage Implementation of the SWPPP, erosion and sediment control BMPs, Caltrans SWMP, applicable guidelines and requirements in the 2015 Caltrans Standard Specifications (CSS), and stormwater guidance measures will minimize the potential for construction-related surface water pollution and ensure that water quality will not be compromised during construction Permanent treatment BMP and design measures from Caltrans' Project Planning Design Guide (PPDG) Permanent treatment BMP and design measures from Caltrans' Project Planning Design Guide (PPDG) Improved storm drainage facilities would minimize the potential for discharges of pollutants to nearby storm drains and Honcut Creek
---	-----------	---	---	---

Geology/Soils/Seismic/Topography

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Risk of seismic hazard	No effect	Low risk of ground-shaking or failure	Low risk of ground-shaking or failure	Comply with recommended design parameters in accordance with Caltrans' Highway Design Manual (HDM) Minimize Impacts from Seismic Events
Risk of landslides	No effect	low risk for landslides	low risk for landslides	Comply with recommended design parameters in accordance with Caltrans' Highway Design Manual (HDM)

Increase in soil erosion rates and/or loss of topsoil	No effect	Ground disturbance could increase erosion and loss of topsoil; The potential is increased because of the low strength of the soils	Ground disturbance could increase erosion and loss of topsoil; The potential is increased because of the low strength of the soils	<p>Implement GEO-2: Minimize Soil Instability</p> <p>The proposed project would be designed in accordance with NPDES Permit requirements</p> <p>The proposed project would be designed in accordance with NPDES Permit requirements</p> <p>Implementation of the SWPPP, erosion and sediment control BMPs, Caltrans SWMP, applicable guidelines and requirements in the 2015 Caltrans Standard Specifications (CSS) would be implemented to prevent any construction materials or debris from entering surface waters or channels within the project vicinity. To prevent silt and sediment from entering surface waters, pollution prevention and erosion control BMPs would be implemented prior to, during, and after construction.</p>
Effects from subsurface road conditions	Would not improve; The highway may be more susceptible to cracking as a result of the low strength and high shrink-swell potential of the underlying soils	Measures would be implemented to address soil issues to minimize the risk of expansive, low strength soils	Measures would be implemented to address soil issues to minimize the risk of expansive, low strength soils	<p>BMPs would be implemented to address soil issues, minimizing the risk to construction workers or the traveling public</p> <p>Minimize Soil Instability</p>

Paleontology

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Damage to paleontological resources	No effect	Low to no potential to affect paleontological resources within the existing paved portion of the project area; low to moderate potential to impact paleontological resources in pervious areas disturbed at depths between 1-4 feet	Low to no potential to affect paleontological resources within the existing paved portion of the project area; low to moderate potential to impact paleontological resources in pervious areas disturbed at depths between 1-4 feet	Implement Construction Training Preparation of a Paleontological Mitigation Plan Construction Monitoring

Hazardous Waste/Materials

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Mitigation, and/or Mitigation Measures
Exposure to hazardous materials to humans or the environment	No effect	Potential exposure of humans and the environment to hazardous conditions from accidental release of hazardous materials during construction; Potential exposure of humans to lead chromate or other harmful chemicals from construction activities; Risk of encountering contaminated soil and exposure to hazardous chemicals from past pesticide/herbicide use during ground-disturbing activities	Potential exposure of humans and the environment to hazardous conditions from accidental release of hazardous materials during construction; Potential exposure of humans to lead chromate or other harmful chemicals from construction activities; Risk of encountering contaminated soil and exposure to hazardous chemicals from past pesticide/herbicide use during ground-disturbing activities	Avoid and Minimize the Potential for Effects from Hazardous Waste or Materials during Project Construction Conduct Sampling, Testing, Removal, Storage, Transportation, and Disposal of Yellow/White Traffic Striping along Existing Roadways Develop and Implement Plans to Address Worker Health and Safety Right of Way/Properties/Structures Survey and NESHAP Notification

Air Quality

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Mitigation, and/or Mitigation Measures
Project-level conformity CO	No effect	The project does not cause or contribute to any new localized CO, PM _{2.5} , and/or PM ₁₀ violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones during the timeframe of the transportation plan	The project does not cause or contribute to any new localized CO, PM _{2.5} , and/or PM ₁₀ violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones during the timeframe of the transportation plan	None required
Project-level conformity PM _{2.5}	No effect	The project does not cause or contribute to any new localized CO, PM _{2.5} , and/or PM ₁₀ violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones during the timeframe of the transportation plan	The project does not cause or contribute to any new localized CO, PM _{2.5} , and/or PM ₁₀ violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones during the timeframe of the transportation plan	None required
Roadway Vehicle Emissions/Criteria Pollutant Emissions	No effect	CO and NO _x emissions from the traffic operation in the opening year (2023) would not be changed between no-build and build alternatives. There are slight changes in CO emissions in build alternatives for the design year (2043) in comparison with those in the no-build alternative. The emissions of CO and NO _x in the future build alternatives would be lower than those in the baseline year.	CO and NO _x emissions from the traffic operation in the opening year (2023) would not be changed between no-build and build alternatives. There are slight changes in CO emissions in build alternatives for the design year (2043) in comparison with those in the no-build alternative. The emissions of CO and NO _x in the future build alternatives would be lower than those in the baseline year.	None required

Noise

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Minimization, and/or Mitigation Measures
Traffic noise	No effect, however future planned projects in the area would result in an increase in traffic noise	Under the design year, the increase in noise will be 1 to 3 dBA. Traffic noise impacts are predicted to occur because the predicted noise levels in the design-year approach or exceed the noise abatement criterion of 67 dBA.	Under the design year, the increase in noise will be 1 to 3 dBA. Traffic noise impacts are predicted to occur because the predicted noise levels in the design-year approach or exceed the noise abatement criterion of 67 dBA.	Noise abatement was considered. A noise barrier would not be feasible due to driveway access requirements to residences along the entire corridor. Noise barriers were therefore not evaluated further in this analysis.
Construction noise	No effect	Temporary increase in noise levels due to operation of construction equipment, construction activities, and implementation of detours; Construction noise would be intermittent and overshadowed by local traffic noise	Temporary increase in noise levels due to operation of construction equipment, construction activities, and implementation of detours; Construction noise would be intermittent and overshadowed by local traffic noise	None required

Energy

Impacts	No Build	Alternative 1	Alternative 2	Avoidance Minimization and/or Mitigation Measures
Energy demands	No effects	Temporary energy consumption during construction for use of construction equipment and on road vehicles	Temporary energy consumption during construction for use of construction equipment and on road vehicles	None required

Biological Environment Natural Communities

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Mitigation, and/or Mitigation Measures
Effects on Valley Foothill Riparian	No effect	Permanent loss of up to 0.24 acres and temporary disturbance due to vegetation trimming and removal Caltrans intends to mitigate through off site mitigation. Specific amount and ratios will determined through consultation with regulatory agencies.	Permanent loss of up to 0.24 acres and temporary disturbance due to vegetation trimming and removal Caltrans intends to mitigate through off site mitigation. Specific amount and ratios will determined through consultation with regulatory agencies.	Install Fencing and/or Flagging to Protect Sensitive Biological Resources Compensate for Impacts on Valley Foothill Riparian
Effects on Wildlife Corridors	No effect	The proposed project vicinity does not contain wildlife corridors	The proposed project vicinity does not contain wildlife corridors	None required

Wetland and Other Waters

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Mitigation, and/or Mitigation Measures
Effects on Wetlands and Other Waters	No effect	Permanent loss of up to 0.58 acres and temporary impacts due to project construction; All areas temporarily disturbed of the riparian wetland would be restored to pre-project contours and conditions Caltrans intends to mitigate through off site mitigation. Specific amount and ratios will determined through consultation with regulatory agencies.	Permanent loss of up to 0.58 acres and temporary impacts due to project construction; All areas temporarily disturbed of the riparian wetland would be restored to pre-project contours and conditions Caltrans intends to mitigate through off site mitigation. Specific amount and ratios will determined through consultation with regulatory agencies.	Implement water quality BMPs and SWPPP to protect water quality and prevent erosion, sedimentation, and construction-related surface water pollution in drainages and wetlands Compensate for Impacts on Riparian Wetland

Plant Species

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Mitigation, and/or Mitigation Measures
Effects on Special-Status Plants	No effect	The study area has low potential to support non-listed special-status plants; Removal of native oak trees in riparian wetland and valley foothill riparian natural communities and as many as 74 mature oak trees in landscaped areas or in ruderal habitat	The study area has low potential to support non-listed special-status plants; Removal of native oak trees in riparian wetland and valley foothill riparian natural communities and as many as 74 mature oak trees in landscaped areas or in ruderal habitat	Install Fencing and/or Flagging to Protect Sensitive Biological Resources Compensate for Impacts on Valley Foothill Riparian Compensate for Impacts on Riparian Wetland

Animal Species

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Mitigation, and/or Mitigation Measures
Effects on Non-Listed Special-Status Species	No effect	Seven non-listed special status wildlife species were identified as occurring or having the potential to occur in the project region. After review of species distribution and habitats requirements, only one of the 7 species was considered to potentially occur in the project vicinity. However, the nearest CNDDDB occurrence is 10.2 miles from the study area.	Seven non-listed special status wildlife species were identified as occurring or having the potential to occur in the project region. After review of species distribution and habitats requirements, only one of the 7 species was considered to potentially occur in the project vicinity. However, the nearest CNDDDB occurrence is 10.2 miles from the study area.	Install Fencing and/or Flagging to Protect Sensitive Biological Resources Compensate for Impacts on Valley Foothill Riparian Compensate for Impacts on Riparian Wetland Remove Vegetation during the Nonbreeding Season and Conduct Preconstruction Surveys for Nesting Migratory Birds, Including Special-Status Birds Avoid and Minimize the Spread of Invasive Plant Species during Project Construction and Restore Temporarily Disturbed Habitat
Effects on Migratory Birds	No effect	Removal of nesting and foraging habitat due to construction noise/activities; extension of the box culvert south of Honcut Creek could result in the injury to nesting birds, or removal or destruction of nests	Removal of nesting and foraging habitat due to construction noise/activities; extension of the box culvert south of Honcut Creek could result in the injury to nesting birds, or removal or destruction of nests	Install Fencing and/or Flagging to Protect Sensitive Biological Resources Compensate for Impacts on Valley Foothill Riparian Compensate for Impacts on Riparian Wetland Remove Vegetation during the Nonbreeding Season and Conduct Preconstruction Surveys for Nesting Migratory Birds, Including Special-Status Birds Avoid and Minimize the Spread of Invasive Plant Species during Project Construction and Restore Temporarily Disturbed Habitat

Threatened and Endangered Species

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Mitigation, and/or Mitigation Measures
Effects on valley elderberry longhorn beetle	No effect	Removal of a portion of the elderberry shrub cluster; however, the shrub is not functioning as habitat for valley elderberry longhorn beetle there would be no direct impact on the species	Removal of a portion of the elderberry shrub cluster; however, the shrub is not functioning as habitat for valley elderberry longhorn beetle there would be no direct impact on the species	Compensate for Impacts on Valley Foothill Riparian Remove Vegetation during the Nonbreeding Season and Conduct Preconstruction Surveys for Nesting Migratory Birds, Including Special-Status Birds
Effects on Swainson's Hawk	No effect	Removal of a minor amount of nesting and foraging habitat; However, this would be a minimal impact due to the limited scope of the project construction and the lack of occupied nests in the project area	Removal of a minor amount of nesting and foraging habitat; However, this would be a minimal impact due to the limited scope of the project construction and the lack of occupied nests in the project area	Install Fencing and/or Flagging to Protect Sensitive Biological Resources Compensate for Impacts on Valley Foothill Riparian Wetland Remove Vegetation during the Nonbreeding Season and Conduct Preconstruction Surveys for Nesting Migratory Birds, Including Special-Status Birds Avoid and Minimize the Spread of Invasive Plant Species during Project Construction and Restore Temporarily Disturbed Habitat

Invasive Species

Impact	No Build	Alternative 1	Alternative 2	Avoidance, Mitigation, and/or Mitigation Measures
Introduction and spread of invasive plant species	No Effect	During construction, areas where temporary disturbance occurs would be more susceptible to introduction and colonization or spread of invasive plants	During construction, areas where temporary disturbance occurs would be more susceptible to introduction and colonization or spread of invasive plants	Avoid and Minimize the Spread of Invasive Plant Species during Project Construction and Restore Temporarily Disturbed Habitat

Table S-4. Summary of CEQA Impacts 3.2.1 Aesthetics

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Have a substantial adverse effect on a scenic vista	NA	LTS	LTS	NA	NA	NA	NA
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	NA	LTS	LTS	NA	NA	NA	NA
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality	NA	LTS	LTS	NA	NA	NA	NA
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area	NA	No Impact	No Impact	NA	NA	NA	NA

3.2.3-Agricultural and Forest Resources

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
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	NA	LTS	LTS	NA	NA	NA	NA
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract	NA	No Impact	No Impact	NA	NA	NA	NA
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))	NA	No Impact	No Impact	NA	NA	NA	NA
d) Result in the loss of forest land or conversion of forest land to non-forest use	NA	No Impact	No Impact	NA	NA	NA	NA
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	NA	LTS	LTS	NA	NA	NA	NA

3.2.3—Air Quality

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Conflict with or obstruct implementation of the applicable air quality plan	NA	LTS	LTS	NA	NA	NA	NA
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard	NA	LTS	LTS	NA	NA	NA	NA
c) Expose sensitive receptors to substantial pollutant concentrations	NA	LTS	LTS	NA	NA	NA	NA
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people	NA	LTS	LTS	NA	NA	NA	NA

3.2.4—Biological Resources

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
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	NA	No Impact	No Impact	NA	NA	NA	NA
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 US Fish and Wildlife Service	NA	LTS	LTS	NA	NA	NA	NA
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means	NA	LTS	LTS	NA	NA	NA	NA
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites	NA	No Impact	No Impact	NA	NA	NA	NA
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance	NA	No Impact	No Impact	NA	NA	NA	NA
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	NA	No Impact	No Impact	NA	NA	NA	NA

3.2.5—Cultural Resources

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5	NA	No Impact	No Impact	NA	NA	NA	NA
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5	NA	LTS	LTS	NA	NA	NA	NA
c) Disturb any human remains, including those interred outside of dedicated cemeteries	NA	LTS	LTS	NA	NA	NA	NA

3.2.6—Energy

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation	NA	LTS	LTS	NA	NA	NA	NA
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	NA	No Impact	No Impact	NA	NA	NA	NA

3.2.7—Geology

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault ii) Strong seismic ground shaking iv) Landslides iii) Seismic-related ground failure, including liquefaction	NA	LTS	LTS	NA	NA	NA	NA
b) Result in substantial soil erosion or the loss of topsoil	NA	LTS	LTS	NA	NA	NA	NA
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse	NA	LTS	LTS	NA	NA	NA	NA
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	NA	LTS	LTS	NA	NA	NA	NA
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water	NA	No Impact	No Impact	NA	NA	NA	NA
f) directly or indirectly destroy a unique paleontological resources or site of unique geologic feature	NA	LTS	LTS	NA	NA	NA	NA

3.2-Greenhouse Gas Emissions

Impact	No Build Significance before Mitigation Alt.1 Alt.2	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
<p>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment</p> <p>b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases</p>	<p>Caltrans has used the best available information based to the extent possible on scientific and factual information, to describe, calculate, or estimate the amount of greenhouse gas emissions that may occur related to this project. The analysis included in the climate change section of this document provides the public and decision-makers as much information about the project as possible. It is Caltrans' determination that in the absence of statewide-adopted thresholds or GHG emissions limits, it is too speculative to make a significance determination regarding an individual project's direct and indirect impacts with respect to global climate change. Caltrans remains committed to implementing measures to reduce the potential effects of the project. These measures are outlined in the climate change section that follows the CEQA checklist and related discussions.</p>	N/A	N/A	N/A	N/A

3.2.9—Hazards and Hazardous Materials

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	NA	LTS	LTS	NA	NA	NA	NA
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	NA	LTS	LTS	NA	NA	NA	NA
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school	NA	No Impact	No Impact	NA	NA	NA	NA
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	NA	LTS	LTS	NA	NA	NA	NA
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	NA	No Impact	No Impact	NA	NA	NA	NA
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	NA	LTS	LTS	NA	NA	NA	NA

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires	NA	LTS	LTS	NA	NA	NA	NA
--	----	-----	-----	----	----	----	----

3.2.10—Hydrology and Water Quality

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality	NA	LTS	LTS	NA	NA	NA	NA
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin	NA	LTS	LTS	NA	NA	NA	NA
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i. result in substantial erosion or siltation on- or off-site; ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv. impede or redirect flood flows	NA	LTS	LTS	NA	NA	NA	NA

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation	NA	No Impact	No Impact	NA	NA	NA	NA
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan	NA	No Impact	No Impact	NA	NA	NA	NA

3.2.11—Land Use and Planning

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Physically divide an established community	NA	No Impact	No Impact	NA	NA	NA	NA
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	NA	No Impact	No Impact	NA	NA	NA	NA

3.2.12-Mineral Resources

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
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	NA	No Impact	No Impact	NA	NA	NA	NA
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	NA	No Impact	No Impact	NA	NA	NA	NA

3.2.13—Noise

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
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	NA	LTS	LTS	NA	NA	NA	NA
b) Generation of excessive groundborne vibration or groundborne noise levels	NA	LTS	LTS	NA	NA	NA	NA
c) For a project within the vicinity of a private airstrip or an airport land use plan, or where such a plan has 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	NA	No Impact	No Impact	NA	NA	NA	NA

3.2.14—Population and Housing

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)	NA	LTS	LTS	NA	NA	NA	NA
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere	NA	LTS	LTS	NA	NA	NA	NA

3.2.15—Public Services

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection Police protection Schools Parks Other Public Facilities	NA	LTS	LTS	NA	NA	NA	NA

3.2.16 Receration

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
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	NA	No Impact	No Impact	NA	NA	NA	NA
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	NA	No Impact	No Impact	NA	NA	NA	NA

3.2.17—Transportation/Traffic

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Conflict with an applicable plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities	NA	No Impact	No Impact	NA	NA	NA	NA
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)	NA	LTS	LTS	NA	NA	NA	NA
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)	NA	No Impact	No Impact	NA	NA	NA	NA
d) Result in inadequate emergency access	NA	LTS	LTS	NA	NA	NA	NA

3.2.19—Utilities and Service Systems

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Require or result in the construction of new or expanded water, wastewater treatment facilities or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects	NA	LTS	LTS	NA	NA	NA	NA
b) Have sufficient water supplies available to serve the project reasonably foreseeable future development during normal, dry and multiple dry years	NA	LTS	LTS	NA	NA	NA	NA
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	NA	LTS	LTS	NA	NA	NA	NA
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	NA	LTS	LTS	NA	NA	NA	NA
e) Comply with federal, state, and local management and reduction statutes and	NA	No Impact	No Impact	NA	NA	NA	NA

regulations related to solid waste							
------------------------------------	--	--	--	--	--	--	--

3.2.20—Wildfire

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
a) Substantially impair an adopted emergency response plan or emergency evacuation plan	NA	LTS	LTS	NA	NA	NA	NA
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	NA	No Impact	No Impact	NA	NA	NA	NA
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	NA	LTS	LTS	NA	NA	NA	NA
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	NA	LTS	LTS	NA	NA	NA	NA

3.2.21—Mandatory Findings of Significance

Impact	No Build Significance before Mitigation	Alt. 1 Significance before Mitigation	Alt. 2 Significance before Mitigation	Mitigation Measures	No Build	Alt. 1 Significance after Mitigation	Alt. 2 Significance after Mitigation
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	NA	LTS	LTS	NA	NA	NA	NA
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)	NA	LTS	LTS	NA	NA	NA	NA
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly	NA	LTS	LTS	NA	NA	NA	NA

Contents

Chapter 1	Proposed Project.....	4
1.1	Introduction	4
1.1.1	Overview of SR 70 in the Project Limits.....	4
1.2	Purpose and Need	6
1.2.1	Purpose	6
1.2.2	Need	6
1.2.3	Independent Utility and Logical Termini.....	7
1.3	Project Alternatives	12
1.3.1	Build Alternatives.....	12
1.3.2	No-Build (No-Action) Alternative.....	13
1.4	Permits and Approvals Needed.....	13
Chapter 2	Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	14
2.1	Human Environment.....	15
2.1.1	Existing and Future Land Use	15
2.1.2	Consistency with State, Regional and Local Plans and Programs	19
2.1.3	Farmland	21
2.1.4	Growth.....	23
2.1.5	Community Character and Cohesion.....	29
2.1.6	Relocations and Real Property Acquisition.....	32
2.1.7	Utilities and Emergency Services	33
2.1.8	Traffic and Transportation/Pedestrian and Bicycle Facilities	36
2.1.9	Visual/Aesthetics	44
2.1.10	Cultural Resources.....	47
2.2	Physical Environment.....	51
2.2.1	Hydrology and Floodplain	51
2.2.2	Water Quality and Storm Water Runoff	54
2.2.3	Geology/Soils/Topography	62
2.2.4	Paleontology.....	67
2.2.5	Hazardous Waste and Materials.....	71
2.2.6	Air Quality	77
2.2.7	Noise	92
2.2.8	Energy	100
2.3	Biological Environment.....	103
2.3.1	Natural Communities	103
2.3.2	Wetlands and Other Waters	108
2.3.3	Animal Species	111
2.3.4	Plant Species.....	116
2.3.5	Threatened and Endangered Species	121
2.3.6	Invasive Species.....	126
2.4	Cumulative Impacts.....	129
2.4.1	Farmland	129
2.4.2	Traffic and Transportation.....	130
2.4.3	Visual Resources.....	131

2.4.4	Hydrology and Water Quality	131
2.4.5	Water Quality and Storm Water Runoff	132
2.4.6	Geology, Soils, Seismicity, and Topography	133
2.4.7	Paleontological Resources	134
2.4.8	Air Quality	134
2.4.9	Noise	134
2.4.10	Biological Resources	135
2.4.11	Climate Change/Greenhouse Gas Emissions	135
Chapter 3	California Environmental Quality Act Evaluation	136
3.1	Determining Significance under the California Environmental Quality Act	136
3.2	CEQA Environmental Checklist.....	136
3.2.1	Aesthetics	137
3.2.2	Agriculture and Forest Resources	138
3.2.3	Air Quality	140
3.2.4	Cultural Resources	141
3.2.5	Biological Resources	142
3.2.6	Energy	143
3.2.7	Geology and Soils	143
3.2.8	Greenhouse Gas Emissions	145
3.2.9	Hazards and Hazardous Materials	146
3.2.10	Hydrology and Water Quality.....	148
3.2.11	Land Use and Planning	150
3.2.12	Mineral Resources	150
3.2.13	Noise	151
3.2.14	Population and Housing	152
3.2.15	Public Services.....	152
3.2.16	Recreation.....	153
3.2.17	Transportation	154
3.2.18	Tribal Cultural Resources.....	155
3.2.19	Utilities and Service Systems	156
3.2.20	Wildfire	157
3.2.21	Mandatory Findings of Significance.....	158
3.3	Wildfire	160
3.4	Climate Change	161
3.4.1	Regulatory Setting	162
3.4.2	Affected Environment	165
3.4.3	Project Analysis	169
3.4.4	Environmental Consequences	171
	CEQA CONCLUSION	174
	GREENHOUSE GAS REDUCTION STRATEGIES	174
	ADAPTATION	177
Chapter 4	Comments and Coordination.....	181
Chapter 5	List of Preparers	182
Chapter 6	Distribution List.....	183

List of Figures

Figure 1. Project Vicinity Map.....	10
Figure 2. Project Location Map.....	11
Figure 3. Land Use Designations	16
Figure 4. Zoning Map	17
Figure 5. Yuba County 2030 General Plan Farmland Map.....	27
Figure 6. Yuba County 2030 General Plan Valley Growth Boundary Map	28
Figure 7. Noise Levels of Common Activities	94
Figure 8. U.S. 2016 Greenhouse Gas Emissions.....	166
Figure 9. California 2016 Greenhouse Gas Emissions.....	166
Figure 10. Change in California GDP, Population, and GHG Emissions since 2000.....	167
Figure 11. Possible Use of Traffic Operation Strategies in Reducing On-road CO ₂ Emissions.....	170
Figure 12. California Climate Strategy.....	175

List of Tables

Table 1. Permits and Approvals Needed	13
Table 2. Road Construction Suitability of Major Soils in Project Area.....	64
Table 3. Air Quality Concentrations for the Past 4 Years Measured at Yuba-City Almond Street.....	81
Table 4. State and Federal Criteria Air Pollutant Effects and Sources.....	82
Table 5. Summary of Comparative Emissions Analysis.....	85
Table 6. Construction Emissions	90
Table 7. Noise Abatement Criteria.....	92
Table 8. Predicted Future Traffic Noise Levels Leq (h), dBA	96
Table 9. Land Cover Types in the Biological Study Area.....	103
Table 10. Impacts on Valley Foothill Riparian by Alternative	107
Table 11. Impacts on Riparian Wetland.....	107
Table 12. Non-Listed Special-Status Wildlife with Potential to Occur in the Vicinity of the Yuba 70 Passing Lanes Project Study Area.....	113
Table 13. Special-Status Plant Species with Potential to Occur in the Vicinity of the Yuba 70 Passing Lanes Project Study Area.....	119
Table 14. Invasive Plant Species Identified in the Biological Study Area.....	127
Table 15. GHG-Related Goals, Policies, and Strategies.....	167
Table 16. Daily VMT and Peak Hour GHG Comparison	172
Table 17. Annual VMT and GHG Emissions Comparison.....	172
Table 18. Construction Emissions to Roadways.....	174

Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) proposes a project on State Route (SR) 70 (Post Mile [PM] 16.2/25.8) from Laurellen Road to Honcut Creek Bridge [Bridge No. 16-0020] in Yuba County, California, north of Marysville. The total length of the project is 9.6 miles. Figures 1 and 2 show the project location and project vicinity.

Caltrans, as assigned by the Federal Highway Administration (FHWA), is the lead agency under the National Environmental Policy Act (NEPA) for this project. Caltrans is also the lead agency under the California Environmental Quality Act (CEQA).

The proposed project is consistent with the Caltrans 2014 Transportation Concept Report (TCR), a 20-year planning document that evaluates current and projected conditions along the route and communicates the vision for its development. The proposed project is included in the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan (MTP) that was adopted in November 2019 as project CAL18815. The proposed project is also included in the SACOG 2019-2022 Metropolitan Transportation Improvement Program (MTIP) as project CAL20795.

1.1.1 Overview of SR 70 in the Project Limits

SR 70 is an interregional Road System (IRRS) route. This route primarily serves to move people or goods from outside the immediate region through Yuba County. Transporting agricultural commodities to markets has made SR 70 a vital economic link to local farmers and agriculture-related businesses. Additionally, SR 70 has become a “gateway” route used to access multiple recreational destinations in the Sierra Nevada and serves as an alternative route to and from Nevada when Interstate 80 is closed due to an accident or weather conditions.

SR 70, north of Marysville in Yuba County is a two-lane rural highway through agricultural land. The highway presently has standard 12-foot lanes, with shoulder widths less than 8 feet in most areas. There are currently left-turn lanes at county road intersections. This portion of SR 70 runs through what is commonly called District 10, which is short for Reclamation District 10. Reclamation District 10 encompasses approximately 12,000 acres and includes 23 miles of levees. Forming the District’s boundaries are Honcut Creek to the north, the Marysville Levee to the south, the Feather River to the west, and the Union Pacific Railroad tracks to the east. The area includes 50 businesses (31 farms, 13 agriculture-related businesses, and 6 other) and over 450 residences. Since extensive farming activities take place throughout the project limits, farming and harvesting equipment share the road with the traveling public. Clusters of houses share frontage with the highway throughout the project limits.

The project limits include a section of SR 70 north of Marysville with a cross section that does not meet current standards for shoulder width and clear recovery zone (CRZ). In 2007, between PM 18.9/20.0, the highway was widened, and a two-way left-turn lane (TWLTL) was installed under Contract 03-4A570. In 2009, centerline ground-in rumble strips were also installed through the project limits, but cross-centerline collisions have continued to occur.

On March 30, 2015, a Project Study Report (PSR) was approved for proposed safety improvements on SR 70. Improvements consisted of two standard 12-foot lanes, 8-foot shoulders, a TWLTL where feasible, left-turn pockets at all county-maintained roads, and a 20-ft CRZ. This proposed safety project included two alternatives, a 3-lane and 5-lane widening with standard 8-foot shoulders and a TWLTL where feasible, as well as providing for a 20-foot CRZ.

Subsequently, Caltrans approved a Project Study Report (PSR) for the Yuba 70 Safety Project (EA: 03-4F380) on June 20, 2019. Initially, this project was a combined Safety/State Transportation Improvement Project or STIP job. The scope of work included capacity increasing features, resulting in a five-lane design. After feedback from a series of public meetings and due to lack of funding for the STIP portion, the project was rescoped as a Safety-only project providing signed slow-moving vehicles lanes less than 1 mile long at up to three locations in each direction.

On February 27 and 28, 2019, a State Route (SR) 70 Safety Audit Workshop was held as a collaborative effort of Caltrans District 3, the California Transportation Commission (CTC), the Sacramento Area Council of Governments (SACOG) and the Butte County Association of Governments (BCAG). One of the primary purposes of the study was to determine the net safety benefits of widening the corridor to the 5-lane ultimate concept facility on State Route 70 from Laurellen Road, north of Marysville, to the Butte/Yuba County Line (Post Mile 16.2 to 25.8). The SR 70 Safety Assessment Report concludes that an additional reduction of approximately 34 percent (from 4.06 to 2.68 collisions per MVM) for fatality and injury collisions could be expected with the conversion from a 3-lane to a 5-lane cross section based on the comparison of similar sites.

The proposed project would connect to two projects; one presently in construction and one planned for future construction. In the summer of 2019, at the southern end of the proposed project, construction was initiated for EA 03-1E060, the Simmerly Slough Bridge Replacement project.

In 2022, at the northern end of the proposed project, the Butte 70 Safety and Capacity Project (EA 03-3H930) will construct a five-lane facility. The proposed project does not conflict with other reasonably foreseeable transportation projects in this segment of SR 70.

Moreover, there is a safety project, EA 03-4F380 programmed in 2018 and approved in June 2019 that has identical project limits as this proposed project. The approved safety project (03-4F380) will construct a roadway prism with 12-foot lanes as well as a Two Way Left Turn Lane (TWLTL) with rumble strips and include designated turn pockets at county roads. Additionally, signed, slow moving vehicles lanes less than 1 mile in length will be

constructed for up to three locations in each direction to allow slow moving vehicles to pull over. Within the project limits of the safety project, EA 03-4F380, where one lane of through traffic is constructed in a given direction, this proposed project, EA 03-3F283, will construct an additional 12-foot lane with an 8-foot shoulder to achieve a continuous passing lane in each direction.

For both project alternatives, construction of this proposed project will result in continuous passing lanes in each direction. The 14-foot wide paved median included in Alternative 1 would be striped and serve as a continuous Two Way Left Turn lane (TWLTL) throughout the project limits, resulting in a five-lane facility. The 14-foot wide paved median included in Alternative 2 would contain a concrete barrier to separate traffic. Vehicles entering the highway from homes and businesses would only be able to turn right onto SR 70. Intermittent locations will be provided to accommodate out of direction travel. The type of improvements at these locations will be refined in the design phase.

While the various studies mentioned above considered various ways to improve SR 70 between Marysville and Oroville, the generally accepted vision was to construct a four-lane "Marysville By-Pass to Oroville Freeway" beginning at the SR 65/SR 70 split and extending to the southern limits of Oroville. This freeway was to provide regional connectivity between Sacramento, Marysville, Oroville, and Chico. Due to lack of funding and significant environmental impacts identified in the Draft Marysville By-Pass Value Analysis Study (Value Management Strategies 2001), the proposed by-pass and freeway were determined to be unviable and were not carried forward into the final stages of project development.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of this project is to achieve the ultimate facility as outlined in the 2014 Route 70 Transportation Concept Report (TCR). Improved travel times along the corridor will result in greater reliability and efficiency for the movement of goods, provide better connectivity between Yuba County and the Sacramento Valley, and support the overall economic viability of the Yuba County region. This project will address operational deficiencies in the corridor, but these improvements improve the overall safety of travelers within the corridor.

1.2.2 Need

The project is needed because there are operational concerns along the corridor. Improved reliability of the SR 70 corridor is needed to prevent lost revenues of local industries due to accidents or operational deficiencies. Furthermore, improved travel times are needed to improve regional connectivity and the overall economic viability of the Yuba County region. An additional project need is based upon economic viability and goods movement along the corridor. The largest industries in the Yuba County area are "highway dependent," and require reliable access to and from SR 70. It has been observed that goods movement

within the regional and local supply chain can be heavily affected by the highway conditions. With the conversion from a 3-lane to a 5-lane cross section a reduction of fatality and injury collisions would be expected.

1.2.3 Independent Utility and Logical Termini

FHWA regulations (23 Code of Federal Regulations [CFR] 771.111 [f]) require that the action evaluated:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope.
- Have independent utility or independent significance (be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made.
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

The need of the project is safety and operational concerns along the corridor. The purpose of the project is to further improve safety, goods movement and emergency evacuation along the corridor and will not require additional future improvements, therefore the project has independent utility. The project also connects logical termini in that the area studied encompasses a broad enough area to fully address environmental issues. The Office of Traffic Safety has established the project limits based on traffic collision data that show higher-than-statewide-average fatalities between PM 16.2 and PM 25.8.

The proposed project would connect to two projects; one presently in construction and one planned for future construction. At the south end of the proposed project in the summer of 2019, EA 03-1E060, the Simmerly Slough Bridge Replacement construction was initiated.

In 2022, at the north end of the proposed project, the Butte 70 Safety and Capacity Project will construct a five-lane facility. The proposed project does not conflict with other reasonably foreseeable transportation projects in this segment of SR 70.

Moreover, there is a safety project, EA 03-4F380 programmed in 2018 and approved in June 2019 that has identical project limits as this proposed project. The approved safety project (03-4F380) will construct a roadway prism with 12-foot lanes as well as a Two Way Left Turn Lane (TWLTL) with rumble strips and include designated turn pockets at county roads. Additionally, signed, slow moving vehicles lanes less than 1 mile in length will be constructed for up to three locations in each direction to allow slow moving vehicles to pull over. Within the project limits of the safety project, EA 03-4F380, where one lane of through traffic is constructed in a given direction, this proposed project, EA 03-3F283, will construct an additional 12-foot lane with an 8-foot shoulder to achieve a continuous passing lane in each direction.

For both project alternatives, construction of this proposed project will result in continuous passing lanes in each direction. The 14-foot wide paved median included in Alternative 1 would be striped and serve as a continuous Two Way Left Turn lane (TWLTL) throughout

the project limits, resulting in a five-lane facility. The 14-foot wide paved median included in Alternative 2 would contain a concrete barrier to separate traffic. Vehicles entering the highway from homes and businesses would only be able to turn right onto SR 70. Intermittent locations will be provided to accommodate out of direction travel. The type of improvements at these locations will be refined in the design phase.

Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are Alternative 1, Alternative 2, and the No-Build alternative.

The existing roadway consists of 12-foot lanes with shoulder widths varying from 0 to 8 feet throughout. There is a safety project, EA 03-4F380 programmed in the 2018 SHOPP, which will construct a roadway prism with 12-foot lanes as well as a Two Way Left Turn Lane (TWLTL), with rumble strips. In addition, county roads will have designated turn pockets and there will be several opportunities for slow moving vehicles to pull over in each direction of travel. The shoulder widths vary from 8 to 10 feet throughout and have rumble strips at the Edge of Traveled Way (ETW).

Within the project limits of the safety project, EA 03-4F380, where one lane of through traffic is constructed in a given direction, this project, EA 03-3F283, will construct an additional 12-foot lane with an 8-foot shoulder to achieve a continuous passing lane in each direction throughout the project limits. The Clear Recovery Zone (CRZ) constructed under the safety project, EA 03-4F380, will be perpetuated in this project and have a minimum width of 20 feet. The CRZ will incorporate side slopes of 4:1 or flatter and remove any physical obstructions such as trees, utility poles, and other fixed objects. Roadside ditches will be constructed outside the CRZ. There are numerous school bus stops throughout the project limits; therefore, in designated locations the shoulder width will be increased to 14 feet to provide areas for school buses to pull over and give students safer access on and off the bus. Where needed, existing driveways along the corridor will be modified to conform to the widened highway. As warranted, driveway culverts will be replaced to convey drainage flows in the roadside ditches. In addition, there will be shifts in the horizontal alignment and adjustments to the vertical profile to minimize impacts on residences and utilities. Existing cross culverts will be replaced or extended as needed.

Another key component of this project, EA 03-3F283, is the method used to separate opposing traffic flows. Alternative 1 proposes to keep the TWLTL that the safety project, EA 03-4F380, constructs. This “soft median” will allow a refuge for drivers turning left across traffic. Where dense clusters of homes occur, the median will be a TWLTL. At county-maintained roads, and certain ag-related businesses, the median will be a designated left turn pocket. See Attachment B, Typical Cross Sections and Layouts, Alternative 1, for more information. Alternative 2 proposes separating traffic with a Type 60 Concrete Barrier installed in the 14-foot paved median constructed by the safety project EA 03-4F380. Vehicles entering the highway from homes and businesses would only be able to turn right onto SR 70. Intermittent locations will be provided to accommodate out of direction travel. The type of improvements at these locations will be refined in the design phase.

The project will be designed as a conventional highway in rural, flat terrain with a minimum design speed of 55 mph.

For the Alternative 1, the project capital cost, including right of way and construction, is estimated to be \$19.4 million as of April 2020.

For Alternative 2 the project capital cost, including right of way and construction, is estimated to be \$25.80 million as of April 2020.

The proposed completion of construction for this project is in the fiscal year 2022/2023.

Figure 1. Project Vicinity Map

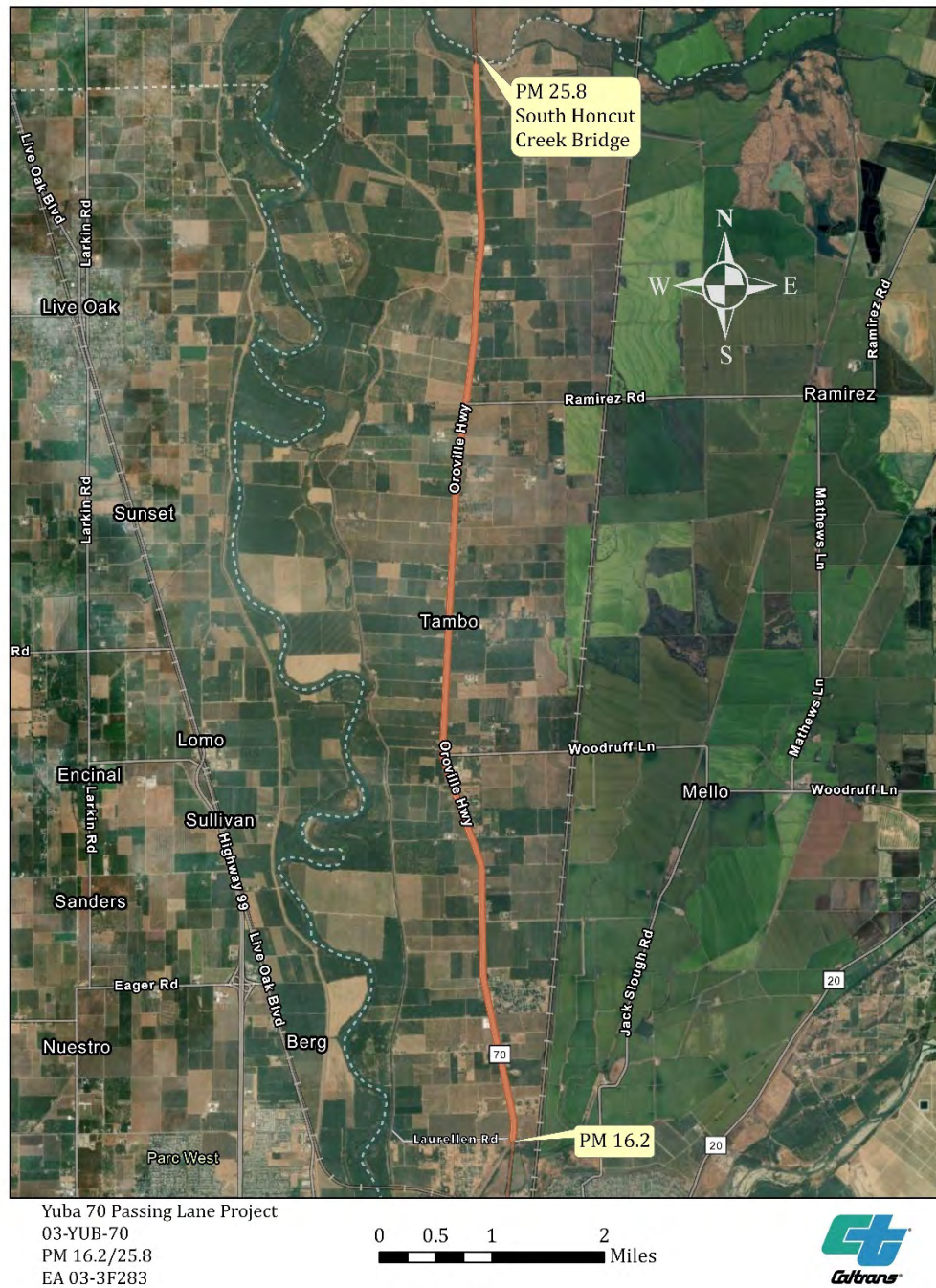


Figure 2. Project Location Map



1.3 Project Alternatives

Under evaluation for this project are two build alternatives – Alternative 1 and Alternative 2, as described in the subsection below, as well as a No-Build (or No-Action) Alternative.

Regardless of the build alternative, the proposed project would contain standardized project measures that are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact that could potentially result from the proposed project. These measures are detailed in the *Environmental Consequences* subsections of Chapter 2, *Affected Environment*, *Environmental Consequences*, and *Avoidance, Minimization and/or Mitigation Measures*.

1.3.1 Build Alternatives

Common Design Features of the Build Alternatives

The construction approach would be the same for both alternatives. Construction of Alternative 1 or Alternative 2 is currently projected to begin in July 2021 and end in December 2023. Both build alternatives contain the following design features:

- Two 12-foot travel lanes and 8-foot shoulder would be provided in each direction.

A minimum 20-foot Clear Recovery Zone (CRZ). The CRZ will incorporate side slopes of 4:1 or flatter and necessitate removal of any physical obstructions such as trees, utility poles, and other fixed objects.

- Construction of roadside ditches outside the CRZ.
- Construction of County-maintained road intersections to facilitate the movement of tractor trailers and farming equipment.
- Extension or replacement of existing cross culverts as needed.
- Replacement of driveway culverts to convey drainage flows to the roadside ditches, as warranted.
- Minor shifting of the vertical profile and horizontal alignment as needed.
- Modification of existing driveways along the corridor, where needed to conform to the widened highway.
- Relocation of utilities.
- Implementation of Caltrans Best Management Practices (BMPs).

Unique Features of the Build Alternatives

Alternative 1

Alternative 1 proposes the addition of a 14-foot-wide paved median, striped as a continuous TWLTL. This TWLTL would create a refuge for drivers turning left in and out of traffic. At county-maintained roads and certain agriculture-related businesses, the TWLTL would be striped as a left-turn lane. Appendix C of this EIR/EA contains a typical cross section and layout of Alternative 1.

Alternative 2

Alternative 2 would separate traffic with a paved 14-foot wide median containing a concrete barrier. Vehicles entering the highway from homes and businesses could only turn right onto SR 70. There would be median openings at major county road intersections with left- and U-turn lanes. Appendix C of this EIR/EA contains a typical cross section and layout of Alternative 2.

1.3.2 No-Build (No-Action) Alternative

The No-Build Alternative would maintain the existing lane configurations, and no work would be conducted to improve safety, good movement or emergency evacuation.

1.4 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications (PLACs) are required for project construction:

Table 1: Permits and Approvals Needed

Agency	Permit/Approval	Status
Central Valley Regional Water Quality Control Board	Section 401 Water Quality Certification	Not yet initiated
U.S. Army Corps of Engineers	Section 404 Authorization for fill of waters of the United States	Not yet initiated
Feather River Air Quality Management District	Formal notification prior to construction	Not yet initiated
California Department of Fish and Wildlife	Streambed Alteration Agreement	Not yet initiated

Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

Topics Considered but Determined Not to be Relevant

As part of the scoping and environmental analysis done for the project, the following environmental issues were considered, but no adverse impacts were identified. So, there is no further discussion of these issues in this document.

Coastal Zone

There will be no effects to coastal resources because the project is not located within a coastal zone.

Wild and Scenic Rivers

There will be no effects to wild and scenic rivers because the project is not located near a designated wild and scenic river.

Parks and Recreational Facilities

There will be no effects to recreational facilities because the project is not located near a recreational facility.

Timberlands

There will be no effects to timberlands because the project is not located near timberlands.

Environmental Justice

No minority or low-income populations that would be adversely affected by the proposed project have been identified. Demographic data for the study area indicates that the proportion of the population composed of minority populations is smaller than for Yuba County as a whole; 30.1% and 43.7%, respectively. No minority or low-income populations that would be adversely affected by the proposed project have been identified above. Therefore, this project is not subject to the provisions of Executive Order 12898

Section 4(f)

There are no historic sites, parks and recreational resources, wildlife or waterfowl refuges, which meet the definition of a Section 4(f) resource, within the project vicinity. Therefore, this project is not subject to the provisions of Section 4(f) of the Department of Transportation Act of 1966

2.1 Human Environment

2.1.1 Existing and Future Land Use

Affected Environment

Yuba County is bordered on the west by Sutter County, on the east by Nevada County, on the north by Butte County, and on the south by Placer County. SR 70 is the primary north-south travel route through the county. Yuba County is dominated by agricultural land and mountainous terrain and has experienced moderate growth over the last several decades, most of which is concentrated in Marysville.

According to the Yuba county 2030 General Plan, all of the land surrounding the study area is designated as Natural Resources. The intent of the Natural Resources land use designation is to conserve and provide natural habitat, watersheds, scenic resources, cultural resources, recreational amenities, agricultural and forest resources, wetlands, woodlands, minerals, and other resources for sustainable use, enjoyment, extraction, and processing. The Natural Resources land use type permits up to one unit and a second unit per parcel except for agricultural employee housing, which does not have a specific density limit. Land use designations are shown in Figure 3.

Most of the land within the study area is zoned as Exclusive Agriculture Zone (AE-40), which has a minimum parcel size of 40 acres. A few parcels are zoned as AI-Agricultural Industrial District, AR-10-Agricultural/Rural Residential District 10 Acres (i.e., a minimum parcel size of 10 acres), and RC-Rural Commercial District. Current zoning is shown in Figure 4.

Figure 3. Land Use Designations

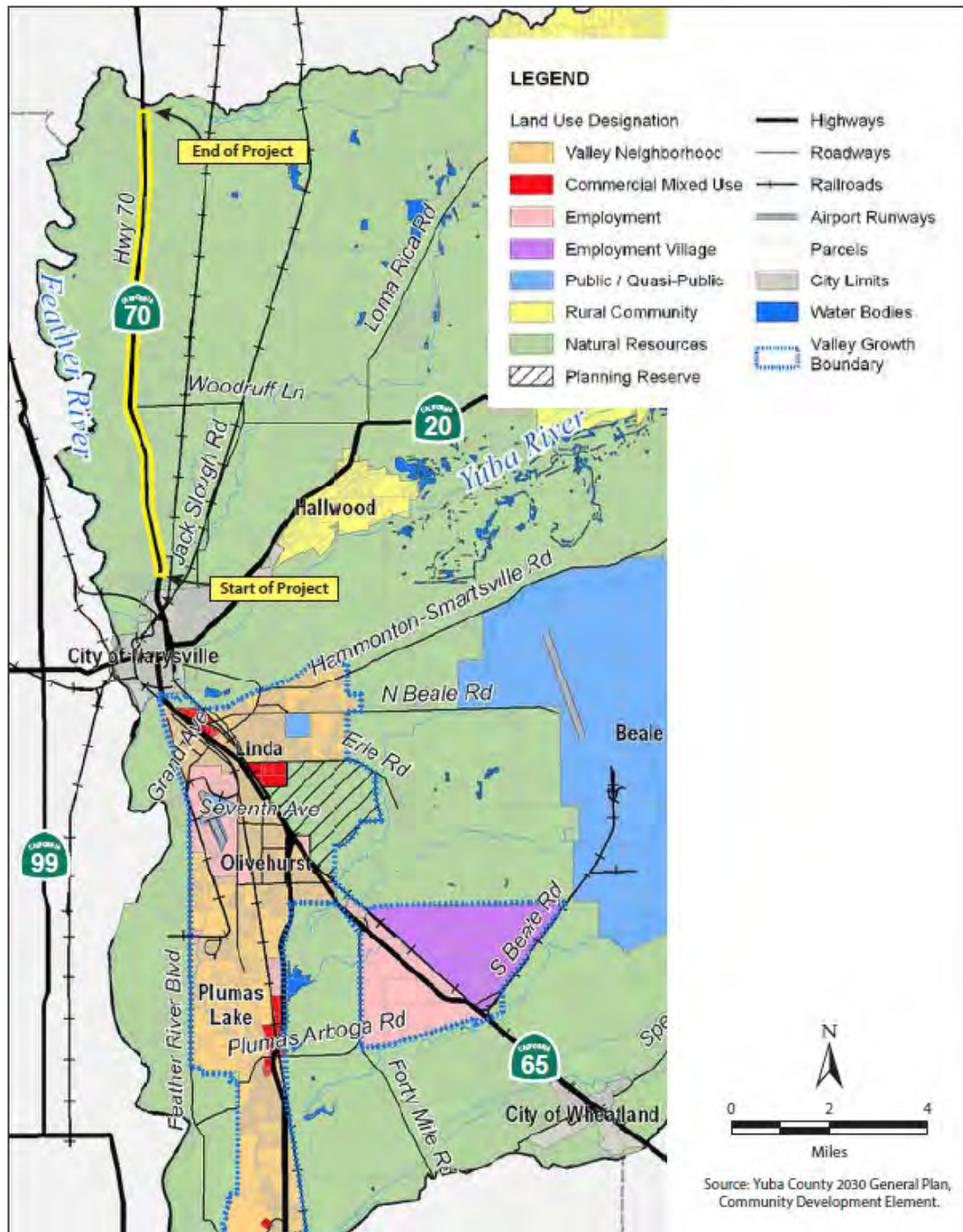
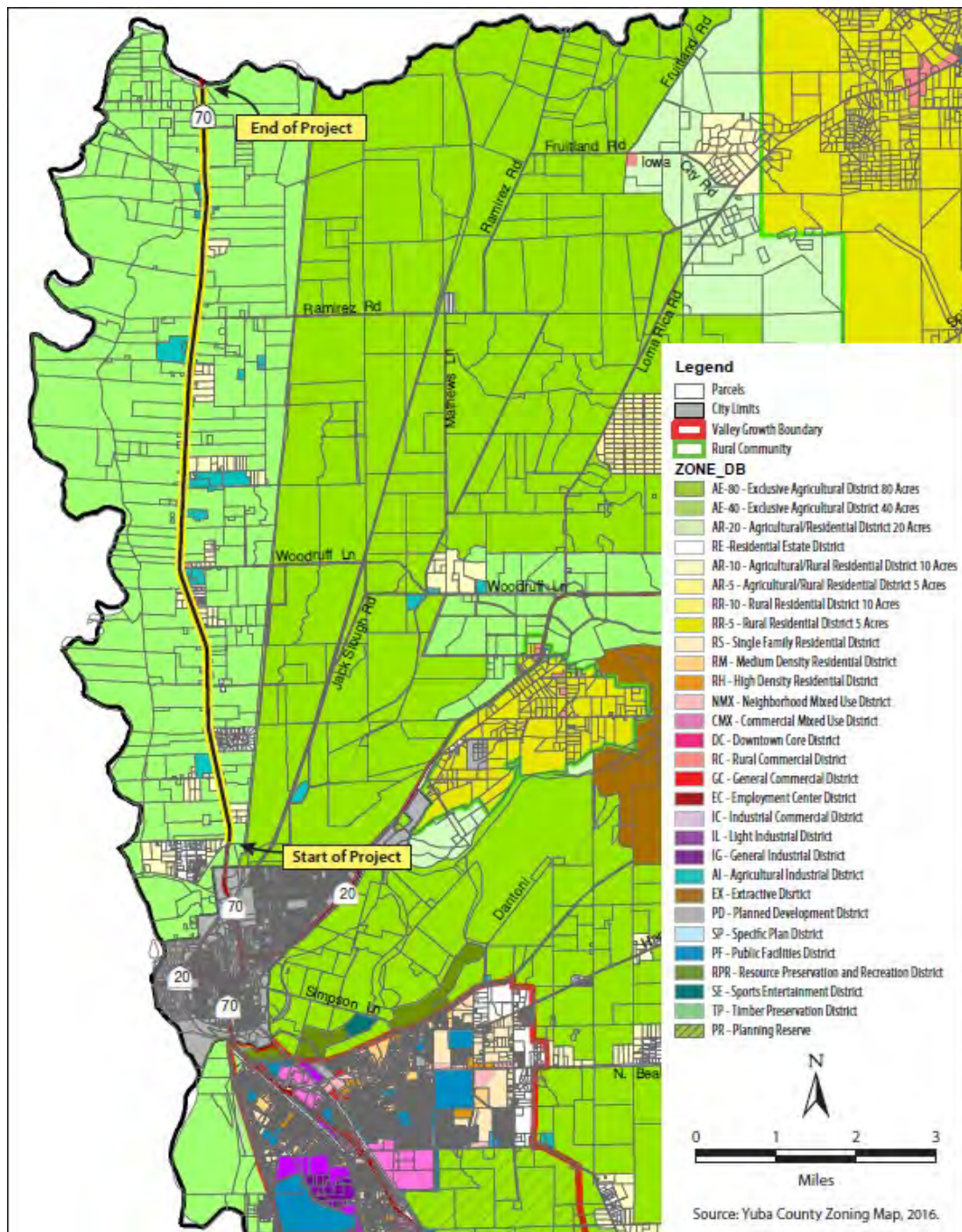


Figure 4. Zoning Map



The project vicinity contains several projects within 2 miles of SR 70.

- SR 70 Simmerly Slough Bridge Replacement near Marysville. The project is located in Yuba County. The bridge will be replaced, and completion is scheduled for 2020.

- Marysville Medical Arts District Transportation Development at 5th Street, from SR 70 to J Street, including the Medical Arts District. The project extends from SR 70 to J Street including the Medical Arts District. The project is located in Yuba County. The project will extend and realign local roadway and completion is scheduled for 2020.
- Bridge Preventative Maintenance at various bridges in Yuba County. The project is located in Yuba County. Preventative maintenance will be conducted and is scheduled for completion in 2022.
- SR 70 Corridor Improvements Project (Ophir Road to Palermo Road). The project is located in Butte County. The project will improve safety on SR 70 corridor by providing continuous passing opportunities for vehicles from Ophir Road to Palermo Road. The project completed construction in 2019.
- SR 70 Corridor Improvements Project (Palermo Road to Cox Lane). The project is located in Butte County. The project will improve safety on SR 70 corridor by providing continuous passing opportunities for vehicles from Palermo Road to just north of Cox Lane. Completion is scheduled for 2020.
- SR 70 Corridor Improvements Project (East Gridley Road to Yuba/Butte County Line). The project is located in Butte County. The project includes widening and other improvements. Completion is scheduled for 2023.
- Rio d'Oro Specific Plan, approximately 11 miles north of the project area between Palermo Road to the south and Ophir Road to the north. The project is located in Butte County. The project is a residential, commercial, and developed parkland project between Palermo Road to the south and Ophir Road to the north. Completion is scheduled for 2035.
- Highway Improvements to SR 70 in Marysville from postmile 14.9 to postmile 15.6. The project is located in Yuba County. The project includes highway improvement, bridge replacement and undercrossings from 14th Street to 0.1 mile south of Cemetery Road. Completion is scheduled for 2026.
- Camp Fire Debris Clean Up. The project is located in Butte County. Project consists of truck trips from ongoing debris removal in Paradise, Butte County. Project activities are ongoing.
- Hard Rock Casino. The project is located in Yuba County. The project is a new casino and hotel development approximately 9 miles south of the project limits, on 40-mile Road, between WR 70 and SR 65. The project was completed in 2019.

Environmental Consequences

No Build Alternative

The No Build Alternative would not affect existing land uses because the proposed project would not be constructed, avoiding the conversion of existing land uses.

Build Alternative

The project includes widening SR 70 within the project limits to improve safety, goods movement and an emergency evacuation route. Other planned transportation projects previously described would not result in additional traffic but would accommodate growth that is planned for the area. Some temporary and permanent land acquisitions would be necessary for the build alternatives, and these are discussed in 2.1.10, Relocations and Real Property Acquisitions. The project involves changes to an existing transportation facility but would not change or add new access points. While additional lanes are included in the project scope, these lanes are not included to address a need for additional capacity but rather designed to improve safety. The surrounding land uses are primarily agricultural, with some rural residential and rural commercial development, and would not change as a result of the project. Conversion from private land to transportation ROW is anticipated.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization or mitigation measures are required.

2.1.2 Consistency with State, Regional and Local Plans and Programs

Affected Environment

Yuba County General Plan

Land use planning in the study area is governed by the Yuba County 2030 General Plan. The following general plan policies are relevant to the proposed project.

- Policy CD9.5: Rural Communities provide the opportunity for agriculture, agricultural tourism, ecological tourism, recreational and other economic activities.
- Policy 11.5: The County will support agriculture, agricultural processing, agricultural tourism, ecological tourism, recreational uses, and other natural-resources based economic development projects in areas with land-based natural resources, natural beauty, and cultural attractions.
- Policy NR3.1: The County's zoning and development standards, including allowable uses and minimum lot sizes, will be designed to support agriculture-related economic activities and avoid conflict with ongoing viable agricultural operations.
- Policy NR3.2: New developments adjacent to ongoing agricultural operations shall provide written notice to landowners and residents regarding potential noise, dust odors, and other effect of adjacent agriculture.
- Policy NR3.4: New developments adjacent to ongoing agriculture shall incorporate design, construction, and maintenance techniques to minimize conflicts with adjacent agricultural uses, including, but not limited to use of agricultural buffers.

- Policy NR3.8 The County will support small-scale farming on Valley Neighborhood properties, where such operations are compatible with surrounding uses.

Sacramento Area Council of Governments

Yuba County is part of the Sacramento Area Council of Governments (SACOG), which is responsible for releasing the region's regional transportation plan. The proposed project is listed in the 2020 MTP/SCS Which was adopted November 2019. The proposed project is listed as CAL18815.

Environmental Consequences

Implementation of the proposed project would involve the conversion of private land not currently used for transportation purposes to transportation ROW. In addition, temporary construction easements would be obtained for construction staging and possibly for access roads. With the exception of the conversion of land to transportation uses and the use of land for construction purposes, no change in land use or underlying zoning designations within the study area would occur as a result of implementing the proposed project. The list below addresses the proposed project's consistency with relevant state, regional, and local plans and programs with the No Build Alternative and the Build Alternatives.

- SACOG 2020 MTP/SCS

For the No Build Alternative, the proposed project is inconsistent because the proposed project is listed in the MTP/SCS.

For the Build Alternatives, the proposed project is consistent because the Build Alternatives are listed in the MTP/SCS as a project that would be implemented.

- Yuba County General Plan Policy CD9.5

For the No Build Alternative, the proposed project is consistent because no new construction would occur

For the Build Alternatives, the proposed project is consistent because the Build Alternatives would not interfere with opportunities for agriculture, agricultural tourism, ecological tourism, recreational and other economic activities. These activities would continue after implementation of the Build Alternatives.

- Yuba County General Plan Policy 11.5

For the No Build Alternative, the proposed project is consistent because no new construction would occur.

For the Build Alternatives the proposed project would not alter the County's support for agriculture related services in the study area. These activities would continue after implementation of the Build Alternatives.

- Yuba County General Plan Policy NR3.1

For the No Build Alternative, the proposed project is consistent because no new construction would occur.

For the Build Alternatives, the proposed project is consistent because the Build Alternatives would not alter zoning or development standards designed to support agricultural activities.

- Yuba County General Plan Policy NR3.2

For the No Build Alternative, the proposed project is consistent because no new construction would occur.

For the Build Alternatives, the proposed project is consistent because the Caltrans will provide written notice to the adjacent landowners as part of the CEQA/NEPA environmental review process.

- Yuba County General Plan Policy NR3.4

For the No Build Alternative, the proposed project is consistent because no new construction would occur.

For the Build Alternatives the proposed project is consistent. Although the proposed project would require acquisition of farmland, this has been minimized to the maximum extent feasible. The land that would be acquired consists of narrow strips adjacent to SR 70. There are no feasible alternative locations, and the conversion of this land for new ROW would not substantially alter the existing agricultural activities on these parcels

- Yuba County General Plan Policy NR3.8

For the No Build Alternative, the proposed project is consistent because no new construction would occur.

For the Build Alternatives, the proposed project is consistent because the Build Alternatives would not alter the County's support for small scale farming in the study area. These activities would continue after implementation of the Build Alternatives.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization or mitigation measures are required.

2.1.3 Farmland

Regulatory Setting

The National Environmental Policy Act (NEPA) and the Farmland Protection Policy Act (FPPA, 7 United States Code [USC] 4201-4209; and its regulations, 7 Code of Federal Regulations [CFR] Part 658) require federal agencies, such as the Federal Highway Administration (FHWA), to coordinate with the Natural Resources Conservation Service (NRCS) if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

The California Environmental Quality Act (CEQA) requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

Affected Environment

Yuba County is one of California's mid-size agricultural counties. Important Farmland, which is farmland classified by the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) as prime farmland, farmland of statewide importance, farmland of local importance, and unique farmland, comprises 83,562 acres in Yuba County (California Department of Conservation 2016). The County's gross value from agricultural production was 231,777,000 in 2017 (Yuba County 2017).

As previously noted, the dominant land use in the study area is agriculture, with scattered rural residences. According to the FMMP, the land within the study area is classified as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. There is no Williamson Act Land in the study area.

Environmental Consequences

No Build Alternative

The No Build Alternative would not affect FMMP-designated farmland because the proposed project would not be constructed, avoiding any conversion of farmland classified by the FMMP as important farmland.

Build Alternatives

A description that follows details the acres of farmland that would be acquired under the proposed project for both Build Alternatives. Implementing the proposed project would involve widening 9.5 miles of SR 70 Conversion of private land not currently used for transportation purposes to transportation ROW would occur and would require easements. Proposed project improvements requiring temporary construction disturbance and temporary and permanent easements would affect lands within the study area that the FMMP classifies as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Grazing Land. Build Alternative 1 would require permanent conversion of the 2.28 acres of Prime Farmland, 0.49 acres of Farmland of Statewide Importance, 0.39 acres of Unique Farmland, 2.48 acres of Urban and Built Up Land for a total of 5.64 total important farmland. This is approximately 0.00007 percent of the County's total important farmland. Build Alternative 2 would require permanent conversion of 3.82 acres of Prime Farmland, 0.95 acres of Farmland of Statewide Importance, 1.43 acres of Unique Farmland and 3.52 acres of Urban and Built Up Land for a total of 9.72 total important farmland. This is approximately 0.00012 percent of the County's total important farmland.

Impacts to mapped farmland are evaluated using the United States Department of Agriculture (USDA) "Farmland Conversion Impact Rating (Form AD 1006, Appendix J), which was completed in conjunction with NRCS. Form AD 1006 helps determine the impact the project may have on farmlands within the study area. NRCS and the applicable federal agency review criteria for projects including, but not limited to, soil productivity, water conditions, proximity to other urban and rural land uses, impact on remaining farmland after the conversion, and indirect or secondary effect of the project on agricultural and other local factors. NRCS must complete the land evaluation part of the form, and the federal agency must complete the site assessment portion. Each criterion has a set number of points it may be awarded. Once the points are added up, they are compared to the threshold score of 160 points created by USDA. Project sites receiving a total score of less than 160 need not be given further consideration for protection and no additional sites need to be evaluated under the FPPA (CFR 658.4 [c] [2]). NRCS has reviewed and completed Parts II, IV, and V of the form prior to the Final EIR/EA. The final Form AD 1006 for the proposed project is provided in Appendix J. NRCS determined that the project total site assessment is 79 for both alternatives which is below the threshold score of 160.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

2.1.4 Growth

Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act (NEPA) of 1969, require evaluation of the potential environmental effects of all proposed federal activities and programs. This provision includes a requirement to examine indirect effects, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations (40 Code of Federal Regulations [CFR] 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also required the analysis of a project's potential to induce growth. The CEQA Guidelines (Section 15126.2[d]) require that environmental documents "...discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."

Affected Environment

Yuba County has experienced moderate population growth compared to other California counties. Between 2010 and 2018, Yuba County grew from 72,315 to 79,087 which is an annual growth rate of approximately 0.4% (California Department of Finance 2018). Most of this population growth has taken place in the city of Marysville and census-designated places of Linda and Olivehurst.

Environmental Consequences

No Build Alternative

The No Build Alternative would not cause growth because the proposed project would not be constructed. Travel times, operations and access would not change.

Build Alternatives

The analysis of growth-related indirect impacts follows the first-cut screening guidelines provided in the California Department of Transportation's Guidelines for Preparers of Growth-Related Indirect Impact Analysis (California Department of Transportation 2006). The first-cut screening analysis focused on addressing the following considerations:

- To what extent would travel times, travel cost, or accessibility to employment, shopping, or other destinations be changed? Would this change affect travel behavior, trip patterns, or the attractiveness of some areas to development over others?
- To what extent would change in accessibility affect growth or land use change-its location, rate, type or amount?
- To what extent would resources of concern be affected by this growth or land use change?

The potential for project implementation to influence growth is based on the first-cut screening analysis.

No Build Alternative

The No Build Alternative would not cause growth because the proposed project would not be constructed. Travel times, operations, and access would not change.

Build Alternatives

First-Cut Screening Analysis

To what extent would travel times, travel cost or accessibility to employment, shopping or other destinations be changed? Would this change affect travel behavior, trip patterns, or the attractiveness of some areas to development over others?

According to the Traffic Study, for horizon year 2043, compared to the No-Build alternative, the travel time savings through the project limits under normal conditions would be 3 minutes and 15 seconds. It is not anticipated that this nominal change in travel time would substantially affect travel behavior, attractiveness of areas for development, or trip patterns.

To further assess trip patterns, the Traffic Study evaluated the potential for diversion of traffic from the parallel SR 99 for longer distance trips; for example, between Linda or Olivehurst and Chico. Applying the California Statewide Travel Demand Model (CSTDm), at the Butte/Yuba County line, the four-lane roadway had slightly higher growth than the

two-lane version: 1.008 times larger in the northbound direction and 1.005 times larger in the southbound direction. This relative growth factor was then applied to the two-lane forecasts to estimate the four-lane forecasts. The growth factors result in 80 more vehicles per day northbound and 50 more vehicles per day southbound. During the AM and PM peak hours, the through volume in both directions would increase by 5 vehicles per hour. Thus, negligible changes to trip patterns are expected due to roadway expansion.

Since SR 70 is an existing roadway in unincorporated Yuba County, widening SR 70 would not provide additional access to undeveloped areas. Therefore, access to employment, shopping or other destinations will not change. Additionally, the proposed project would not impact current ag uses adjoining the roadway.

To what extent would change in accessibility affect growth or land use change – its location, rate, type or amount?

While the proposed project would create additional capacity on SR 70 and have a minimal effect on travel times though the project area under standard conditions, since the project would widen an existing roadway alignment it is not anticipated to provide access to new areas or change accessibility. Additionally, the area is rural with relatively strict land use controls in place to prevent the loss of agricultural land.

The Yuba County General Plan calls for preservation of productive agricultural land and avoidance of unnecessary conversion of agricultural land to other use. Land along the project limits is primarily designated as Prime Farmland and Farmland of Statewide Importance (See figure 5.). Per the Yuba County General Plan policies, conversion of this productive agricultural land to an alternate use is not foreseeable.

Goal CD 1 of the Yuba County General Plan related to efficient valley development patterns is as follows:

Policy CD 1.1 - Urban and suburban development in the unincorporated County not related to agriculture, mining or some natural or cultural resource-oriented purpose is prohibited in valley areas outside the Valley Growth Boundary.

Figure 6 shows that the project limits are within the unincorporated County and well outside of Valley Growth Boundary limits.

Figure 5 - Yuba County 2030 General Plan Farmland Map

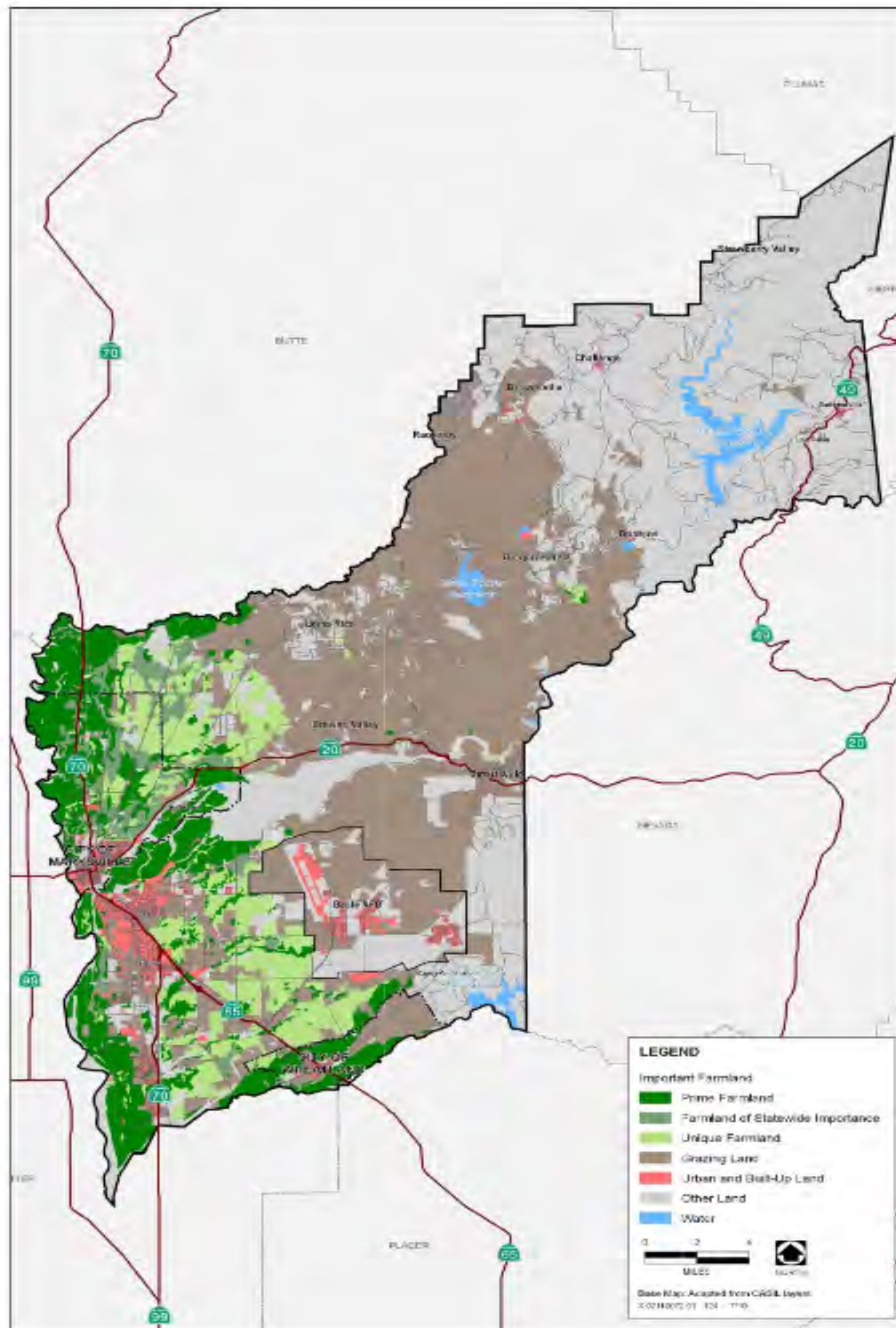
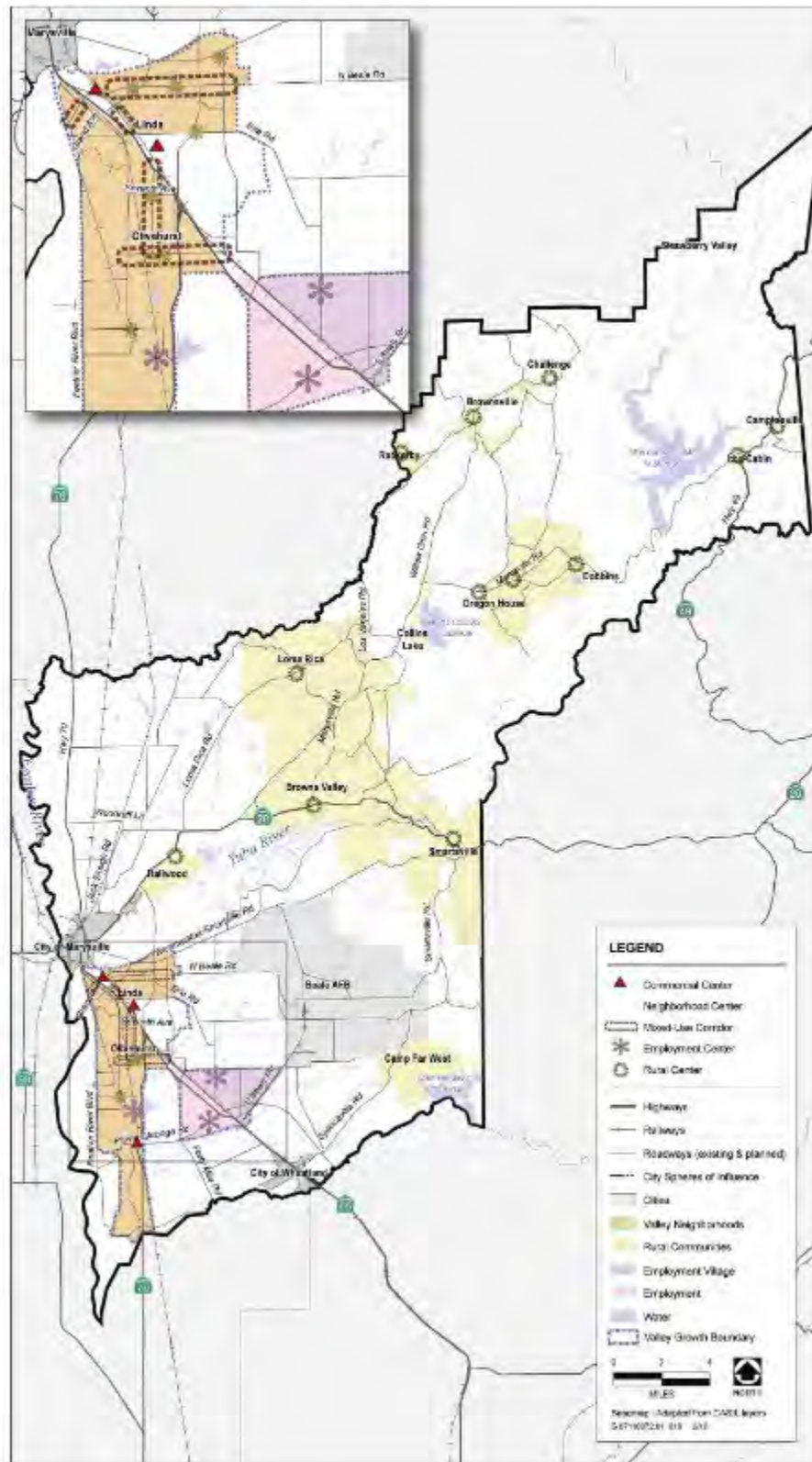


Figure 6. Yuba County 2030 General Plan Valley Growth Boundary Map



In terms of regional planned growth, beyond the limits of the project north into Butte County, the Butte County General Plan designates land use along SR 70 primarily as agricultural until just south of Oroville. Along SR 70 beginning just south of Oroville and extending south to Palermo Road, the Rio D'Oro development is planned. This planned development is located approximately 9 miles north of the project limits. All of the development due to Rio D'Oro is captured under the circulation element of the Butte County General Plan.

The proposed project is not expected to lead to additional planned or unplanned development in either Yuba or Butte counties.

To what extent would resources of concern be affected by this growth or land use change?

Project-related growth is not reasonably foreseeable. The project would not result in changes in accessibility because no new access points are being created. The only land use changes would be the incorporation of ROW for the widening. Project-related growth is not anticipated to occur. Based on the above first-cut screening analysis, no additional analysis related to growth is required.

Avoidance, Minimization, and/or Mitigation Measures

o avoidance, minimization or mitigation measures are required.

References

California Department of Transportation, 2006. *Guidance for Preparers of Growth-Related Indirect Impact Analysis*. Available: http://www.dot.ca.gov/ser/Growth-relatedIndirectImpactAnalysis/gri_guidance.htm. Accessed October 8, 2019.

California Department of Finance 2018. Table P-1 Total Estimated and Projected Population for California and Counties, July 1, 2010 to July 1, 2060 in 1-year Increments. Available: <http://www.dof.ca.gov/Forecasting/Demographics/projections/>. Accessed October 8, 2019.

Fehr and Peers. March 2019. State Route 70 Segments 4 & 5 Safety Improvements in Yuba County Transportation Analysis Report.

2.1.5 Community Character and Cohesion

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surrounds (42 United States Code [USC] 4331[b][2]). The Federal Highway Administration (FHWA) in its implementation of NEPA 923 USC 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts,

such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

Regional Population Characteristics

The proposed project is in unincorporated Yuba County, north of the city of Marysville. Census Tract 4010, Block Groups 4 and 5 comprise the study area. Non-Hispanic Whites are the largest racial/ethnic group and represent about 56.3% of the population in Yuba County. Hispanic/Latinos of any race make up the next largest group, accounting for 27.4% of the population in Yuba County. Individuals of Asian ancestry and people of Two or More Races make up approximately 6.3% and 5.3% of the county's population, respectively.

Neighborhoods/Communities/Community Character

The project vicinity is composed primarily of large parcels, some of which have low-density, single-family residential development. Given the distances between residences along SR 70, the area is most appropriately described as rural. The nearest community facilities, such as churches or other gathering places, are in the city of Marysville, approximately 0.5 miles south. There is one small residential neighborhood along SR 70 in the project area at Mayer Road and Saddleback Drive. There is also a mobile home park, Country Village Mobile Park, along SR 70 at Bettencourt Lane. Both of these areas are part of unincorporated Yuba County and can also be described as rural.

Housing

In terms of housing characteristics in the county and study area, most of the housing units in both Yuba County and the study area are occupied, 91.7% and 77.9% respectively. The study area has a much higher percentage of owner-occupied housing units when compared to the Yuba County; 85.2% compared to 58.2% respectively. This data could indicate more long-term residents in the study area compared to Yuba County.

Environmental Consequences

Regional Population Characteristics

No Build Alternative

There would be no changes to regional population characteristics under the No Build Alternative because there would be no highway improvements constructed on this segment of SR 70.

Build Alternatives

As discussed in Section 2.1.4, Growth, although the project would increase capacity, it would not affect growth. The proposed project would require property acquisitions, so some displacement would occur. However, these displacements would not be enough to cause changes to the sufficient replacement properties in the study area (See Section 2.1.6, Relocations and Real Property Acquisition, for more information on displacements and relocations). Therefore, the proposed project would not contribute to changes in the population characteristics of the region and study area.

Neighborhoods/Communities/Community Character

No Build Alternative

There would be no changes to neighborhoods or community character under the No Build Alternative because the rural character of the study area would not change.

Build Alternatives

The proposed project would not change the rural character of the study area because it would neither alter the zoning within the area, nor provide access to areas that are currently undeveloped. Although transportation improvements are generally capable of having urbanizing effects in an area, the extent of the project improvements would improve the existing roadway for safety, good movement and emergency evacuation purposes and is not anticipated to result in changes in land use patterns nor would it have urbanizing effects.

Housing

No Build Alternative

There would be no changes to housing under the No Build Alternative because the proposed project would not be implemented, avoiding residential acquisitions.

Build Alternatives

Both build alternatives would require acquisition of 3 residential mobile home sites. See Section 2.1.6, Relocations and Real Property Acquisition for a full discussion of the residential acquisitions required as part of the project. As discussed in Section 2.1.6, there is adequate replacement housing within the replacement area (i.e., Yuba County) for those displaced, and the relocation of residents would not pose an impact on the community. Relocation assistance payments and counseling would be provided to persons in accordance with the Uniform Relocation Act and Real Property Acquisition Policies Act of 1970, as amended, to ensure adequate relocation and decent, safe, and sanitary housing for displaced residents. All eligible displaces would be entitled to moving expenses. In addition, as discussed in Section 2.1.4, growth is not reasonably foreseeable, and no development is anticipated to result from the project. Consequently, no change to the local housing market would occur.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization or mitigation measures are required.

2.1.6 Relocations and Real Property Acquisition

Regulatory Setting

The Department's Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of the RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please See Appendix B for a copy of the Department's Title VI Policy Statement.

Affected Environment

Strips of land from parcels, along with some full parcels, would be acquired on both the west and east sides of SR 70 in the study area. The listing below summarizes the number of residential and nonresidential displacements as a result of partial or full acquisitions by alternative.

Build Alternative 1

- 0 Single Family Units
- 3 Mobile Homes
- 0 Multifamily Units
- 8 +/- Residential Displacements (Units/Resident)
- 2 Nonresidential Displacements (Commercial and Retail)

Build Alternative 2

- 0 Single Family Units
- 3 Mobile Homes
- 0 Multifamily Units
- 8 +/- Residential Displacements (Units/Resident)
- 3 Nonresidential Displacements (Commercial and Retail)

Environmental Consequences

No Build Alternative

There would be no property acquisitions under the No Build Alternative because the project would not be implemented.

Build Alternatives

Three mobile homes would be acquired under both build alternatives. Two nonresidential, commercial properties would be acquired for Alternative 1 and three nonresidential, commercial properties would be acquired for Alternative 2.

The relocation resources available for residential and non-residential displaces available as of December 2019 are listed below:

Residential

- Multifamily Residences. There are 13 for rent and 5 for sale for a total of 18 units.
- Two Bedroom houses. There are 12 for rent and 14 for sale for a total of 26 units.
- Three Bedroom Houses. There are 13 for rent and 30 for sale for a total of 33 units
- Mobile Homes. There are 3 for rent and 14 for sale for a total of 17 units.

Non-Residential

- Office Complex. There are 17 for rent and 13 for sale for a total of 30 units.
- Industrial Complex. There are 1 for rent and 2 for sale for a total of 3 units.
- Special Services/Use. There are 0 for rent and 2 for sale for a total of 2 units
- Commercial Operation. There are 6 for rent and 5 for sale for a total of 11 units.
- Industrial/Commercial Properties. There are 1 for rent and 3 for sale for a total of 4 units.

Based upon available data, it appears that there are sufficient residential and non-residential parcels available in the replacement area (Yuba County) for all parcels affected by both build alternatives that would be equal to or better than the displacement properties.

It does not appear that the Last Resort Housing Program will be necessary, as the residential housing stock in the replacement area is ample. Should the housing market improve, and prices increase, however, the Last Resort Housing Program would be available to assist any residential displaces unable to afford comparable replacement housing.

As part of project implementation, all acquisitions would be conducted in accordance with the Federal Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, and the California Relocation Act.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization or mitigation measures are required.

2.1.7 Utilities and Emergency Services

Affected Environment

Emergency Services

The Yuba County Sheriff's Department provides police protection to unincorporated Yuba County. The primary office is at 215 5th Street, Suite 150, in Marysville. There is also a Yuba County Sheriff Sub-Station in Brownsville (16796 Willow Glen Road), in the mountainous portion of Yuba County, and a Plumas Lake Field Station (1765 River Oaks

Boulevard), south of Marysville. There are three divisions within the Yuba County Sheriff Department: operations, support services, and jail. The Operations Division is the most visible to the public and includes patrol, volunteer search teams, and a SWAT team. The Sheriff's Department Support Services Division is responsible for providing support to units and divisions within the department through a wide variety of programs and services. The division is also responsible for overseeing Animal Care Services and the Communications and Records Unit. The Jail Division is responsible for the operation of the 432-bed jail facility. The California Highway Patrol provides traffic enforcement on all highways in the county, including SR70, and all roadways in the unincorporated county.

Fire protection and emergency services are overseen by the Yuba County Office of Emergency Services. Yuba County does not have its own fire protection or emergency services, but the cities and neighborhoods within Yuba County each have their own. The closest fire station to the study area is the Marysville Fire Department (107 9th Street Marysville), which includes the District 10 Hallwood Community Services District and the CAL FIRE Nevada-Yuba-Placer Unit, in Marysville approximately 1.7 miles south of the project area. The department has five fire engines, one fire truck, one hazmat unit, one squad and one water tender.

Additionally, the North Tree Fire Station #20 is 3.3 miles east of SR 70, near the unincorporated community of Ramirez. The Live Oak Fire Station is 3.4 miles west of SR 70 in the community of Live Oak in Sutter County.

Utilities

Water services in the project area are provided by private wells.. Electricity and natural gas are provided by Pacific Gas & Electric, which has aerial and underground lines in the study area. AT&T provides telephone and internet service in the study area and also has underground and aerial lines traversing the study area. The Yuba-Sutter Regional Waste Management Authority manages solid waste disposal and recycling in the county. Most properties in unincorporated Yuba County have septic systems, which is overseen by the Yuba County Environmental Health Department.

Environmental Consequences

No Build Alternative

The No Build Alternative has the potential to affect emergency services. Currently, shoulders along SR 70 within the project limits are non-standard, which can create unsafe conditions for emergency service providers to bypass vehicles traveling along SR 70. These conditions would continue, and likely worsen over time, under the No Build Alternative.

Build Alternatives

The project would not result in direct impacts to medical facilities, fire or police stations, and are not anticipated to adversely affect response time for emergency services associated with fire station or police/sheriff department personnel. It is likely that additional lanes may improve response times of emergency services in addition to implementing standard

shoulder widths and a median left-turn lane. The build alternatives would allow emergency service personnel to bypass other vehicles safely and quickly.

During construction, there may be temporary disruptions along SR 70 from shifting traffic or construction equipment. There may be times of one-way traffic control, but this would occur during off-peak times. Overall, traffic would be shifted to allow continued two-way operation of SR 70, as described in the Traffic Management Plan. Any required closures would be coordinated with emergency service providers so as not to hinder emergency responses. Delays in access, although temporary, could disrupt normal operations and may result in impacts on emergency services.

Build Alternatives

The project would require the relocation of a PG&E aerial electrical line and an underground gas line. Additionally, aerial and underground AT&T lines would require relocation during construction. Relocation of these utilities could cause planned or accidental temporary service interruptions during construction.

Avoidance, Minimization, and/or Mitigation Measures

The following measure would minimize effects on emergency services and utilities during the construction.

TRA-1: Implement Traffic Management Plan

As part of construction, Caltrans will prepare and implement a TMP to avoid and minimize any temporary delays on SR 70 during construction. The TMP will include the following elements.

- One-way (reversible) traffic control using flaggers in accordance with Standard Plan sheet T13 will be allowed during nighttime hours, but may be restricted during daytime peak hours, and weekends.
- The maximum length of any lane closure shall be limited to 1.0 mile.
- A minimum of one paved traffic lane not less than 11 feet wide, shall be open for use by public traffic at all times, and two lanes shall remain open when construction operations are not actively in progress.
- Whenever one-way traffic control is maintained, traffic may be stopped in 1 direction for periods not to exceed 10 minutes, after which accumulated traffic for that direction must pass through the work zone before another stoppage is made.
- Access to driveways and cross streets must be maintained during construction in accordance with traffic control standard plans or traffic handling plans.
- Pedestrian and bicycle access must be maintained during construction. Additional signs may be required to detour pedestrians and bicycle traffic.
- Portable changeable message signs will be required in direction of traffic during construction for each lane closure or shoulder closure.

- No lane closures, shoulder closures, or other traffic restrictions will be allowed on Special Days, designated legal holidays and the day preceding designated legal holidays, and when construction operations are not actively in progress. If traffic is rerouted to paved shoulders, make sure structural section is adequate to handle additional traffic.
- When closures occur within 200 feet of an intersection flaggers shall be deployed to control all legs of the intersection.
- Work at these locations may require the assistance of Construction Zone Enhanced Enforcement Program (COZEEP), but a full time COZEEP presence is not anticipated.
- Coordination with projects within, or nearby the project limits will be required to avoid conflicts.
- Lane closure charts will be developed prior to final design.

Emergency Services

Any required closures would be coordinated with emergency service providers so as not to hinder emergency responses. Implementing the TMP described above would ensure emergency vehicles are not impeded, and in the case of natural disaster and designation of an evacuation route, the construction activity will be superseded by efforts to ensure traffic flows are maintained.

Utilities

Caltrans will coordinate utility relocation work with the affected utility companies to minimize disruption of services to customers in the area during construction. If previously unknown underground utilities are encountered, Caltrans will coordinate with the utility provider to develop plans to address the utility conflict, protect the utility if needed, and limit service interruptions. Any short-term, limited service interruptions of known utilities will be scheduled well in advance, and appropriate notification will be provided to users.

2.1.8 Traffic and Transportation/Pedestrian and Bicycle Facilities

Regulatory Setting

The Department, as assigned by the Federal Highway Administration (FHWA), directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of Federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all Federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794).

The FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to Federal-aid projects, including Transportation Enhancement Activities.

Affected Environment

A Transportation Analysis Report was completed by Fehr and Peers in March 2019. The transportation analysis study locations are composed of highway segments and intersections. The study area extends along SR 70 from Laurellen Road to the Butte/Yuba County line. In the study area, the north-south highway connects Oroville in Butte County and Marysville in Yuba County. Adjacent land uses are primarily agricultural fields and associated facilities. Rural residential areas are located throughout the study area and concentrated on Saddleback Drive and Laurellen Road.

The total collision rate is less than the statewide average for similar facilities, and the actual collision rate is about 65 percent of the corresponding statewide average. However, the study area has a higher than average rate of fatality collisions; more than 4.5 times higher than the statewide average for similar facilities.

SR 70 is a two-lane highway from Marysville to the Butte/Yuba County line. The highway has paved shoulders that vary from 3 to 5 feet in width. Left-turn pockets are provided at Ramirez Road, Boyer Road, Magnolia Road, Woodruff Lane, Noble Road, Ellis Road, Saddleback Drive, Silva Avenue, and Laurellen Road. An approximately ¾-mile center turn lane exists between Noble Road and Woodruff Lane. All intersections in the study area have side street stop control. No passing lanes exist in the study area.

The study highway segments are listed below.

- Laurellen Road to Woodruff Lane
- Woodruff Lane to Ramirez Road
- Ramirez Road To Old State Highway

The study intersections are listed below.

- SR 70/Old State Highway
- SR 70/Ramirez Road
- SR 70/Woodruff Lane
- SR 70/Laurellen Road

The major cross roads that intersect SR 70 are described below.

- Old State Highway is a minor rural road that provides access to SR 70 for agricultural fields and rural homes.

- Ramirez Road is an east-west rural highway that connects SR 70 with Lower Honcut Road/La Porte Road. It provides access for rural homes and adjacent agricultural fields.
- Woodruff Lane is an east-west rural highway that connects SR 70 and SR 20. In addition to providing access for rural homes and adjacent agricultural fields, the highway provides a shorter connection than traveling through Marysville for traffic traveling to and from the north on SR 70 and to and from the east on SR 20 (reduces the distance by more than 6 miles).
- Laurellen Road is a minor rural road that provides a connection to SR 70 for a rural residential community and agricultural fields.

The average daily traffic count through the project area is approximately 10,110 vehicles per day with an average peak hour count of approximately 835 per day through the project area. Daily truck volume on SR 70 are estimated at about 960 trucks per day making up roughly 6.5 percent of the total vehicle volume.

Existing Conditions for Highway Study Segments and Study Intersections

To measure the operational status of the local roadway network, transportation engineers and planners use a grading system called level of service (LOS). Level of service is a description of the quality of operation of a roadway segment or intersection, ranging from LOS A (for free-flowing traffic with little to no delay) to LOS F (where traffic in excess of capacity introduces significant delays). Level of service policies vary within the study area. Caltrans has established route concept LOS thresholds of LOS **D** for SR 70 within the project limits.

Highway Study Segments

Under existing (2018) conditions, during the AM peak hour, SR 70 operates at LOS C or D conditions in the study area. More segments operate at LOS D conditions in the southbound (peak) direction than in the northbound (off-peak) direction. During the PM peak hour all segments operate at LOS D conditions.

Study Intersections

Under existing (2018) conditions, the study intersections operate at LOS C or better conditions during both peak hours. Conditions are similar during the AM and PM peak hours. Two intersections operate at LOS B during the morning but LOS C in the afternoon; however, the difference in average delay is about 2 seconds.

Opening Year (2023) Conditions for Highway Study Segments and Study Intersections

Highway Study Segments

Compared to existing (2018) conditions, operations under the opening year (2023) would worsen under the no-build alternative due to increasing traffic volumes. However, operations would remain the same (LOS C/D) for all study segments. The build alternatives

would widen to provide a multilane highway for SR 70. The capacity provided by the four-lane cross-section would provide LOS A operations.

Since all highway segments would operate with LOS D or better under opening year (2023) conditions for build and no-build alternatives, no segments would have deficient operations.

Compared to existing conditions, travel times under the no-build alternative would increase by 10 to 15 seconds in both directions during both peak hours. With the additional lane provided by the build alternatives, average speed would increase from 61 to 62 miles per hour. As a result, travel times would be reduced by up to 2.2 to 2.8 minutes compared to the no-build alternative. The reduced travel times would be lower than existing (2018) conditions.

Study Intersections

Intersection operations were analyzed for opening year (2023) conditions during the AM and PM peak hours. With the increase in traffic volumes from existing conditions, the delay values would increase, but LOS would remain at LOS C or better for all intersections under all alternatives. For the no-build alternative, the intersections would have LOS C or better conditions. For the build alternatives, the wider approaches on SR 70 would provide LOS B or better conditions at all study intersections.

Since all intersections would operate with LOS C or better under opening year (2023) conditions for all alternatives, no intersections would have deficient operations and no alternatives would have project impacts.

Horizon Year (2043) Conditions for Highway Study Segments and Study Intersections

Highway Study Segments

Operations under the horizon year (2043) would worsen under the no-build alternative due to increasing traffic volumes. Compared to existing (2018) conditions, the AM peak hour conditions would have one segment worsening from LOS C to D in the northbound direction and one segment worsening from LOS D to E. The PM peak hour would have all segments worsening from LOS D to E. Similar to opening year (2023) conditions, the roadway segments widened to four lanes would have LOS A conditions.

The following highway segments would have deficient operations (worse than LOS D) for horizon year (2043) conditions under the no-build alternative.

- LOS E for all segments of Northbound SR 70 (PM)
- LOS E for southbound SR 70 from Woodruff Lane to Laurellen Road (AM and PM)
- LOS E for two segments of southbound SR 70 from Old State Highway to Woodruff Lane (PM).

Since the operations would improve to LOS A under the build alternatives, no project impacts would occur.

Compared to existing conditions, travel times under the no-build alternative would increase in both directions by 30 seconds during the AM peak hour and 45 seconds during the PM peak hour. With the additional lanes provided by the build alternatives, travel time would be reduced by 2.5 to 3.3 minutes compared to the No-Build Alternative.

Study Intersections

Intersection operations were analyzed for horizon year (2043) conditions under AM and PM peak hour conditions. During the AM and PM peak hours, the build alternatives would provide LOS C or better conditions at the study intersections. The no-build alternative would have nearly all intersections operate at LOS C, with the exception of one intersection (Old State Highway) which would operate at LOS D during PM peak hour.

The following intersection would have deficient operations (worse than LOS D) for horizon year (2043) under the no-build alternative:

- LOS E for SR 70/Old State Highway (PM 2-hour peak period)

Under the build alternatives, all intersections would operate acceptably with LOS C or better. As a result, no project impacts would occur at intersections under horizon year (2043) conditions.

Transit System

The transit agency for Yuba County, Yuba-Sutter Transit, does not have scheduled routes in the study area. Amtrak Thruway Connecting Service provides regional bus connections to the Amtrak station in Sacramento via SR 70. However, no Amtrak stops are located in the study area. The Marysville Joint Unified School District provides bus service to school children along SR 70.

Bicycle/Pedestrian Facilities

SR70 is a conventional highway with no pedestrian or bicycle restrictions. Although there are no exclusive bike and pedestrian facilities within the limits of the project, pedestrians and bikes are allowed to use the shoulder.

Bicycle volume is very low along the corridor. No bicycles were observed during the 12-hour counts at 3 of the 4 study intersections. For the 24-hour count at SR 70/Laurellen Road, the intersection nearest to Marysville, 9 bicycles were observed.

Pedestrian volume is also low along the corridor. No pedestrians were observed during the 12-hour counts at 3 of the 4 study intersections. Similar to the bicycle counts, pedestrians were only observed at SR 70/Laurellen Road, which is near Marysville. Four pedestrians were counted in a 24-hour period at this southern-most study intersection.

Freight System

SR 70 is a Terminal Access route for truck traffic in the study area. Terminal Access routes accommodate STAA trucks. SR 70 provides access for agricultural trucks and connects industrial areas in Oroville and Marysville to the rest of the state. A Union Pacific rail line runs parallel to SR 70 between Marysville and Oroville from about ¼ to 1 ½ miles to the east.

Daily truck volume on SR 70 is estimated at about 960 trucks per day at the Butte/Yuba County Line, which is about 6.5 percent of the total daily volume (Annual Average Daily Truck Traffic, Caltrans 2016). The truck volume is divided among 24 percent 2-axle trucks, 17 percent 3 or 4-axles trucks, and 59 percent trucks with 5 or more axles.

The District 3 Goods Movement Study identified SR 70 in the study area as highest priority for improving truck mobility under the base year conditions. In addition, the bridge at the Butte/Yuba County line was identified as high deficiency for over-weight permit loads.

Transportation System/Demand Management

The study area does not experience peak hour congestion (LOS F conditions) and is not expected to experience peak hour congestion under horizon year (2043) conditions. As a result, no bottlenecks occur in the study area. Since congestion does not exist and will likely not occur, the need for transportation system and/or demand management is low.

Environmental Consequences

Induced Travel

Building new roadways, adding roadway capacity in congested areas, or adding roadway capacity to areas where congestion is expected in the future, generally induces additional vehicle travel. The proposed project, which would widen SR 70 to provide four travel lanes in Yuba County, is expected to have higher traffic volumes under horizon year (2043) conditions compared to the *no build* alternative that maintains two travel lanes. The phenomenon where additional capacity leads to additional travel demand is called induced travel. The concept underlying induced travel is that lower travel cost generates an increase in travel demand due to the following causes.

Short-term responses

- New vehicle trips that would otherwise would not be made
- Longer vehicle trips to more distant destinations
- Shifts from other modes to driving
- Shifts from one driving route to another

Longer-term responses

- Changes in land use development patterns (these are often more dispersed, low density patterns that are auto-dependent)
- Changes in overall growth

Some of these responses are accounted for in the transportation analysis. For example, the Transportation Analysis Report (Fehr & Peers March 2019) evaluated the potential for diversion of traffic from the parallel SR 99 for longer distance trips; such as, between Linda or Olivehurst and Chico. Applying the California Statewide Travel Demand Model (CSTDm), the four-lane roadway had slightly higher growth than the two-lane version at the Butte/Yuba County line: 1.008 times larger in the northbound direction and 1.005 times larger in the southbound direction. This relative growth factor was then applied to the two-lane forecasts to estimate the four-lane forecasts. The growth factors result in 80 more vehicles per day northbound and 50 more vehicles per day southbound. During the AM and PM peak hours, the through volume in both directions would increase by 5 vehicles per hour.

To estimate the effect of other responses, lead agencies can evaluate induced travel quantitatively by applying the results of existing studies that examine the magnitude of the increase of VMT resulting for a given increase in lane miles. These studies estimate the percent change in VMT for every percent change in miles to the roadway system. The Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) provides a method to estimate induced travel (VMT) from a roadway capacity increasing project, but it notes that the method may not be suitable for rural locations “which are neither congested nor projected to become congested.” Given that the SR 70 study area is rural and is neither congested nor projected to become congested, these methods may not be suitable. Based on existing studies, the Transportation Analysis Report (Fehr & Peers March 2019) estimated the short-term response for induced travel to range from 1,500 to 9,280 vehicle miles traveled per day, which is a change of 0.03 to 0.15 percent on a regional basis.

As noted above, induced demand can be influenced by changes in land use development patterns. The project area is rural with relatively strict land use controls in place to prevent the loss of agricultural land. Yuba County General Plan calls for preservation of productive agricultural land and avoidance of unnecessary conversion of agricultural land to other use. Land along the project limits is primarily designated as Prime Farmland and Farmland of Statewide Importance. Per Yuba County General Plan policies, conversion of this productive agricultural land to an alternate use is not foreseeable. Thus, project-related growth in the immediate project area is not reasonably foreseeable. The only direct land use changes would be the incorporation of ROW for the widening. Under long-term conditions, the project may influence indirect land use changes consistent with the objectives of the purpose and need statement. Existing and future employer’s dependent on reliable travel in the corridor may be more likely to retain or expand businesses at either end of the corridor resulting in higher levels of economic activity. The induced travel estimates above account for this potential economic effect of improving the region’s accessibility and travel reliability.

See Chapter 3.4, Climate Change for more analysis of forecasted vehicle miles traveled (VMT) and associated impacts.

Alternatives Comparison Summary

The build and no-build alternatives are compared based on several horizon year (2043) performance measures; namely, the average PM peak hour travel time in both directions, highway operations deficiencies, and intersection operations deficiencies.

Compared to the no-build alternatives, the build alternatives would provide a lower average travel time in both directions; 9.0 minutes for the build alternative and 12.3 minutes for the no-build alternatives. Thus, the travel time savings for the build alternatives would be 3 minutes and 15 seconds.

The widening to four through lanes proposed by the build alternatives would eliminate the highway and intersection operations deficiencies that exist under the no-build. The no-build alternative would result in one intersection deficiency and six highway operations deficiencies.

Avoidance, Minimization, and/or Mitigation Measures

As described in Section 2.1.7 – Utilities and Emergency Services, the following measure would be implemented to minimize the effects during construction of the proposed project:

TRA-1: Implement Traffic Management Plan

As part of construction, Caltrans will prepare and implement a TMP to avoid and minimize any temporary delays on SR 70 during construction. The TMP will include the following elements.

- One-way (reversible) traffic control using flaggers in accordance with Standard Plan sheet T13 will be allowed during nighttime hours, but may be restricted during daytime peak hours, and weekends.
- The maximum length of any lane closure shall be limited to 1.0 mile.
- A minimum of one paved traffic lane not less than 11 feet wide, shall be open for use by public traffic at all times, and two lanes shall remain open when construction operations are not actively in progress.
- Whenever one-way traffic control is maintained, traffic may be stopped in 1 direction for periods not to exceed 10 minutes, after which accumulated traffic for that direction must pass through the work zone before another stoppage is made.
- Access to driveways and cross streets must be maintained during construction in accordance with traffic control standard plans or traffic handling plans.
- Pedestrian and bicycle access must be maintained during construction. Additional signs may be required to detour pedestrians and bicycle traffic.
- Portable changeable message signs will be required in direction of traffic during construction for each lane closure or shoulder closure.
- No lane closures, shoulder closures, or other traffic restrictions will be allowed on Special Days, designated legal holidays and the day preceding designated legal

holidays, and when construction operations are not actively in progress. If traffic is rerouted to paved shoulders, make sure structural section is adequate to handle additional traffic.

- When closures occur within 200 feet of an intersection flaggers shall be deployed to control all legs of the intersection.
- Work at these locations may require the assistance of Construction Zone Enhanced Enforcement Program (COZEEP), but a full time COZEEP presence is not anticipated.
- Coordination with projects within, or nearby the project limits will be required to avoid conflicts.

Lane closure charts will be developed prior to final design.

2.1.9 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically (emphasis added) and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). To further emphasize this point, the Federal Highway administration (FHWA), in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of aesthetic, natural, scenic and historic environmental qualities” (CA Public Resources Code [PRC] Section 21001[b]).

Affected Environment

This section was prepared using information from the *Visual Impact Assessment* (VIA) technical report prepared for the project (Caltrans 2019). The VIA assesses potential visual impacts of the project based on guidance outlined in the *Visual Impact Assessment for Highway Projects* published by the FHWA (1988). The following key terms describe visual resources in a project area. The terms are used as descriptors and as part of a rating system to assess a landscape’s visual quality.

- *Visual character* includes attributes such as form, line, color, and texture and is used to describe, not evaluate visual resources.
- *Visual quality* is evaluated by identifying the vividness, intactness, and unity present in the project area.
- *Vividness* is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements.

- *Intactness* is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions.
- *Unity* is the extent to which all visual elements combine to form a coherent, harmonious visual pattern.
- *Resource change* is one of the two major variables that determine visual impacts. Resource change refers to the evaluation of the visual character and the visual quality of the visual resources that comprise the project corridor before and after construction of a proposed project. The other major variable is viewer response, the response of viewers to changes in their visual environment.

Project Setting

The project setting provides the context for determining the type and severity of changes to the existing visual environment. The project is in the northern Sacramento Valley biogeographic province, where the landscape is characterized by open space lands, orchards, and rural landscaping over terrain that is generally flat. The land uses along the project corridor are primarily orchards, fallow fields, a limited amount of row crops, and associated agricultural buildings. Small pockets of development include mostly low-density, single-family rural residences and the Country Village Senior Living Mobile Home Park. Commercial businesses are also along SR 70.

SR 70, adjoining local roadways, and associated signage also comprise the project corridor. The Sutter Buttes are notable scenic resources that are visible and can be seen in the background from the project corridor. Breaks in the orchards increase visibility of the buttes. Background views to the Sierra Nevada to the east are available from the southern project terminus near Laurellen Road, where SR 70 gains elevation to meet the Feather River levee and span the river. The Feather River lies just south of, but outside of, the project boundaries. Views from the Feather River toward the project area do not exist due to intervening levees and vegetation.

Much of this segment of SR 70 does not have street lighting, except near the entrance to Country Village Senior Living Mobile Home Park (PM 17.5) and Saddleback Drive (PM 19.3), which both have one overhead streetlight. Therefore, most of the light within the project corridor comes from interior and exterior residential lighting, nighttime security lighting for commercial development, and vehicle headlights using local roadways.

There are no roadways within or near the project area that are designated as scenic highways or routes. Therefore, implementation of the project would not damage scenic resources, such as trees, rock outcroppings, and historic buildings along a scenic highway.

Viewers

There are two major types of viewer groups for highway projects: Highway neighbors and highway users. Both these types of viewers would be affected by the project. Highway neighbors are all those who can see the roadway project or any of its components from off-site locations. In the case of this project, the number of people with views to the specific project location are the residence, business owners and farmers. Highway users are those travelling Route 70 through the project area's foreground and middle ground views along

the highway are screened by roadside vegetation. The highway corridor is open in some locations to distant views of the surrounding mountains and hillsides. During the week, the viewers are local travelers, business owners and operators, farmland owners and farm equipment operators and truck drivers transporting goods. During the weekend hours, the viewers are less business/commuter oriented and more recreational tourist type motorists visiting the local recreational areas. The awareness of visual resources by these highway users is expected to vary with their specific activity. In general, highway users in vehicles will experience the area as a cumulative sequence of views and may not focus on specific roadway features. Residents and business owners are the most sensitive to aesthetic issues due to their familiarity as well as their personal investment in the area.

Environmental Consequences

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. As discussed in Project Setting above, there are no officially designated scenic roadways within or near the project corridor. Therefore, implementation of the project would not damage scenic resources, such as trees, rock outcroppings, and historic buildings along a scenic highway.

No Build Alternative

Under the No Build Alternative, the project would not be constructed and there would be no visual impacts on the existing visual character, visual quality, or affected viewer groups.

Build Alternatives

As described in Chapter 1, *Project Description*, Build Alternative widens the roadway and includes a continuous center Two Way Left Turn Lane (TWLTL) while Build Alternative 2 adds a concrete barrier within a median. For Build Alternative 2, there would be median openings at major county road intersections with left- and U-turn lanes. Since the types of visual impacts that would result from construction and operation for all alternatives are similar, they are discussed together.

The primary effect that this project would have on aesthetics along the highway corridor would be the removal of trees and mature shrubs along the highway required to be cleared around the road widening. The trees to be removed are outside of their biological range, do not provide optimum habitat, and do not support oak populations; however, they are considered aesthetic resources. The oak trees to be removed as part of the project were planted in clusters along Route 70.

Overall, the most noticeable aspects of the completed project will be any loss of vegetation, such as the mature trees that are required to be cleared around the road widening. The loss of vegetation and orchard planting would have a moderate effect on the spatial character adjacent to the roadsides. The removal of any large, established trees, shrubs, and ground covers to facilitate the project would cause a moderate adverse effect on the visual character of the site and its surroundings. The site will look bare for a while until the erosion control grows. After the mitigation and replanting of trees and vegetation, the impact should begin to lessen and at that time the project will not degrade existing visual

character of quality of the site and its surrounding community. Further, no new sources of light or glare are anticipated.

Avoidance, Minimization, and/or Mitigation Measures

The following measures to avoid or minimize visual impacts will be incorporated into the project:

AES-1: Replace or Relocate Site Features and Landscaping Affected by the Project

- Tall scrubs and screening shrubs shall be planted to the maximum feasible extent within available planting areas between the proposed widened lanes and residences.
- Sound walls and barriers should be looked at for possible opportunities for aesthetic treatments. Wall and Barrier in the vicinity should be looked at for their aesthetics likeliness. Materials, texture, and colors may have already been established at those locations and should be continued and included in this project. Final design decisions shall be conducted under the guidance of the District's Landscape Architect.
- Areas that will require ground disturbance by removing vegetation should be restored and rectified respectively before completion of the construction project. The trees and vegetation should be protected, where feasible. Vegetation removal should be limited to the extent necessary to construct the project.
- Some vegetation that is removed will need to be replaced with appropriate vegetation that is indigenous to the area. Access roads shall be re-graded to their pre-construction profiles and contours.
- Vegetation Control shall be placed under all new and existing guardrails and signs.
- If the project requires equipment/staging areas per our Special Provision, Section 5.1 indicates that the contractor will be responsible for securing locations for staging, access, or other construction activities shall be repaired pursuant to Section 5-1.36 Property and Facility Preservation.

AES-2: Apply Minimum Lighting Standards

- All nighttime construction lighting shall be shielded and directed to eliminate all direct lighting outside of the construction area. Where substantial headlight glare could affect residences during construction, opaque screening shall be introduced to block such headlight glare for the duration of the construction period. If headlight glare could affect residents and business owners at homes and businesses on a long-term basis, planting or permanent screening shall be installed at the highway ROW to block headlight glare.

2.1.10 Cultural Resources

Regulatory Setting

The term "cultural resources," as used in this document, refers to the "built environment" (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of

significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including “historic properties,” “historic sites,” “historical resources,” and “tribal cultural resources.” Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the Federal Highway Administration (FHWA), the ACHP, the California State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the ACHP’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA’s responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as “unique” archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term “tribal cultural resources” to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires the Department to inventory state-owned structures in its rights-of-way.

Affected Environment

This section is based on the studies performed to identify and evaluate the potential for the Project effects on cultural resources, including the Historical Properties Survey Report (HPSR) (California Department of Transportation 2019), Archaeological Survey Report (ASR) (Tremaine & Associates, Inc. 2017), and the Historical Resources Evaluation Report (HRER) (JRP Historical Consulting LLC 2017) prepared for the proposed project. No

historic properties are present in the APE, therefore, Caltrans, pursuant to Section 106 Programmatic Agreement Stipulation IX.A, has determined a Finding of No Historic Properties Affected is appropriate for the Project. Area of Potential Effects (APE)

In accordance with Section 106 Programmatic Agreement Stipulation VIII.A, the Area of Potential Effects (APE) for the project was established by Caltrans District 3 staff on November 11, 2019.

The archaeological APE consists of both the horizontal and vertical maximum potential extent of direct impacts resulting from the project. The archaeological APE was established to encompass the entire north-south right-of-way and existing easements, covering all areas of ground-disturbing activities.

The architectural APE consists of the existing right-of-way for SR 70 as well as adjacent parcels. Research Methodology

Records Search and Archival Research

On December 8, 2015 staff at the North Central California Information Center conducted a records search for the project area to identify previous surveys conducted and cultural resources recorded within a 0.5-mile radius of the APE.

The results of the records check identified thirteen previous studies covering approximately 90% of the project area and only one historic archaeological site outside of the project APE.

Consultation with Interested Parties

Between November 2015 and October 2017 Consultation was conducted with the Butte Tribal Council, Mooretown Rancheria of Maidu Indians, the T'si-Aim Maidu, Strawberry Valley Rancheria, Estom Yumeka Maidu Tribe of the Enterprise Rancheria, and united Auburn Indian Community (UAIC). The result of the consultation was that there were no concerns at that time.

Consultation was reinitiated in October 2019 with these tribes, as well as, the Konkow Valley Band of Maidu. Letters containing project description and location maps were sent to the aforementioned tribes followed up by e-mails. Responses were received from Mooretown Rancheria of Maidu Indians, UAIC, Estom Yumeka Maidu Tribe of the Enterprise Rancheria, and KonKow Valley Band of Maidu. To date no concerns with the project have been raised and consultation shall continue through the life of the project.

Notification letters for the proposed project were sent to identified potential local interested parties on August 25, 2017. Recipients of the letter were the Yuba County Museum of History; Yuba County Library, Local History Archives; Mary Aaron Memorial Museum Association; Yuba County Planning Department; and Yuba County Historical Resources Committee. A second letter was sent to Yuba County Museum of History (at a different address) on September 18, 2017. Follow-up electronic communications were sent on September 20, 2017. Kevin Perkins, Principal Planner with Yuba County Planning Department responded via email on September 20, 2017, stating that he had no information to add. No additional responses have been received.

Survey Results

Archaeological Resources

An intensive pedestrian survey was conducted of the APE on March 29 and 30, 2017. The results found that the only properties present within the APE meet the criteria for Section 106 PA Attachment 4 (Properties Exempt from Evaluation) and as applicable PRC 5024 MOU Stipulation VIII.C.1 Attachment 4.

Built Environment Resources

Caltrans has identified thirty-six architectural properties in the APE. All 36 properties were previously determined ineligible for listing in the National Register of Historic Properties (NRHP) as well as for the California Register of Historical Resources (CRHR). The only other properties present within the APE are properties exempt from evaluation.

Tribal Cultural Resources

The cultural studies and Native American consultation did not identify any tribal cultural resources within the project area.

Environmental Consequences

The archaeological APE encompasses no known NRHP-eligible, NRHP-listed, or previously unevaluated archaeological resources. The APE maintains a low potential for buried archaeological sites overall.

Similarly, the architectural APE encompasses no known NRHP-eligible, NRHP-listed, or previously unevaluated built environment resources. In addition, there are no Section 4(f) resource types within the Project APE.

Therefore, a finding of No Historic Properties Affected has been determined for the Project.

Avoidance, Minimization, and/or Mitigation Measures

CUL-1: Implement Plan to Address Discovery of Unanticipated Buried Cultural Resources or Human Remains

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

- If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to CA Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Erin Dwyer, Caltrans District 3 Environmental

Branch Manager, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.2 Physical Environment

2.2.1 Hydrology and Floodplain

Regulatory Setting

Executive Order (EO) 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration (FHWA) requirements for compliance are outlined in 23 Code of Federal Regulations (CFR) 650 Subpart A.

To comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments.
- Risks of the action.
- Impacts on natural and beneficial floodplain values.
- Support of incompatible floodplain development.
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

Affected Environment

The project area is within the jurisdiction of the Central Valley Regional Water Quality Control Board. This region includes the Sacramento River and San Joaquin River basins, including all areas from the crest of the Sierra Nevada range west to the Coast Range and Klamath Mountains. The region is bounded in the north by the California-Oregon border and extends south past the headwaters of the San Joaquin River to the base of the Tehachapi Mountains. The Sacramento and San Joaquin rivers meet and form the Delta, ultimately draining into San Francisco Bay. This basin covers about one-fourth of the total area of the state—more than 30 percent of the state’s land that can be irrigated—and furnishes about 51 percent of the state’s water supply.

The majority of the project area is within the Lower Feather Watershed (hydrologic unit code [HUC] 1802015905), and a small northern segment of the project is within the Honcut Creek watershed (HUC 1802015901), both within the larger Honcut Headwaters-Lower Feather watershed (HUC 18020159; ESRI ND). The average annual precipitation within the Lower Feather River watershed is approximately 50 inches (eastside foothills) to 20 inches (valley floor) (Sacramento River Watershed Program 2015). The terrain, within the project

area and vicinity, is generally flat, with elevations ranging from approximately 75 to 90 feet above mean sea level. The Feather River is almost entirely contained within a series of levees, with levees lining the Feather River west of the project alignment (Sacramento River Watershed Program 2015), and south of the Yuba-Butte County line. Soils in the drainage basin consist of clay, and therefore, have a low resistance to erosion. The project is located within the North Yuba groundwater sub-basin, in the eastern portion of the larger Sacramento Valley groundwater basin.

At the north end of the project area, SR 70 crosses (North and South) Honcut Creek. The creek appears to connect to the Feather River, a tributary of the Sacramento River. Jack-Simmerly Slough, which is influenced by the confluence with the Feather River, is 1000 feet south of the project area. The project area is less than 1 mile east of the Feather River, and approximately 20 miles east of the Sacramento River. The headwaters of the Feather River are the Oroville Dam at Lake Oroville and flows south to the Sacramento River (U.S. Geological Survey 2019).

Local and regional drainage runoff patterns are influenced by agricultural grading and terrain modifications. Farming practices, including grading, leveling, in-fill of drainage ditches, crop modifications, and irrigation practices have also influenced historic natural terrain and storm water runoff patterns. Drainage and storm water runoff from the highway are primarily conveyed through existing roadside ditches, which includes offsite contribution from the surrounding agricultural area. However, these ditches do not connect a natural drainage to a downstream tributary. Honcut Creek and Jack-Simmerly Slough are naturally occurring drainages that carry flow after rain events.

This project area is within flood zone A, a Federal Emergency Management Agency (FEMA) 100-year floodplain, as depicted on Flood Insurance Rate Maps (FIRMs). Areas within Zone A, a special flood hazard area, are subject to flooding by the 100-year storm event, however no depths or base flood elevations have been determined (Caltrans 2018). The project area is surrounded by a system of flood control levees; the Honcut Creek levee to the north, SP rail road levee to the east, east Feather River levee to the west, and the Jack-Simmerly Slough north levee to the south.

The project segment has experienced numerous localized flood events over the past 50 years. Recurring minor localized flooding is typically related to inadequate cross drainage at intersecting streets and driveways which prohibits runoff within the highway shoulder drainage ditches from moving to the south within the ditches. Although the Oroville Dam on the Feather River has reduced floodwaters, during very wet rainfall years, when the water surface elevation within the Feather River leveed area is elevated, much of basin, including the project area, can become inundated with water. This inundation is primarily due to a lack of overland drainage from farmlands being able to runoff into the Feather River levee basin to the west or to the drainage ditch that runs along the west edge of the railroad right of way to the east that eventually discharges into Jack-Simmerly Slough to the south (Caltrans 2018).

When the water surface elevation within the Feather River levee system rises near the tops of the levees, flap gates for the discharge pipes close tightly, impeding the release of

ponding water, and accumulated runoff is not able to pass into the Feather River levee system. Further, as the water surface elevation of the Feather River is elevated, the discharge from Jack-Simmerly Slough at the south end of the basin, is impeded and the water surface elevation of the Slough rises, inhibiting runoff from running off into Jack-Simmerly Slough. Under these conditions, surface water runoff is inhibited from discharging into the Feather River and Jack-Simmerly Slough leveed areas, resulting in flooding within the basin. The current alignment of Yub-70 within the project limits is representative of a longitudinal floodplain encroachment (Caltrans 2018).

No Build Alternative

The No Build Alternative would not change hydrology in the project area because the proposed project would not be constructed.

Build Alternatives

Environmental consequences for the two alternatives are similar, and therefore discussed together. The project would construct shoulders (minimum width of 10-feet), a soft shoulder (without paving), establish a Clear Recovery Zone (CRZ; minimum width of 20-feet), and provide passing opportunities in each direction of travel. The total length of the project is 9.6 miles. Roadside ditches will be constructed outside the CRZ, which will incorporate side slopes of 4:1 or less. Cross culverts for intersecting street drainage culverts and driveways would be hydraulically evaluated and replaced as necessary to provide improved drainage capacity along the northbound and southbound highway shoulder drainage ditches. Existing driveways would be modified to conform to the widened highway, as needed. As a result, driveway culverts would be replaced to convey drainage flows in the roadside ditches. Existing cross culverts would also be extended or replaced, as needed. In addition, there will be minor shifts in the horizontal alignment and minor adjustments in vertical profile to correct existing non-standard features.

The proposed project would likely exceed 1 acre of new impervious area. With new impervious surfaces, post-project flows will exceed/increase pre-project flows and could result in downstream erosion or flooding. In addition, increased impervious surfaces could reduce the ability for groundwater recharge within the localized groundwater aquifer system. However, to address the additional flows and ensure that the proposed project does not exceed existing flow conditions, the project would include stormwater runoff best management practices (BMPs) to collect and retain or detain the additional flows within the project limits, as required by the California Department of Transportation National Pollution Discharge Elimination System municipal separate storm sewer systems (MS4) permit and a Storm Water Management Plan. In addition, the proposed project would only minimally affect groundwater resources because the excavations would occur on a temporary, short-term basis during the construction period. The proposed project would result in a longitudinal floodplain encroachment but would not constitute a significant floodplain encroachment.

Avoidance, Minimization, and/or Mitigation Measures

Impacts from these activities would be avoided or minimized because all construction activities would comply with the necessary permits and requirements from regulatory

agencies, including the State Water Resources Control Board, Central Valley Regional Water Quality Control Board, U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and Yuba County. In addition to agency coordination and permit compliance, project drainage has been considered in the design, which will include new roadside ditches, and replacing cross culverts and driveway culverts, as needed. Additional details related to permanent best management practices (BMPs) will be evaluated during subsequent project phases. The minimal increase in impervious area would not cause on- or offsite flooding. The proposed project design includes side slopes of 4H:1V or less for the CRZ, which would maintain pre-project sheet-flow drainage patterns (i.e., flow and rates) and improve storm drainage facilities.

2.2.2 Water Quality and Storm Water Runoff

Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source (a point source is any discrete conveyance such as a pipe or a man-made ditch) unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general

category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of the USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency's (U.S. EPA) Section 404 (b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent¹ standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the State include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those uses. As a

¹ The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."

result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water.” The SWRCB has identified the Department as an owner/operator of an MS4 under federal regulations. The Department’s MS4 permit covers all Department rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The Department’s MS4 Permit, Order No. 2012-0011-DWQ (adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (conformed and effective April 7, 2015) has three basic requirements:

1. The Department must comply with the requirements of the Construction General Permit (see below);
2. The Department must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. The Department storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best

Management Practices (BMPs), to the maximum extent practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, the Department developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within the Department for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices the Department uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

Construction General Permit

Construction General Permit, Order No. 2009-0009-DWQ (adopted on September 2, 2009 and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17, 2012). The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop Storm Water Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective SWPPP. In accordance with the Department's SWMP and Standard Specifications, a Water Pollution Control Program (WPCP) is necessary for projects with DSA less than one acre.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the U.S. must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as WDRs under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

Affected Environment

The majority of the project is within the Lower Feather River watershed (HUC 1802015905), and a small northern portion is within the Honcut Creek watershed (HUC 1802015901), both within the larger Honcut Headwaters-Lower Feather watershed (HUC 18020159; ESRI ND). The segment of SR 70 within the project area crosses one drainage, Honcut Creek. The creek appears to connect to the Feather River, which is less than 1 mile east of the project area. The Jack-Simmerly Slough is 1000 feet south of the project area. The headwaters of the Feather River are the Oroville Dam at Lake Oroville and flow south to the Sacramento River. The project is located within the North Yuba groundwater sub-basin, within the larger Sacramento Valley groundwater basin.

Local and regional drainage runoff patterns are influenced by agricultural practices and terrain modifications. Drainage and storm water runoff from the highway is primarily conveyed through existing roadside ditches, which includes offsite contribution from the surrounding agricultural area. Honcut Creek and Jack-Simmerly Slough are naturally occurring drainages that carry flow after rain events. Beneficial uses for the projects receiving waters, the Feather River (Fish Barrier Dam to Sacramento River) include: municipal and domestic supply (MUN), agricultural supply/ irrigation (AGR), contact recreation (REC-1), non-contact recreation (REC-2), warm and cold freshwater habitat (WARM; COLD), warm and cold migration (MIGR), warm and cold spawning (SPWN), and wildlife habitat (WILD).

Surface and groundwater quality are a concern for both fisheries and agricultural supply use. Water in the Sacramento River Basin is generally considered to be relatively clean and acceptable for a variety of beneficial uses. Because most of the water in the Sacramento River and its major tributaries, such as the Feather River, is derived from melting snow that enters the rivers by managed discharges of water from reservoirs, much of the Sacramento River and its large tributaries have low concentrations of dissolved minerals. Although water quality of the Sacramento River is good most of the year, seasonal events, such as agricultural runoff or runoff from historical mining operations, may affect water quality. Water quality in the Lower Feather River Watershed is influenced by agricultural and

municipal land and water use in the watershed. (North) Honcut Creek (Butte and Yuba Counties) is 303(d) listed as impaired for indicator bacteria and dissolved oxygen; the Lower Feather River (Lake Oroville Dam to Confluence with Sacramento River) is impaired for chlorpyrifos, group A pesticides, mercury, polychlorinated biphenyls (PCBs), and toxicity. Jack-Simmerly Slough is impaired for diazinon, dissolved oxygen, and toxicity. None of the expected TMDLs have sources that are linked to Caltrans activities, nor has Caltrans been identified as a stakeholder for them; therefore, the Department has no obligation to implement permanent treatment BMPs for the pollutants causing impairment. Chlorpyrifos in the Lower Feather River is managed by the Sacramento/Feather Diazinon/Chlorpyrifos BPA TMDL, which was approved by the U.S. EPA on August 11, 2016 (State Water Board 2018).

Generally, groundwater quality in the North Yuba groundwater sub-basin is good, with consistent salinity throughout the basin. Constituents of concern for groundwater are total dissolved solids, nitrate, and several other individual chemical constituents (Sacramento River Watershed Program 2019). Unless otherwise designated by the Central Valley Regional Water Board, all groundwaters in the region are considered as suitable or potentially suitable, for municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO).

Environmental Consequences

No Build Alternative

The No Build Alternative would not affect water quality in the project area because the proposed project would not be constructed.

Build Alternatives

Construction of the proposed project would involve land-disturbing activities, stockpiling, equipment uses and storage, and potential spills that could result in temporary impacts on water resources within the project site or nearby. Construction activities may also result in eroded soil or suspended solids being temporarily introduced into waterways. These activities have the potential to violate water quality standards or WDRs if sediment- or contaminant-laden runoff from disturbed work areas enters storm drains or other pathways leading to receiving waters, or if fuel or other construction chemicals are accidentally spilled or leaked into the water. Sources of sediment include earthwork, excavation, embankment/fill construction, in-water work, uncovered or improperly covered stockpiles, unstabilized slopes, and construction equipment not properly cleaned or maintained.

The delivery, handling, and storage of construction materials and wastes, and the use of heavy construction equipment, could result in storm water contamination and thereby affect water quality. Construction activities may involve the use of chemicals and operation of heavy equipment that could result in accidental spills of hazardous materials (e.g., fuel and oil) during construction activities; these spills could enter the groundwater aquifer or nearby surface water bodies via runoff or storm drains. Constituents in fuel, oil, and grease can be acutely toxic to aquatic organisms and/or bioaccumulate in the environment. Staging areas or building sites can be sources of pollution because of the use of paints, solvents, cleaning

agents, and metals during construction. Impacts associated with metals in storm water include toxicity to aquatic organisms, such as bioaccumulation, and potential contamination of drinking supplies.

The proposed project would likely result in more than 1 acre of new impervious surfaces. An increase in impervious surface (pavement) would result in the potential for additional roadway contaminants to affect water quality. Potential sources of pollutants from the roadway include total suspended sediments, nutrients, volatile and semi volatile organics, hydrocarbons, pesticides, particulate metals, dissolved metals, pathogens, litter, biochemical oxygen demand, total dissolved solids, and targeted design constituents. Potential impacts of the proposed project on existing water quality conditions in Honcut Creek and Lower Feather River would consist of short-term discharges of sediments, oil, grease, and chemical pollutants into nearby storm drains or surface waters generated during construction.

Land-disturbing activities (e.g., vegetation clearing, excavation, and grading) could result in erosion and subsequent soil deposition to surface waters, which would temporarily increase turbidity. Contaminated soil on construction sites would be managed to prevent any pollutants from entering storm drain systems or receiving waters. Soil from areas with aerially deposited lead (ADL) may be reused as indicated by the Department of Toxic Substance Control. Generally, this would include placing contaminated soil under pavement or clean soil. If contaminated soil cannot be reused safely, it will be transported to a licensed landfill or other disposal site. At all times, stormwater and groundwater would be prevented from mixing with and transporting contamination. If any water does come in contact with contaminated soil, it will be collected and safely disposed of.

Long-term impacts on water quality could occur from increased impervious area, operation and maintenance activities, such as road and bridge maintenance and inspections, and discharges of sediments and other pollutants collected in stormwater runoff. However, surface runoff drainage patterns would remain similar to existing conditions. It is anticipated that the addition of new impervious area will have insignificant impacts to regional aquifer levels and groundwater levels (in general). Furthermore, at this time, groundwater dewatering will most likely not be necessary for project operations and maintenance activities. The project does not pass through areas where spills from Caltrans activities could discharge directly to municipal or domestic water supply reservoirs or ground water percolation facilities. In addition, standard facilities used to handle stormwater on site would include an array of structural elements or facilities that would serve to manage, direct, and convey stormwater, as described in the Avoidance, Minimization and/or Mitigation Measures that follow.

Avoidance, Minimization, and/or Mitigation Measures

WQ-1: NPDES Construction General Permit Coverage

It is anticipated that the project will be regulated under the NPDES Construction General Permit (previously discussed) which contains requirements to maintain water quality within

the project area and vicinity and includes stormwater and non-stormwater quality protection measures for all construction activities within Caltrans' right-of-way. This includes a Risk Level Assessment to determine and establish the anticipated level of environmental risk to receiving waters and potentially sensitive areas within the project limits.

2.2.3 Geology/Soils/Topography

Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the California Environmental Quality Act (CEQA).

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Structures are designed using the Department’s Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge’s category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities. For more information, please see the Department’s Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria

Yuba County requires a grading permit for any project that “creates or replaces 2,500 square feet or more of impervious surface.” The purpose of this requirement is to regulate grading, drainage, and other earthwork to preserve and safeguard public welfare, life, health, and property; ensure that the project is consistent with the Yuba County General Plan and local plans, specifications, standards, ordinances, and building codes; and require implementation of erosion and sedimentation control measures.

Affected Environment

National Natural Landmarks

There are no National Natural Landmarks in Yuba County.

Regional Geology

The project area is in the northeastern portion of the Sacramento Valley, which forms the northern portion of California’s Great Valley geomorphic province (Norris and Webb 1990; California Geological Survey 2002).

The Great Valley, also called the Central Valley, is a nearly flat alluvial plain that lies between the Sierra Nevada on the east and the Coast Ranges on the west. The valley’s south end is defined by the Tehachapi Mountains north of Los Angeles, and its north end is defined by the Klamath Mountains. The Great Valley is approximately 400 miles long, 50 miles wide, and is subdivided into the Sacramento Valley to the north and the San Joaquin Valley to the south (Norris and Webb 1990; Bartow 1991).

The Great Valley is floored by a thick sequence of sedimentary deposits that range in age from Jurassic through Quaternary (approximately 200 million years ago [mya] to present day). Under the eastern and central portions of the valley, the base of the sequence likely rests on Mesozoic crystalline rock allied to the plutons of the Sierra Nevada; to the west, basement rocks are believed to be Franciscan metasediments and/or mélange similar to

exposures in the Coast Ranges. Mesozoic sedimentary rocks that are now in the subsurface record marine deposition. These sedimentary rocks are overlain by Tertiary strata reflecting marine, estuarine, and terrestrial conditions, which are in turn overlain by Quaternary fluvial and alluvial strata, recording uplift and erosion of the Sierra Nevada and Coast Ranges to approximately their present shape (Norris and Webb 1990; Bartow 1991).

Local Topography and Geology

The project area is in the valley floor and is relatively flat. The depth to groundwater is unknown but is likely shallow, given its proximity to the Feather River and several creeks.

Geologic mapping by Saucedo and Wagner (1992) shows the project area is immediately underlain by three geologic units: natural levee and channel deposits (Qa), the Modesto Formation (Qm), and the Riverbank Formation (Qr).

The natural levee and channel deposits are of Holocene age (approximately 11,000 years old or younger) and occur as a narrow band along South Honcut Creek (Saucedo and Wagner 1992). This unit was formed as a result of stream deposition.

The Modesto Formation immediately underlies most of the project area, with small exposures of the Riverbank Formation scattered throughout the southern half of the project area. These units are both of Pleistocene age (approximately 2.6 mya to 11,000 years old), with the younger Modesto Formation overlying the older Riverbank Formation. Both units are alluvial deposits and share many of the same physical characteristics because the sediments that compose each unit were derived from the same rocks in the headwaters of the contributory streams issuing from the Sierra Nevada and were deposited in similar alluvial fan environments. The primary differences between the Modesto and Riverbank Formations are age-related; they include the degree of consolidation/cementation, the amount of deformation (tilting and/or folding), and soil development. Where Modesto alluvium overlies the Riverbank Formation, the contact between the two units is frequently marked by a deeply developed paleosol (ancient soil horizon) with a pronounced clay horizon (Atwater 1982).

Primary Seismic Hazards

The State of California considers two aspects of earthquake events as primary seismic hazards: surface fault rupture (i.e., disruption of the Earth's surface as a result of fault activity) and seismic ground shaking.

Surface Fault Rupture

The risk of surface rupture in the project area is low because there are no active faults (i.e., faults that show evidence of surface displacement in the past 11,000 years) in the project area. The nearest active fault is the Cleveland Hill fault, which is located just south of Lake Oroville, approximately 20 miles north of the project area (California Geological Survey 2010).

Seismic Ground Shaking

Unlike surface rupture, ground shaking is not confined to the trace of a fault, but rather ground shaking propagates into the surrounding areas during an earthquake. The intensity of ground shaking typically diminishes with distance from the fault, but ground shaking may be locally amplified and/or prolonged by some types of substrate materials.

The project area is in an area of relatively low ground shaking potential for California (Branum et al. 2008).

Secondary Seismic Hazards

Secondary seismic hazards are seismically induced landslide, liquefaction, and related types of ground failure events, such as differential settlement and lateral spread. The State of California maps areas that are subject to secondary seismic hazards pursuant to the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6), which is intended to reduce damage resulting from earthquakes. These hazards are addressed briefly below based on available information.

The potential for landslides and other slope stability issues is low because the project area is relatively flat and the risk of strong shaking is low.

Liquefaction is the process in which soils and sediments lose shear strength and fail during seismic ground shaking. The risk of liquefaction and related types of ground failure is low because the risk of strong ground shaking is low.

Soils

The major soils present in the project area and their suitability for road construction is shown in Table 2.

Table 2. Road Construction Suitability of Major Soils in the Project Area

Soil	Suitability Issue	Road Construction and Suitability Rating
Conejo loam, 0 to 2 percent slopes	Low strength, moderate shrink-swell potential	Somewhat limited
Kilanga clay loam, 0 to 1 percent slopes	Low strength, high shrink-swell potential	Very limited
Kimball loam, 0 to 1 percent slopes	Low strength, high shrink-swell potential	Very limited
Marysville loam, 0 to 1 percent slopes	Low strength, moderate shrink-swell potential	Very limited
San Joaquin loam, 0 to 1 percent slopes	Low strength, high shrink-swell potential	Very limited

Source: Natural Resources Conservation Service 2017

Mineral Resources

The California Surface Mining and Reclamation Act (SMARA) provides for the evaluation of an area's mineral resources using a system of mineral resource zone (MRZ) classifications that reflect the known or inferred presence and significance of a given mineral resource. The MRZ classifications are based on available geologic information, including geologic mapping and other information on surface exposures, drilling records, and mine data; and socioeconomic factors such as market conditions and urban development patterns. The MRZ classifications are defined as follows.

- MRZ-1—areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- MRZ-2—areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.
- MRZ-3—areas containing mineral deposits, the significance of which cannot be evaluated from available data.
- MRZ-4—areas where available information is inadequate for assignment into any other MRZ.

The southern portion of the project area is in the Yuba-Marysville Production-Consumption (P-C) region, which extends from Marysville east into most of Yuba County. In other parts of California, the 50-year demand for aggregate resources exceeds the permitted aggregate resources; however, the opposite is true for the Yuba-Marysville P-C region. The permitted aggregate material in the Yuba-Marysville P-C region exceeds the 50-year demand, and approximately 70% of its supply is exported to nearby counties, such as Sacramento and Placer Counties (California Geological Survey 2012).

Although the project area is in a region with active aggregate mines, there are no areas designated as MRZ-2 in or near the project area. No mineral land classification has been assigned to most of the project area, and the classification of the very southern portion of the project area is MRZ-4 (California Geological Survey 2012, 2017; California Division of Mines and Geology 1988).

Environmental Consequences

No Build Alternative

Under the no build alternative, there would be no change in seismic-related conditions because the project area has no known active faults and a low potential for strong seismic ground shaking. There would be no impact related to land sliding because the topography is flat and no construction would occur. There would be no impacts related to erosion because no grading would occur.

Subsurface road conditions would not be improved because subgrade enhancement geotextile and cementitious binder would not be installed and were likely not installed when

the highway was built. The highway may therefore be more susceptible to cracking as a result of the low strength and high shrink-swell potential of the underlying soils.

Build Alternatives

There are no known active faults in or near the project area. There would be no impact to construction workers or the traveling public related to subsurface fault rupture.

The project is an area with a low potential for strong seismic ground shaking. The project would be designed according to Caltrans seismic standards, as provided in the Caltrans' *Highway Design Manual* (HDM), minimizing the risk to construction workers or the traveling public.

Ground-disturbing earthwork associated with road grading and construction could increase soil erosion rates and loss of topsoil. The potential for erosion is increased because of the low strength of the soils. The best management practices (BMPs) described in Section 2.2.1, Hydrology and Floodplains, and Section 2.2.2, Water Quality and Stormwater Runoff, would minimize erosion and the loss of topsoil.

The project area is located on soils known to be expansive (have a high shrink-swell potential) and have low strength. Minimization measures in the Geotechnical Design Report, such as use of subgrade enhancement geotextile and cementitious binder, as well as BMPs, would be implemented to address soil issues, minimizing the risk to construction workers or the traveling public.

The project would not include a septic system. There would be no impact to construction workers or the traveling public.

No natural landmarks are present in the project area or vicinity. There would be no impact to natural landmarks.

There are no designated mineral resource areas (MRZ-2) in the project area or vicinity, and the project would not impede the extraction of any known mineral resources. There would be no impact to mineral resources.

Avoidance, Minimization, and/or Mitigation Measures

The BMPs described in Section 2.2.1, Hydrology and Floodplains, and Section 2.2.2, Water Quality and Stormwater Runoff in addition to the measures below would minimize erosion and the loss of topsoil.

GEO-1: Minimize Impacts from Seismic Events

To minimize potential impacts from seismic events, the project will be constructed in accordance with all applicable Caltrans standards and regulations and will be designed for the maximum possible earthquake. All construction activities will adhere to current engineering practices.

GEO-2: Minimize Soil Instability

To minimize the potential for soil instability from shrink-swell potential, soils with shrink-swell potential will be compacted at the highest moisture content possible and not be allowed to dry out prior to being covered with other material.

2.2.4 Paleontology

Regulatory Setting

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils.

A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized projects.

16 United States Code (USC) 431-433 (the “Antiquities Act”) prohibits appropriating, excavating, injuring, or destroying any object of antiquity situated on federal land without the permission of the Secretary of the Department of Government having jurisdiction over the land. Fossils are considered “objects of antiquity” by the Bureau of Land Management, the National Park Service, the Forest Service, and other federal agencies.

16 United States Code (USC) 461-467 established the National Natural Landmarks (NNL) program. Under this program property owners agree to protect biological and geological resources such as paleontological features. Federal agencies and their agents must consider the existence and location of designated NNLs, and of areas found to meet the criteria for national significance, in assessing the effects of their activities on the environment under NEPA.

16 United States Code (USC) 470aaa (the Paleontological Resources Preservation Act) prohibits the excavation, removal, or damage of any paleontological resources located on federal land under the jurisdiction of the Secretaries of the Interior or Agriculture without first obtaining an appropriate permit. The statute establishes criminal and civil penalties for fossil theft and vandalism on federal lands.

23 United States Code (USC) 1.9(a) requires that the use of Federal-aid funds must be in conformity with all federal and state laws.

23 United States Code (USC) 305 authorizes the appropriation and use of federal highway funds for paleontological salvage as necessary by the highway department of any state, in compliance with 16 USC 431-433 above and state law.

Under California law, paleontological resources are protected by the California Environmental Quality Act (CEQA).

The basis for assessments of paleontological sensitivity (i.e., potential to contain scientifically important paleontological resources) followed standard California Department of Transportation (Caltrans) criteria (California Department of Transportation 2014), which have three categories to describe the likelihood that a geologic unit contains significant fossil materials—high potential, low potential, and no potential, as described in the listing below:

High Potential (High Sensitivity) Category

This category consists of rock units known to contain important vertebrate, invertebrate, or plant fossils anywhere within their geographic extent, including sedimentary rock units that are suitable for the preservation of fossils, as well as some volcanic and low-grade metamorphic rock units.

This category includes rock units with the potential to contain the following:

- Abundant vertebrate fossils.
- A few significant fossils (large or small vertebrate, invertebrate, or plant fossils) that may provide new and significant taxonomic, phylogenetic, ecologic, and/or stratigraphic data.
- Areas that may contain datable organic remains older than Recent, including *Neotoma* (sp.) middens.
- Areas that may contain unique new vertebrate deposits, traces, and/or trackways.
- Fossiliferous deposits with very limited geographic extent or an uncommon origin (e.g., tar pits and caves) are given special consideration and ranked as highly sensitive.

Low Potential (Low Sensitivity) Category

This category includes sedimentary rock units that have the following characteristics:

- Are potentially fossiliferous but have not yielded significant fossils in the past.
- Have not yet yielded fossils but have the potential to contain fossil remains.
- Contain common and/or widespread invertebrate fossils of species whose taxonomy, phylogeny, and ecology are well understood.

Note that sedimentary rocks expected to contain vertebrate fossils are considered highly sensitive, because vertebrates are generally rare and found in more localized strata.

No Potential (No Sensitivity)

This category includes rock units and deposits that are either too young to contain fossils or are of intrusive igneous origin, most extrusive igneous rocks, and moderate- to high-grade metamorphic rocks.

Affected Environment

A draft Paleontological Identification Report (PIR) and Paleontological Evaluation Report (PER) was prepared for this report (ICF 2017) and was amended by Caltrans in January 2020. This section is based on the findings of the PIR/PER.

The listing below presents a summary of the geologic units which would be potentially affected by project excavations and their respective paleontological sensitivities.

Quaternary Alluvium and Quaternary Basin Deposits

There are no known significant resources in the Quaternary Alluvium and Quaternary Basin Deposits. The potential for paleontological resources is low.

Laguna Formation

Although there are no known records of fossils in the Laguna Formation (University of California Museum of Paleontology 2015a), nonmarine Pliocene deposits are a regionally extensive and are considered sensitive throughout their extent.

Modesto Formation

Numerous vertebrate fossil localities have been reported from sediments referable to the Modesto Formation in the San Joaquin and Sacramento Valleys. A search of the UCMP online database identified two specimens from the Modesto Formation in Sutter County, one Rancholabrean age specimen of long-horned bison (*Bison latifrons*), and plant specimens from sediments of the Modesto Formation that were recovered during paleomitigation of excavations at the Sutter Energy Center in Yuba County (University of California Museum of Paleontology 2016).

Riverbank Formation

As described for the Modesto Formation, Pleistocene sedimentary units are typically considered highly sensitive for paleontological resources. The Pleistocene age of the Riverbank Formation is well represented by important fossils recovered from excavations at the Arco Arena site in 1989 and more than a dozen other localities. Fossil finds in the Riverbank Formation include mammoth, bison, camel, horse, ground sloth, dire wolf, rodents, moles, birds, and bony fish (University of California Museum of Paleontology 2015b).

In addition, the UCMP database has one record of an avian fossil from an unidentified vertebrate specimen in Sutter County (University of California Museum of Paleontology 2016) and six vertebrate specimens and one plant specimen in Sacramento County (Hilton et al. 2000), but none are recorded in Yuba County. Because of its vertebrate fossil content, the Riverbank Formation is considered highly sensitive for paleontological resources.

Project Area

There are no fossil localities in the project boundaries; however, as stated previously, all formations in the project area, with the exception of the dredge tailings, have the potential or are known to contain substantial paleontological resources.

Environmental Consequences

No Build Alternative

Under the no build alternative, there would be no impacts to paleontological resources because no construction would occur.

Build Alternatives

The project vicinity contains four identified geologic units, of which only two have the potential to be impacted by the project. The Pliocene Laguna Formation is known to contain vertebrate fossil resources; however, it lies outside of the project impact area, and Quaternary alluvium is generally not considered to contain substantial paleontological resources. The other two units, the Pleistocene Modesto and Riverbank Formations, underlie the entire project impact area and have well-documented histories of containing significant vertebrate fossils. No previously-recorded fossil sites have been recorded in the footprint of the proposed project, and no fossils were seen during the field review in December 2016. However, a known fossil-bearing geologic unit is considered highly sensitive in its entire extent, not only in the location where fossils have been previously discovered.

Impacts to paleontological resources generally occur during excavations and other ground-disturbing activities. Since the existing facility is assumed to be built on imported fill material, activities related to grinding, pulverizing, excavating and paving within the existing paved portion of the project area have low to no potential to affect significant paleontological resources. Existing roadside ditches will most likely be graded and filled with imported material to build the proposed wider shoulders at the existing highway elevation. There is a low to moderate potential for these activities to impact paleontological resources in these areas as depth of excavation will be between 1-3 feet.

Newly acquired right-of-way will be cleared of vegetation and graded or excavated. The majority of new right-of-way would be acquired from actively-managed orchards. The ground surface of these orchards is likely to have been mechanically tilled and prepared when the orchard was created, likely impacting and damaging any paleontological resources in the upper 2-4 feet of the rock unit. However due to the high sensitivity of the geologic units, there remains a low to moderate potential to affect paleontological resources in these areas.

Finally, culverts installed in fill material underneath the roadway have no potential to impact paleontological resources, and impact-potential from roadside ditch culverts are considered low to moderate.

Avoidance, Minimization, and/or Mitigation Measures

Due to the high sensitivity of the Modesto and Riverbank formations, and the potential for some construction activities to uncover or affect paleontological resources, the following measures are required.

PALEO-1: Preparation of a Paleontological Mitigation Plan (PMP)

A Paleontological Mitigation Plan will be prepared prior to construction. The PMP will use 95% Design plans to accurately schedule paleontological monitoring efforts where/when construction activities could encounter fossil resources. The PMP will also outline the procedures to follow if fossils are encountered, and the curation facility where any significant fossils will be housed and prepared.

PALEO-2: Implement Construction Training

Prior to the start of grading or excavation activities into any non-fill soils in the project vicinity (specifically the Modesto and Riverbank formations), construction personnel involved with earth-moving activities (including the Caltrans Resident Engineer or site superintendent) shall be informed of the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction activities, and proper notification procedures should fossils be encountered. This training must be prepared and delivered by a qualified paleontological resource professional.

PALEO-3: Construction Monitoring

Construction monitoring for all Earth-moving construction activities with the potential to encounter or otherwise impact fossil resources. These activities and their locations will be determined in the aforementioned Paleontological Mitigation Plan (PMP). Qualified paleontological monitors must be present when these activities are occurring, however, monitoring does not need to be conducted in areas where sediment have been previously disturbed, or work is occurring in imported fill/road base materials. At the discretion of the Principle Paleontologist, and in coordination with the Caltrans Resident Engineer, construction monitoring can be reduced to weekly spot-monitoring checks if no fossil resources have been encountered after 50% of excavation activities have been completed in a specific geologic formation.

2.2.5 Hazardous Waste and Materials

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage, and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the [Comprehensive Environmental Response, Compensation and Liability Act \(CERCLA\) of 1980](#), and the [Resource Conservation and Recovery Act \(RCRA\) of 1976 \(RCRA\)](#). The purpose of CERCLA, often referred to as “Superfund,” is to identify and cleanup abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for “cradle to grave” regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992

- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order (EO) 12088, Federal Compliance with Pollution Control Standards, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the [CA Health and Safety Code](#) and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

Affected Environment

The existing conditions presented in this section are based on review of the *Hazardous Waste Initial Site Assessment (ISA), Yuba 70 Continuous Passing Lane Project, Yuba County, California* prepared in November 2019.

The ISA identified and evaluated potential hazardous waste sites and includes the following tasks:

- Review of previous environmental reports about the project site
- Geologic evaluation regarding Naturally Occurring Asbestos (NOA) within the project limits
- Review of government database of hazardous waste sites
- Preparation of a written report summarizing the records search results

Aerially Deposited Lead

Aerially deposited lead (ADL) is attributed to the historic use of leaded gasoline. Areas of primary concern are soils along routes that have had high vehicle emissions from large traffic volumes or congestion during the time when leaded gasoline was in use (generally prior to 1986). Along roads where the shoulder subgrade has not been disturbed, the presence of ADL is generally limited to the upper 24 inches. Lead concentrations typically drop rapidly with increasing depth below the ground surface.

Naturally Occurring Asbestos

A geologic evaluation regarding Naturally Occurring Asbestos (NOA) was conducted within the project limits. This evaluation included a review of geologic maps and reports including data prepared by the California Geological Survey (CGS) and the United States Geological Survey (USGS), previous studies conducted by Caltrans and their consultants. The evaluation does not indicate the presence of altered ultramafic bedrock, alluvium derived from ultramafic rock, or rock commonly associated with NOA.

Yellow Thermoplastic Striping

SR 70 has yellow pavement striping and markings. Yellow thermoplastic striping and yellow painted markings may contain elevated concentrations of lead chromate and hexavalent chromium manufactured before 2005 and painted markings manufactured before 1997.

Treated Wood Waste

Treated wood is wood with preservative chemicals that protect it from insect attack and fungal decay during its use. Typical uses in the highway environment include sign posts, metal beam guardrail wood posts, and lagging on retaining walls. The chemical preservatives used are hazardous and pose a risk to human health and the environment. Arsenic, chromium, copper, creosote, and pentachlorophenol are among the chemicals used. These chemicals are known to be toxic or carcinogenic. Harmful exposure to these chemicals may result from dermal contact with treated wood waste (TWW) or from inhalation or ingestion of TWW particulate (e.g., sawdust and smoke) as this material is handled.

Cortese List

The Cortese List is a compilation of contaminated sites identified by the State of California – State Water Resource Control Board; active, closed, and inactive landfills identified by the Integrated Waste Management Board; and potential hazardous waste sites identified by the Department of Toxic Substance Control. This list was reviewed as part of the initial screening for this project. The list, or a property's presence on the list, has bearing on the local permitting process as well as on compliance with the CEQA. Both the Envirostor and the Geotracker database did show the study area containing potential hazardous waste/sources. The proposed project is within or impacting a site on the Cortese List.

There is a total of three sites within the Geotracker database (all three are UST leaks). Two of the sites are closed/inactive (Six Mile Station & Mayfair Packing Co). One site is active (Atwal Site). There is a total of five other sites that have the potential to be contaminated.

These five sites are not identified in the Geotracker or Envirostor database, rather have been discovered through archaeological/historical research. An exemption to acquire contaminated parcels must be obtained if any work is to be done on the active Cortese site (Atwal site). This active Cortese site must be acquired through the 'Request for Acquisition of Contaminated Property' process.

The two closed/inactive sites located in the Geotracker database can be acquired through the 'HMDD' process.

- Mayfair Packing Co – 7880 Highway 70, Marysville, CA 95901 – Geotracker: Closed/Inactive - 8/30/1996
- Six Mile Station – 8991 Highway 70, Marysville, CA 95901 – Geotracker: Closed/Inactive – 1/19/2010

An exemption to acquire contaminated parcels must be obtained if any work is to be done on the active Cortese site (Atwal site). This active Cortese site must be acquired through the 'Request for Acquisition of Contaminated Property' process. *The office of Hazardous-Waste highly recommends avoiding the active parcel (Atwal Site) altogether; however, if any portion is to be acquired, please add 10-12 months of additional time to the project for R/W acquisition/certification (it is CALTRANS policy to not acquire contaminated properties).*

- Atwal Site – 95901 Highway 70, Marysville, CA 95901 – Geotracker: Active

The five below listed sites all have the potential to be contaminated. A site investigation must be conducted to determine if the site(s) are contaminated or not. Dependent upon the SI results; if the SI shows the site(s) to be contaminated, the below listed site(s) must be acquired through the 'Request for Acquisition of Contaminated Property' process. If the site(s) are contaminated, the office of Hazardous-Waste highly recommends avoiding the parcels altogether; however, if any portion is to be acquired, please add 10-12 months of additional time to the project for R/W acquisition/certification.

- 11196 Highway 70, Marysville, CA 95901 – Potential UST
- 9807 Highway 70, Marysville, CA 95901 – Potential UST
- 8787 Highway 70, Marysville, CA 95901 – Potential UST
- 8967 Highway 70, Marysville, CA 95901 – Potential UST
- 10507 Highway 70, Marysville, CA 95901 – Potential UST

Structures/National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Asbestos Containing Materials (ACM's) and Lead-Based Paint (LBP) survey is required for any structure proposed to be demolished and/or disturbed. Following the structural survey, proper specifications for notification, handling and disposal will be necessary. Also, if demolishing/disturbing structures, then demolition/renovation/rehabilitation notification/permit forms and attachments must be submitted to the Air Pollution Control District (APCD) or Air Quality Management District (AQMD) as required by the National

Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR Part 61, Subpart M, and California Health and Safety Code section 39658(b)(1).

Environmental Consequences

No Build Alternative

No construction would take place under the No-Build Alternative; therefore, there would be no potential to expose workers or nearby land uses to soil contamination or hazardous materials from construction activities. The No-Build Alternative would not result in right-of-way acquisition or construction disturbance. Accordingly, the No-Build Alternative would not result in any direct effects regarding hazardous wastes or materials.

Build Alternatives

Humans and the environment could be exposed to hazardous conditions from the accidental release of hazardous materials during construction activities. Construction would involve the use of heavy equipment, involving small quantities of hazardous materials (e.g., petroleum and other chemicals used to operate and maintain construction equipment) that may result in hazardous conditions in the project area.

Disturbing either yellow or white pavement markings by grinding or sandblasting or removal of treated wood posts or guardrails could expose construction workers or the general public to lead chromate and other harmful chemicals unless standard removal protocols are followed. Exposure of construction workers or the general public to these hazardous materials or wastes could pose a possible threat to human health. Soils on agricultural parcels could contain hazardous chemicals from past pesticide/herbicide use. Exposure of construction workers or the general public to these hazardous materials or wastes could pose a possible threat to human health.

Aerially deposited lead (ADL) from the historical use of leaded gasoline, exists along roadways throughout California. If encountered, soil with elevated concentrations of lead as a result of ADL on the state highway system right of way within the limits of the project will be managed under the July 1, 2016, ADL Agreement between Caltrans and the California Department of Toxic Substances Control. This ADL Agreement allows such soils to be safely reused within the project limits as long as all requirements of the ADL Agreement are met.

Avoidance, Minimization, and/or Mitigation Measures

HAZ-1: Avoid and Minimize the Potential for Effects from Hazardous Waste or Materials during Project Construction

The proposed project will disturb soil during construction. As it is possible that aerially deposited lead may be disturbed, a preliminary site investigation (PSI) is required. If the PSI shows the soil/groundwater at these parcels to be contaminated, NSSPs for the specific contaminant will also be needed (i.e. such as for petroleum hydrocarbons).

Contractors would be required to work under a health and safety plan and soil management plan. These plans would be prepared to address worker safety when working with potentially hazardous materials, including soils potentially containing aerially deposited lead, pesticides, herbicides, and other construction-related materials within the project right-of-way. The plans would provide for identification of potential hazardous materials at the work site and for specific actions to avoid worker exposure.

HAZ-2: Conduct Sampling, Testing, Removal, Storage, Transportation, and Disposal of Yellow/White Traffic Striping Along Existing Roadways

As required by Caltrans' standard special provisions, the construction contractor will sample and test yellow/white traffic striping scheduled for removal to determine whether lead or chromium is present. The construction contractor will also implement a project specific lead compliance plan prepared by a Certified Industrial Hygienist (CIH) as required by Cal/OSHA.

All aspects of the project associated with removal, storage, transportation, and disposal will be in strict accordance with appropriate regulations of the California Health and Safety Code. The stripes will be disposed of at a Class 1 disposal facility. These grindings (which consist of the roadway material and the yellow color traffic stripes) will be removed and disposed of in accordance with Standard Special Provision 36-4 (Residue Containing High Lead Concentration Paints) requires a Lead Compliance Plan.

The responsibility of implementing this measure will be outlined in the contract between Caltrans and the construction contractor. Implementing this measure will minimize potential effects from these hazardous materials.

HAZ-3: Perform Soil Testing and Dispose of Contaminated Soils Appropriately

To prevent exposure of workers and the public to contaminated soils, requirements as detailed in the DTSC Agreement will be followed. In addition, surface soils from potentially contaminated areas would be screened and contaminated soils disposed of appropriately. Soil excavated from the surface to a depth of 1 foot can be reused within Caltrans right of way if covered with at least one foot of clean soil or pavement structure. If soil excavated from the top 1 foot will not be reused within Caltrans ROW, then the excavated soil should be either: (1) managed and disposed of as a California hazardous waste, or (2) stockpiled and resampled to confirm waste classification in accordance with specific disposal facility acceptance criteria, if applicable.

Therefore, screening of surface soils for residual chemical contamination will occur for any parcels to be acquired and if soils are to be moved off agricultural parcels, to non-agricultural parcels. Soils testing positive should be removed off site to a permitted treatment/disposal facility. This testing should be completed before construction activities.

HAZ-4: Develop a Lead Compliance Plan

The Contractor shall prepare a project-specific Lead Compliance Plan to minimize worker exposure to lead-impacted materials. The plan will include protocols for environmental and personal monitoring, requirements for person protective equipment, and other health and

safety protocols and procedures for the handling of lead-impacted materials. Screening of surface soils for lead contamination will occur for any parcels to be acquired before construction activities.

HAZ-5: Develop and Implement Plans to Address Worker Health and Safety

As necessary, and as required by Caltrans and federal and state regulations, plans such as a health and safety plan, BMPs, and/or an injury and illness prevention plan will be prepared and implemented to address worker safety when working with potentially hazardous materials, including potential TWW, lead or chromium in traffic stripes, ADL, and other construction-related materials within the right-of-way during any soil-disturbing activity.

If project components are removed that may contain TWW (e.g., sign posts, metal beam guardrail wood posts, and lagging on retaining walls), the contractor must prepare and submit a safety and health work practices plan for handling TWW approved by an American Board of Industrial Hygiene Certified Industrial Hygienist. TWW must be disposed of in an approved TWW facility. Construction workers who handle this material must be provided training that includes the following.

- All applicable requirements of Title 8 CCR;
- Procedures for identifying and segregating TWW;
- Safe handling practices;
- Requirements of Title 22 CCR, Division 4.5, Chapter 34; and
- Proper disposal methods.

HAZ-6: Right of Way/Properties/Structures Survey and NESHAP Notification

Asbestos Containing Materials (ACM's) and Lead-Based Paint (LBP) survey is required for any structure proposed to be demolished and/or disturbed. Right of way entry permit for Asbestos Containing Materials/Lead Based Paint survey is required to execute the task order survey(s).

If demolishing/disturbing structures, then the Contractor must prepare demolition/renovation/rehabilitation notification/permit form and attachments to be submitted to the Air Pollution Control District (APCD) or Air Quality Management District (AQMD) as required by the National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR Part 61, Subpart M, and California Health and Safety Code section 39658(b)(1).

2.2.6 Air Quality

Regulatory Setting

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act (CCAA) is its companion state law. These laws,

and related regulations by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM)—which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM₁₀) and particles of 2.5 micrometers and smaller (PM_{2.5})—and sulfur dioxide (SO₂). In addition, national and state standards exist for lead (Pb), and state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H₂S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel “Conformity” requirement under the FCAA also applies.

Conformity

The conformity requirement is based on FCAA Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. “Transportation Conformity” applies to highway and transit projects and takes place on two levels: the regional (or planning and programming) level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and “maintenance” (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), and in some areas (although not in California), sulfur dioxide (SO₂). California has nonattainment or maintenance areas for all of these transportation-related “criteria pollutants” except SO₂, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP) and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those

projects would conform to emission budgets or other tests at various analysis years showing that requirements of the FCAA and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA) make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the FCAA. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept and scope and the “open-to-traffic” schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP; the project has a design concept and scope (“Design concept” means the type of facility that is proposed, such as a freeway or arterial highway. “Design scope” refers to those aspects of the project that would clearly affect capacity and thus any regional emissions analysis, such as the number of lanes and length of the project) that has not changed significantly from those in the RTP and TIP; project analyses have used the latest planning assumptions and EPA-approved emissions models; and in PM areas, the project complies with any control measures in the SIP. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM nonattainment or maintenance areas to examine localized air quality impacts.

Affected Environment

Information presented in this section is based on the Air Quality Report prepared for the proposed project (Caltrans 2020).

Location Climate and Meteorology

Meteorology (weather) and terrain can influence air quality. Certain weather parameters are highly correlated to air quality, including temperature, the amount of sunlight, and the type of winds at the surface and above the surface. Winds can transport ozone and ozone precursors from one region to another, contributing to air quality problems downwind of source regions. Furthermore, mountains can act as a barrier that prevents ozone from dispersing.

The Yuba county airport climatological station, maintained by Feather River Air Quality Management District (FRAQMD), is located near the project site and is representative of meteorological conditions near the project. The climate of the project area is generally Mediterranean in character, with mild winters (from 38 to 55°Fahrenheit in January) and hot, dry summers (from 64 to 96°Fahrenheit in July). Annual average rainfall is approximately 22.02 inches (at Yuba county airport), mainly falling during the winter months. Yuba County, California, covers an area of approximately 645 square miles. The lowest and highest elevations in Yuba County are 199 meters (653 feet) and 2,541 meters (8,337 feet) , respectively.

The mountains surrounding the Sacramento Valley Air Basin (SVAB) create a barrier to airflow, which can trap air pollutants under certain meteorological conditions. The highest

frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells collect over the Sacramento Valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with temperature inversions that trap pollutants near the ground. The ozone season (May through October) in the Sacramento Valley is characterized by stagnant morning air or light winds with the delta sea breeze arriving in the afternoon out of the southwest. Usually the evening breeze transports the airborne pollutants to the north out of the Sacramento Valley. During about half of the days from July to September, however, a phenomenon called the “Schultz Eddy” prevents this from occurring. Instead of allowing for the prevailing wind patterns to move north carrying the pollutants out, the Schultz Eddy causes the wind pattern to circle back to the south, preventing pollutants from cycling out of the air basin. This phenomenon has the effect of exacerbating the pollution levels in the area and increases the likelihood of violating federal or state standards. The eddy normally dissipates around noon when the delta sea breeze arrives.

Existing Air Quality Conditions

Existing air quality conditions in the project area can be characterized in terms of the ambient air quality standards that federal and state governments have established for various pollutants by monitoring data collected in the region. The nearest air quality monitoring station in the vicinity of the project area that reported pollutant concentrations between 2015 and 2018 is the Yuba City-Almond Street monitoring station, which is approximately 4 miles south of the proposed project (Table 3). Air quality standards are summarized in Table 4.

**Table 3. Air Quality Concentrations for the Past 4 Years Measured at Yuba City-
Almond Street
Ozone**

Pollutant	Standard	2015	2016	2017	2018
Max 1-hr concentration (ppm): State		0.08	0.075	0.085	0.086
No. days exceeded: State	0.09 ppm	0	0	0	0
Max 8-hr concentration (ppm):		N/A	N/A	N/A	N/A
State					
Federal		0.074	0.065	0.073	0.071
No. days exceeded:					
State	0.070 ppm	1	0	2	1
Federal	0.070 ppm	1	0	2	1

PM10

Pollutant	Standard	2015	2016	2017	2018
Max 24-hr concentration (µg/m3): State					
State		67.2	51.7	145.5	339.6
Federal		68.2	51.4	145	318.6
Estimated No. days exceeded:					
State	50 µg/m3	6	1	19.3	*
Federal	150 µg/m3	0	0	0	8
Annual average concentration (µg/m3): State		23.1	20.4	21.8	*
Federal		23.2	20.7	21.8	30.6

PM2.5

Pollutant	Standard	2015	2016	2017	2018
24-hr average concentration (µg/m3): State		36.1	40.1	47.2	285.0
Federal		36.1	40.1	45.0	52.8
Estimated No. days exceeded:					
Federal	35 µg/m3	2	1	2.4	8.4
Annual average concentration (µg/m3):					
State		10.2	11.4	11.8	18.0
Federal		9.6	8.1	9.2	10.2

Source: California Air Resources Board (<http://www.arb.ca.gov/adam>) and accessed on 12/20/2019

*there was insufficient (or no) data available to determine the value.

N/A: not provided for Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), Lead (Pb), Hydrogen Sulfide (H₂S), Vinyl Chloride, or Visibility Reducing Particles as these pollutants are not currently monitored at the Yuba City-Almond Street monitoring station.

Attainment Status

Areas that do not violate ambient air quality standards are considered to have attained the standard. Violations of ambient air quality standards are based on air pollutant monitoring data and are evaluated for each air pollutant. Table 3 lists the state and federal attainment status for all regulated pollutants. At the federal level, Yuba County is classified as attainment-maintenance for PM_{2.5}, unclassified for PM₁₀, and unclassified/attainment for O₃, CO, NO₂, and SO₂. At the state level, Yuba County is classified as nonattainment for O₃ and PM₁₀, attainment for PM_{2.5}, NO₂, SO₂, Pb, and sulfates, and unclassified for CO, visibility-reducing particles, and hydrogen sulfide.

Sensitive Receptors

Sensitive receptors include residential areas, schools, hospitals, other health care facilities, child/day care facilities, parks, and playgrounds. On the basis of research showing that the zone of greatest concern near roadways is within 500 feet (or 150 meters), a sensitive receptor within 500 feet (or 150 meters) have been identified except a few agricultural residential properties. Little Orchard's Preschool n' Daycare is located at 8973 Highway 70, Marysville, CA. No other sensitive receptors such as hospitals, or schools occur within the 500 feet buffer of the proposed project area.

Table 4. State and Federal Criteria Air Pollutant Effects and Sources

Pollutant	Principal Health and Atmospheric Effects	Typical Sources
Ozone (O ₃)	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known toxic air contaminants. Biogenic VOC may also contribute.	Low-altitude ozone is almost entirely formed from reactive organic gases/volatile organic compounds (ROG or VOC) and nitrogen oxides (NO _x) in the presence of sunlight and heat. Common precursor emitters include motor vehicles and other internal combustion engines, solvent evaporation, boilers, furnaces, and industrial processes.

Respirable Particulate Matter (PM10)	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many toxic and other aerosol and solid compounds are part of PM10.	Dust- and fume-producing industrial and agricultural operations; combustion smoke & vehicle exhaust; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources.
Fine Particulate Matter (PM2.5)	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter – a toxic air contaminant – is in the PM2.5 size range. Many toxic and other aerosol and solid compounds are part of PM2.5.	Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical and photochemical reactions involving other pollutants including NO _x , sulfur oxides (SO _x), ammonia, and ROG.
Carbon Monoxide (CO)	CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO also is a minor precursor for photochemical ozone. Colorless, odorless.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.
Nitrogen Dioxide (NO ₂)	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain & nitrate contamination of stormwater. Part of the “NO _x ” group of ozone precursors.	Motor vehicles and other mobile or portable engines, especially diesel; refineries; industrial operations.
Sulfur Dioxide (SO ₂)	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used.
Lead (Pb)	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also, a toxic air contaminant and water pollutant.	Lead-based industrial processes like battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from older gasoline use may exist in soils along major roads.
Visibility-Reducing Particles (VRP)	Reduces visibility. Produces haze. NOTE: not directly related to the Regional Haze program under the Federal Clean Air Act, which is oriented primarily toward visibility issues in National Parks and other “Class I” areas. However, some issues and measurement methods are similar.	See particulate matter above. May be related more to aerosols than to solid particles.
Sulfate	Premature mortality and respiratory effects. Contributes to acid rain. Some toxic air contaminants attach to sulfate aerosol particles.	Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas.
Hydrogen Sulfide (H ₂ S)	Colorless, flammable, poisonous. Respiratory irritant. Neurological damage and premature death. Headache, nausea. Strong odor.	Industrial processes such as: refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs.
Vinyl Chloride	Neurological effects, liver damage, cancer. Also considered a toxic air contaminant.	Industrial processes.

Environmental Consequences

No-Build Alternative

Under the No Build Alternative, the proposed project would not be built, and the existing roadway would be maintained. The No Build Alternative would not directly generate any short-term construction emissions. It is anticipated that future emissions of criteria pollutants and MSAT would decrease relative to existing conditions because of improvements in engine technology and the phasing out of older, more polluting engines. Likewise, CO concentrations would be reduced.

Build Alternatives

Regional Conformity

The proposed project is listed in the Metropolitan Transportation Improvement Program (MTIP) and the Metropolitan Transportation Plan/Sustainable Communities Strategy (adopted November 2019) under CAL18815, and FHWA and FTA made a regional conformity determination finding on December 7, 2018. The project is also included in SACOG financially constrained 2019-2022 Metropolitan Transportation Improvement Program, pages 117/440. The SACOG and 2019-2022 Metropolitan Transportation Improvement Program was determined to conform by FHWA and FTA on December 17, 2018. The design concept and scope of the proposed project is consistent with the project description in the 2019-22 MTIP, and the “open to traffic” assumptions of the SACOG regional emissions analysis.

Project Level Conformity

The project is located in the maintenance area for PM_{2.5}, thus a project-level hot-spot analysis for PM_{2.5} is required under 40 CFR 93.109. This proposed project includes improvement of safety, goods movement, and emergency evacuation along the corridor, providing continuous passing lanes within the full postmile limits (P.M. 16.2 – 25.8). The project’s design concept and the scope match those assumed for regional analysis purposes (in the MTP and MTIP) and a hot-spot analysis for carbon monoxide and/or particulate matter. The project does not cause or contribute to any new localized CO, PM_{2.5}, and/or PM₁₀ violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones during the timeframe of the transportation plan

Additional Environmental Analysis

Operational Emissions

Operational emissions take into account long-term changes in emissions due to the project (excluding the construction phase). The operational emissions analysis compares forecasted emissions for existing/baseline, No-Build, and all Build alternatives. Table 5 below contains a summary of all long-term operational emissions associated with the proposed project. CO and NO_x emissions from the traffic operation in the opening year (2023) would not be changed between no-build and build alternatives. There are slight changes in CO emissions in build alternatives for the design year (2043) in comparison with those in the no-build alternative. The emissions of CO and NO_x in the future build alternatives would be lower than those in the baseline year.

Table 5. Summary of Comparative Emissions Analysis.

Baseline (Existing Conditions), 2018	CO (US tons/day)	PM10 (US tons/day)	PM2.5 (US tons/day)	NOx (surrogate for NO2) (US tons/day)
Northbound	0.39	0.222	0.037	0.104
Southbound	0.405	0.23	0.039	0.108
No-Build, 2023	CO (US tons/day)	PM10 (US tons/day)	PM2.5 (US tons/day)	NOx (surrogate for NO2) (US tons/day)
Northbound	0.244	0.249	0.041	0.07
Southbound	0.252	0.258	0.043	0.073
No-Build, 2023	CO (US tons/day)	PM10 (US tons/day)	PM2.5 (US tons/day)	NOx (surrogate for NO2) (US tons/day)
Northbound	0.244	0.249	0.041	0.07
Southbound	0.252	0.258	0.043	0.073
Build Alternatives 1 & 2, 2023	CO (US tons/day)	PM10 (US tons/day)	PM2.5 (US tons/day)	NOx (surrogate for NO2) (US tons/day)
Northbound	0.244	0.249	0.041	0.07
Southbound	0.252	0.258	0.043	0.073

No-Build, 2043	CO (US tons/day)	PM10 (US tons/day)	PM2.5 (US tons/day)	NOx (surrogate for NO2) (US tons/day)
Northbound	0.133	0.307	0.05	0.070
Southbound	0.137	0.316	0.052	0.073
No-Build, 2043	CO (US tons/day)	PM10 (US tons/day)	PM2.5 (US tons/day)	NOx (surrogate for NO2) (US tons/day)
Northbound	0.134	0.31	0.051	0.030
Southbound	0.138	0.317	0.052	0.031
No-Build, 2043	CO (US tons/day)	PM10 (US tons/day)	PM2.5 (US tons/day)	NOx (surrogate for NO2) (US tons/day)
Northbound	0.134	0.31	0.051	0.03
Southbound	0.138	0.317	0.052	0.031

CO: carbon monoxide; PM: particulate matter; NOx: oxides of nitrogen; NO₂: nitrogen dioxide

Source: EMFAC2017

Naturally Occurring Asbestos

Based on review of the California Geological Survey¹², Yuba County includes the presence of ultramafic rocks or serpentinite and asbestos occurrences reported in the literature. However, Naturally Occurring Asbestos (NOA) is not mapped in the area of Yuba County where NOA is expected to occur.

The construction activities proposed by Caltrans may disturb NOA-containing soil/rock units, if present at the site. The California Air Resources Board (CARB) has mitigation practices for construction, grading, quarrying and surface mining operations that may disturb natural occurrences of asbestos as outlined in CCR Title 17, §93105 – Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (ATCM 93105). NOA potentially poses a health hazard when it becomes an airborne particulate. Mitigation practices can reduce the risk of exposure to asbestos-containing dust. The primary mitigation practice used for controlling exposure to potentially asbestos-containing dust is the implementation of engineering controls including wetting the materials being disturbed. If engineering controls do not adequately control exposure to potentially asbestos-containing dust, the use of personal protective equipment including wearing air purifying respirators with High Efficiency Particulate Air (HEPA) filters is required during construction activities.

Lead

Lead is normally not an air quality issue for transportation projects unless the project involves disturbance of soils containing high levels of aerially deposited lead or painting or modification of structures with lead-based coatings. Any potential Aerially Deposited Lead (ADL) issues will be addressed within the Initial Site Assessment.

Mobile Source Air Toxics

Mobile source air toxics (MSATs) are a subset of the 187 air toxics defined by the Clean Air Act. MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

FHWA released updated guidance in October 2016 (FHWA, 2016) for determining when and how to address MSAT impacts in the NEPA process for transportation projects. FHWA identified three levels of analysis:

- No analysis for exempt projects or projects with no potential for meaningful MSAT effects;
- Qualitative analysis for projects with low potential MSAT effects; and
- Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

Projects with no impacts generally include those that a) qualify as a categorical exclusion under 23 CFR 771.117, b) qualify as exempt under the FCAA conformity rule under 40 CFR 93.126, and c) are not exempt, but have no meaningful impacts on traffic volumes or vehicle mix.

Projects that have low potential MSAT effects are those that serve to improve highway, transit, or freight operations or movement without adding substantial new capacity or creating a facility that is likely to substantially increase emissions. The large majority of projects fall into this category.

Projects with high potential MSAT effects include those that:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of Diesel Particulate Matter in a single location; or
- Create new or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000, or greater, by the design year; and

- Are proposed to be located in proximity to populated areas or, in rural areas, in proximity to concentrations of vulnerable populations (i.e., schools, nursing homes, hospitals).

Based on the ARB Land Use Handbook (Cal/EPA and ARB, 2005), it is generally recommended in California that projects perform an emissions analysis to address CEQA requirements if any of the following criteria are met:

- The project changes capacity or realigns a freeway, or urban road with AADT of 100,000 or more and there are sensitive land uses within 500 feet of the roadway.
- The project changes capacity or realigns a rural road (non-freeway) with AADT of 50,000 or more and there are sensitive land uses within 500 feet of the roadway.

Given that the design-year AADT volume for the most heavily traveled segment in the modeled area is predicted less than 50,000 for the build alternatives, the MSAT emission analysis for CEQA requirements is not addressed. The proposed project can fall into the Category 2 (FHWA, 2016), a project with low potential MSAT effects, since the AADT of this proposed project is projected to be less than 140,000 – 150,000 AADT in the design year traffic. As such, a qualitative MSAT analysis for NEPA requirements is appropriate.

For each alternative, the amount of MSAT emitted would be proportional to the vehicle miles traveled (VMT), assuming that other variables such as fleet mix are the same for each alternative. The daily VMT estimated for the opening (6,152,200 miles) and the design years (8,015,500 miles) under the no-build condition would be the same (6,152,200 miles) for the opening year and slightly change (8,015,400 miles) for the design year under the build conditions (Transportation Analysis Report, 2019). Therefore, these values in VMT would not lead to higher MSAT emissions for the preferred action alternative along the highway corridor. In addition, these emissions would be offset somewhat by lower MSAT emission rates probably due to increases in speeds; according to the Environmental Protection Agency's (EPA) MOVES2014 model, emissions of all of the priority MSAT decrease as speed increases. Because the estimated VMT under the build alternatives is the same or would be reduced, it is expected there would be no appreciable difference in overall MSAT emissions between the build and no-build alternatives. Also, regardless of the alternative chosen, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050 (Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents, Federal Highway Administration, October 12, 2016). Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

Construction (Short-term) Impacts

Site preparation and roadway construction will involve grading, removing or improving existing roadways, installing a traffic sign, and paving roadway surfaces. During

construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, NO_x, ROG_s, directly emitted PM₁₀ and PM_{2.5}, and toxic air contaminants (TACs) such as diesel exhaust particulate matter. Construction activities are expected to increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Under the transportation conformity regulations (40 CFR 93.123(c)(5)), construction-related activities that cause temporary increases in emissions are not required in a hot-spot analysis. These temporary increases in emissions are those that occur only during the construction phase and last five years or less at any individual site. They typically fall into two main categories:

- *Fugitive Dust*: A major emission from construction due to ground disturbance. All air districts and the California Health and Safety Code (Sections 41700-41701) prohibit “visible emissions” exceeding three minutes in one hour – this applies not only to dust but also to engine exhaust. In general, this is interpreted as visible emissions crossing the right-of-way line.
- Sources of fugitive dust include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site may deposit mud on local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions may vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.
- *Construction equipment emissions*: Diesel exhaust particulate matter is a California-identified toxic air contaminant, and localized issues may exist if diesel-powered construction equipment is operated near sensitive receptors.

Construction emissions were estimated using the latest Caltrans’ Model (CAL-CET2018). Construction-related emissions for the proposed project are presented in Table 6. The emissions presented are based on the best information available at the time of calculations. The emissions represent the daily average construction and project total emissions, respectively.

Table 6. Construction Emissions

Construction Type	PM10 (lbs./day) Alt. 1	PM10 (lbs./day) Alt. 2	PM2.5 (lbs./day) Alt. 1	PM2.5 (lbs./day) Alt. 2	CO (lbs./day) Alt. 1	CO (lbs./day) Alt. 2	NOx (lbs./day) Alt. 1	NOx (lbs./day) Alt. 2	CO2 (lbs./day) Alt. 1	CO2 (lbs./day) Alt. 2
Land Clearing/ Grubbing	41.732	41.779	4.913	4.959	10.3	10.86	12.27	12.94	2,631	2,768
Roadway Excavation/Removal	15.481	15.625	3.8	3.941	29.84	31.48	33.98	35.86	6,411	6,753
Structural Excavation/ Removal	57.095	57.122	6.129	6.156	4.19	4.41	8.09	8.58	1,892	2,006
Base/Subbase/ Imported Borrow	23.735	23.951	5.742	5.953	47.38	50.02	49.14	51.89	9,184	9,689
Structure Concrete	0.629	0.664	0.61	0.645	5.74	6.06	9.63	10.18	2,028	2,143
Paving	2.004	2.116	1.955	2.066	11.8	12.47	28.44	30.02	5,339	5,636
Drainage/Environment/ Landscaping	1.046	1.105	1.016	1.073	5.98	6.34	12.96	13.76	2,363	2,531
Traffic Signalization/ Signage/Striping/Painting	1.114	1.176	1.085	1.146	11.95	12.62	20.72	21.88	6,867	7,245
Project Total daily average	142.84	143.54	25.25	25.94	127.18	134.26	175.23	185.11	36,715	38,771
Project Total (tons)	1.725	1.739	0.394	0.407	2.57	2.71	3.49	3.68	719	759

Alt. = Alternative

Implementation of the following measures will reduce air quality impacts resulting from construction activities. Please note that although these measures are anticipated to reduce construction-related emissions, these reductions cannot be quantified at this time.

Avoidance, Minimization, and/or Mitigation Measures

AQ-1: Implement Dust Control Measures

Dust control measures will be implemented as specified in Caltrans 2018 Standard Specifications Section 10-5 “Dust Control”, Section 14-9 “Air Quality” and Section 18 “Dust Palliatives”.

AQ-2: Adhere to FRAQMD Rule 3.16 (Fugitive Dust)

The project proponent will control dust emissions from earth moving activities, storage or any other construction activity to prevent airborne dust from leaving the project site.

AQ-3: Implement Fugitive Dust Control Plan

The FRAQMD CEQA Guidelines provide feasible control measures for construction emissions. Measures to reduce PM₁₀, PM_{2.5} and diesel particulate matter from construction are recommended to ensure that short-term health impacts to nearby sensitive receptors are avoided. These are listed below.

- 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.
- 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.
- 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.
- Onsite dirt piles or other stockpiled particulate matter should be covered, wind breaks installed, and water and/or soil stabilizers employed to reduce wind-blown dust emissions. Incorporate the use of approved non-toxic soil stabilizers according to manufacturer's specifications to all inactive construction areas.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Reestablish ground cover on the construction site as soon as possible and prior to final occupancy, through seeding and watering.
- Disposal by burning: Opening 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.

Climate Change

Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level greenhouse gas analysis. FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and executive orders on climate change, the issue is addressed in the California Environmental Quality Act (CEQA) chapter of this document. The CEQA analysis may be used to inform the National Environmental Policy Act (NEPA) determination for the project.

2.2.7 Noise

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

California Environmental Quality Act

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The rest of this section will focus on the NEPA/23 Code of Federal Regulations Part 772 (23 CFR 772) noise analysis; please see Chapter 3 of this document for further information on noise analysis under CEQA.

National Environmental Policy Act and 23 CFR 772

For highway transportation projects with Federal Highway Administration (FHWA) involvement (and the Department, as assigned), the Federal-Aid Highway Act of 1970 and its implementing regulations (23 Code of Federal Regulations [CFR] 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). The following table lists the noise abatement criteria for use in the NEPA/23 CFR 772 analysis.

Table 7 Noise Abatement Criteria

Activity Category	NAC, Hourly A- Weighted Noise Level, Leq(h)	Description of activity category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of

		those qualities is essential if the area is to continue to serve its intended purpose.
B ¹	67 (Exterior)	Residential.
C ¹	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No NAC—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No NAC—reporting only	Undeveloped lands that are not permitted.

¹ Includes undeveloped lands permitted for this activity category

Table 7 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

Figure 7: Noise Levels of Common Activities

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet Fly-over at 300m (1000 ft)	110	Rock Band
Gas Lawn Mower at 1 m (3 ft)	100	
Diesel Truck at 15 m (50 ft), at 80 km (50 mph)	90	Food Blender at 1 m (3 ft)
Noisy Urban Area, Daytime	80	Garbage Disposal at 1 m (3 ft)
Gas Lawn Mower, 30 m (100 ft)	70	Vacuum Cleaner at 3 m (10 ft)
Commercial Area		Normal Speech at 1 m (3 ft)
Heavy Traffic at 90 m (300 ft)	60	Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime		Library
Quiet Rural Nighttime	30	Bedroom at Night, Concert Hall (Background)
	20	Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

According to the Department's *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, May 2011*, a noise impact occurs when the predicted future noise level with the project substantially exceeds the existing noise level (defined as a 12 dBA or more) or when the future noise level with the project approaches or exceeds the NAC. A noise level is considered to approach the NAC if it is within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

The Department's Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. Noise abatement must be predicted to reduce noise by at least 5 dB at an impacted receptor to be considered feasible from an acoustical perspective. It must also be possible to design and construct the noise abatement measure for it to be considered feasible. Factors that affect the design and constructability of noise abatement include, but are not limited to, safety, barrier height, topography, drainage, access requirements for driveways, presence of local cross streets, underground utilities, other noise sources in the area, and maintenance of the abatement measure. The overall reasonableness of noise abatement is determined by the following three factors: 1) the noise reduction design goal of 7 dB at one or more impacted receptors; 2) the cost of noise abatement; and 3) the viewpoints of benefited receptors (including property owners and residents of the benefited receptors)

Affected Environment

The following analysis was prepared using information from the Noise Study Report (NSR) prepared for the project (Caltrans 2020). The project area consists of single-family residences (Activity Category B), agricultural and agricultural-related businesses (Activity Category F) and undeveloped lands that are not permitted (Activity Category G). Traffic on SR 70 was observed to be the dominant source of noise in the study area.

Environmental Consequences

No Build Alternative

No construction would take place under the No-Build Alternative; therefore, there would be no noise effects related to the project resulting from traffic or construction.

Build Alternative

Operation Noise

FHWA defines a Type I project as a proposed federal or federal-aid highway project for the construction of a highway on a new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment of the highway. The proposed project is considered a Type I project since it proposes to add additional traffic through lanes for the entire project limit. Table 8 below summarizes the

traffic noise modeling results for existing conditions and design-year conditions with and without the project. Predicted design-year traffic noise levels with the project are compared to existing conditions and to design-year no-project conditions. The comparison to existing conditions is included in the analysis to identify traffic noise impacts as defined under 23 CFR 772. The comparison to no-project conditions indicates the direct effect of the project.

Receptor	Location	Land Use	Existing Noise Level Leq (h)dB	Future No Build (2040) Noise Level Leq (h)dB	No Build minus Existing Leq (h)dB	Future Build (2040) Noise Level Leq (h)dB	Build minus Existing Leq (h)dB	Traffic Noise Impact*
*ST-1	646 Silva Ave.	Residential	66	67	1	68	2	A/E
ST-2	7821 Highway 70	Residential	65	66	1	67	2	A/E
ST-4	644 Mayer Road	Residential	63	65	2	66	3	A/E
*ST-5	516 Saddleback Dr.	Residential	63	65	2	66	3	A/E
ST-6	647 Ellis Road	Residential	65	67	2	67	2	A/E
ST-7	639 Noble Road	Residential	64	65	1	66	2	A/E
ST-8	8831 Highway 70 (Country Village)	Residential	67	68	1	68	1	A/E
ST-9	9050 Highway 70	Residential	63	64	1	66	3	A/E
ST-10	659 Magnolia Road	Residential	60	61	1	62	2	None
ST-11	9917 Highway 70	Residential	67	68	1	68	1	A/E
ST-12	714 Boyer Road	Residential	61	62	1	63	2	None
ST-13	699 Ramirez Road	Residential	70	71	1	71	1	A/E
ST-14	10655 Highway 70	Residential	62	64	2	65	3	None
ST-15	10879 Highway 70	Residential	65	66	1	67	2	A/E
ST-16	11179 Highway 70	Residential	66	67	1	67	1	A/E

Receptor	Location	Land Use	Existing Noise Level Leq (h)dB	Future No Build (2040) Noise Level Leq (h)dB	No Build minus Existing Leq (h)dB	Future Build (2040) Noise Level Leq (h)dB	Build minus Existing Leq (h)dB	Traffic Noise Impact*
ST-17	11227 Highway 70	Residential	63	64	1	66	3	A/E
ST-18	11624 Highway 70	Residential	63	64	1	66	3	A/E
*ST-19	Old State Highway	Residential	62	63	1	65	3	None
R-1	Highway 70	Residential	57	58	1	59	2	None
R-2	Highway 70	Residential	66	67	1	68	2	A/E
*R-2A	Highway 70	Residential	66	67	1	68	2	A/E
R-3	Highway 70	Residential	63	64	1	65	2	None
**R-4	Highway 70	River Bend Stables	68	69	1	69	1	None
R-5	Saddleback Drive	Residential	60	61	1	62	2	None
R-6	Saddleback Drive	Residential	58	59	1	61	3	None
R-8	Highway 70	Residential	68	69	1	69	1	A/E
*R-9	Highway 70	Residential	65	67	2	68	3	A/E
R-10	Highway 70	Residential	63	64	1	66	3	A/E
R-11	Highway 70	Residential	64	65	1	66	2	A/E
R-11A	Bettencourt Ln.	Residential	61	63	2	64	3	None
R-12	Highway 70 (Country Village)	Residential	60	61	1	62	2	None
R-13	Highway 70	Residential	64	65	1	66	2	A/E
R-14	Highway 70	Farm Supply	60	62	2	63	3	None
R-15	Highway 70	Farm Supply	63	65	2	66	2	A/E
R-16	Highway 70	Residential	59	60	1	61	2	None
			58	59	1		3	

R-17	Highway 70	Residential				61		None
------	------------	-------------	--	--	--	----	--	------

Receptor	Location	Land Use	Existing Noise Level Leq (h)dB	Future No Build (2040) Noise Level Leq (h)dB	No Build minus Existing Leq (h)dB	Future Build (2040) Noise Level Leq (h)dB	Build minus Existing Leq (h)dB	Traffic Noise Impact*
R-18	Highway 70	Residential	63	64	1	65	2	None
R-19	Highway 70	Residential	62	64	2	66	3	A/E
R-20	Highway 70	Residential	60	61	1	63	3	None
R-21	Highway 70	Residential	63	64	1	66	3	A/E
R-22	Highway 70	Residential	63	64	1	65	2	None
*R-23	Highway 70	Residential	68	69	1	70	2	A/E
R-24	Highway 70	Residential	58	59	1	61	3	None
R-25	Highway 70	Residential	60	61	1	63	3	None
R-26	Highway 70	Residential	55	57	2	58	3	None
R-27	Highway 70	Residential	65	67	2	67	2	None
R-28	Highway 70	Residential	67	69	2	69	2	A/E
R-29	Highway 70	Residential	59	61	2	62	3	None
R-30	Highway 70	Residential	65	66	1	68	3	A/E
R-31	Highway 70	Packing Facility	69	70	1	70	1	None
R-32	Highway 70	Residential	64	65	1	66	2	A/E
R-33	Highway 70	Commercial	69	70	1	71	2	None
R-34	Highway 70	Residential	61	62	1	63	2	None
R-35	Highway 70	Residential	66	67	1	67	1	A/E
R-36	Highway 70	Residential	62	63	1	64	2	None

Note: All NAC are exterior. A/E= Future noise conditions approach or exceed the Noise Abatement Criteria.

**R/W Take- Removed from the project. *This location is covered under another project.

The Existing worst-hour traffic noise levels were predicted to range from 57 to 70 dBA Leq[h]. The traffic noise modeling results in Table 6 above indicate that traffic noise levels at residences (Activity Category B) in the project area are predicted to be in the range of 58 to 71 dBA Leq(h) in the design-year, and that the increase in noise will be 1 to 3 dBA in the

design-year. Traffic noise impacts are predicted to occur because predicted noise levels in the design-year approach or exceed the noise abatement criterion of 67 dBA $L_{eq}[h]$.

Thirty-one out of the sixty-nine receptors exceed the noise abatement criteria. Noise abatement in the form of soundwalls were considered where impact occurs. However, after further evaluation, it was determined that constructing a soundwall at any location would not be feasible due to conflict with accessing driveways and public roads. For these reasons noise abatement is not considered for this project. Some of the impacted receivers will be fully purchased as indicated in Table 6 above to accommodate the proposed highway improvements.

The modeling results indicate traffic noise levels at agricultural and agricultural-related businesses use (Activity Category F) in project area will be 67 to 70 dBA $L_{eq}(h)$ in the design-year. Because there is no noise abatement criterion for Activity Category F land use, noise abatement is not considered.

Construction Noise

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Noise associated with construction is controlled by Caltrans Standard Specification Section 14-8.02, "Noise Control," which states the following:

- Do not exceed 86 dBA L_{max} at 50 feet from the job site activities from 9 p.m. to 6 a.m.
- Control and monitor noise resulting from work activities.

No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans Standard Specifications Section 14.8-02.

Construction noise would be short-term, intermittent, and overshadowed by local traffic noise. Although not required, of Caltrans Standard Specification. Section 14.8-02 would be implemented which states the following:

- Notify the residents within 100 feet of the project area in advance of nighttime construction activities.
- All equipment shall have sound-control devices that are no less effective than those provided on the original equipment. No equipment may have an unmuffled exhaust.
- As directed by Caltrans, implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.

Avoidance, Minimization, and/or Abatement Measures

No avoidance, minimization and/or abatement measures are required.

The traffic noise modeling results in the Noise Study Report indicate that noise levels of up to 31 receptors (out of 69) are predicted to exceed noise abatement criteria. Therefore,

traffic noise impacts are predicted to occur at this location and noise abatement must be considered. A noise barrier would not be feasible along SR 70 northbound or SR 70 southbound under any of the build alternatives due to driveway access requirements to residences along the entire corridor, all of which are preserved and improved as part of the project. For a wall to be acoustically feasible, it would need to be continuous along residential frontage, and maintain access, required sight lines and safety requirement for driveway access along SR 70. Noise barriers are therefore not considered feasible and were not evaluated further in this analysis.

2.2.8 Energy

Regulatory Setting

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

The California Environmental Quality Act (CEQA) Guidelines section 15126.2(b) and Appendix F, Energy Conservation, require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

An Energy technical study was prepared (Caltrans January 2020) that analyses both the direct and indirect energy impacts.

Affected Environment

There are currently no major sources of energy use and consumption along the project corridor.

Direct Energy

In the context of transportation, direct energy involves all energy consumed by vehicle propulsion (e.g., automobiles, trains, airplanes). This energy consumption is a function of traffic characteristics such as vehicle miles traveled (VMT) (volume X distance traveled), speed, vehicle mix, and thermal value of the fuel being used. Some projects may also include features such as new or replacement roadway lighting or other features requiring electricity which is an ongoing and permanent source of direct energy consumption. The one-time energy expenditure involved in constructing a project is also considered direct energy.

Indirect Energy

Indirect energy includes maintenance activities which would result in long-term indirect energy consumption by equipment required to operate and maintain the roadway.

Environmental Consequences

Indirect Energy

The proposed project does not include maintenance activities which would result in long-term indirect energy consumption by equipment required to operate and maintain the roadway. It will maintain mobility and connectivity on SR 70 in Yuba County from Laurellen Road to Old State Hwy without load restrictions due to the addition of an additional 12-foot lane to both directions of the highway. As such, it is unlikely to increase in direct energy consumption through increased fuel usage.

Direct Energy

The proposed project construction would primarily consume diesel and gasoline through operation of heavy-duty construction equipment, material deliveries, and debris hauling. Energy use associated with proposed project construction is estimated to result in the short-term consumption of 59,814 gallons for Alternative 1 and 63,177 gallons for Alternative 2 from diesel-powered equipment and 37,105 gallons from Alternative 1 and 39,182 gallons for Alternative 2 from gasoline-powered equipment. These represent small demands (approximately diesel: 0.5%; gasoline: 0.09%) on Yuba County's gasoline and diesel sales estimates (i.e. 12 million diesel gallons and 46 million gasoline gallons in 2018) that would be easily accommodated, and this demand would cease once construction is complete. Moreover, construction-related energy consumption would be temporary and not a permanent new source of energy demand, and demand for fuels would have no noticeable effects on peak or baseline demands for energy. While construction would result in a short-term increase in energy use, construction design features would help conserve energy.

The added 12-foot lanes on both directions of the highway proposed for both build alternatives would affect traffic operations and increase vehicle capacity along SR 70 in the project area. Although the annual fuel consumption for the alternatives is higher than the no-build scenario for the 2043 design year due to increase in traffic volumes, the differences between the build and the no-build alternatives in 2043 are approximately 10 diesel gallons and 53 gasoline gallons at the northbound direction and 6 diesel gallons and 32 gasoline gallons at the southbound, respectively.

The proposed project is expected to increase carpooling as well as use hybrid and electric cars that can reduce the gasoline consumption in comparison with the existing condition. Another consideration is that for operation of a project over the long term, newer and more fuel-efficient vehicles will enter the fleet, resulting in an overall lower potential for an increase in energy consumption.

Overall, the project is expected to increase travel speed for carpools and vanpools as well as the utilization of hybrid/electric cars, which in turn is expected to cause some level of mode shift to carpools and eco-friendly fuel automobiles. As such, the proposed project regarding the non-truck portion would not result in an increase in a consumption of energy in comparison with the existing conditions.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization and/or mitigation measures are required.

2.3 Biological Environment

2.3.1 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plants or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species section 2.3.5. Wetlands and other waters are also discussed below in Section 2.3.2.

Regulatory Setting

The California Department of Fish and Wildlife (CDFW) regulates activities that would interfere with the natural flow of—or substantially alter the channel, bed, or bank of—a lake, river, or stream, including disturbance of riparian vegetation, under CFGC Sections 1600–1616. CDFW requires a Lake or Streambed Alteration Agreement (LSAA) permit for these activities. Requirements to protect the integrity of biological resources and water quality often are conditions of LSAA's. CDFW may establish conditions that include avoiding or minimizing vegetation removal, using standard erosion control measures, limiting the use of heavy equipment, limiting work periods to avoid impacts on fisheries and wildlife resources, and restoring degraded sites or compensating for permanent habitat losses. The valley foothill riparian in the study area would be regulated by CDFW.

Affected Environment

The BSA is within the Sacramento Valley subregion of the California Floristic Province and supports seven land cover types (Table 9).

Table 9. Land Cover Types in the Biological Study Area

Land Cover Type	Alternative 1 Acreage in the BSA	Alternative 2 Acreage in the BSA
Riparian Wetland *	0.58	0.58
Valley Foothill Riparian *	0.24	0.24
Roadside Ditch	3.9	3.9
Ruderal	12.08	12.08
Orchard	81.12	83.94
Landscaped	15.31	15.13
Developed	74.89	74.84
Total	187.92	190.51

Vegetative land cover within the BSA consists predominantly of orchards, with a mix of naturalized annual grasses and ruderal forbs along the margins and between tree rows. Rural residential housing, with associated driveways, are interspersed with the orchards and other habitats and contain irrigated ornamental and domestic plants that are regularly mowed, trimmed, or sprayed. Roadside ditches line the majority of both sides of SR 70 in the BSA, with sparse to no vegetation growing in them, and are not considered waters of the United States or waters of the State.

Two of the land cover types, riparian wetland and valley foothill riparian, are considered natural communities of special concern because of their high species diversity, limited distribution, and declining status. Local, state, and federal agencies consider riparian habitats to be important, and compensation for loss of riparian habitat is generally required by agencies. The CNDDDB contains a current list of rare natural communities throughout the state, including valley oak woodland and valley foothill riparian. USFWS considers riparian habitat important to wildlife. USACE and EPA consider wetlands and stream habitats important for water quality and wildlife. Waters of the United States and waters of the State are regulated by USACE and the RWQCBs, respectively

Riparian Wetland

A low-lying, broadly U-shaped area extends to both sides of SR 70 approximately 2 miles south of the northern end of the BSA. On the west side of SR 70, this feature is incised to approximately 7 feet deep and flows into a catchment basin between orchards. This feature flows west to the levee surrounding the survey area. Historic topographic maps from 1895 and 1912 (U.S. Geological Survey 2017) do not show a direct connection between this feature and the Feather River before the current river levee was built. This area supports riparian wetland habitat that transitions to upland riparian habitat along the banks of the historical drainage. Tree species within the wetland include valley oak, black walnut, and Fremont cottonwood. There is a shrubby understory consisting of California rose. Herbaceous vegetation within the wetland is mainly torrent sedge, with a small population of iris-leaf rush and spreading rush. Other associated species include cocklebur and mugwort.

Valley Foothill Riparian

Valley foothill riparian habitat occurs on the banks adjacent to the riparian wetland habitat and at the northernmost end of the survey area, south of South Honcut Creek. The northern bank adjacent to the riparian wetland is heavily vegetated with Himalayan blackberry. The less steep southern bank supports predominantly upland vegetation, including valley oak, interior live oak, California wild grape, common chickweed, prickly lettuce, small-flowered miner's lettuce, cut-leaf geranium, dove weed, western bittercress, bedstraw, and nonnative annual grasses such as wild oats and hare barley. The bank south of South Honcut Creek supports several valley oaks in the overstory with primarily annual grasses and some forbs in the understory.

Roadside Ditch

Roadside ditches occur along both sides of SR 70 throughout most of the study area. The ditches appear to primarily convey stormwater flows from the road. Several small irrigation

ditches perpendicular to the roadside ditches convey stormwater and agricultural runoff from the surrounding uplands. Vegetative cover within the ditches varied between dense and absent. When present, vegetation in the ditches was primarily composed of upland species, although a few facultative species (i.e., equally likely to occur in wetlands or uplands) were observed. Species in the ditches include Johnson grass (*sorghum halepense*), tumbleweed (*amaranthus albus*), wild radish (*Raphanus sativus*, *R. raphanistrum*), mallow (*Malva neglecta*, *M. nicaeensis*), dove weed, Italian ryegrass (*Festuca perennis*), wild oats, field mustard (*Brassica rapa*), prickly lettuce, canary grass (*Phalaris paradoxa*), annual blue grass (*Poa annua*), Russian thistle (*Salsola tragus*), and vervain (*Verbena hastata*).

Ruderal

The ruderal cover type characterizes fallow fields, vegetated strips that are at least 20 feet wide and adjacent to roadside ditches, and unmaintained vegetated areas next to buildings. Orchard was recently removed from a plowed area west of SR 70 on the north side of Boyer Road, approximately 0.3 miles south of Shauna Way. This area was mapped as a ruderal cover type based on the assumption that it would be fallow long enough for colonization of ruderal plant species. Ruderal areas support nonnative annual grasses and forbs. Species in the ruderal cover type include field mustard, mallows, wild radish, wild oats, ripgut brome (*Bromus diandrus*), common knotweed (*Polygonum aviculare*), burclovers (*Medicago* spp.), filarees (*Erodium* spp.), fescue (*Festuca myuros*), hare barley, field madder (*Sherardia arvensis*), vetch (*Vicia sativa*, *V. villosa*), hedge parsley (*Torilis arvensis*), and rose clover (*Trifolium hirtum*). Trees that occur along the roadside in the ruderal cover type include English walnut (*Juglans regia*), interior live oak, and valley oak. Many of these trees are of mature size.

Because ruderal areas typically are disturbed on a regular basis by human activity, they provide low-quality habitat for wildlife. While soaring raptors may use larger fields of ruderal habitat for foraging, the narrow strips of ruderal between the roadway and orchard, or bordering roadside ditches, are unlikely to provide foraging habitat because they are too narrow and adjacent to orchard and large trees which provide cover for their prey base, or too close to the roadway.

Orchard

Almond (*Prunus dulcis*), English walnut, peach (*Prunus persica*), and prune (*Prunus* sp.) orchards are locally common along the portion of SR 70 north of Marysville. The understory, vegetated strips between rows of trees, and edges of the field surrounding the trees consists mostly of ruderal herbaceous vegetation, including the plant species found in the ruderal cover type. Several irrigation ditches drain from the orchards to the roadside ditches.

Orchards are typically planted on deep fertile soils that supported diverse and productive natural habitats in the past. Orchards can provide shade or water, if irrigated, for wildlife.

Landscaped

The landscaped cover type is associated with residences and other buildings in the study area. Mapping of rural residential areas include the buildings within the landscaped area where the buildings or closely clustered buildings are smaller than approximately 5,000 square feet. Plant species in this cover type are consistent with landscaping, lawns, and unmanicured ruderal fringes. Several horticultural escapees occupy this habitat. Species in these areas include Bermuda grass (*Cynodon dactylon*), field mustard, wild radish, mallows, filarees, wild oats, hare barley, ripgut brome, henbit, field madder, kickxia (*Kickxia elatine*), pineapple weed (*Matricaria discoidea*), Bermuda butter-cup (*Oxalis pes-caprae*), dandelion (*Taraxacum officinale*), and periwinkle (*Vinca major*). One area mapped as the landscaped cover type is located in front of a residence and includes a grove of interior live and valley oaks growing among walnut tree snags.

Because landscaped areas typically are disturbed on a regular basis by human activity, they provide low-quality habitat for wildlife.

Developed

The developed cover type includes large residential and commercial buildings such as rural residences and associated outbuildings, a mobile home park, a restaurant, and several fruit dryers. There are paved, and/or graveled surfaces associated with these buildings throughout the survey area. This cover type also includes the roads that intersect with SR 70 in the BSA and unvegetated roadside pullouts. Developed areas may be temporarily occupied by wildlife species but do not provide suitable habitat.

Environmental Consequences

No Build Alternative

Under the no build alternative, no construction would take place. Therefore, there would be no impacts to vegetation or wildlife species in the study area.

Build Alternatives

Valley Foothill Riparian

Project construction would encroach on the upland valley foothill riparian habitat in the study area, resulting in permanent impacts. No direct impacts on the riparian habitat at South Honcut Creek are anticipated. Impacts associated with SR 70 widening were considered to be permanent if they would result in the removal of woody riparian vegetation. Impacts were considered to be temporary if only herbaceous vegetation was affected during construction and the area would be restored after project completion. Tree removal in riparian habitat would be considered a permanent impact because of the time required for maturation of planted trees in restored areas. Table 10 summarizes the impacts on valley foothill riparian habitat.

Table 10. Impacts on Valley Foothill Riparian by Alternative

Feature Type	Alternative 1 Permanent (acres)	Alternative 2 Permanent (acres)
Valley Foothill Riparian	0.24	0.24

Riparian Wetland

Project construction would encroach on the riparian wetland in the BSA, resulting in both permanent impacts. Impacts associated with SR 70 widening were considered to be permanent if they would result in the placement of permanent fill in the riparian wetland. All areas temporarily disturbed of the riparian wetland would be restored to pre-project contours and conditions.

State and federal agencies will require avoidance, minimization, and compensatory mitigation for the loss of riparian wetland habitat. Implementation of the avoidance and minimization efforts described below would minimize the impacts on riparian wetlands. Additional mitigation is proposed to compensate for the permanent loss of riparian wetlands. Table 11 summarizes the impacts on riparian wetlands for the two build alternatives.

Table 11. Impacts on Riparian Wetland

Feature Type	Alternative 1 Permanent (acres)	Alternative 2 Permanent (acres)
Riparian Wetland	0.58	0.58

Avoidance, Minimization, and/or Mitigation Measures

Caltrans intends to mitigate through off site mitigation. Specific amount and ratios will be determined through consultation with regulatory agencies. Measures to offset this loss are discussed further in the measures below.

BIO-1: Install Fencing and/or Flagging to Protect Sensitive Biological Resources

Prior to construction, high-visibility orange construction fencing and/or flagging will be installed along the perimeter of the work area adjacent to Environmentally Sensitive Areas (ESAs) (e.g., wetlands, special-status species habitat, and active bird nests). Where specific buffer distances are required for sensitive biological resources (e.g., special-status species habitats and active bird nests), they will be specified under the corresponding measures identified below. The final construction plans will show the locations where fencing will be installed. The fencing will be maintained throughout the duration of the construction period. If the fencing is removed, damaged, or otherwise compromised during the construction period, construction activities will cease until the fencing is repaired or replaced. The project's special provisions package will provide clear language regarding

acceptable fencing material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within ESAs.

BIO-2: Compensate for Impacts on Riparian Wetland

The permanent loss of riparian wetland will be offset by mitigation determined during the permitting phase of this project. Measures to offset this loss may include one of the following options: planting native riparian species at an onsite or offsite location, or contribution to USACE's in-lieu fee programs at a ratio to be determined during permitting. Disturbed soils will be treated with an erosion control seed mixture, as described in BIO-6 below.

BIO-3: Compensate for Impacts on Valley Foothill Riparian

The permanent loss of valley foothill riparian habitat will be offset by one of the options, such as planting, listed in Measure 2 above. Replacement plantings for riparian habitat may be installed onsite and/or at offsite locations. Disturbed soils will be treated with an erosion control seed mixture, as described in BIO-6 below.

2.3.2 Wetlands and Other Waters

Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. The lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high-water mark (OHWM), in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental

effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a "least environmentally damaging practicable alternative" (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, EO 11990 states that a federal agency, such as FHWA and/or the Department, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction and (2) the proposed project includes all practicable measures to minimize harm. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or the Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see the Water Quality section for more details.

Affected Environment

A delineation of aquatic resources in the BSA was conducted by Area West Environmental biologists Mary Bailey, Samuel Price, Art Richardson, and Mark Noyes on January 25–27 and February 4, 2016. Ms. Webber conducted additional delineation fieldwork in the BSA on December 28, 2016. The delineation was conducted using the routine onsite determination method described in the U.S. Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and the supplemental procedures and wetland indicators provided in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (U.S. Army Corps of Engineers 2008).

Other waters of the United States were evaluated in the field for meeting the definition of non-wetland waters in accordance with indicators and guidance in USACE Regulatory Guidance Letter No. 05-05, dated December 7, 2005 (U.S. Army Corps of Engineers 2005), and A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region (Lichvar and McColley 2008). Methods and standards conform to the USACE Sacramento District's Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (U.S. Army Corps of Engineers 2016a) and Revised Map and Drawing Standards for the Pacific Division Regulatory Program Delineations (U.S. Army Corps of Engineers 2016b).

On December 26, 2019, Kateri Harrison, Kelli Angel, and Anna Kluge did a follow up field survey to clarify previously written notes and to add further comments to a written Wetland Delineation.

The only water of the United States that occurs in the study area is riparian wetland. Impacts to riparian wetlands are discussed in section 2.3.1 – Riparian Impacts.

Environmental Consequences

No Build Alternative

Under the no build alternative, no construction would take place. Therefore, there would be no impacts to wetlands in the study area.

Build Alternatives

Project construction would encroach on the riparian wetland in the study area, resulting in both permanent and temporary impacts. Impacts associated with SR 70 widening were considered to be permanent if they would result in the placement of permanent fill in the riparian wetland. All temporarily disturbed areas of the riparian wetland would be restored to pre-project contours and conditions. USACE and EPA consider wetlands and stream habitats important for water quality and wildlife. Waters of the United States and waters of the State are regulated by USACE and the RWQCBs, respectively. State and federal agencies will require avoidance, minimization, and compensatory mitigation for the loss of riparian wetland habitat. The loss or disturbance of riparian wetland is considered adverse because this wetland type provides a variety of important ecological functions and values.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the water quality BMPs and project SWPPP, Caltrans will install fencing and/or flagging (BIO-1) to ensure that the proposed project minimizes effects on wetlands in and adjacent to the designated work area and compensate for the loss of riparian wetland (BIO-2) and valley foothill riparian (BIO-3). Additional avoidance and minimization measures may be agreed upon during the future permitting phase.

2.3.3 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service), and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the Threatened and Endangered Species Section 2.3.5 below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act
- State laws and regulations relevant to wildlife include the following:
 - California Environmental Quality Act
 - Sections 1600 – 1603 of the California Fish and Game Code
 - Sections 4150 and 4152 of the California Fish and Game Code

Affected Environment

A wildlife biologist conducted a reconnaissance-level field survey of the study area on December 28, 2016. This survey focused on evaluating land cover types in the study area and determining their suitability to support special-status animal species. The wildlife biologist drove the project corridor and walked portions of the study area where permission to access had been obtained, making notes on the types and suitability of habitat present, and recording any wildlife species observed.

Table 10 includes non-listed special-status animal species that are known to occur or have the potential to occur in the geographic region (i.e., within 5 miles of the proposed project). These species were identified based on the CNDDDB records search (California Department

of Fish and Wildlife 2019), and species distribution and habitat requirements data. Non-listed special-status animal species discussed in this section are legally protected under FESA, CESA, or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. Non-listed special-status animals are those species in any of the categories listed below:

- Species that are candidates for possible future listing as threatened or endangered under FESA (81 FR 87246, December 2, 2016).
- Species proposed for listing by the State of California as threatened or endangered under CESA (14 California Code of Regulations [CCR] 670.5).
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines Section 15380).
- Animal species of special concern to CDFW (California Department of Fish and Wildlife 2018c).
- Animals fully protected in California (CFGF Section 3511 [birds], 4700 [mammals], 5050 [amphibians and reptiles], and 5515 [fish]).

Based on the CNDDDB search results (California Department of Fish and Wildlife 2019), seven non-listed special-status wildlife species were identified as occurring or having the potential to occur in the project region (Table 12) After a review of species distribution and habitat requirements data, and the field survey, it was determined that three of the seven species would not occur in the study area because it lacks suitable habitat for the species or is outside the species' known range. It was determined that four of the seven species have potential foraging habitat in the study area. Due to the limited scope of the project construction, only one of the four species, northern harrier, was considered to potentially occur in the vicinity. However, the nearest CNDDDB occurrence is 10.2 miles from the study area.

Migratory Birds

Non-special-status migratory birds, including raptors, have the potential to nest in trees, shrubs, and ground vegetation in the study area. These generally common species are locally and regionally abundant. The breeding season for most birds is generally from February 1 to August 31. Some birds could nest in the culvert south of South Honcut Creek within the study area.

The habitat-based field survey was conducted outside the breeding season for most birds, and a focused survey for nest structures was not conducted. Remnants of a mud cup nest structure were attached to the wall of the culvert south of South Honcut Creek during the December 28, 2016, field survey. Suitable nesting habitat for migratory birds is present within the valley foothill riparian, riparian wetland, ruderal, orchard, developed, and landscaped land cover types in and adjacent to the study area.

Table 12. Non-Listed Special-Status Wildlife with Potential to Occur in the Vicinity of the Yuba 70 Passing Lanes Project Study Area

Invertebrates

Common Name Scientific Name	Legal Status (Federal/ State/Other)	General Habitat Description	Habitat Present/ Absent	Rationale
California linderiella Linderiella occidentalis	-/-/-	Vernal pools in the Central Valley.	Absent	No suitable rain-filled ephemeral pools are present in the study area. The nearest CNDDDB occurrence is 6.6 miles from the study area.

Reptiles

Common Name Scientific Name	Legal Status (Federal/ State/Other)	General Habitat Description	Habitat Present/ Absent	Rationale
Western pond turtle Emys marmorata	-/SSC/-	Occurs throughout California west of the Sierra-Cascade crest. Found from sea level to 6,000 feet. Does not occur in desert regions except for along the Mojave River and its tributaries. Occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests	Absent	The riparian wetland in the study area does not provide suitable aquatic habitat and is too far from a perennial waterbody to provide suitable nesting habitat. The nearest CNDDDB occurrence is 6.2 miles from the study area in Butte County.

Birds

Common Name Scientific Name	Legal Statusa (Federal/ State/Other)	General Habitat Description	Habitat Present/ Absentb	Rationale
Northern harrier <i>Circus cyaneus</i>	–/SSC/–	Occurs throughout lowland California. Has been recorded in fall at high elevations. Nests and forages in grasslands, meadows, marshes, and seasonal and agricultural wetlands.	Present	Observed foraging in the study area during the December 2016 field survey. This species could forage in ruderal, fallow, and plowed fields in the study area. Low likelihood of nesting in these same fields. The nearest CNDDDB occurrence is in Yuba County 10.2 miles from the study area.
Burrowing owl <i>Athene cunicularia</i>	–/SSC/–	Lowlands throughout south, central, and east California, including the Central Valley, northeastern plateau, southeastern deserts, and some coastal areas. Rare along the south coast. Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows; also found in coastal terrace prairies and sagebrush habitats.	Habitat Present	Suitable foraging habitat is present in ruderal and fallow fields. No suitable burrows were observed associated with foraging habitat during the December 2016 field survey, however California ground squirrels were observed in the study area. The nearest CNDDDB occurrence is from 1906, 8.2 miles from the study area.
Tricolored blackbird <i>Agelaius tricolor</i>	–/C, SSC/–	Permanent resident in the Central Valley from Butte County to Kern County. Breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties. Rare nester in Siskiyou, Modoc, and Lassen Counties. Nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grain fields. Habitat must be large enough to support 50 pairs. Probably requires water at or near the nesting colony.	Habitat Present	Could forage in ruderal and fallow fields in the study area but nesting habitat is not present. The nearest CNDDDB occurrence is 0.3 mile from the study area in Yuba County; however, the 2014 update for this record did not observe any nesting for this species.

Modesto song sparrow <i>Melospiza</i> <i>melodia</i>	-/SSC/-	Found in the north-central portion of the Central Valley, from Butte Sink, Perkins and Eddy Lakes and Little Butte Creek in Butte County, Colusa and Delevan NWR, along the Sacramento River in Colusa and Sutter Counties, west of Tisdale in Sutter County, northern San Joaquin Valley in the Delta, and sparsely along the Mokelumne River riparian corridor. Breeds in emergent freshwater wetlands (tules and cattails) and early successional riparian thickets (willows). May also use sparsely vegetated irrigation canals and levees, and valley oak riparian forests with blackberry understory for breeding. Can be found singing or foraging along roadside irrigation ditches. Requires moderately dense vegetation for nest site cover, semi-open canopies, and open ground or leaf litter for foraging.	Habitat Present	Could forage in the riparian wetland in the study area but nesting habitat is not present. The nearest CNDDDB occurrence is a historic record in Yuba County 0.9 mile from the study area.
---	---------	---	--------------------	--

Mammals

Common Name Scientific Name	Legal Status ^a (Federal/ State/Other)	General Habitat Description	Habitat Present/ Absent ^b	Rationale
North American porcupine <i>Erethizon dorsatum</i>	-/-/-	Wide variety of coniferous and mixed woodland habitat in the Sierra Nevada, Cascade, and Coast Ranges.	Absent	There are no continuous patches of woodland in the study area. The nearest CNDDB occurrence is 6 miles from study area in Butte County; collected in 1976.

Environmental Consequences

No Build Alternative

Under the no build alternative, no construction would take place. Therefore, there would be no impacts to special-status species in the study area.

Build Alternatives

Migratory Birds

Tree removal and trimming is expected to occur for construction of the proposed project. Clearing of ruderal vegetation, where ground nesting birds may be present, may also occur. Construction to extend the concrete box culvert south of Honcut Creek to accommodate widening or demolition of structures within the right-of-way, where structure nesting birds may be present, would likely also occur. Construction activities would occur during the nesting season of migratory birds (generally February 1 through August 31) and could result in the possible injury to nesting birds. Removal or destruction of nests or construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment.

The occupied nests and eggs of migratory birds are protected by federal and state laws, including the MBTA and CFGC Sections 3503 and 3503.5. USFWS is responsible for overseeing compliance with the MBTA, and CDFW is responsible for overseeing compliance with the CFGC and making recommendations on nesting bird protection. Impacts on nesting migratory birds would be an adverse effect.

Avoidance, Minimization, and/or Mitigation Measures

Measures BIO-1 (described above under Section 2.3.1 - Natural Communities) and BIO-5 (described below under Section 2.3.5 - Threatened and Endangered Species) will be implemented to avoid and minimize impacts on Swainson's Hawk and other nesting birds.

2.3.4 Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are

provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species section 2.3.5 in this document for detailed information about these species.

This section of the document discusses all other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000-21177.

Affected Environment

Botanical surveys in the study area were also conducted on December 28, 2016, and January 26, 2017; however, they did not coincide with the identification periods of special-status plants identified as having potential to occur in the project region. A botanist walked accessible parcels that had areas of natural vegetation, parts of the ROW in and adjacent to undeveloped parcels, and visually surveyed inaccessible residential parcels from the ROW.

Non-Listed Special-Status Plants

Table 13 includes non-listed special-status plant species that are known to occur or have the potential to occur in the geographic region (i.e., within 5 miles of the study area). These species were identified based on the CNDDDB records search (California Department of Fish and Wildlife 2019) and the CNPS Inventory of Rare and Endangered Plants (2019), and species distribution and habitat requirements data. Special-status plant species discussed in this section are legally protected under FESA, CESA, or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. Special-status plants are those species in any of the categories listed below:

- Species that are candidates for possible future listing as threatened or endangered under FESA (81 FR 87246, December 2, 2016).
- Species proposed for listing by the State of California as threatened or endangered under CESA (14 California Code of Regulations [CCR] 670.5).
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines Section 15380).
- Plants with a California Rare Plant Rank (CRPR) of 1, 2, 3, or 4 (California Native Plant Society 2018).

Ten non-listed special-status plant species were identified as potentially occurring within 5 miles of the study area based on the CNDDDB search results (California Department of Fish and Wildlife 2019) and the CNPS Inventory (California Native Plant Society 2019) for the project region (Table 13). Nine of these species have habitat or microhabitat requirements (e.g., valley and foothill grassland; vernal pools; perennial marsh in rivers, sloughs, or streams; serpentine, alkaline, or clay soils; rocky roadsides) that are not present in the study area, or they occur at higher elevations than the study area, which ranges from approximately 60 to 90 feet above mean sea level. Three of these species are recorded in the CNDDDB as occurring in or near the study area (Ferris' milk-vetch [*Astragalus tener* var. *ferrisiae*], recurved larkspur [*Delphinium recurvatum*], and veiny monardella [*Monardella venosa*]), although these records are historical (i.e., from the 1800s), have unspecific locations, and were located in habitat that has been developed or altered. There is potential habitat for veiny monardella in the valley foothill riparian and riparian wetland habitats in the study area. Veiny monardella was previously identified as having potential habitat in the valley foothill riparian and riparian wetland habitats present in the project area. After evaluating the species lists and the quality of habitat present in the project area, this plant is not anticipated to occur in the project area.

No special-status plants have been previously reported in the study area and none were observed in the study area during the December 28, 2016 and January 26, 2017 field surveys. Overall, the study area has a low potential to support special-status plants due to the historic and on-going modifications of habitat.

Native Oak Trees

Oak trees in the riparian wetland and valley foothill riparian areas are protected as part of the overall riparian habitat and may be regulated by CDFW and are addressed in the discussion of those communities in Sections 2.3.1 and 2.3.2.

Table 13. Special-Status Plant Species with Potential to Occur in the Vicinity of the Yuba 70 Passing Lanes Project Study Area

Common Name (Scientific Name)	Status ^a Federal/State CRPR	General Habitat Description	Blooming Period	Habitat Present/ Absent	Rationale
Ferris' milk-vetch (<i>Astragalus tener</i> var. <i>ferrisiae</i>)	—/—/1B.1	Historical range included the Central Valley from Butte to Solano County but currently only occurs in Butte, Glenn, Colusa, Sutter, and Yolo Counties. Seasonally wet areas in meadows and seeps, sub alkaline flats in valley and foothill grassland; 2–75 meters	April– May	Habitat absent	No suitable habitat in study area. Nearest recorded occurrence is ~1.5 miles southwest of the study area but was last observed in 1891.
<i>Depauperate milk-vetch</i> (<i>Astragalus pauperculus</i>)	—/—/4.3	Chaparral, cismontane woodland, valley and foothill grassland. Vernal mesic, volcanic.	March– June	Habitat absent	No suitable habitat in study area. Nearest recorded occurrence is more than 10 miles from the study area.
Sierra foothill Brodiaea (<i>Brodiaea sierra</i>)	—/—/4.3	Sierra Nevada foothills. Usually serpentine or gabbroic, chaparral, cismontane woodland, lower montane coniferous forest.	May– August	Habitat absent	No suitable habitat in study area. Nearest recorded occurrence is more than 10 miles from the study area.
Brandegee's clarkia (<i>Clarkia biloba</i> ssp. <i>Brandegeeae</i>)	—/—/4.2	Northern Sierra Nevada Foothills from Butte to El Dorado Counties. Chaparral, cismontane woodland, lower coniferous forest, often on roadcuts; 75–915 meters.	May– July	Habitat absent	No suitable habitat in study area, and study area is below the known elevational range. Nearest recorded occurrence is more than 10 miles from the study area.
Recurved larkspur (<i>Delphinium recurvatum</i>)	—/—/1B.2	Central Valley from Colusa (extirpated) to Kern Counties. Alkaline soils in valley and foothill grassland, saltbush scrub, cismontane woodland; 3–790 meters	March– June	Habitat absent	No suitable soils mapped in study area. Nearest recorded occurrence is ~1.5 miles southwest of the study area but was last observed in 1900 and presumed extirpated due to development.
Dwarf downingia (<i>Downingia pusilla</i>)	—/—/1B.2	Primarily in the lower Sacramento Valley, also from north Coast Ranges, northern San Joaquin Valley and the Santa Cruz Mountains. Deep, seasonally wet habitats such as vernal pools, ditches, marsh edges, and river banks; below 880 meters.	April– June	Habitat absent	No suitable habitat in study area ditches. Nearest recorded occurrences are ~6.5 miles southeast of the study area.

Ahart's dwarf rush (<i>Juncus leiospermus</i> var. <i>ahartii</i>)	-/-/1B.2	Eastern Sacramento Valley, northeastern San Joaquin Valley with occurrences in Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba Counties. Wet areas in valley and foothill grassland, vernal pool margins; 30–229 meters.	April–June	Habitat absent	No suitable habitat in study area. Nearest recorded occurrence is more than 10 miles from the study area.
Legenere (<i>Legenere limosa</i>)	-/-/1B.1	Primarily in the lower Sacramento Valley, also from north Coast Ranges, northern San Joaquin Valley and the Santa Cruz Mountains. Deep, seasonally wet habitats such as vernal pools, ditches, marsh edges, and river banks; below 880 meters.	April–June	Habitat absent	No suitable habitat in study area ditches. Nearest recorded occurrences are ~6.5 miles southeast of the study area.
Veiny monardella (<i>Monardella venosa</i>)	-/-/1B.1	Occurrences in the northern and central Sierra Nevada Foothills; also historically known from the Sacramento Valley. Cismontane woodland, valley and foothill grassland on heavy clay soils; 60–410 meters.	May–July	Habitat absent	Suitable habitat in riparian areas in study area. Nearest recorded occurrence is within the study area, but was last observed in 1854, and is most likely extirpated.
Sanford's arrowhead (<i>Sagittaria sanfordii</i>)	E/E/1B.1	Eastern side of Sacramento-San Joaquin Valleys and adjacent foothills, historically as far north as Yuba County; currently Fresno, Madera, Merced, Stanislaus, and Tuolumne Counties. Predominantly on northern slopes of rocky, bare areas along rolling hills, shady creeks, adjacent to vernal pools and streams, on heavy clay soils in valley and foothill grasslands and cismontane woodland; 15–150 meters	March–April	Habitat absent	Marginal habitat in riparian wetlands in BSA, but the project is outside of the current range for this species. Nearest recorded occurrence is within the BSA but was extirpated for development of Marysville and last observed in 1847. This species is no longer known to occur in Yuba County, and the proposed project will have no effect on this plant.

Environmental Consequences

No Build Alternative

Under the no build alternative, no construction would take place. Therefore, there would be no impacts to plant species in the study area.

Build Alternatives

Non-Listed Special-Status Plants

The study area has low potential to support non-listed special-status plants, surveys during the appropriate identification periods have been conducted to confirm whether special-

status plants are absent from the study area or, if present, determine whether there would be project impacts on these species.

Native Oak Trees

The proposed project would result in the removal of native oak trees in riparian wetland and valley foothill riparian natural communities. These native trees are regulated as part of the overall riparian habitat that may fall within CDFW jurisdiction, and impacts would be addressed and compensated as part of the permitting process for riparian habitat. The build alternatives would also remove as many as 74 mature oak trees that grow in landscaped areas or in ruderal habitat along the ROW. There is no required mitigation for these individual trees.

Avoidance, Minimization, and/or Mitigation Measures

Implementation of measures BIO-1, BIO-2, BIO-3 and BIO-6 (described below) will ensure that the proposed project minimizes effects on special-status plant habitat in and adjacent to the designated work area.

BIO-4: Protect Special-Status Plant Species

To avoid and minimize impacts on special-status plant species, the following measures will be incorporated into the project:

- A properly timed survey for special-status plant species will be conducted by a qualified biologist prior to the start of construction.
- If special-status plant species are not detected during the survey, then no further avoidance and minimization measures will be required.
- If a special-status plant species is observed during the survey, the plant will be avoided to the maximum extent practicable during project construction. ESAs will be established around special-status plant occurrences within the BSA to exclude project activities. Temporary exclusionary fencing will be installed to define the limits of the ESA.
- If avoidance is not feasible, the plants will be transplanted to a suitable location, if feasible.

2.3.5 Threatened and Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA) (and the Department, as assigned), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to

jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement or a Letter of Concurrence. Section 3 of FESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct.”

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2080 of the California Fish and Game Code prohibits “take” of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

Affected Environment

As described previously, a botanist and wildlife biologist conducted a reconnaissance-level field survey of the study area on December 28, 2016 to evaluate land cover types in the study area and determining their suitability to support special-status plant and animal species. In addition, the wildlife biologist conducted a focused survey for elderberry shrubs (*Sambucus* sp.), the host plant (habitat) for the valley elderberry longhorn beetle, on January 19 and 26, 2017. The wildlife biologist walked accessible parcels that had dense vegetation obscuring the view from SR 70, and those that had dense vegetation within the project ROW. Most of these areas occur on portions of parcels that are landscaped, or adjacent to developed lands. The ROW within inaccessible parcels was visually surveyed from the road or road shoulder.

Tables 12 and 13 list threatened or endangered plant and wildlife species, respectively, that are known to occur or have the potential to occur in the geographic region (i.e., within 5 miles of the proposed project). These species were identified based on the CNDDB records

search (California Department of Fish and Wildlife 2019), the CNPS Inventory of Rare and Endangered Plants (2019), the USFWS and NMFS species lists (U.S. Fish and Wildlife Service 2019; National Marine Fisheries Service 2019), and species distribution and habitat requirements data. For the purpose of this report, special-status species are plants and animals that are legally protected under FESA, CESA, or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. There is no Essential Fish Habitat (protected under the Magnuson-Stevens Fishery Conservation and Management Act) in the study area. Threatened and endangered plants and animals are those species in any of the categories listed below:

- Species listed or proposed for listing as threatened or endangered under FESA (50 CFR 17.11 [listed animals], 50 CFR 17.12 [listed plants], and various notices in the Federal Register [FR] [proposed species]).
- Species listed by the State of California as threatened or endangered under CESA (14 California Code of Regulations [CCR] 670.5).
- Plants listed as rare under CNPPA (California Fish and Game Code 1900 et seq.).

Threatened or Endangered Plant Species

Eleven special-status plant species were identified as potentially occurring in the BSA vicinity based on the CNDDDB search results (California Department of Fish and Wildlife 2017a), the CNPS Inventory (California Native Plant Society 2017), and the USFWS list (U.S. Fish and Wildlife Service 2017a) for the project region (Appendix E). Seven of these species have habitat or microhabitat requirements (e.g., valley and foothill grassland; vernal pools; perennial marsh in rivers, sloughs, or streams; serpentine, alkaline, or clay soils; rocky roadsides) that are not present in the BSA, or they occur at higher elevations than the BSA, which ranges from approximately 60 to 90 feet above mean sea level. Four of these species are recorded in the CNDDDB as occurring in or near the BSA (Ferris' milk-vetch [*Astragalus tener* var. *ferrisiae*], recurved larkspur [*Delphinium recurvatum*], veiny monardella [*Monardella venosa*], and Hartweg's golden sunburst [*Pseudobahia bahiifolia*]), although these records are historical (i.e., from the 1800s), have unspecific locations, and were located in habitat that has been developed or altered. Hartweg's golden sunburst is considered extirpated from Yuba County, and now is only known to occur in the San Joaquin Valley (U.S. Fish and Wildlife Service 2007). There is potential habitat for veiny monardella in the valley foothill riparian and riparian wetland habitats in the BSA. Veiny monardella was previously identified as having potential habitat in the valley foothill riparian and riparian wetland habitats present in the project area. After evaluating the species lists and the quality of habitat present in the project area, this plant is not anticipated to occur in the project area.

Further surveys will be conducted this coming spring during proper blooming periods. If any special status species are found to be present, this document will be amended, and consultation will be initiated.

Threatened or Endangered Wildlife Species

Based on the CNDDDB search results (California Department of Fish and Wildlife 2019), the USFWS list (U.S. Fish and Wildlife Service 2019), and the NMFS list (National Marine

Fisheries Service 2019), 16 special-status wildlife species (including five fish) were identified as occurring or having the potential to occur in the project region (Table 12). After a review of species distribution and habitat requirements data, and the field survey, it was determined that 14 of the 16 species would not occur in the study area because it lacks suitable habitat for the species or is outside the species' known range. It was determined that one species, valley elderberry longhorn beetle, may occur in the study area or be affected by the proposed project; and one of the species, Swainson's hawk, has limited potential foraging and nesting habitat in the study area.

Environmental Consequences

No Build Alternative

Under the no build alternative, no construction would take place. Therefore, there would be no impacts to threatened and endangered species in the study area.

Build Alternatives

Threatened or Endangered Plant Species

No threatened or endangered plant species are expected to occur in the project area, and, therefore, there would be no impacts on these species.

Valley Elderberry Longhorn Beetle

Valley elderberry longhorn beetle is federally listed as threatened. The presumed historical range and current range of valley elderberry longhorn beetle extends from Tehama County south to Fresno County through California's Central Valley and associated foothills from about the 3,000-foot contour on the east and the watershed of the Central Valley on the west (79 FR 55881-55884; U.S. Fish and Wildlife Service 1999:1). Valley elderberry longhorn beetle is dependent on its host plant, elderberry, which is a common component of riparian corridors and adjacent upland areas in the Central Valley (Barr 1991:5).

Valley elderberry longhorn beetle has four stages of life: egg, larva, pupa, and adult. Females deposit eggs on or adjacent to the host elderberry. Egg production varies; females have been observed to lay between 16 and 180 eggs. Eggs hatch within a few days of being deposited. Larvae emerge and bore into the wood of the host plant, creating a long feeding gallery in the pith of the elderberry stem. The larvae feed on the pith of the plant for 1 to 2 years. When a larva is ready to pupate, it chews an exit hole to the outside of the stem and then plugs it with frass. The larva then retreats into the feeding gallery and constructs a pupal chamber from wood and frass. The larvae metamorphose between December and April; the pupal stage lasts about a month. The adult remains in the chamber for several weeks after metamorphosis and then emerges from the chamber through the exit hole. Adults emerge between mid-March and mid-June, the flowering season of the plant. Adults feed on elderberry leaves and mate within the elderberry canopy (Talley et al. 2006:7–9).

The proposed project would result in the removal of a portion of the elderberry shrub cluster; however, because the shrub is not functioning as habitat for valley elderberry

longhorn beetle there would be no direct impact on the species. Because no additional elderberry shrubs were observed within the study area, no indirect impacts on valley elderberry longhorn beetle habitat are expected.

The FESA effects determination for the proposed project is no effect on valley elderberry longhorn beetle based on the evaluation of the shrub according to the USFWS's Framework.

Swainson's Hawk

Swainson's hawk is a state-listed threatened species. Swainson's hawks forage in grasslands, grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. Vineyards, orchards, rice, and cotton crops are generally unsuitable for foraging because of the density of the vegetation (California Department of Fish and Game 1992:41). The majority of Swainson's hawks' winter in South America, although some winter in the United States. Swainson's hawks arrive in California in early March to establish nesting territories and breed (California Department of Fish and Game 1994). They usually nest in large, mature trees. Most nest sites (87%) in the Central Valley are found in riparian habitats, primarily because trees are more available there. Swainson's hawks also nest in mature roadside trees and in isolated trees in agricultural fields or pastures. The breeding season is from March through August.

Construction activities would occur during the Swainson's hawk nesting season (February 1 through September 31) and could result in the disturbance of Swainson's hawk. There is marginal nesting and foraging habitat within the project limits that the project has the potential to be impacted.

Avoidance, Minimization, and/or Mitigation Measures

BIO-1 (described above) and BIO-5 (described below) will be implemented to avoid and minimize impacts on Swainson's Hawk and other nesting birds. Additionally, temporarily disturbed ruderal lands that provide suitable foraging habitat for Swainson's Hawk will be restored to pre-project conditions or better through implementation of BIO-6 (described below).

BIO-5: Remove Vegetation during the Nonbreeding Season and Conduct Preconstruction Surveys for Nesting Migratory Birds, Including Special-Status Birds

In accordance with the MBTA, vegetation removal (including trees and ruderal vegetation) will occur during the non-breeding season for most migratory birds (generally between October 1 and January 31). If vegetation cannot be removed between October 1 and January 31, the area where vegetation will be removed will be surveyed for nesting birds, as discussed below.

- If construction activities are expected to begin during the nesting season for birds (generally February 1 through September 31), a qualified biologist will conduct nesting surveys within 14 days of the start of construction. Surveys will include a search of ruderal vegetation, and all trees and shrubs that provide suitable nesting habitat in the

BSA. If no active nests are detected during these surveys, no additional measures are required.

- If an active nest is found in the survey area, a no-disturbance buffer will be established around the site to avoid disturbance or destruction of the nest site until a qualified biologist determines that the young have fledged and moved out of the project. The extent of these buffers will be determined by the qualified biologist in coordination with CDFW and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species.

2.3.6 Invasive Species

Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State’s invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

Affected Environment

Invasive plant species include species designated as federal noxious weeds by USDA, species listed by CDFA, and invasive plants identified by Cal-IPC. Invasive plants displace native species, change ecosystem processes, alter plant community structure, and lower wildlife habitat quality (California Invasive Plant Council 2006:1). Road, highway, and related construction projects are some of the principal dispersal pathways for invasive plants and their propagules. Table 12 lists the invasive plant species identified by CDFA and Cal-IPC that are known to occur in the study area (California Department of Food and Agriculture 2016; California Invasive Plant Council 2016). No plant species designated as federal noxious weeds have been identified in the study area. Invasive plant species occur in all of the non-wetland vegetated cover types in the study area.

Table 14. Invasive Plant Species Identified in the Biological Study Area

Species	CDFA	Cal-IPC
Slender wild oat (<i>Avena barbata</i>)	–	Moderate
Wild oat (<i>Avena fatua</i>)	–	Moderate
Black mustard (<i>Brassica nigra</i>)	–	Moderate
Common mustard (<i>Brassica rapa</i>)	–	Limited
Ripgut brome (<i>Bromus diandrus</i>)	–	Moderate
Soft chess (<i>Bromus hordeaceus</i>)	–	Limited
Italian thistle (<i>Carduus pycnocephalus</i>)	C	Moderate
Yellow star-thistle (<i>Centaurea solstitialis</i>)	C	High
Bull thistle (<i>Cirsium vulgare</i>)	C	Moderate
Pampas grass (<i>Cortaderia selloana</i>)	–	High
Bermuda grass (<i>Cynodon dactylon</i>)	C	Moderate
Orchard grass (<i>Dactylis glomerata</i>)	–	Limited
Red-stemmed filaree (<i>Erodium cicutarium</i>)	–	Limited
Rattail fescue (<i>Festuca myuros</i>)	–	Moderate
Italian ryegrass (<i>Festuca perennis</i>)	–	Moderate
Cutleaf geranium (<i>Geranium dissectum</i>)	–	Limited
Mediterranean mustard (<i>Hirschfeldia incana</i>)	–	Moderate
Mediterranean barley (<i>Hordeum marinum</i> var. <i>gussoneanum</i>)	–	Moderate
Foxtail barley (<i>Hordeum murinum</i> ssp. <i>leporinum</i>)	–	Moderate
Horehound (<i>Marrubium vulgare</i>)	–	Limited
California burclover (<i>Medicago polymorpha</i>)	–	Limited
Bermuda buttercup (<i>Oxalis pes-caprae</i>)	–	Moderate
Harding grass (<i>Phalaris aquatica</i>)	–	Moderate
English plantain (<i>Plantago lanceolata</i>)	–	Limited
Wild radish (<i>Raphanus sativus</i>)	–	Limited
Himalayan blackberry (<i>Rubus armeniacus</i>)	–	High
Curly dock (<i>Rumex crispus</i>)	–	Limited
Russian thistle (<i>Salsola tragus</i>)	C	Limited
Milk thistle (<i>Silybum marianum</i>)	–	Limited
Johnson grass (<i>Sorghum halepense</i>)	C	–
Hedge parsley (<i>Torilis arvensis</i>)	–	Moderate
Rose clover (<i>Trifolium hirtum</i>)	–	Moderate
Periwinkle (<i>Vinca major</i>)	–	Moderate

Note: The California Department of Agriculture (CDFA) and California Invasive Plant Council (Cal-IPC) lists assign ratings that reflect the CDFA and Cal-IPC views of the statewide importance of the pest, likelihood that eradication or control efforts would be successful, and present distribution of the pest in the state. These ratings are guidelines that indicate the most appropriate action to take against a pest under general circumstances. The Cal-IPC species list is more inclusive than the CDFA list.

The CDFA categories indicated in the table are defined as follows:

C: State-endorsed holding action and eradication only when found in a nursery; action to retard spread outside nurseries at the discretion of the county agricultural commissioner.

The Cal-IPC categories indicated in the table are defined as follows:

High: Species with severe ecological impacts, high rates of dispersal and establishment, and usually widely distributed.

Moderate: Species with substantial and apparent ecological impacts, moderate to high rates of dispersal, establishment dependent on disturbance, and limited to widespread distribution.

Limited: Species with minor ecological impacts, low to moderate rates of invasion, limited distribution, and locally persistent and problematic.

Environmental Consequences

No Build Alternative

Under the no build alternative, no construction would take place. Therefore, there would be no impacts related to invasive species in the study area.

Build Alternatives

The proposed project would create additional disturbed areas for a temporary period. Areas where temporary disturbance occurs would be more susceptible to colonization or spread by invasive plants. Implementation of Measure 6 below will help to avoid and minimize the introduction and spread of invasive plants.

Avoidance, Minimization, and/or Mitigation Measures

BIO-6: Avoid and Minimize the Spread of Invasive Plant Species during Project Construction and Restore Temporarily Disturbed Habitat

To avoid and minimize the introduction of new invasive plants and the spread of invasive plants previously documented in the BSA, the following BMPs will be implemented during project construction.

- Use a weed-free source for project materials (e.g., straw wattles for erosion control that are weed-free or contain less than 1% weed seed).
- Prevent invasive plant contamination of project materials during transport and when stockpiling (e.g., by covering soil stockpiles with a heavy-duty, contractor-grade tarpaulin).
- Use a seed mix for erosion control activities comprising California native species appropriate to the project location.

2.4 Cumulative Impacts

Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

The California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR) Section 1508.7.

2.4.1 Farmland

The Yuba County General Plan EIR concluded that buildout of the general plan would result in a significant cumulative impact to farmland.

A substantial amount of high-quality agricultural land has been lost in recent years to urban development. Between 2006 and 2016, 46,060 acres of agricultural land was converted to non-agricultural uses – a loss of approximately 54% of the county's important farmland (California Department of Conservation 2008, 2016). Much of the farmland conversion has occurred in the south county due to residential development in areas such as Plumas Lake. Agricultural conversion rates are lower in northern Yuba County. This trend is expected to continue due to the continued conversion of agricultural land to residential, commercial, and industrial uses, as well as for transportation infrastructure.

Under the build alternative, the conversion of private land not currently used for transportation purposes to transportation right-of-way would occur and would require easements. Proposed project improvements would affect lands classified by the Farmland Protection Policy Act (FPPA) as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Grazing Land. Approximately 5.64 acres total important farmland

would be acquired for Alternative 1 and approximately 9.72 acres total important farmland would be acquired for Alternative 2.

The acquisitions consist of slivers of land adjacent to SR 70. Many of the affected parcels, while classified as important farmland, are not currently in agricultural production.

Due to the location of the acquisition on each parcel and the small size of project encroachment relative to the rest of the parcel, it is anticipated that these parcels would continue to be used for agricultural purposes. The farmland acquisitions for Alternative 1 represent approximately 0.00007 percent of the County's total important farmland and farmland acquisitions for Alternative 2 represent approximately 0.00012 percent of the County's important farmland. Compensation to the individual landowners for property impacts would be addressed and negotiated through the right-of-way process, as warranted. Given the low rate of farmland conversion within this section of Yuba County, and the relatively numbers of farmland acres converted, the project's contribution to the conversion of farmland would not be cumulatively considerable.

2.4.2 Traffic and Transportation

The Yuba County General Plan EIR concluded that buildout of the general plan would result in a significant impact due to regional population growth.

Under the cumulative condition, ongoing development is expected to continue within the study area. Local and regionally planned transportation projects are intended to accommodate the expected increase in traffic related to development in the region. However, if work on multiple projects were to overlap with the proposed project during construction, significant cumulative impacts related to traffic delays and detours for travel in the region could occur.

Planned highway projects, such as the SR 70 Simmerly Sough Bridge Replacement near Marysville, and other projects along the SR 70 corridor as described in Section 2.1.1, Existing and Future Land Use, could require temporary reductions in lane widths and reductions in speed limits along SR 70, which could contribute to significant cumulative impacts on traffic circulation and congestion in construction zones. While some level of disruption in traffic could occur if planned development and transportation improvement projects overlap, cumulative construction impacts would be temporary and individual projects would contain measures to avoid major traffic delays. Therefore, it is not anticipated that temporary effects of construction of multiple projects would combine to result in cumulatively significant impacts.

Over the long term, planned transportation improvements of major roadways in the study area are anticipated to provide beneficial impacts on the existing highway network by widening existing highways, improving safety and reducing congestion. Taken together, these transportation projects would provide a cumulative regional benefit to transportation, improving circulation and access in the region. Therefore, there would not be a cumulatively significant impact on traffic and transportation.

2.4.3 Visual Resources

The Yuba County General Plan EIR concluded that cumulative impacts related to visual resources would be significant due to the anticipated development of rural land.

Temporary construction impacts associated with the proposed project would not result in cumulative visual impacts because they would be temporary, especially when compared to larger-scale development and transportation projects occurring in the area. However, planned land uses in the area include retaining the existing agricultural land uses and rural character of the project vicinity. Transportation projects may slightly alter the existing visual character of the area by expanding the rural transportation corridor. These changes are likely to be limited to major transportation routes because there are no plans to develop agricultural lands with suburban land uses. Mature oak trees are considered a scenic resource which are protected by the Yuba County General Plan. The loss of mature oak trees along this portion of SR 70 would affect visual quality because these resources would be permanently removed, and it is not likely that they can be fully mitigated onsite. In addition, it would take several decades for any replacement plantings to reach the same stature as the existing oaks, resulting in long-term visual changes to the corridor. However, oak trees on lands surrounding the project alternatives and lands associated with other projects would not be affected, retaining mature oak trees in the vicinity of SR 70. Even though it would take mitigation plantings a long time to grow, they would ensure that oak trees are being replanted at a higher rate than the number of oak tree removals, so that oak trees can be retained as a scenic resource within the visual landscape for generation to come.

Additionally, future development and roadway improvements would add to ambient atmospheric lighting and glare in the area by infilling unlit open space areas with lit buildings and roadways, and by adding reflective surfaces to areas that are currently undeveloped. The project would only result in a nominal increase in glare from the slightly widened roadway surface and replacement lighting and would not result in cumulative impacts. There are no scenic roadways in or near the project area, so there would be no cumulative impact to such resources. In addition, scenic vistas would not be negatively affected by the proposed project.

Overall, the proposed project would not contribute to cumulative impacts related to planned and/or proposed transportation projects and small-scale, rural development in the area because the build alternatives would not substantially alter the existing visual landscape, degrade the visual quality of the project area, or alter levels of light and glare. As such, the combined visual effect of both alternatives with other projects planned, recently and in construction or currently in construction would not result in impacts that are cumulatively considerable.

2.4.4 Hydrology and Water Quality

The Yuba County General Plan EIR concluded that there would be a significant cumulative impact related to an increase in impervious surfaces.

Planned and reasonably foreseeable development, including major construction projects in the project vicinity, could impede flood flows or increase the number of people or structures affected by flooding within the cumulative floodplain Resource Study Area. Future projects involving new and improved bridge crossings, such as bridge crossings, such as the Simmerly Slough Bridge replacement, could require the placement of piers in a Federal Emergency Management Agency floodway or floodplain. If the effects to floodplains from these projects were to combine to substantially redirect flood flows or increase flood elevations such that it placed structures within a floodplain such that they would be imperiled, it would be considered a significant cumulative impact.

All ongoing and reasonably foreseeable projects are subject to and must comply with applicable federal, state, and local policies, programs, and ordinances, which would reduce the impact on floodplains and flood risks. The local flood control agencies and applicable flood control design criteria require projects in areas within the designated 100-year flood zones to design project-specific drainage systems in accordance with findings of site-specific studies. Therefore, construction associated with reasonably foreseeable projects in such areas would be designed to comply with regulatory agency requirements. Consistent with the standard requirements of those agencies, design of these bridge crossings would include measures to minimize the impacts of placing piers in the floodplains and floodways.

In addition, some development within a 100-year floodplain may divert or redirect flood flows; however, where these floodplains and floodways exist, project proponents would design projects so that little to no increase in water surface elevation would occur, in accordance with local regulations and permitting. In addition, new development within levee-protected zones could expose more people and structures to flooding risks. However, federal, state, and local agencies (i.e., USACE, California Department of Water Resources, municipalities, and local flood districts) will continue to coordinate so that levees are constructed, repaired, and maintained to provide adequate flood protection within potential inundation areas. Accordingly, development under county and city general plans as well as other past, present, and reasonably foreseeable projects would not result in cumulatively significant impacts on localized or regional flooding by impeding or redirecting flood flows nor would the proposed project impede or redirect flood flows or otherwise encroach on a 100-year floodplain. Based on the above analysis, the proposed project, when combined with the cumulative projects, is not anticipated to result in a cumulative impact to hydrology and floodplains.

2.4.5 Water Quality and Storm Water Runoff

The Yuba County General Plan EIR concluded that there would be a significant cumulative impact related to an increase in impervious surfaces.

The anticipated growth and development within the Lower Feather River Watershed could contribute to the cumulative surface water quality degradation and the collective effect of development could degrade stormwater quality by contributing pollutants during construction and operations within the cumulative surface water RSA. Cumulative development could also affect surface water quality if the land uses change, the intensity of

land use changes, or drainages are altered such that they facilitate introduction of pollutants to surface water. A significant cumulative impact would occur if the effects of multiple projects combined to violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality in water bodies in the project vicinity.

As a result of land use changes, the preservation of surface water quality is anticipated to be an increasing challenge through 2040. Planned and reasonably foreseeable future projects could have construction schedules that overlap. Construction in, across, or over rivers, streams and canals (e.g., 5th Street Bridge Replacement, the Pennington Bridge replacement, the Simmerly Slough Bridge replacement, and bridge preventative maintenance within Yuba County) has the potential to degrade surface water quality, and concurrent construction schedules for these multiple projects could exacerbate this degradation of surface water quality. Accordingly, construction and ongoing operations and maintenance of these overlapping projects would have the potential to result in cumulative impacts on surface water and stormwater quality.

However, compliance with regulatory standards (NPDES Permit, MS4 Permit, and local stormwater requirements) and required avoidance features, as conditions of individual project approvals, should minimize or eliminate potential water quality impacts associated with construction operations and the functionality of the facility (post construction). With required actions in place and the implementation of avoidance and minimization measures, construction work and operations within the project vicinity are not anticipated to violate water quality standards or waste discharge requirements or further degrade water quality within the Lower Feather River Basin; therefore, cumulative surface water and stormwater quality impacts are not anticipated to be cumulatively significant.

2.4.6 Geology, Soils, Seismicity, and Topography

The Yuba County General Plan EIR concluded that there would be a significant cumulative impact related to loss of mineral resources.

Planned projects may convert additional land to transportation or developed land uses within the project vicinity for geology, soils, seismicity, and topography. These projects would likely require excavation and grading activities that would contribute in the removal of vegetation and could collectively increase the potential for surface water runoff and expose soils to wind and water erosion. Exposed soils that are not protected, such as exposed work areas and stockpiles, could erode and result in a loss of high-value topsoil. In addition, planned and future transportation and development projects occurring in areas of expansive soils could contribute to differential movement and possible foundation damage as a result of changes in soil volume. Regulatory and State standards and requirements, including the California Building Code, Caltrans' Specifications, avoidance features, and the implementation of construction site BMPs, should minimize or eliminate the potential geological impacts identified and associated with the construction and operation of planned development projects on SR 70. There are no anticipated impacts to minerals as a result of

the build alternatives. Therefore, the proposed project, in combination with the cumulative projects, is not anticipated to produce cumulative impacts related to geology and soils.

2.4.7 Paleontological Resources

The Yuba County 2030 General Plan EIR concluded that future development would result in significant cumulative impacts to paleontological resources.

Future projects in the project vicinity involving ground disturbance during construction would involve geologic units that have produced abundant and diverse fossil resources and are thus considered highly sensitive for paleontological resources (i.e., likely to produce additional similar finds in the future). Construction of planned and future projects in the project vicinity would require ground disturbance in areas that include the Laguna, Riverbank, and Modesto Formations; and the construction of other transportation and development projects within the Sacramento Valley could require ground disturbance in other areas highly sensitive for paleontological resources. These projects would have the potential to cumulatively disturb, damage, or destroy significant (scientifically important) fossil resources. Once lost, such resources cannot be recovered, and impacts are therefore considered permanent. However, regulatory standards and a properly designed and implemented monitoring, collection, and treatment program would minimize impacts on paleontological resources. With these measures in place, construction and operation of planned development projects within the project vicinity would not result in the widespread destruction of scientifically important fossil resources; therefore, the impact would not be cumulatively significant.

2.4.8 Air Quality

The Yuba County 2030 General Plan EIR concluded that construction and operational criteria pollutant emissions and TACs associated with buildout of the general plan would have a significant cumulative impact.

Future planned transportation projects such as the SR 70 Simmerly Slough Bridge replacement and widening projects on SR 70 are located within the project vicinity. These projects could contribute to cumulative short-term air quality impacts if construction schedules for these projects overlap. This scenario is not anticipated to occur because the construction of the various present and reasonably foreseeable future projects would be temporary, and the projects do not generally have overlapping or adjacent construction footprints or schedule. As a result, the proposed project, in combination with these cumulative projects, would not contribute to a cumulative air quality impact.

2.4.9 Noise

The Yuba County 2030 General Plan EIR concluded that traffic noise associated with buildout of the general plan would have a significant cumulative impact.

A cumulative noise impact would occur if activities related to the proposed project combined with the noise generated by other projects to expose people to noise levels in excess of standards for severe impacts as established by the FHWA. Future planned transportation projects on and near SR 70 could contribute to cumulative noise impacts on sensitive receivers if construction schedules for these projects overlap and sensitive receptors are within the impact areas of two or more projects at a time. This scenario is unlikely to occur because the construction of the various present and reasonably foreseeable future projects would be temporary, and the projects do not generally have overlapping or adjacent construction footprints or schedules. Further, each project would be responsible for following applicable noise ordinances during construction, thereby reducing the noise impact. As a result, the proposed project would not contribute to a cumulative noise impact.

2.4.10 Biological Resources

The Yuba County 2030 General Plan EIR concluded that impacts to biological resources related to buildout of the general plan would be cumulatively significant.

Cumulative impacts on riparian wetland habitat, valley foothill riparian habitat, and native oak trees would result from construction of other transportation and development projects in Yuba County. Construction of the proposed project would add to the cumulative loss of riparian wetlands, valley foothill riparian habitat, and native oak trees. However, with implementation of the measures prescribed for minimizing impacts and compensating for remaining impacts, the proposed project's incremental contribution to cumulative impacts would not be cumulatively considerable.

2.4.11 Climate Change/Greenhouse Gas Emissions

GHG analysis is by its nature cumulative. No individual project is of sufficient size to be the sole reason for climate change. See Section 3.4, Climate Change, for a full discussion of climate change impacts.

Chapter 3 California Environmental Quality Act Evaluation

3.1 **Determining Significance under the California Environmental Quality Act**

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal Environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated, and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 **CEQA Environmental Checklist**

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant With Mitigation Incorporated, Less Than

Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The words “significant” and “significance” used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 to provide you with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

3.2.1 Aesthetics

CEQA Significance Determinations for Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

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

Less Than Significant

Scenic vistas are often panoramic views that have high quality compositional and picturesque value. Within the project vicinity, scenic vistas are available where the roadway viewing position allows visual access to the hillsides and ridgelines.

The addition of the roadway widening will have a moderate impact on the scenic quality of the project location. The vegetation and tree removal that is required to facilitate the widening will be kept to the minimum required. Still, the project would have a moderate effect on scenic vistas. It is possible that the impact will lessen as the project is finished and the roadway replanted, but the initial impact may be noticed. The impact would be less than significant.

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

Less Than Significant Impact

This highway corridor is not eligible for designation as a State Scenic Highway. The proposed project described in this visual analysis will create ground disturbance with the vegetation removal. The exact amount of replacement planting and possible erosion control will be determined during the design phase.

The required removal of vegetation will have a moderate visual effect on the scenic resources. The effect will be higher in the beginning as the removal process start. After the mitigation and replanting of trees and vegetation, the impact should begin to lessen and at that time the project will not degrade the existing visual character or quality of the site and its surrounding community. The impact would be less than significant.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact

The most noticeable aspects of the completed project will be any loss of vegetation such as the mature trees that are required to be cleared around the road widening. The loss of vegetation and orchard planting would have a moderate effect on the spatial character adjacent to the roadsides. The removal of any large established trees, shrubs, and ground covers to facilitate the project would cause a moderate adverse effect on the visual character of the site and its surroundings. The site will look bare for a while until the erosion control grows, but with appropriate replanting in and around the cleared zones, the vegetated character of the roadway would be re-established. The impact would be less than significant.

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

No Impact

No new sources of light or glare are anticipated. Thus, no impact would occur.

3.2.2 Agriculture and Forest Resources

CEQA Significance Determinations for Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department 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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

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

Less Than Significant Impact

As discussed in the Farmlands section in Chapter 2, implementation of the proposed project would involve the conversion of private land not currently used for transportation purposes to transportation ROW, which would require easements. Proposed project improvements requiring temporary construction disturbance, temporary easements, and permanent easements would affect lands within the project area that are mapped as Grazing Land (G), Unique Farmland (U) and Farmland of Statewide Importance (S) by the California Department of Conservation Farmland Mapping and Monitoring Program. Build Alternative 1 would require permanent conversion of 5.64 acres of total important farmland, which represents approximately 0.00007 percent of the County's farmland. Build Alternative 2 would require conversion of 9.72 acres of total important farmland, which represents approximately 0.00012 percent of the County's farmland. Therefore, the impact is less than significant.

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

No Impact

As discussed in the Farmlands section in Chapter 2, no farmlands under Williamson Act contract are present within the project area; therefore, the proposed project would not conflict with 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))?

No Impact

The proposed project would not conflict with existing zoning for forestland since there is no forestland in the project area.

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

No Impact

There is no forestland in the project area. Therefore, the project would not result in a loss or conversion of forestland.

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?

Less Than Significant Impact

As discussed in the Farmlands section in Chapter 2, implementation of the proposed project would involve the conversion of private land not currently used for transportation purposes to transportation ROW, which would require easements. Proposed project improvements requiring temporary construction disturbance, temporary easements, and permanent easements would affect lands within the project area that are mapped as

Grazing Land (G), Unique Farmland (U) and Farmland of Statewide Importance (S) by the California Department of Conservation Farmland Mapping and Monitoring Program. Build Alternative 1 would require permanent conversion of 5.64 acres of total important farmland, which represents approximately 0.00007 percent of the County's farmland. Build Alternative 2 would require conversion of 9.72 acres of total important farmland, which represents approximately 0.00012 percent of the County's farmland. Therefore the impact is less than significant.

There is no forest land in the project area.

3.2.3 Air Quality

CEQA Significance Determinations for Air Quality

Where available, the significance criteria established by the applicable air quality management district 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?

Less Than Significant Impact

The proposed project is located in the Sacramento Valley Air Basin and is within the jurisdiction of the Feather River Air Quality Management District (FRAQMD) and the California Air Resources Board (CARB). The FRAQMD is the primary agency responsible for writing the Air Quality Management Plan in cooperation with Sacramento Area Council of Governments, local governments, and the private sector. The Air Quality Management Plan provides the blueprint for meeting state and federal ambient air quality standards. The proposed project is included in SACOG's Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP), both of which were found to be conforming. Therefore, the proposed project would not conflict with the applicable Air Quality Management Plan. Thus, the impact would be less than significant.

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

Less Than Significant Impact

No cumulatively considerable impacts to criteria pollutants are anticipated as the project's operational emissions under the build alternatives. Thus, the impact is less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact

There is a sensitive receptor within the project area, Little Orchard's Preschool n' Daycare, located at 8973 Highway 70, Marysville, CA. No considerable impacts to criteria pollutants are anticipated as the project's operational emissions are not significant under the build

alternatives. For temporary construction emissions, construction dust and equipment exhaust emissions measures shall be implemented through Caltrans' special provisions and standard specifications, during all phases of construction work thus, the impact would be less than significant.

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

Less Than Significant Impact

Temporary construction activities could generate fugitive dust from the operation of construction equipment. The project will comply with construction standards adopted by FRAQMD as well as Caltrans standardized procedures for minimizing air pollutants during construction. Impacts would be less than significant. No mitigation is required.

3.2.4 Cultural Resources

CEQA Significance Determinations for Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact

As discussed in the Cultural Resources Section in Chapter 2, there are no known National Register of Historic Places (NRHP)-eligible or NRHP-listed historical resources within the Area of Direct Impact (ADI). Similarly, the architectural APE encompasses no known NRHP-eligible NRHP-listed or previously unevaluated built environment resources. Thus, no impact would occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant Impact

As discussed in the Cultural Resources Section in Chapter 2, there are no known National Register of Historic Places (NRHP)-eligible or NRHP-listed historical resources within the Area of Potential Effect (APE). However, the potential for discovery of unknown cultural resources does exist. As discussed in the Cultural Resources Section in Chapter 2, there are no known National Register of Historic Places (NRHP)-eligible or NRHP-listed historical resources within the Area of Direct Impact (ADI).

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant Impact

There is no indication or reason to believe human remains would be encountered during the project since there are no known cemeteries or burial sites in the project APE. However, the potential does exist to encounter unknown human remains during

construction. As discussed in the Cultural Resources Section in Chapter 2, there are no known National Register of Historic Places (NRHP)-eligible or NRHP-listed historical resources within the Area of Direct Impact (ADI).

3.2.5 Biological Resources

CEQA Significance Determinations for Biological Resources

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?

No Impact

Survey results have concluded that the Environmental Study Area does not contain suitable habitat for any candidate, sensitive or special status species as recognized by California Department of Fish and Wildlife or U.S. Fish and Wildlife.

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?

Less Than Significant With Mitigation Incorporated

The proposed project has will result in the permanent loss of riparian habitat. However, Caltrans intends to mitigate through off site mitigation. Specific amount and ratios will be determined through consultation with regulatory agencies.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant With Mitigation Incorporated

Proposed project will result in the placement of permanent fill into a riparian wetland. However, the permanent loss of riparian wetland habitat will be offset by mitigation determined during the permitting phase of this project.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact

The Project does not contain wildlife corridors or sites that have the potential to impede the movement of resident migratory fish.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact

There are no anticipated local ordinances or preservation policies protecting biological resources that have the potential to occur within the Environmental Study Area.

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?

No Impact

The proposed project does not conflict with the listed Conservation Plans above.

3.2.6 Energy

CEQA Significance Determinations for 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?

Less Than Significant Impact

The proposed project involves widening SR 70 to improve safety, goods movement and emergency evacuation along the corridor. During construction, energy use would primarily involve fuel consumption from use of construction equipment and onroad vehicles. This consumption would be temporary in nature and would cease once construction is complete. Indirect energy use such as fuel consumption by vehicles utilizing the roadway would occur. However, the proposed project is not anticipated to substantially increase vehicle traffic (Fehr & Peers 2019). Therefore, the project would not result in a wasteful, inefficient, or unnecessary usage of energy resources during project construction or operation. Thus, the impacts would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact

The applicable renewable energy plan for the project area would be the State Renewable Portfolio Standards (RPS), which requires utility agencies to ensure a certain percentage of the electricity they sell is from a renewable source. The project will not conflict with or obstruct this plan. Thus, no impact would occur.

3.2.7 Geology and Soils

CEQA Significance Determinations for Geology and Soils

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

No Impact

There are no known active faults in or near the project area according to the California Geological Survey.

ii) Strong seismic ground shaking?

No Impact

The project is located in an area that does not require investigation by the California Geological Survey.

iii) Seismic-related ground failure, including liquefaction?

No Impact

The project is located in an area that was not evaluated for liquefaction by the California Geological Survey. Thus, no impact would occur.

iv) Landslides?

No Impact

The project is located in an area that was not evaluated for landslides by the California Geological Survey. Thus, no impact would occur.

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

Less Than Significant Impact

Construction BMPs would minimize erosion and loss of topsoil from road grading and construction activities. Thus, the impact would be less than significant.

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

No Impact

The project is not located on a geologic unit or soil that is unstable or would become unstable as a result of the project according to the California Geological Survey. No impact would occur.

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

Less Than Significant Impact

Although there are expansive soils located within the project limits, this is a roadway project and the potential expansion risk is very low. Thus, there is less than significant impact.

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

No Impact

The project would not include a septic system or alternative waste water disposal systems. There would be no impact.

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

Less Than Less Than Significant Impact

Paleontological resources have not been found directly within the proposed project's area of disturbance, however the age and type of subsurface geologic units indicate fossil resources have the potential to occur. Impacts to paleontological resources will be minimized through the use of pre-construction awareness training for excavation personnel and the use of qualified paleontological monitors onsite during excavation. With these measures in place, the impact is less than significant

3.2.8 Greenhouse Gas Emissions

CEQA Significance Determinations for Greenhouse Gas Emissions

Would the project:

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

Less Than Significant Impact

As discussed in the Climate Change section in Section 3.4, operationally, the proposed project build and no build alternatives would not generate greenhouse gas emissions above the existing condition (2018). Moreover, any temporary GHG emissions generated from construction activities would be offset by project-level reduction strategies. Thus, the impact is less than significant. No mitigation is required.

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

Less Than Significant Impact

The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions, as the project is consistent with SACOG's RTP/SCS (which considers goals stipulated by AB 32, etc.) would therefore not conflict with SB 375. In addition, although the project is not specifically called out in the

General Plan, the project is consistent with the policies in the General Plan and would help the County achieve its goals of providing a safe and efficient transportation system by improving the throughput of vehicles in the corridor. The project is considered a project accommodated for in the General Plan. No impact would occur. Moreover, the build alternatives result in a decrease in GHG emissions by horizon year in relation to existing conditions for all project alternatives consistent with the goal of SB 743 to reduce greenhouse gas emissions.

3.2.9 Hazards and Hazardous Materials

CEQA Significance Determinations for Hazards and Hazardous Materials

Would the project:

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

Less Than Less Than Significant Impact

It is anticipated this project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. If soil is to be removed from site, an ADL survey will need to be conducted. If new right of way is acquired and structures are to be demolished or disturbed, then an Asbestos Containing Material (ACM) and Lead Containing Paint (LCP) survey will need to be conducted. Based on the results, hazardous waste can be produced. However, it will be handled, transported, and disposed of properly. Therefore, less than significant impact is anticipated.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact

This project is expected to create less than significant impact to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The Aerially Deposited Lead (ADL) survey will provide direction on how to handle the excess soil (lead). The excess soil will be properly disposed of depending on whether the survey indicates it is hazardous or non-hazardous. The yellow traffic striping and treated wood waste will be properly disposed of as well. No other accidental hazardous waste is anticipated. If new right of way structures are to be demolished, they will need to be tested for Asbestos Containing Materials (ACM) and Lead Containing Paint (LCP). All the anticipated hazardous waste material will be properly handled and/or disposed of.

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

No Impact

Neither an existing nor proposed school is located within one-quarter mile of the project area. Thus, emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school is not anticipated. No impact would occur.

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?

Less Than Significant Impact

There are three sites that are included on the list of hazardous materials sites compiled pursuant to the Government Code Section 65962.5. These three sites can be found on the Geotracker database (database maintained by the State Water Resources Control Board). Two of the sites are closed and one labeled as an active. The three sites are 'Atwal Site,' 'Mayfair Packing,' and 'Six Mile Station.' The only active site is the Atwal Site. The other two sites have been properly closed. The Atwal Site is on its way to being closed. As per the correspondence on the Geotracker database, it is anticipated that this site is in the process of being closed and should be labeled inactive soon. All three of these sites were either gasoline or diesel leaks. Less than significant impact is anticipated as the risk has been mitigated and properly handled. If CALTRANS works or acquires any contaminated parcel (besides the two closed Cortese sites listed in the Geotracker database), a site investigation will also need to be conducted to test for the possible contaminants. Thus, the impact would be less than significant.

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

No Impact

The closest public airport is the Sutter County Airport, which is approximately 3.3 miles southwest of the SR 70/Laurellen Road intersection. In addition, no aspect of the proposed project would result in a safety hazard for people residing or working in the project area. No impact would occur.

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

Less Than Significant Impact

As discussed in the Utilities and Emergency Services section in Chapter 2, there may be temporary disruptions to the existing highway during the construction period. Any required closures would be coordinated with emergency service providers so as not to hinder emergency responses. After project completion, continuous passing opportunities would improve emergency response. Additionally, the completed project could provide an enhanced evacuation route in the event of an emergency evacuation.

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

Less Than Significant Impact

There is the potential for wildland fires in the region given the relatively dry summer climate, with hot days and wind; however, the project site is not located in a fire hazard severity zone according to the California Department of Forestry and Fire Protection's fire hazard severity zone map for Yuba County (California Department of Forestry and Fire Protection 2007). Thus, the impact would be less than significant.

3.2.10 Hydrology and Water Quality

CEQA Significance Determinations for 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?

Less Than Significant Impact

It is anticipated that the project will be regulated under the Construction General Permit (CGP). Compliance with the CGP will require a risk level analysis based on the project's potential erosion and transport to receiving waters. Analysis results will be utilized to determine standard water quality protection measures that will be implemented in order to avoid surface and ground water quality degradation. It is anticipated that BMP usage, placement, field implementation and effectiveness will be monitored, adjusted, and modified (accordingly) for the duration of the project. Compliance with all applicable NPDES Permits, in addition to coordination with the Regional Water Quality Board, is anticipated to ensure the protection of water resources in the area.

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

Less Than Significant Impact

The intended use of the facility and potential pollutants that will be encountered in storm water runoff, after the project is constructed, is not anticipated to change from its current condition. The groundwater elevation, within this corridor, historically fluctuates and is not anticipated to impact the storm water treatment measures to be implemented. Biofiltration and infiltration are the current and historic minimization and avoidance measures anticipated for the project and offer a strategy that is intended to treat storm water runoff to the maximum extent practicable for a general pollutant category. The proposed project would only minimally affect groundwater resources because excavation would occur on a temporary, short-term basis during the construction period. The project would not impede sustainable groundwater management of the basin. The impact is anticipated to be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

Less Than Significant Impact

Standard construction erosion control measures will be utilized to avoid erosion and siltation for the duration of project activities. BMP measures and implementation strategies will be outlined in the Contractor prepared and Caltrans approved SWPPP. These will likely include temporary soil stabilization measures, linear sediment barriers (i.e. silt fence, gravel bag berms, fiber rolls), and construction site waste management (i.e. concrete washout, construction materials storage, litter/ waste management) among other approved controls. Thus, the impact is anticipated to be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less Than Significant Impact

Uncertainty exists related to farming practices, which may impact the nature and character of flow to surface water runoff within the project limits. However, it is anticipated that drainage system design will focus on perpetuating existing highway drainage conditions to the greatest extent feasible. New drainage features will be designed to perpetuate flow in the existing direction and will have similar or greater capacity than what currently exists. Thus, the impact is less than significant.

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

Less Than Significant Impact

Drainage appurtenances, within the project limits, will be designed to accommodate the anticipated change in flow. Treatment BMPs will be incorporated into the project design, where applicable and feasible, to treat the new impervious area anticipated for the project. The implementation of BMPs meant to treat general pollutants will be evaluated and an analysis of site characteristics to optimize water quality volume/water quality flow and maximize site perviousness will be performed. Thus the impact is anticipated to be less than significant.

iv) Impede or redirect flood flows?

No Impact

It is not anticipated that the project would redirect flood flows. It is anticipated that contouring needed for earthwork will retain the same flow direction, drainage functionality and characteristics, as the current existing condition. No impact would occur.

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

No Impact

The project is not located near inundation zones.

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

No Impact

It is not anticipated that the project will affect water quality control plans or sustainable groundwater management plans. Currently, the anticipated treatment strategy is to treat 100% of the water quality volume/water quality flow by maximizing perviousness and deploying biofiltration devices where appropriate. It is anticipated that biofiltration swales/strips (using roadside ditches, side slopes and embankment slopes) will be constructed to serve as treatment mechanisms and address stormwater runoff and potential water quality concerns (i.e. general pollutants) within the project limits.

3.2.11 Land Use and Planning

CEQA Significance Determinations for Land Use and Planning

Would the project:

a) Physically divide an established community?

No Impact

The project includes the widening of the existing SR 70 roadway from Laurellen Road and the Butte/Yuba County line to provide a five-lane cross-section within the full postmile limits. Therefore, the project would not physically divide an established community. No impact would occur.

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?

No Impact

The project is included in SACOG's 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy and 2019-2022 Federal Transportation Improvement Program, where it is listed as "SR 70 Passing Lanes – Segments 4 and 5" (Project ID#CAL20795). According to Caltrans' Interregional Transportation Strategic Plan, SR 70 is identified as one of 34 High Emphasis Routes that are of particular importance from a statewide perspective and is further designated as one of 10 Focus Routes in California. Additionally, the project would not conflict with the Yuba County General Plan. No impact would occur.

3.2.12 Mineral Resources

CEQA Significance Determinations for 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?

No Impact

As discussed in the Geology/Soils/Seismic/Topography Mineral Resources section in Chapter 2, there are no designated mineral resources areas in the project area or vicinity. No impact would occur.

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

No Impact

As discussed in the Geology/Soils/Seismic/Topography Mineral Resources section in Chapter 2, there are no designated mineral resources areas in the project area or vicinity. No impact would occur

3.2.13 Noise

CEQA Significance Determinations for 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?

Less Than Significant Impact

The project will cause noise levels to approach and exceed the Federal impact threshold for some of the receivers within the project limit; the estimated increase in noise from the project is 1 to 3 dBA. This increase is considered less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant

The noise increase from the project is generated due to future traffic growth and addition of traffic lanes proposed, moreover, the project scope will not contribute to excessive vibrations or groundborne noise. Therefore, the impact is considered less than significant.

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

No Impact

The proposed project is not located within the vicinity of a private airstrip or an airport land use, nor within two miles of a public airport or public use airport. Therefore, there is no impact.

3.2.14 Population and Housing

CEQA Significance Determinations for Population and Housing

Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact

The proposed project would involve the widening of an existing roadway from two-lanes to a five-lane cross-section; two travel lanes in each direction with a 14-foot-wide center paved strip between opposing traffic lanes striped as a Two Way Left Turn Lane. The project is not anticipated to provide access to new areas that are currently inaccessible via SR 70 nor change land uses surrounding the project alignment. Thus, growth in the project vicinity is not reasonably foreseeable. Therefore, impacts would be less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Less Than Significant Impact

Displacements resulting from the proposed project would not be enough to cause changes to the regional population due to the relatively small number of relocations required and the sufficient replacements properties in the study area. Therefore, impacts would be less than significant.

3.2.15 Public Services

CEQA Significance Determinations for Public Services

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

Fire protection?

Less Than Significant Impact

The project would not result in direct impacts on fire stations, and the project is not anticipated to adversely affect response time for emergency services associated with fire stations. It is likely that additional lanes may improve response times, allowing fire personnel to bypass other vehicles safely and quickly.

During construction, there may be temporary disruptions along SR 70 from shifting traffic or construction equipment. Traffic would be shifted to allow continued two-way operation of

SR 70, as described in the traffic management plan. Any required closures would be coordinated with emergency service providers so as not to hinder emergency responses.

Police protection?

Less Than Significant Impact

The project would not result in direct impacts on police stations, and the project is not anticipated to adversely affect response time for emergency services associated with police stations. It is likely that additional lanes may improve response times, allowing police personnel to bypass other vehicles safely and quickly.

During construction, there may be temporary disruptions along SR 70 from shifting traffic or construction equipment. Traffic would be shifted to allow continued two-way operation of SR 70, as described in the traffic management plan. Any required closures would be coordinated with emergency service providers so as not to hinder emergency responses.

Schools?

No Impact

Marysville High School is located about 0.7 miles south of the project site. The project would not result in an increase in population or facilities that would require the provision of schools or result in the need for physically altered facilities. The demand for schools would be the same as under existing conditions after construction of the project. Therefore, no impact on schools or other public facilities would occur from the project.

Parks?

No Impact

There are no parks within close proximity to the project alignment. The project would not result in an increase in population or result in the need for new parks or altered facilities.

Other public facilities?

No Impact

Besides Marysville High School, there are no other public facilities within close proximity to the project alignment. The project would not result in an increase in population or result in the need for new or altered facilities.

3.2.16 Recreation

CEQA Significance Determinations for 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?

No Impact

There are no parks or recreation facilities near the proposed project; most land in the immediate vicinity is agricultural land. The closest park, SJ Field Park is located in Marysville and is approximately 0.9 miles south of the project boundary. Therefore, increased use at a park or recreational facility would not occur. No impact would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact

There are no parks or recreation facilities near the proposed project; most land in the immediate vicinity is agricultural land. The closest park, SJ Field Park is located in Marysville and is approximately 0.9 miles south of the project boundary. Therefore, the project would not require the construction or expansion of recreational facilities. No impact would occur.

3.2.17 Transportation

CEQA Significance Determinations for Transportation

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact

The project is consistent with SACOG's 2019-2022 Metropolitan Transportation Plan/Sustainable Communities Strategy and 2019-20 Metropolitan Transportation Improvement Plan where it is listed as "SR 70 Passing Lanes – Segments 4 and 5" under the description "On SR 70, from Laurellen to Yuba/Butte county line (segments 4 and 5) – Address safety concerns, improve highway segments and provide continuous passing lane opportunities (PM 16.2/25.8)". The project is also consistent with Caltrans' Interregional Transportation Strategic Plan, which identifies SR 70 as one of 34 High Emphasis Routes that are of particular importance from a statewide perspective. SR 70 is further designated as one of 10 Focus Routes in California. The project would not conflict with any plans, rather it would implement these plans. No impact would occur.

b) Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Note: While public agencies may immediately apply Section 15064.3 of the updated Guidelines, statewide application is not required until July 1, 2020. In addition, uniform statewide guidance for Caltrans projects is still under development. The Project Development Team may determine the appropriate metric to use to analyze traffic impacts pursuant to section 15064.3(b). Projects for which a Notice of Preparation (NOP) will be issued any time after December 28, 2018 should consider including an analysis of VMT/induced demand if the project has the potential to increase VMT (see page 20 of the

Governor's Office of Planning and Research's updated SB 743 Technical Advisory), particularly if the project will be approved after July 2020.

Less Than Significant Impact

Although the project will be approved prior to July 2020, the Project Development Team determined that the appropriate metric to use to analyze traffic impacts pursuant to section 15064.3(b) includes an analysis of VMT/induced demand in addition to LOS analysis. Lead agencies can evaluate induced travel quantitatively by applying the results of existing studies that examine the magnitude of the increase of VMT resulting for a given increase in lane miles. These studies estimate the percent change in VMT for every percent change in miles to the roadway system. Based on existing studies, the Transportation Analysis Report (Fehr & Peers March 2019) estimated the short-term response for induced travel to range from 1,500 to 9,280 vehicle miles traveled per day, which is a change of 0.03 to 0.15 percent on a regional basis.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact

No incompatible uses or hazardous design features are associated with operation of the proposed project. The project would widen 9.5 miles of SR 70 and improve traffic operations and safety along this segment of the highway. No impact would occur.

d) Result in inadequate emergency access?

Less Than Significant Impact

The project would widen 9.5 miles of SR 70 and improve traffic operations. Thus operationally, the project would improve emergency access. Temporary construction impacts could have the potential to impact emergency access during construction. However, a traffic control plan would provide continuous emergency access throughout construction. Thus, the temporary impact would be less than significant.

3.2.18 Tribal Cultural Resources

CEQA Significance Determinations for Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

No Impact

The cultural resource studies and Native American Consultation conducted for the project did not identify any tribal cultural resources within the project area. Thus, no impact would occur.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

No Impact

The cultural resource studies and Native American Consultation conducted for the project did not identify any tribal cultural resources within the project area. Thus, no impact would occur.

3.2.19 Utilities and Service Systems

CEQA Significance Determinations for Utilities and Service Systems

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact

The proposed project would not require water or wastewater treatment as no potable water and/or toilets would be provided as part of the project. No impact would occur. The proposed project would require relocation of electrical power and telecommunications utility poles; however, this would be a temporary disruption of service and all utilities would be notified in advance. This temporary impact is less than significant.

The project design includes improved storm drainage facilities, which would minimize the potential for discharges of pollutants to nearby storm drain, Honcut Creek, and the Lower Feather River. In addition, vegetative areas would allow for infiltration and water quality treatment. The project would be designed in accordance with the objectives of Caltrans' NPDES Permit requirements and related stormwater requirements to reduce runoff and the volume of entrained sediment. Caltrans stormwater quality manuals also include BMPs to be implemented for erosion and sediment control and material management. The implementation of BMPs would minimize impacts on drainage and water quality during long-term operations at the site. The impact is less than significant.

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

Less Than Significant Impact

The project would not require any water during operation. During construction, water would only be used for dust control along the project corridor. Due to the minimal amount of water that would be required for dust control, the impact on the existing water supply would be less than significant.

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

Less Than Significant Impact

No wastewater would be generated by the project. If dewatering is necessary in areas where groundwater is encountered, depending on surface and groundwater levels at the time of construction, a permit for discharge of extracted groundwater would be obtained from the RWQCB. This discharge shall be consistent with RWQCB requirement and as such would not result in a violation of water quality standards or waste discharge requirements. The impact is less than significant.

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

Less Than Significant Impact

Construction of the project would generate solid waste. The amount of construction waste would not be substantial, would be limited to the construction time period, and would not result in a substantial reduction in the capacity of a landfill. Most municipal wastes in Yuba County are hauled to the Ostrom Road Landfill which is operated by Recology Yuba-Sutter. The facility is permitted to accept municipal solid waste, construction and demolition debris, special wastes and non-friable asbestos. The facility's maximum permitted capacity is 43,467,231 cubic yards and its remaining capacity is 39,223,000 cubic yards, with an estimated closure year of 2059 (CalRecycle 2019). There is sufficient capacity in the landfill to serve the project; therefore, construction of the project would not result in an impact on the capacity of this landfill. The impact is less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact

The project would comply with all federal, State, and local statutes and regulations related to solid waste. No impact would occur.

3.2.20 Wildfire

CEQA Significance Determinations for 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?

Less Than Significant Impact

There is potential for wildland fires in the region given the relatively dry summer climate, with hot days and wind; however, the project site is not located in a fire hazard severity zone according to the California Department of Forestry and Fire Protection's fire hazard severity zone map for Yuba County. The project would implement a traffic control plan which would keep lanes open for emergency access at all times. Thus, the impact would be less than significant.

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?

No Impact

The project would not exacerbate wildfire risks due to slope, prevailing winds and other factors. No impact would occur.

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?

Less Than Significant Impact

The proposed project would provide additional lanes and require utility relocation along an existing roadway corridor. No additional water sources would be required. Thus, the impact would be less than significant.

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

Less Than Significant Impact

It is anticipated that drainage system design will focus on perpetuating existing highway drainage conditions to the greatest extent feasible. New drainage features will be designed to perpetuate flow in the existing direction and will have similar or greater capacity than what currently exists. Thus, the impact is less than significant.

3.2.21 Mandatory Findings of Significance

CEQA Significance Determinations for 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?

Less Than Significant Impact

The project is located in a rural environment along an existing 9.6-mile section of SR 70. Implementation of Caltrans' standard measures, which are described in Chapter 2, Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures, would ensure that the construction and operation of the proposed project would not reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory. Impacts would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less Than Significant Impact

Cumulative impacts related to development accommodated by Yuba County's General Plan were analyzed in the Final Yuba County 2030 General Plan 2030 EIR (Yuba County 2011). Although the project is not specifically called out in the General Plan, the project is consistent with the policies in the General Plan and would help the County achieve its goals of providing a safe and efficient transportation system. The project is considered a project accommodated for in the General Plan.

Cumulative impacts related to development accommodated by the County's General Plan were found to be significant in the General Plan 2030 EIR, including aesthetics, agriculture, air quality, biological resources, cultural resources, geology/soils, greenhouse gases (GHGs), land use, noise, parks/recreation, traffic, utilities (wastewater and solid waste), and energy.

The proposed project's contribution to the cumulative impacts of these resource areas, with the exception of agricultural resources, would be less than significant.

As described in Section 3.2.5, impacts on special-status species, riparian areas, and wetlands would be less than significant with implementation of mitigation measures. Because the project would not result in impacts on special-status species, riparian areas, and wetlands, the project's contribution to cumulative biological resources impacts would be less than significant.

As described in Section 3.2.2, proposed project improvements would affect lands classified by the FMMP as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Grazing Land. The farmland acquisitions for Alternative 1 represent approximately 0.00007 percent of the County's total important farmland and farmland acquisitions for Alternative 2 represent approximately 0.00012 percent of the County's important farmland. Given the low rate of farmland conversion within this portion of Yuba County, the project's contribution to a cumulative farmland impact would be less than significant.

As described in Section 3.2.8, the proposed project build and no build alternatives would not generate greenhouse gas emissions above the existing condition (2018). Moreover,

any temporary GHG emissions generated from construction activities would be offset by project-level reduction strategies. Thus, the impact is less than significant.

As described in Section 3.2.10, potential impacts on water quality, depletion of groundwater, erosion, flooding, and polluted runoff were determined to be less than significant. Because the project would not have a significant impact on hydrology and water quality resources, the project's contribution to a cumulative hydrology and water quality impact would be less than significant.

As described in Section 3.2.11, the proposed project would not physically divide a community, conflict with an applicable land use plan or policy, or a conservation plan. Because the project would not be inconsistent with any land use plan or policy, the project's contribution on a cumulative land use impact would be less than significant.

As described in Section 3.2.13, The noise increase from the project is generated due to future traffic growth and addition of traffic lanes proposed, moreover, the project scope will not contribute to excessive vibrations or groundborne noise. Therefore, the impact is considered less than significant.

As described in Section 2.4.2, over the long term, planned transportation improvements of major roadways in the study area are anticipated to provide beneficial impacts on the existing highway network by widening existing highways, improving safety and reducing congestion. Taken together, these transportation projects would provide a cumulative regional benefit to transportation, improving circulation and access in the region. Therefore, there would not be a cumulatively significant impact on traffic and transportation.

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

Less Than Significant Impact

The implementation of the proposed project could result in impacts on aesthetics, agriculture, air quality, cultural resources, geology/soils, hazards/hazardous materials, GHGs, noise, traffic, utilities, and energy; however, implementation of Caltrans' standard measures, described in Chapter 2 of this document, would ensure that the proposed project would not result in environmental effects that would cause substantial adverse effects on human beings. Impacts would be less than significant.

3.3 Wildfire

Regulatory Setting

Senate Bill 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection to develop amendments to the "CEQA Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as very high fire hazard severity zones. The

2018 updates to the CEQA Guidelines expanded this to include projects “near” these very high fire hazard severity zones.

Affected Environment

There is potential for wildland fires in the region given the relatively dry summer climate, with hot days and wind; however, the project site is not located in a fire hazard severity zone according to the California Department of Forestry and Fire Protection’s fire hazard severity zone map for Yuba County.

Environmental Consequences

The project would implement a traffic control plan which would keep lanes open for emergency access and/or evacuation at all times in the event of a wildfire in the region. After construction, the provision of additional lanes would provide enhanced emergency access and/or evacuation.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization or mitigation measures are required.

3.4 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth’s climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), and various hydrofluorocarbons (HFCs). CO₂ is the most abundant GHG; while it is a naturally occurring component of Earth’s atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO₂.

Two terms are typically used when discussing how we address the impacts of climate change: “greenhouse gas mitigation” and “adaptation.” Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or “mitigate” the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

3.4.1 Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source greenhouse gas reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and greenhouse gas emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 U.S. Code Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. The Federal Highway Administration therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices.² This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—“the triple bottom line of sustainability.”³ Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been made at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005 (109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) Indian energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light

² <https://www.fhwa.dot.gov/environment/sustainability/resilience/>

³ <https://www.sustainablehighways.dot.gov/overview.aspx>

trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

AB 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG reduction goals.

SB 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing

GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO_{2e}).⁴ Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands ... is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

Senate Bill 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles travelled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires ARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets or reducing GHG emissions.

EO N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investment near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to

⁴ GHGs differ in how much heat each trap in the atmosphere (global warming potential, or GWP). CO₂ is the most important GHG, so amounts of other gases are expressed relative to CO₂, using a metric called "carbon dioxide equivalent" (CO_{2e}). The global warming potential of CO₂ is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO₂.

encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

3.4.2 Affected Environment

The proposed project is in a rural area, with primarily natural-resources based agricultural and tourism economy. SR-70 is the main transportation route to and through the area for both passenger and commercial vehicles. The nearest alternate route is SR-99, which is up to 4 miles to the east. Railroad tracks running parallel to SR-70 right-of-way carry several passenger and freight trains each day. SACOG guides transportation development in the project area. The Yuba County General Plan Health and Safety and Circulation elements address GHGs and/or involve sustainability policies in the project area.

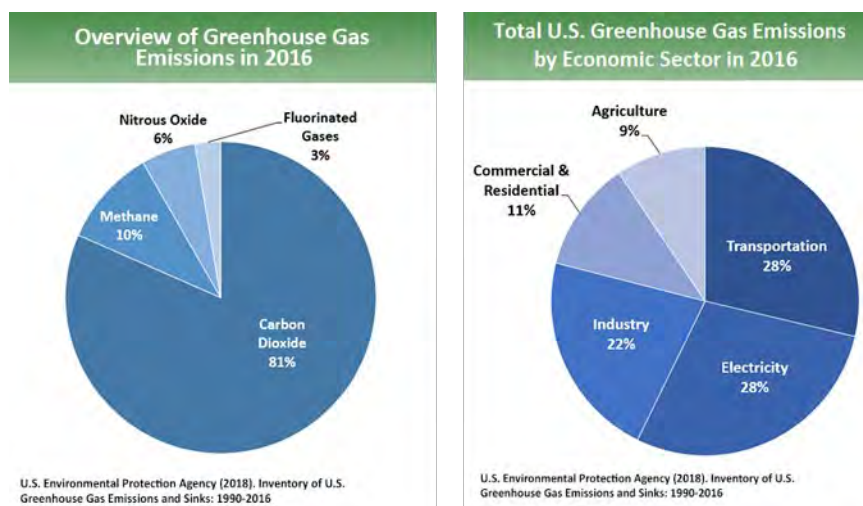
A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the Air Resources Board does so for the state, as required by Health and Safety Code Section 39607.4.

National GHG Inventory

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO₂, CH₄, N₂O, HFCs, perfluorocarbons, SF₆, and nitrogen trifluoride. It also accounts for emissions of CO₂ that are removed from the atmosphere by “sinks” such as forests, vegetation, and soils that uptake and store CO₂ (carbon sequestration). The 1990–2016 inventory found that of 6,511 MMTCO₂e GHG emissions in 2016, 81% consist of CO₂, 10% are CH₄, and 6% are N₂O; the balance consists of fluorinated gases (US EPA 2018a).⁵ In 2016, GHG emissions from the transportation sector accounted for nearly 28.5% of U.S. GHG emissions.

<https://www.epa.gov/ghgemission>

FIGURE 8. U.S. 2016 GREENHOUSE GAS EMISSIONS



State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2019 edition of the GHG emissions inventory found total California emissions of 424.1 MMTCO₂e for 2017, with the transportation sector responsible for 41% of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2017 despite growth in population and state economic output (ARB 2019a).

FIGURE 9. CALIFORNIA 2017 GREENHOUSE GAS EMISSIONS

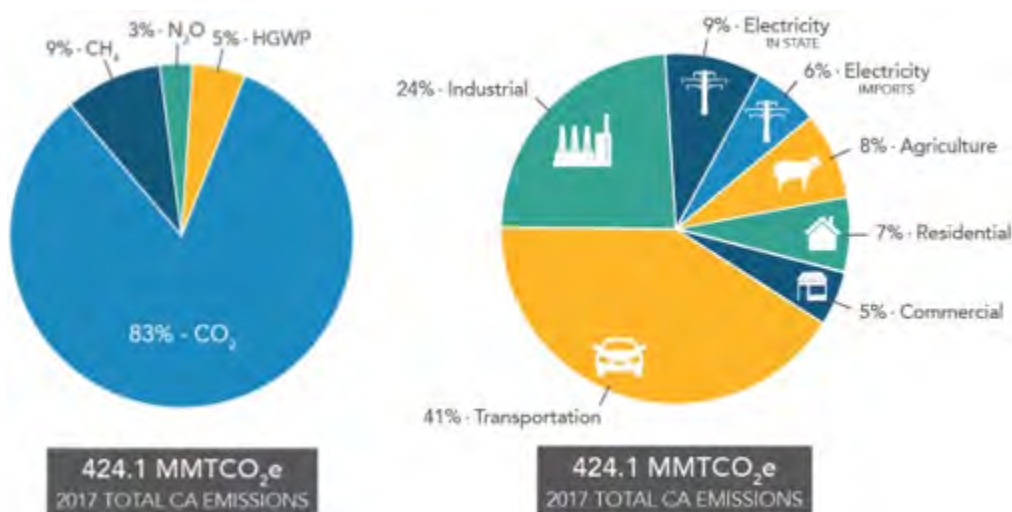
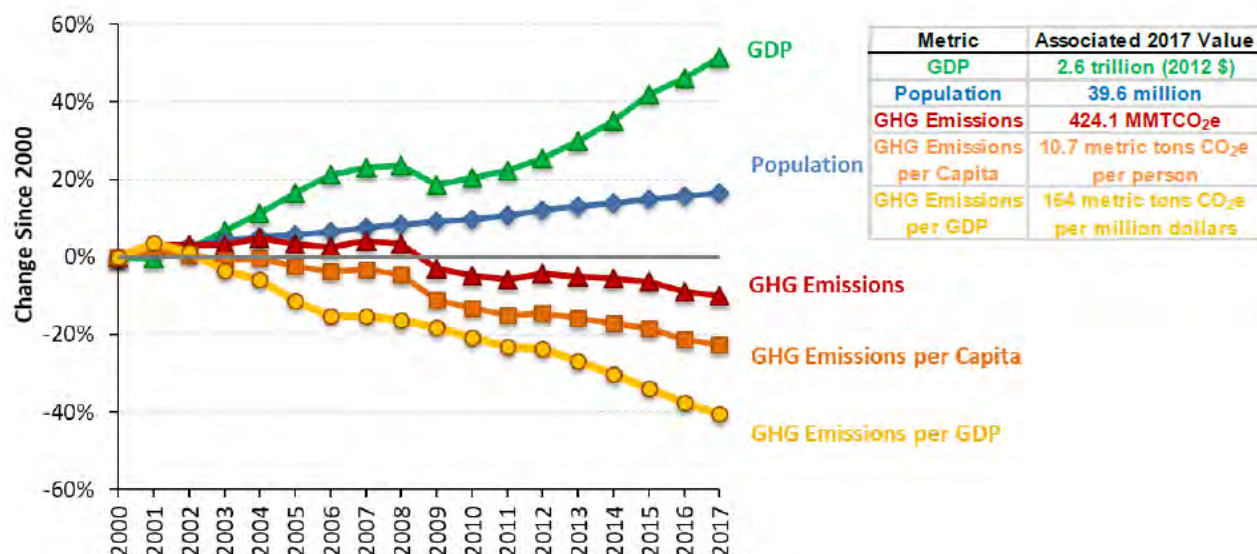


FIGURE 10. CHANGE IN CALIFORNIA GDP, POPULATION, AND GHG EMISSIONS SINCE 2000



(Source: ARB 2019b)

AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008. The second updated plan, California's 2017 Climate Change Scoping Plan, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

Regional Plans

ARB sets regional targets for California's 18 MPOs to use in their RTP/SCSs to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is listed in the SACOG's Metropolitan Transportation Improvement Program (MTIP) and the Metropolitan Transportation Plan/Sustainable Communities Strategy (SCS) which was adopted November 2019. The project is also included in SACOG financially constrained 2019-2022 MTIP. The regional reduction targets for SACOG are 7 percent by 2020 and 19 percent by 2035.

Table 15. GHG-Related Goals, Policies, and Strategies

Title	GHG Reduction Policies or Strategies
Sacramento Area Council of Governments (SACOG) 2016 <i>Metropolitan Transportation Plan/Sustainable Communities Strategy</i> (adopted February 2016)	<ul style="list-style-type: none"> Manage and increase the productivity of the region's transportation system (e.g., state of good repair improvements) Strategic capacity and technology enhancements to existing highways

	<ul style="list-style-type: none"> • Transportation Systems Management measures • Transportation Demand Management
Yuba County 2030 General Plan (Adopted June 2011)	<p>Health and Safety Goal 5 – GHG and Climate Change: Provide GHG efficient development patterns and successfully adapt to future changes in Yuba County’s climate.</p> <ul style="list-style-type: none"> • Policy HS5.6: The County relies, in part on infrastructure planning and funding controlled by regional, state and other local agencies, and will work cooperatively with these agencies to provide infrastructure and public facilities needed to support GHG-efficient development pattern. • Policy HS5.8: The County will actively pursue funding for GHG-efficient transportation systems and other needed infrastructure, building and public real energy efficiency upgrades, renewable energy production, land use-transportation modeling, and other projects to reduce local greenhouse gas emissions. <p>Health and Safety Goal 6 – Construction and Climate Change: Use construction practices and operational strategies that minimize air pollution.</p> <ul style="list-style-type: none"> • Policy HS6.1: New developments shall implement emission control measures recommended by the Feather River Air Quality Management District for construction, grading, excavation, and demolition, to the maximum extent feasible. <p>Circulation Goal 16: Maintain a roadway system that provides adequate level of service, as funding allows, and that is consistent with the County’s planning, environmental and economic policies.</p> <ul style="list-style-type: none"> • Policy CD16.1: The County will maintain roadway levels of service that recognize differences between urban and rural environments and consideration of other community character, economic, and environmental policies of the County. • Policy CD16.11: The County will analyze and mitigate transportation impacts in CEQA documents according to their

	<p>relative increase in vehicular travel demand.</p> <p>Circulation Goal 18 – Regional Transportation Planning: Improved transportation access throughout the County and surrounding region.</p> <ul style="list-style-type: none"> • Policy CD18.1: The County will support regional transportation planning for roadway improvement within Yuba County identified by SACOG, Caltrans, and documented in the Metropolitan Transportation Plan and Highway Concept Reports. • Policy CD18.8: The County will coordinate with Caltrans to implement context-sensitive improvements to State facilities that are keyed to local multi-modal transportation needs.
--	---

3.4.3 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the SHS and those produced during construction. The primary GHGs produced by the transportation sector are CO₂, CH₄, N₂O, and HFCs. CO₂ emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH₄ and N₂O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project’s contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130)).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

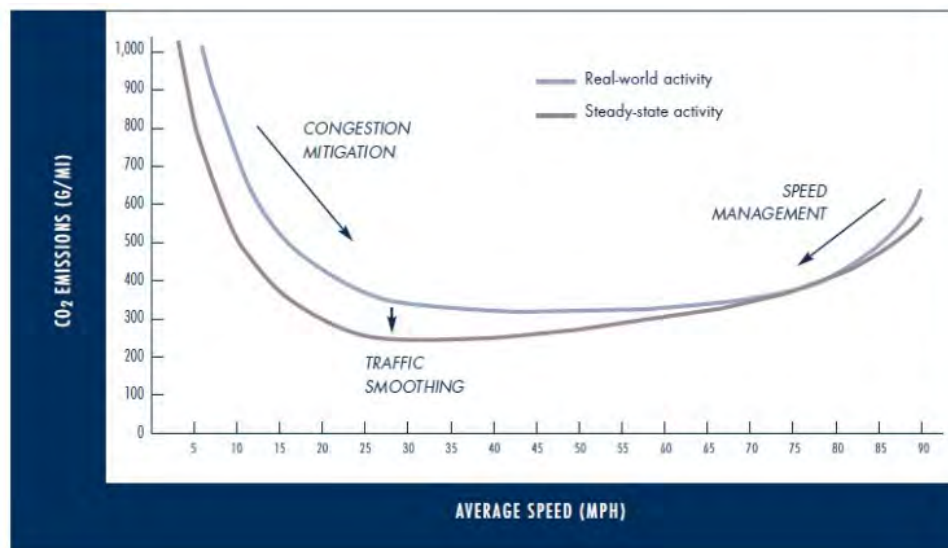
CO₂ accounts for 95 percent of transportation GHG emissions in the U.S. The largest sources of transportation-related GHG emissions are passenger cars and light-duty trucks, including sport utility vehicles, pickup trucks, and minivans. These sources account for over half of the emissions from the sector. The remainder of GHG emissions comes from other

modes of transportation, including freight trucks, commercial aircraft, ships, boats, and trains, as well as pipelines and lubricants. Because CO₂ emissions represent the greatest percentage of GHG emissions it has been selected as a proxy within the following analysis for potential climate change impacts generally expected to occur.

The highest levels of CO₂ from mobile sources such as automobiles occur at stop-and-go speeds (0–25 miles per hour) and speeds over 55 miles per hour; the most severe emissions occur from 0–25 miles per hour (see Figure 8). To the extent that a project relieves congestion by enhancing operations and improving travel times in high-congestion travel corridors, GHG emissions, particularly CO₂, may be reduced.

Four primary strategies can reduce GHG emissions from transportation sources: (1) improving the transportation system and operational efficiencies, (2) reducing travel activity, (3) transitioning to lower GHG-emitting fuels, and (4) improving vehicle technologies/efficiency. To be most effective, all four strategies should be pursued concurrently.

Figure 11. Possible Use of Traffic Operation Strategies in Reducing On-Road CO₂



Emissions

Source: Barth and Boriboonsomsin 2010⁶

The proposed project is listed in the Metropolitan Transportation Improvement Program (MTIP) and SACOG's 2019 financially constrained Metropolitan Transportation Plan/Sustainable Communities Strategy. The project is also included in SACOG's financially constrained 2019 Transportation Improvement Program, pages 117/440. The

⁶ Barth, Matthew and Kanok Boriboonsomsin. 2010. *Real-World Carbon Dioxide Impacts of Traffic Congestion*. Berkeley, CA: University of California Transportation Center. UCTC-FR-2010-11. Available: <https://www.researchgate.net/publication/46438207>

proposed project supports SACOG's RTP/SCS and Yuba County General Plan goals and policies listed in Table 15, above.

3.4.4 Environmental Consequences

Yuba 70 Segments 4 and 5 in Yuba County are covered by the Sacramento Area Council of Governments' (SACOG) SACSIM travel demand forecast model, which has a 2012 base year and a 2036 future year.

For the SR 70 projects, a travel demand forecast model was developed starting from the BCAG model and adding roadway network for the northwest portion of Yuba County along the SR 70 corridor north of Marysville. The roadway network and land use for the added portion of Yuba County were based on the SACSIM model for the corresponding locations. After the base year model was validated, year 2020 and 2040 models were prepared using the same process.

While CT-EMFAC has a rigorous scientific foundation and has been vetted through multiple stakeholder reviews, its GHG emission rates are based on tailpipe emission test data^[7]. Moreover, the model does not account for factors such as the rate of acceleration and vehicle aerodynamics, which influence the amount of emissions generated by a vehicle. GHG emissions quantified using CT-EMFAC are therefore estimates and may not reflect actual physical emissions. Though CT-EMFAC is currently the best available tool for calculating GHG emissions from mobile sources, it is important to note that the GHG results are only useful for a comparison among alternatives

Using the project's travel demand forecast model, Vehicle Miles Traveled (VMT) was measured over the entire model area. The analysis included consideration of induced travel demand. Under horizon year conditions, the separate projects to widen SR 70 were assumed to be in place for both the No Build and Build Alternatives. For example, both the No Build and Build Alternatives for Segments 4-5 have SR 70 as four lanes from East Gridley Road to the Yuba/Butte County Line (Segment 3) and from Laurellen Road to 14th Street (Segments 6 and 7). To estimate model-wide VMT for a four-lane configuration (Build Alternative), the No Build Alternative VMT was modified by replacing VMT in the project area (Marysville and along SR 70 in Yuba County to East Gridley Road in Butte County) with the corresponding project area VMT from the Build Alternative model (the Build Alternative model has the same lane configurations – four lanes on SR 70 – for both Segments 4-5 and 7). Segment 7 was analyzed in conjunction with Segments 4-5 because for each project, the other project is assumed to be built.

To estimate model-wide VMT for Alternative 3 (four lanes), the No-Build Alternative VMT was modified by replacing VMT in the project area with the corresponding project area VMT from the Alternative 3 model.

Given that the SR 70 study area is rural, the VMT estimates presented here are calculated directly from the travel demand forecast model. The estimates of induced travel area

provided in the SR 70 Segments 4 & 5 Transportation Analysis Report and discussed in Section 2.1.8 Traffic and Transportation section.

The GHG emissions are calculated using estimates of VMT by 5-mph speed bin increments and the EMFAC 2017 emissions factors from the California Air Resources Board (CARB).

^[7] U.S. Department of Transportation (U.S. DOT). 2018. *National Highway Traffic Safety Administration Corporate Average Fuel Economy*. <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>. Accessed: August 21, 2019

Table 16. Daily VMT and Peak Hour GHG Comparison

	Existing Year (2018)	Horizon Year 2043 Build Alternatives 4, 5 & 7	Horizon Year 2043 No- Built Alternative Segment 4 & 5
Daily VMT	6,029,277	8,611,528	8,611,530
Peak Hour GHG Emissions (tons) AM/PM	6.93/7.94	8.93/12.12	9.82/17.71

Quantitative Analysis

The travel demand model was used to produce estimate of daily VMT by speed bin. GHG emissions were then estimated based on factors from EMFAC2017.

Table 17. Annual VMT and GHG Emissions Comparison

Performance Measure	Existing Year (2018)	Horizon Year (2043)		
		Segments 4-5 No Build Alternative	Segment 7 No Build Alternative	Segments 4-5 & 7 Build Alternative
VMT	1,808,783,100	2,583,459,000	2,583,444,300	2,583,458,400
GHG Emissions ¹	1,029,923	1,020,604	1,026,038	1,024,593

Notes: 1. GHG is reported in tons per year.

Source: EMFAC2017 (CARB, 2017), Fehr & Peers (2019)

Compared to existing conditions (2018), GHG emissions are expected to be more than 9,000 tons per year lower under the Segments 4-5 No Build Alternative during the horizon year. Widening SR 70 to four lanes (Segments 4-5 & 7 Build Alternative) would also have less GHG emissions than the existing year (2018) – more than 5,000 tons per year lower. Decreases in both scenarios are attributable to planned improvements in fuel efficiency and anticipated changes to alternative fuels (such as electric vehicles).

For Segments 4-5, the Build Alternative would have more GHG emissions than the No Build Alternative in the horizon year. The additional VMT and the increase in speed at the higher end of the range (from 60-65 mph to 65-70 mph) would lead to the higher GHG emissions. However, the Segments 4-5 and 7 Build Alternative would have less GHG emissions than the Segment 7 No-Build. The increase in GHG emissions to the small VMT increase would be offset by the reduction in peak hour GHG emissions due to improved intersection operations.

VMT by speed bin was estimated by expanding the travel demand forecasting model prepared for the SR 70 Segments 4-5 traffic analysis to include the City of Marysville. This model truncates trips at the model boundary and may not fully account for the VMT change associated with the Segments 4-5 and 7 projects. EMFAC2017 emissions factors were used to develop GHG emissions estimates for the alternatives. The emissions factors do not include off-model adjustment factors to account for the SAFE Vehicles Rule Part One from the US EPA and NHTSA.

Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities. Additionally, approximately 50% of the volume of asphalt will contain rubberized material from recycled sources which will offset GHG emissions.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

Construction equipment emissions

Diesel exhaust particulate matter is a California-identified toxic air contaminant, and localized issues may exist if diesel-powered construction equipment is operated near sensitive receptors.

Construction emissions were estimated using the latest Caltrans' Model (CAL-CET2018). The emissions represent the daily average construction and project total emissions, respectively. Construction-related emissions for the proposed project are presented in the table below.

Table 17. Construction Emissions to Roadways

	Alternative. 1 CO2 (lbs./day)	Alternative. 2 CO2 (lbs./day)
Land Clearing/Grubbing	2,631	2,768
Roadway Excavation/Removal	6,411	6,753
Structural Excavation/Removal	1,892	2,006
Base/Subbase/ Imported Borrow	9,184	9,689
Structure Concrete	2,028	2,143
Paving	5,339	5,636
Drainage/Environment/Landscaping	2,363	2,531
Traffic Signalization/Signage/Striping/Painting	6,867	7,245
Project Total daily average (lbs.)	36,715	38,771
Project Total	719	759

CEQA CONCLUSION

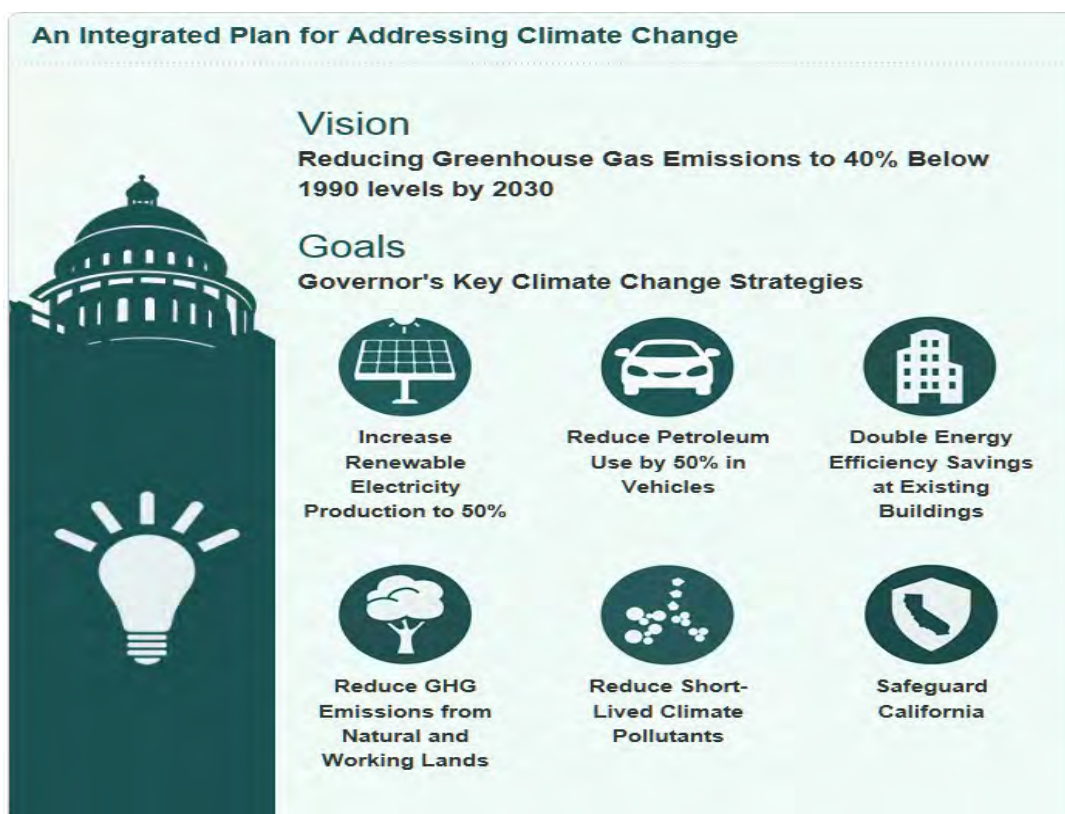
The project is a capacity increasing project with the potential for increased GHG emissions. However, analysis demonstrates that both future no-build and future build GHG emissions would be lower than emissions under the existing condition (2018). Although future GHG emissions under the build alternatives would be higher than the no-build alternative, there is evidence of substantial progress in reducing emissions with the build alternatives, and the impact is considered less than significant.

GREENHOUSE GAS REDUCTION STRATEGIES

Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

FIGURE 11. CALIFORNIA CLIMATE STRATEGY



The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). A key state goal for reducing greenhouse gas emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030.

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

CALIFORNIA TRANSPORTATION PLAN (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. In 2016, Caltrans completed the *California Transportation Plan 2040*, which establishes a new model for developing ground transportation systems, consistent with CO₂ reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

CALTRANS STRATEGIC MANAGEMENT PLAN

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

FUNDING AND TECHNICAL ASSISTANCE PROGRAMS

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

CALTRANS POLICY DIRECTIVES AND OTHER INITIATIVES

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

Project-Level GHG Reduction Strategies

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

- The construction contractor must comply with the Caltrans' Standard Specifications in section 14-9 (2018). Section 14-9-02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinance.
- Construction Environmental Training: Supplement existing training with information regarding methods to reduce GHG emissions related to construction.
- Construction contract will include asphalt with Approximately 50% of the volume containing rubberized material from recycled sources. which will offset GHG emissions.

ADAPTATION

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGRCP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. ch. 56A § 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime."

U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to “integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions.”⁷

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*, December 15, 2014)⁸ established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems.

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's latest effort to “translate the state of climate science into useful information for action” in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the “combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities.”
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- Resilience is the “capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience”. Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the “susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt.” Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality.² Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

⁷ https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm

⁸ <https://www.fhwa.dot.gov/legisregs/directives/orders/5520.cfm>

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate “sea-level rise (SLR) projections into planning and decision making for projects in California” in a consistent way across agencies.

The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.⁹

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California’s infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability

⁹ <http://www.opc.ca.gov/updating-californias-sea-level-rise-guidance/>

assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Sea Level Rise Analysis

The proposed project is outside the coastal zone and not in an area subject to sea-level rise. Accordingly, direct impacts to transportation facilities due to projected sea-level rise are not expected.

WILDFIRE

There is potential for wildland fires in the region given the relatively dry summer climate, with hot days and wind; however, the project site is not located in a fire hazard severity zone according to the California Department of Forestry and Fire Protection's fire hazard severity zone map for Yuba County. The project would implement a traffic control plan which would keep lanes open for emergency access at all times.

Chapter 4 Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation, the level of analysis required, and to identify potential impacts and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including project development team meetings and interagency coordination meetings. This chapter summarizes the results of Caltrans efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

Caltrans, as CEQA Lead Agency, distributed a Notice of Preparation of a Draft Environmental Impact Report for the proposed project on February 11, 2020. A copy of the NOP is included in Appendix E. The Notice of Preparation requested comments from the public regarding environmental issues, reasonable alternatives and reasonable mitigation measures that should be discussed in the Draft Environmental Impact Report to address each agency's specific concerns in their areas of responsibility. The 30-day comment period closed on March 11, 2020.

The Environmental Impact Report/Environmental Assessment will be made available for public and agency review and comment for 45 days. Caltrans has ensured that the document will be made available to all appropriate parties and agencies, including the following: 1) Responsible agencies, 2) Trustee agencies that have resources affected by the project, 3) other state, federal and local agencies which have regulatory jurisdiction, or that exercise authority over resources which may be affected by the project, 4) public. The document will be made available online at <https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental-planning/d3-environmental-docs>.

Chapter 5 List of Preparers

The following Caltrans District 3 staff contributed to the preparation of this Environmental Impact Report.

Cara Lambirth, Associate Environmental Planner. Contribution: Environmental Coordinator and Document Writer

Mike Bartlett, D-3 Office Chief (Acting). Contribution: Document review

Sandra Rosas, NEPA Assignment Coordinator. Contribution: Document review

Anna Kluge, Associate Environmental Planner. (Natural Sciences) Contribution: Project Biologist, Natural Environmental Study (NES)

William Larson/Erick Wulf, Associate Environmental Planner (Archaeology). Contribution: Archaeological Survey Report (ASR), Historic Resources Compliance Report (HRCR)

Betzaida Perez, Transportation Engineer. Contribution: Initial Site Assessment

Saeid Zandian-Jazi, Transportation Engineer. Contribution: Noise Study.

Sean Cross, NPDES Coordinator. Contribution: Water Quality Assessment

Youngil Cho, Transportation Engineer. Contribution: Air Quality Study

Julia Riggins, Landscape Architect. Contribution: Visual Impact Assessment

Cameron Knudson, Transportation Engineer. Contribution: Project Manager

Scott Foster, Transportation Engineer. Contribution: Project Engineer

Bradley Bowers, Associate Environmental Planner. Contribution: Paleontological Evaluation Report

Brenda Powell-Jones, Senior Environmental Planner. Contribution: Climate Change Policy Advisor, GHG Reviewer.

Chapter 6 Distribution List

The State Clearinghouse distributed copies of this document to reviewing agencies. In addition, a copy was made available online at <https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental-planning/d3-environmental-docs>.

A Notice of Availability (NOA) was posted in the local newspaper.

Appendix A - Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
TTY 711
www.dot.ca.gov



Making Conservation
a California Way of Life.

November 2019

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page:
<https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

A blue ink signature of Toks Omishakin, consisting of a stylized 'T' followed by a cursive 'O' and 'M'.

Toks Omishakin
Director

Appendix B - Summary of Relocation Benefits

Summary of Relocation Benefits

B.1 - California Department of Transportation Relocation Assistance Program

B.1.1 - Declaration of Policy

“The purpose of this title is to establish a ***uniform policy for fair and equitable treatment*** of persons displaced as a result of federal and federally assisted programs in order that such persons ***shall not suffer disproportionate injuries*** as a result of programs designed for the benefit of the public as a whole.”

The Fifth Amendment to the U.S. Constitution states, “No Person shall...be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation.” The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 Code of Federal Regulations (CFR) Part 24. Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments, as discussed below.

B.1.2 - Fair Housing

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This act, and as amended, makes discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and are within their financial means. This policy, however, does not require Caltrans to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the initiation of negotiations (usually the first written offer to purchase), owner-occupants are given a detailed explanation of the state’s relocation services. Tenant occupants of properties to be acquired are contacted soon after the initiation of negotiations and also are given a detailed explanation of the Caltrans Relocation Assistance Program. To avoid loss of possible benefits, no

individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Caltrans relocation advisor.

B.1.3 - Relocation Assistance Advisory Services

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Caltrans will provide relocation advisory assistance to any person, business, farm, or nonprofit organization displaced as a result of the acquisition of real property for public use, so long as they are legally present in the United States. Caltrans will assist eligible displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are “decent, safe, and sanitary.” Nonresidential displacees will receive information on comparable properties for lease or purchase (for business, farm, and nonprofit organization relocation services, see below).

Residential replacement dwellings will be in a location generally not less desirable than the displacement neighborhood at prices or rents within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning federal and state assisted housing programs and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written notice. Residential occupants eligible for relocation payment(s) will not be required to move unless at least one comparable “decent, safe, and sanitary” replacement dwelling, available on the market, is offered to them by Caltrans.

B.1.3.1 - Residential Relocation Payments

The Relocation Assistance Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Assistance Program can be summarized as follows:

Moving Costs

Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs.

Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule. Lawful occupants who move into the displacement property after the initiation of negotiations must wait until Caltrans obtains control of the property in order to be eligible for relocation payments.

Purchase Differential

In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 90 days or more prior to the date of the initiation of negotiations (usually the first written offer to purchase the property), may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate.

Rent Differential

Tenants and certain owner-occupants (based on length of ownership) who have occupied the property to be acquired by Caltrans prior to the date of the initiation of negotiations may qualify to receive a rent differential payment. This payment is made when Caltrans determines that the cost to rent a comparable “decent, safe, and sanitary” replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the Down Payment section below.

To receive any relocation benefits, the displaced person must buy or rent and occupy a “decent, safe and sanitary” replacement dwelling within one year from the date Caltrans takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Down Payment

The down payment option has been designed to aid owner-occupants of less than 90 days and tenants in legal occupancy prior to Caltrans’ initiation of negotiations. The one-year eligibility period in which to purchase and occupy a “decent, safe and sanitary” replacement dwelling will apply.

Last Resort Housing

Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on Federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances.

After the initiation of negotiations, Caltrans will within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Number of people to be displaced.
- Specific arrangements needed to accommodate any family member(s) with special needs.
- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family.
- Preferences in area of relocation.
- Location of employment or school.

B.1.4 - Nonresidential Relocation Assistance

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms, and nonprofit organizations are: searching and moving expenses, and possibly reestablishment expenses; or a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payment types can be summarized as follows:

B.1.4.1 - Moving Expenses

Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property, including: dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property. Items acquired in the right-of-way contract may not be moved under the Relocation Assistance Program. If the displacee buys an Item Pertaining to the Realty back at salvage value, the cost to move that item is borne by the displacee.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.

- Expenses related to searching for a new business site, up to \$2,500, for reasonable expenses actually incurred.

B.1.4.2 - Reestablishment Expenses

Reestablishment expenses related to the operation of the business at the new location, up to \$25,000 for reasonable expenses actually incurred.

B.1.4.3 - Fixed In Lieu Payment

A fixed payment in lieu of moving, searching, and reestablishment payments may be available to businesses that meet certain eligibility requirements. This payment is an amount equal to half the average annual net earnings for the last two taxable years prior to the relocation and may not be less than \$1,000 nor more than \$40,000.

B.1.5 - Additional Information

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, or any other law, except for any federal law providing local "Section 8" Housing Programs.

Any person, business, farm or nonprofit organization that has been refused a relocation payment by the Caltrans relocation advisor or believes that the payment(s) offered by the agency are inadequate may appeal for a special hearing of the complaint. No legal assistance is required.

Information about the appeal procedure is available from the relocation advisor.

California law allows for the payment for lost goodwill that arises from the displacement for a public project. A list of ineligible expenses can be obtained from Caltrans' Division of Right of Way and Land Surveys. California's law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency.

More information regarding Caltrans' Division of Right of Way's Relocation Assistance Program can be found on the internet at <http://www.dot.ca.gov/hq/row/rap/index.htm>.

Appendix C – Alternative 1 & 2 Layouts

Alternative 1

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. MATCH EXISTING SUPERELEVATION OR AS DIRECTED BY THE ENGINEER.
3. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
4. PROFILE GRADE LOCATED AT TOP OF HMA (TYPE A)

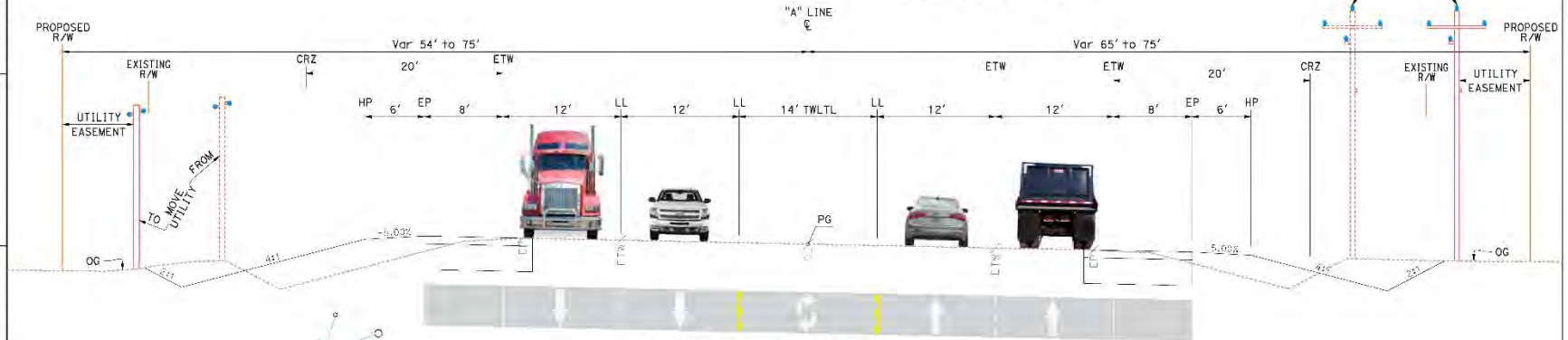
STRUCTURAL SECTIONS:

- | | | | |
|--|----------------------------------|--|---|
| 1 0.10' RHM-0
0.60' HMA (TYPE A)
2.25' CI 2 AB | 3 0.50' HMA (TYPE A)
0.75' AB | 4 EXISTING STRUCTURAL SECTION
MAINLINE
0.05' OPEN GRADED PMS
0.20' TYPE "B" PMS
0.67' CLA CTB
0.50' ISM | SHOULDERS
0.20' TO 0.17' TYPE "B" PMS
0.67' UB
0.50' ISM |
| 2 0.10' RHM-0
0.15' HMA-A OVERLAY
0.00'-0.75' HMA (TYPE A) LEVELING COURSE | | | |

ABBREVIATIONS

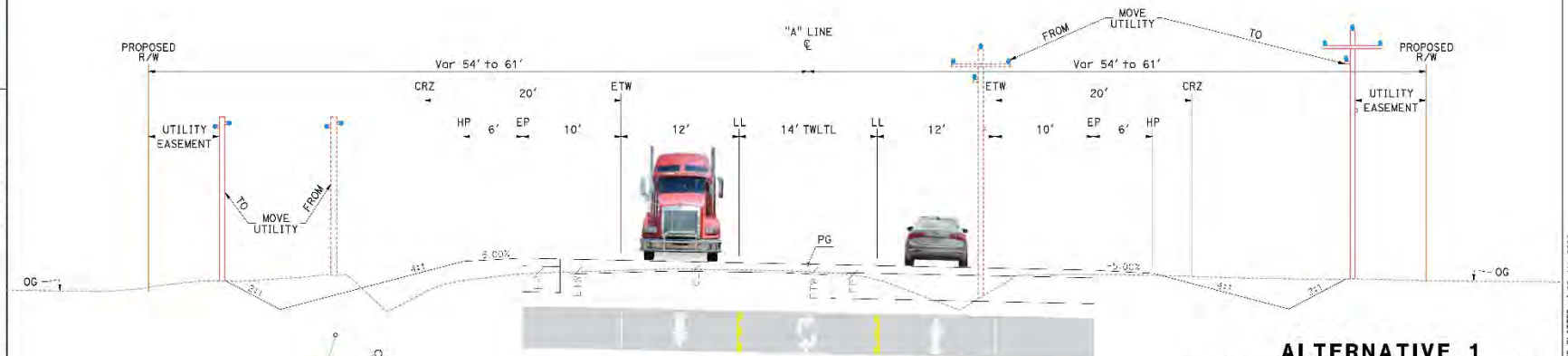
CRZ - CLEAR RECOVERY ZONE
TWTL - TWO WAY LEFT TURN LANE

DATE	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yuba	70	16.2/25.8	
REGISTERED CIVIL ENGINEER DATE				
PLANS APPROVAL DATE				
THE STATE OF CALIFORNIA AND ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION OR DATA CONTAINED IN THESE PLANS.				



"A" LINE (ROUTE 70)

CONSTRUCTED WITH YUBA 70 SHOPP 03-3F283K
(WIDEN LEFT AND RIGHT)



"A" LINE (ROUTE 70)

CONSTRUCTED WITH YUBA 70 SHOPP
(YUBA 70 SAFETY PROJECT EA 03-4F380)

ALTERNATIVE 1 TYPICAL CROSS SECTIONS NO SCALE

X-1

BORDER LASS REVISED 7/2/2013

USERNAME => 8112028
DON FILE => X-1-100001.cogn

RELATIVE BORDER SCALE
1/5 IN. INCHES

UNIT 0322

PROJECT NUMBER & PHASE

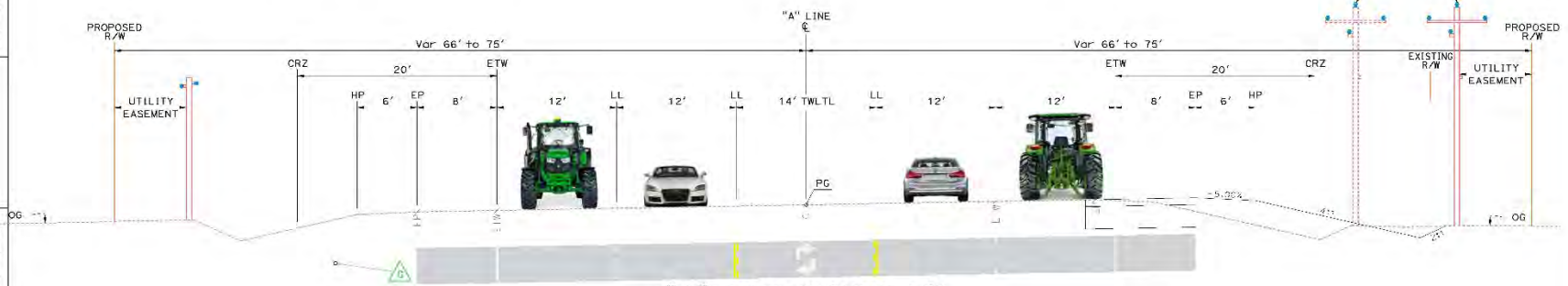
03120000681

DATE PLOTTED 25-JAN-2020
TIME PLOTTED 9:02:00

NOTES:

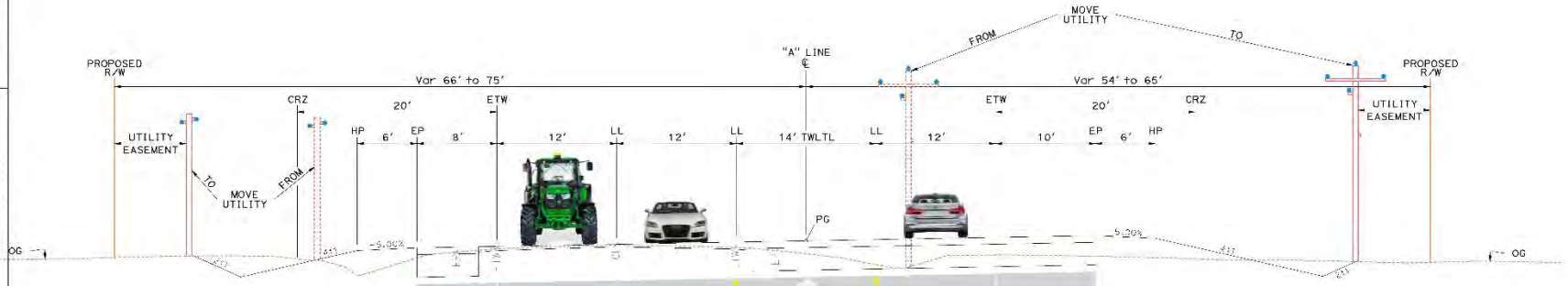
1. MATCH EXISTING SUPERELEVATION OR AS DIRECTED BY THE ENGINEER.
2. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
3. PROFILE GRADE LOCATED AT TOP OF HMA (TYPE A).

DIST	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
USE SCALE OF 1"=40' FOR ALL DIMENSIONS ON THIS SHEET. ALL DIMENSIONS ARE TO CENTERLINE UNLESS OTHERWISE NOTED. FOR THE ACCURACY OF THIS PLAN, THE ENGINEER HAS REVIEWED THE RECORD DRAWINGS OF THIS ROAD AND HAS FOUND THEM TO BE CORRECT.				



"A" LINE (ROUTE 70)

CONSTRUCTED WITH YUBA TO STIP EA 03-3F283K
(WIDEN RIGHT)



"A" LINE (ROUTE 70)

CONSTRUCTED WITH YUBA TO SHOPP
(YUBA TO SAFETY PROJECT EA 03-4F380)

**ALTERNATIVE 1
TYPICAL CROSS SECTIONS**

NO SCALE

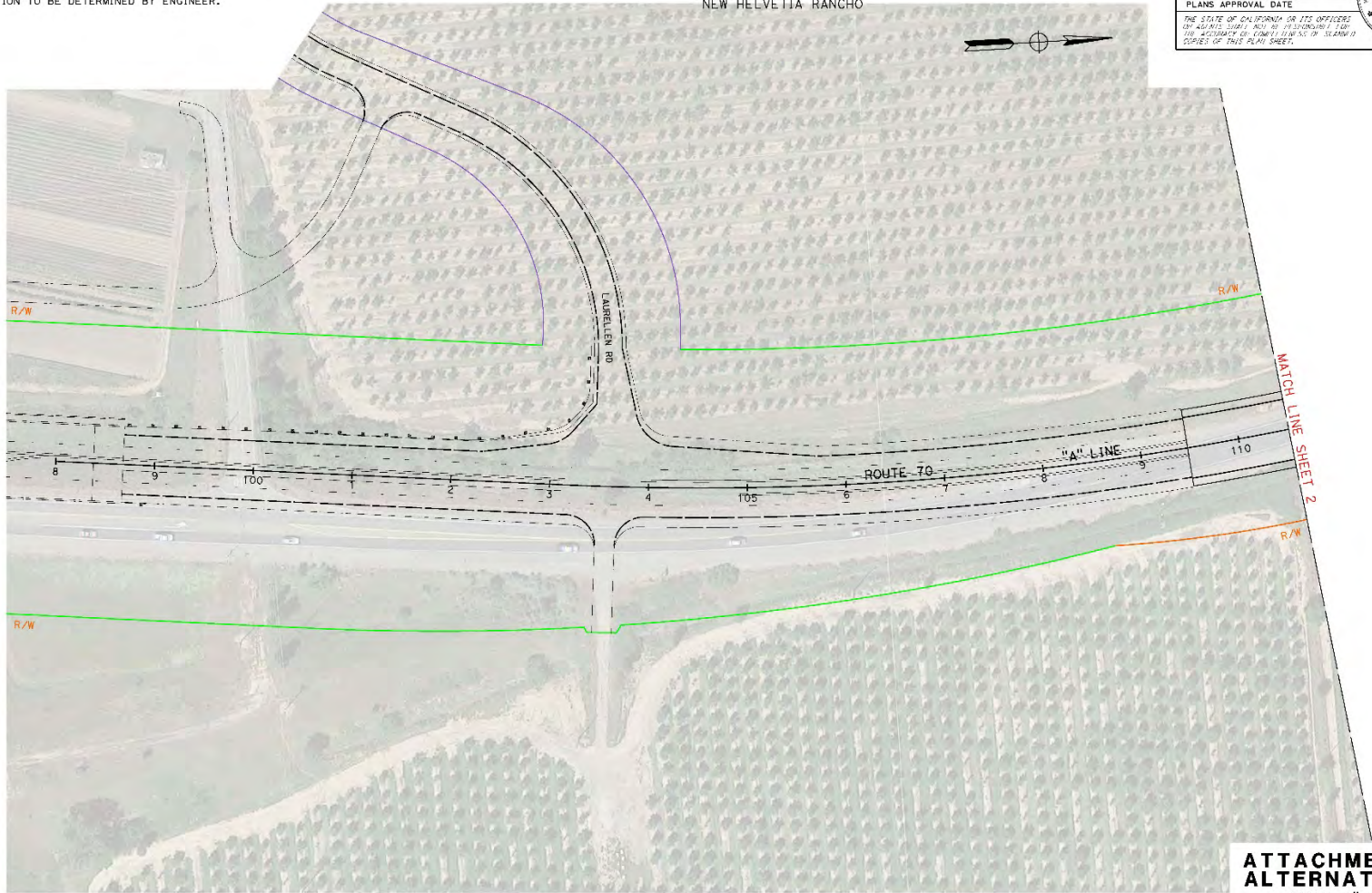
X-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGN
Caltrans	KEN KEATON	
	DESIGNED BY	CHECKED BY
	A. ANTHONY JONES	R. SCOTT FOSTER
	REVIEWED BY	DATE REVIEWED

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	70	16.2/25.8		
REGISTERED CIVIL ENGINEER 112					
PLANS APPROVAL DATE					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS DO NOT WARRANT, GUARANTEE, OR ACCEPT ANY LIABILITY FOR ANY ERRORS OR OMISSIONS IN THIS PLAN SHEET.</small>					

**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET -1

BORDER LAST REVISED 7/22/2010

USERNAME => K112608
DGN FILE => AL112608.dgn

RELATIVE BORDER SCALE
IN INCHES

0 1 2 3

UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED 01/17/2010
DATE PLOTTED 01/17/2010
01-31-20 THE PLOTTED 01/17/2010

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR KEN KEATON	DESIGNED BY R SCOTT FOSTER	REVIEWED BY A. ANTHONY JONES	DATE REVIEWED

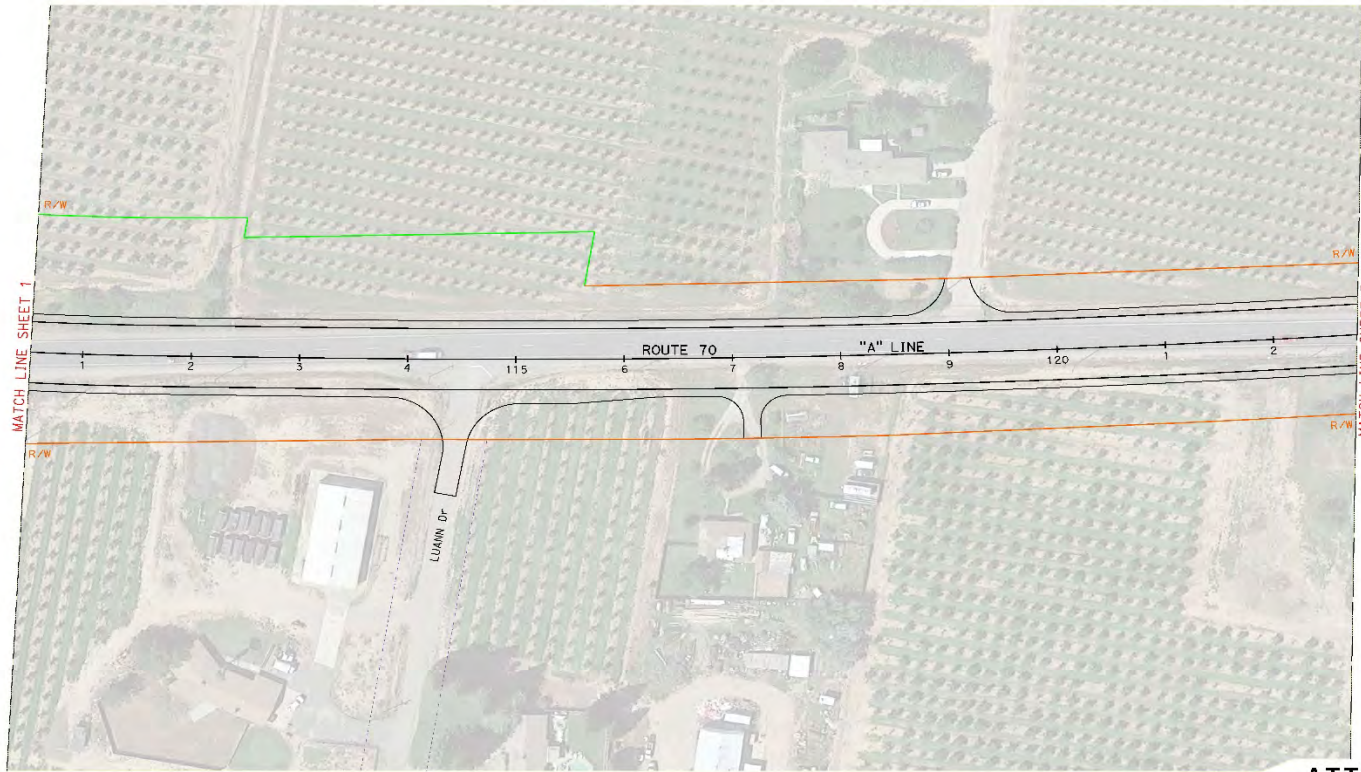
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE		EXP. DATE		
<small>THIS PLAN IS A PRELIMINARY PLAN. IT IS NOT TO BE USED FOR CONSTRUCTION. THE ENGINEER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE DATA AND THE CORRECTNESS OF THE PLAN. THE USER OF THIS PLAN AGREES TO HOLD THE ENGINEER HARMLESS FROM ALL LIABILITY FOR ANY DAMAGE OR INJURY TO PERSONS OR PROPERTY CAUSED BY THE USE OF THIS PLAN.</small>				

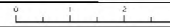


**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET-2

DO NOT SCALE. DATE PLOTTED 02/27/2013

USERNAME => s112606
DGN FILE => s112606.dgn

PLANS (1/1) SCALE
18 IN. X 24 IN.



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED 02/27/2013
01-31-20 THE PLOTTED 03 1 12:13

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CC583 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



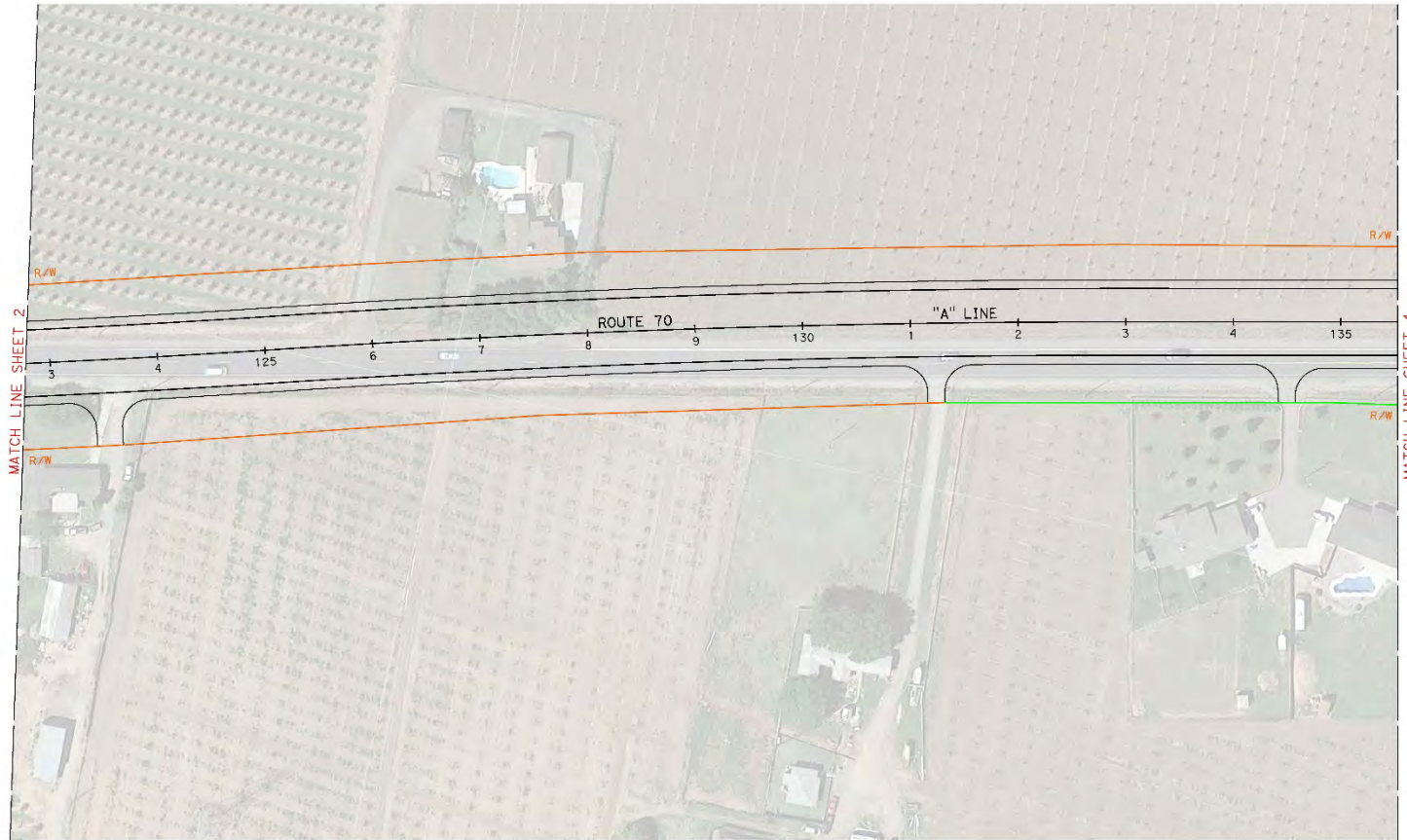
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	

REGISTERED CIVIL ENGINEER DATE _____

PLANS APPROVAL DATE _____

USE SEAL OF CALIFORNIA OF 115 OR 116
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETION OF PLANS
COPIES OF THIS PLAN SHEET.

NO. _____
EXP. _____
CIVIL



ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-3

BORDER LAST FILED 7/2/2010

USERNAME => j12509
DON FILE => A:\11ec003.dgn

REF. A-1171 2007R SCA
15 IN 1/4"=45'

0 1 2 3

UNIT 0323

PROJECT NUMBER & PHASE

03180000186

11/15/2009 01:31:20 TIME PLOTTED # 9 00111

NOTES:

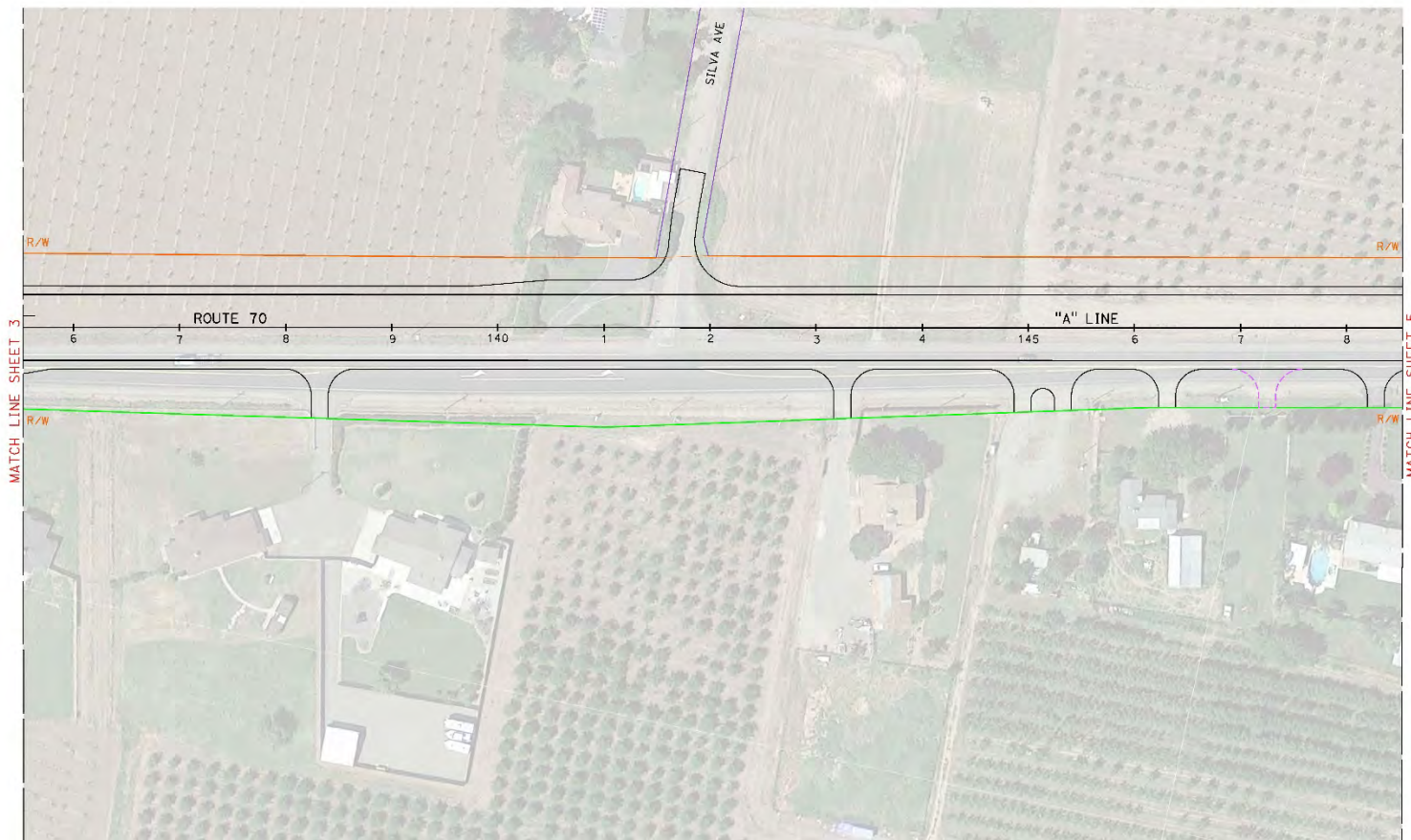
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CC583 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				

NO. 10000
CIVIL
STATE OF CALIFORNIA
EXPIRATION DATE 12/31/2010



ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN

Gilbert

FUNCTIONAL SUPERVISOR
KEN REATON

CALCULATED
DESIGNED BY
CHECKED BY

A. ANTHONY JONES
R. SCOTT FOSTER

REVIEWED BY
DATE REVISED

9043L < LAST > REVISED 7/2/2010

USERNAME => 0112508
DGN FILE => 4.11a.m004.dgn

RELATIVE BORDER SCALE
15 IN. = 400 FT

UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED => 07-24-2010
TIME PLOTTED => 1:19 PM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR	KEN REATON	CALCULATED DESIGNED BY	A. ANTHONY JONES	REVIEWED BY	DA = REVISED

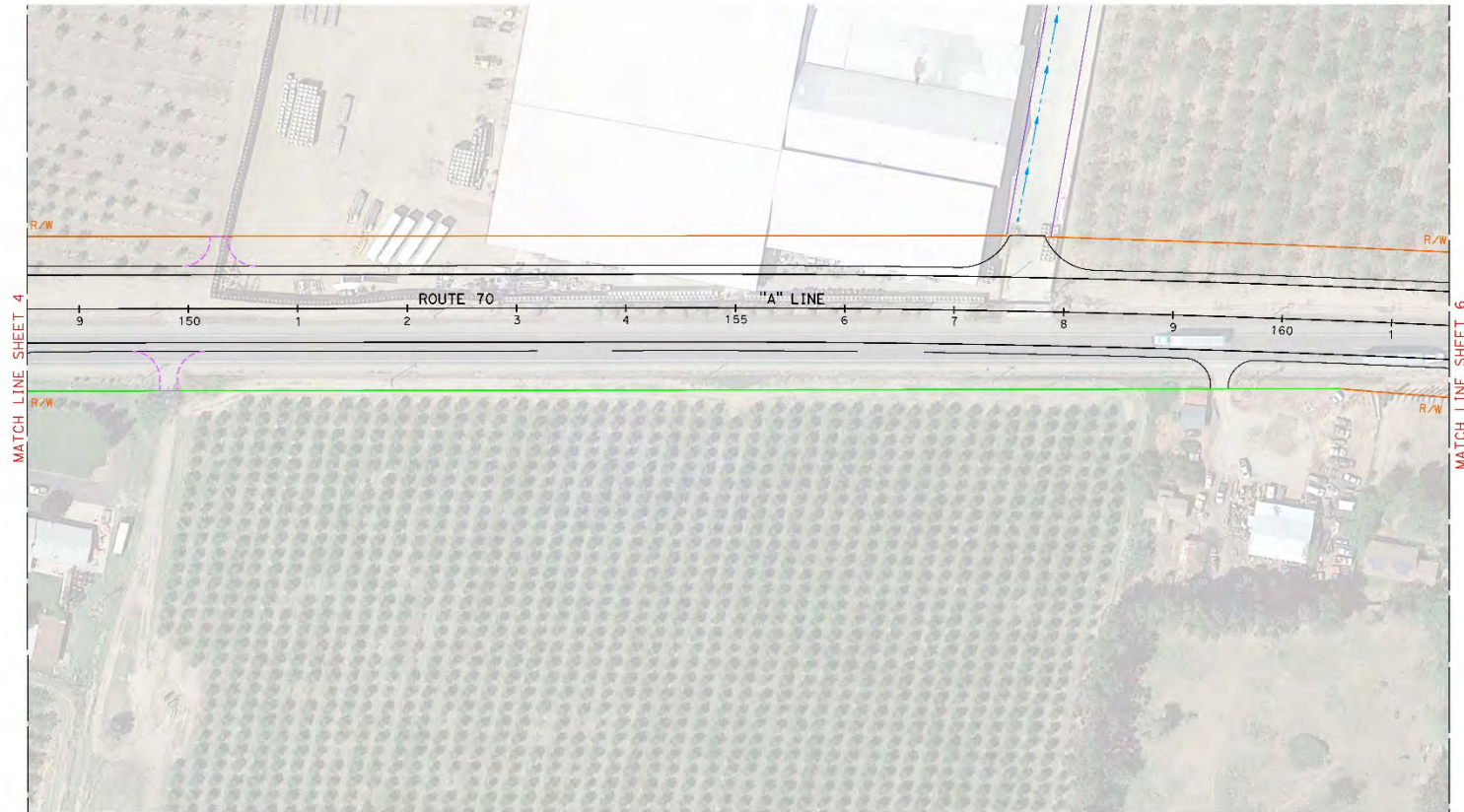
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE SEAL OF THE CIVIL ENGINEER FOR THE STATE OF CALIFORNIA IS THE PROPERTY OF THE BOARD OF CIVIL ENGINEERS. IT IS TO BE KEPT IN THE POSSESSION OF THE ENGINEER TO WHOM IT IS ISSUED AND IT IS TO BE RETURNED TO THE BOARD UPON THE DEATH OF THE ENGINEER OR UPON HIS OR HER RESIGNATION FROM THE PROFESSION. ANY ENGINEER WHOSE SEAL IS LOST OR DESTROYED SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF THE SEAL. THE FEE FOR THE REPLACEMENT OF THE SEAL IS \$100.00. THE FEE FOR THE REPLACEMENT OF THE SEAL IS \$100.00.</small>				

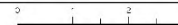


ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-5

9040L LASI KLV.SLD 7/2/2010

USERNAME => 0112508
DGN FILE => 4.11a600b.dgn

RELATIVE BORDER SCALE
15 IN. X 45 IN.



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED => 07-24-2020
TIME PLOTTED => 11:16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	SECTIONAL SHEET NO. 503	DESIGNED BY KEN KEATON	CHECKED BY A. ANTHONY JONES R. SCOTT FOSTER	DATE REVISED	DATE
--	--------	-------------------------	---------------------------	---	--------------	------

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

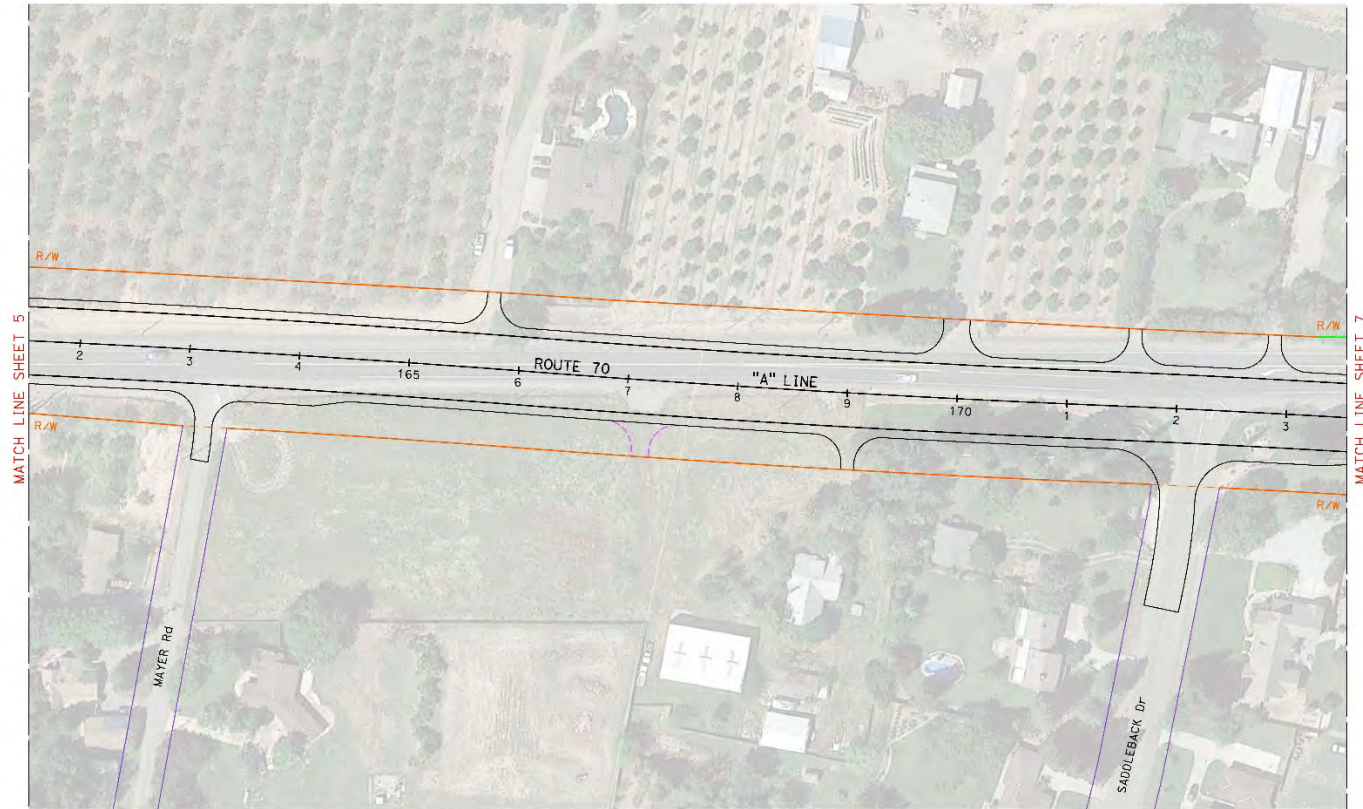
YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	70	16.2/25.8		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

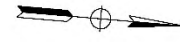
FOR STATE OF CALIFORNIA OR ITS AGENCIES
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SHOWN
DATA OR THIS PLAN SET.



**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET-6

REGISTERED PROFESSIONAL ENGINEER
No. 10000
Exp. CIVIL
STATE OF CALIFORNIA

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

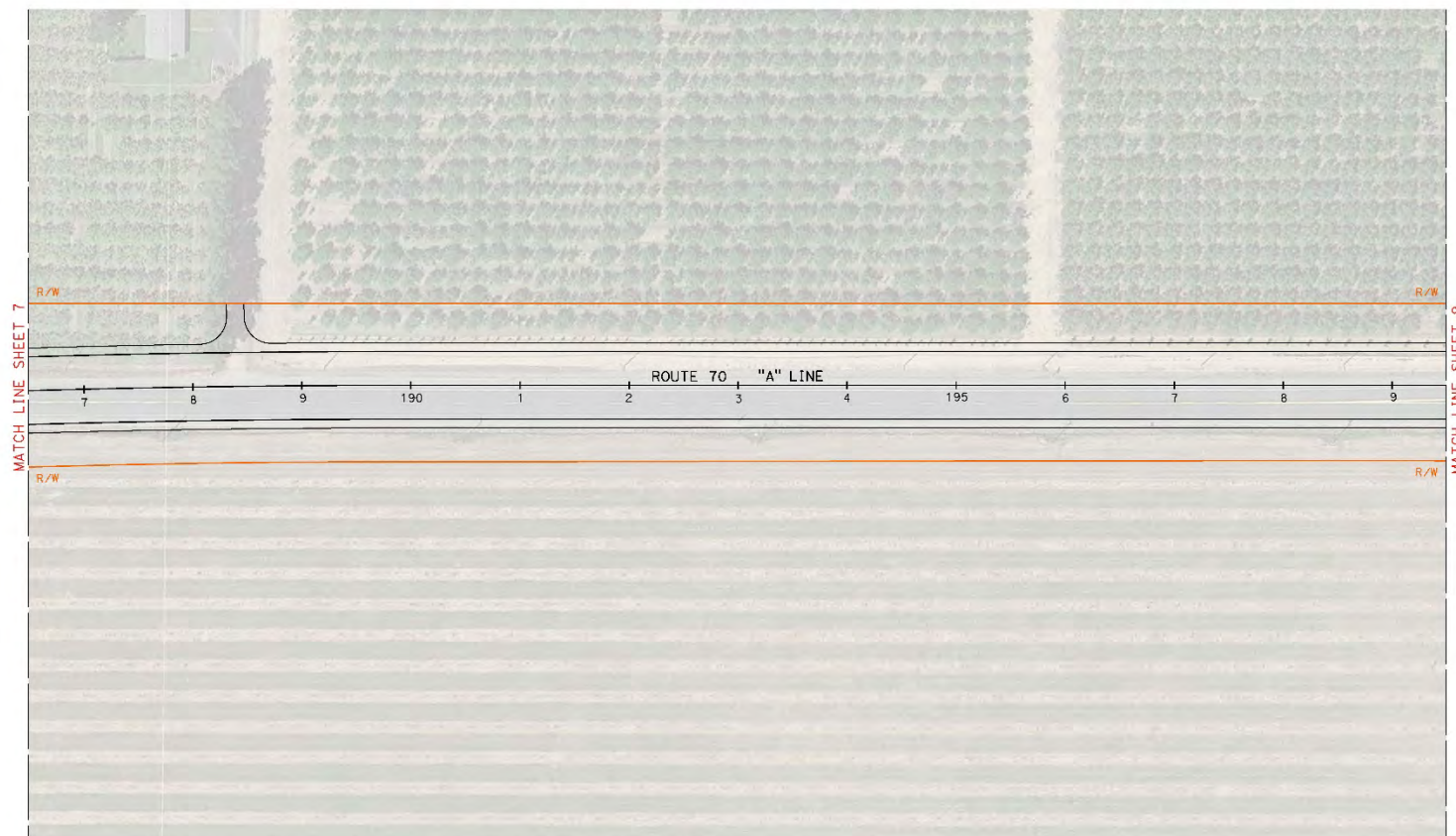


DATE PLOTTED => 07-JAN-2022
TIME PLOTTED => 13:56

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	COLLEAGUE, SUPERVISOR	REVIEWED BY
DESIGN	KEN KEATON	A. ANTHONY JONES	
et al		R. SCOTT FOSTER	DATE: REVIEWED

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-8

03180000186

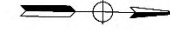
DATE PLOTTED => 07-JAN-2020
TIME PLOTTED => 3:57

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISION BY
et-Gilberts	KEN KEATON	A. ANTHONY JONES	DATE REVISED
DESIGN		R. SCOTT FOSTER	

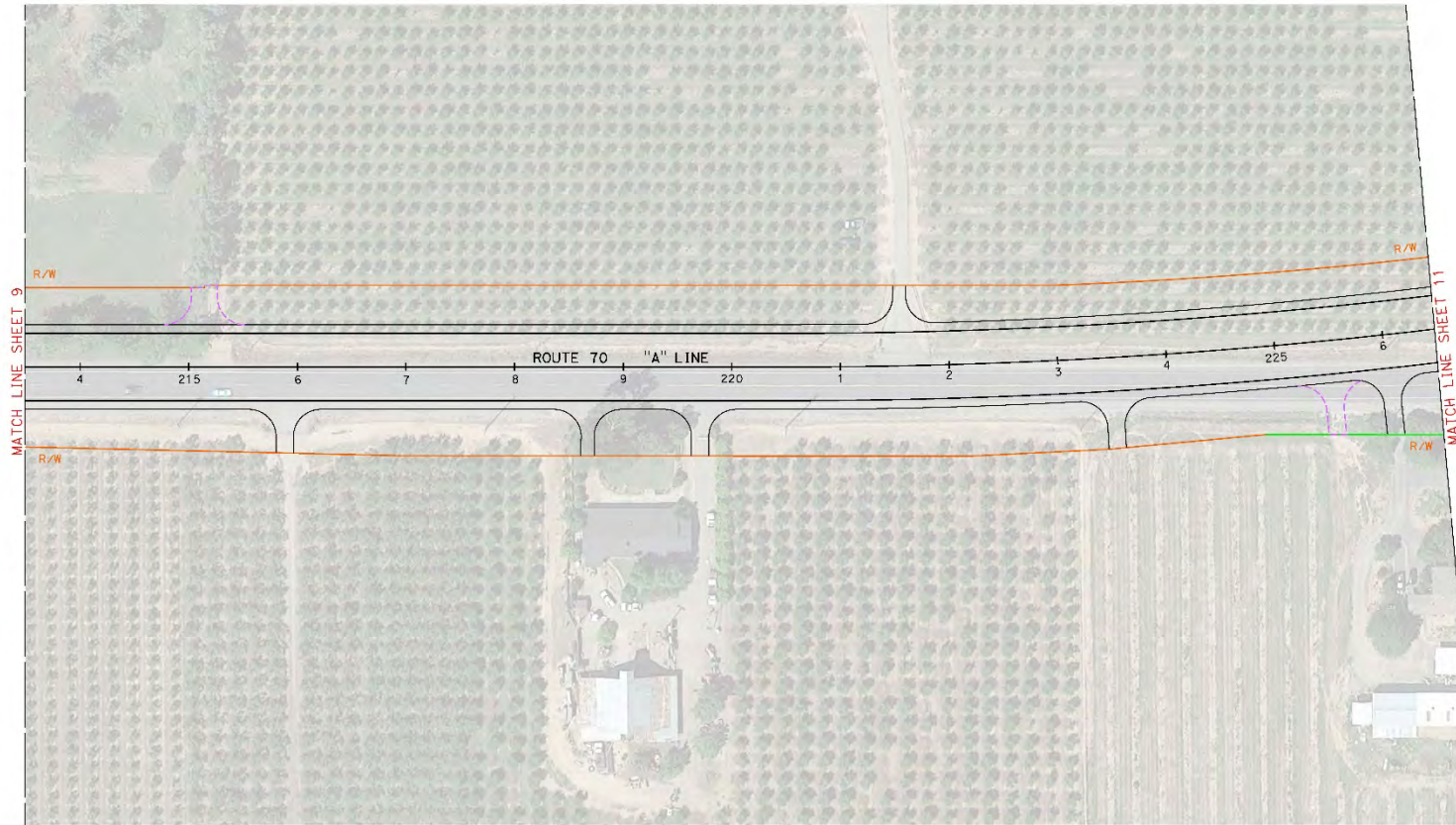
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE		No.		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION CONTAINED HEREIN.				

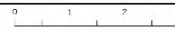


**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET -10-

ORDER LAST REVISED: 7/2/2010

USERNAME => A11260R
DGN FILE => A11260R.dgn

RELATIVE DESIGN SCALE
5' = 1" (HORIZONTAL)




UNIT 0323

PROJECT NUMBER & PHASE

03180000186

01-31-20 DATE PLOTTED => 01-31-20
01-31-20 TIME PLOTTED => 4:24

Dist#	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	70	16.2/25.8		
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE					

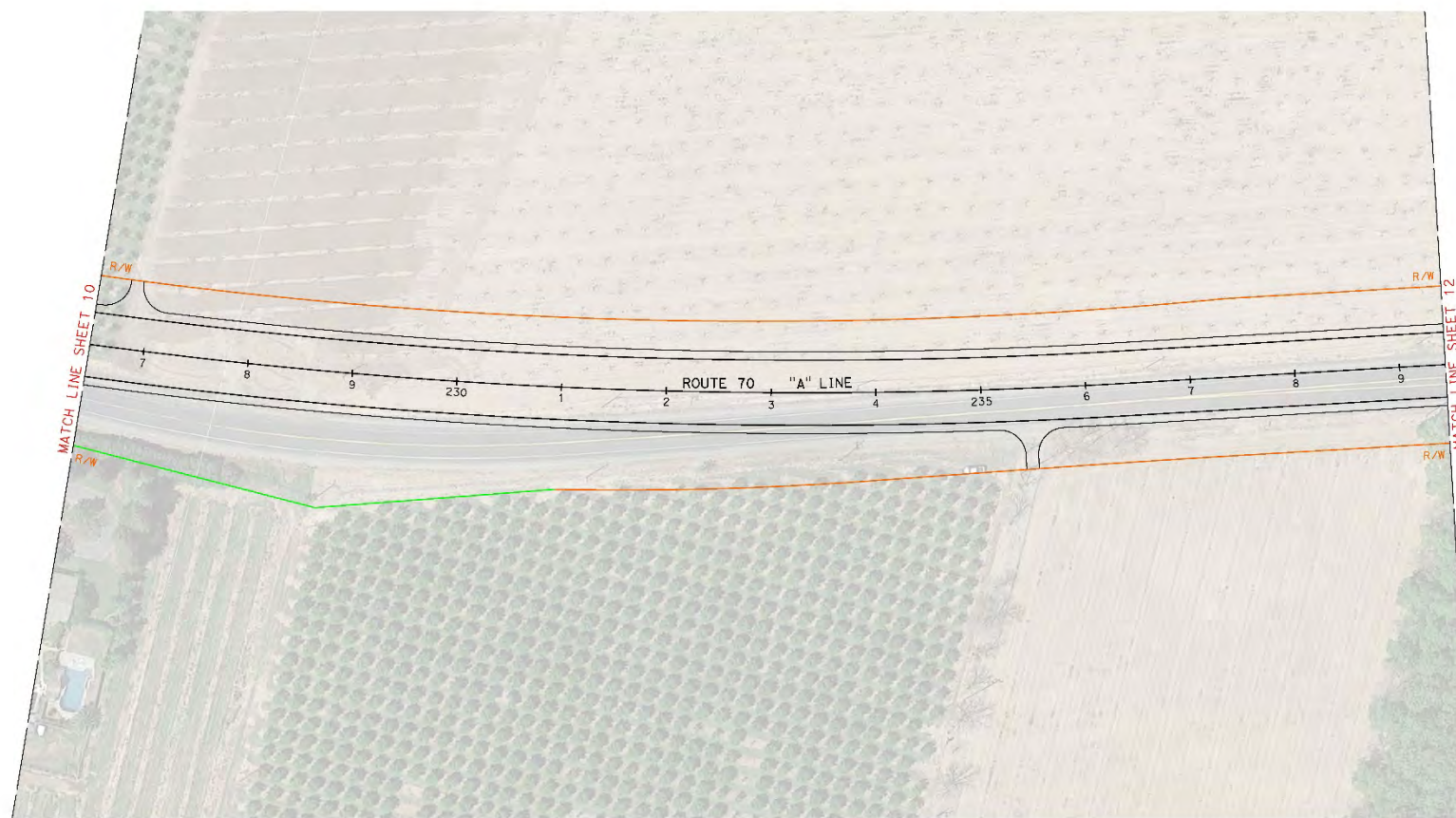


THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCHWAB
CORP.'S 1993 YEAR BOOK

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO

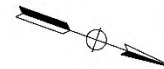


**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET -11

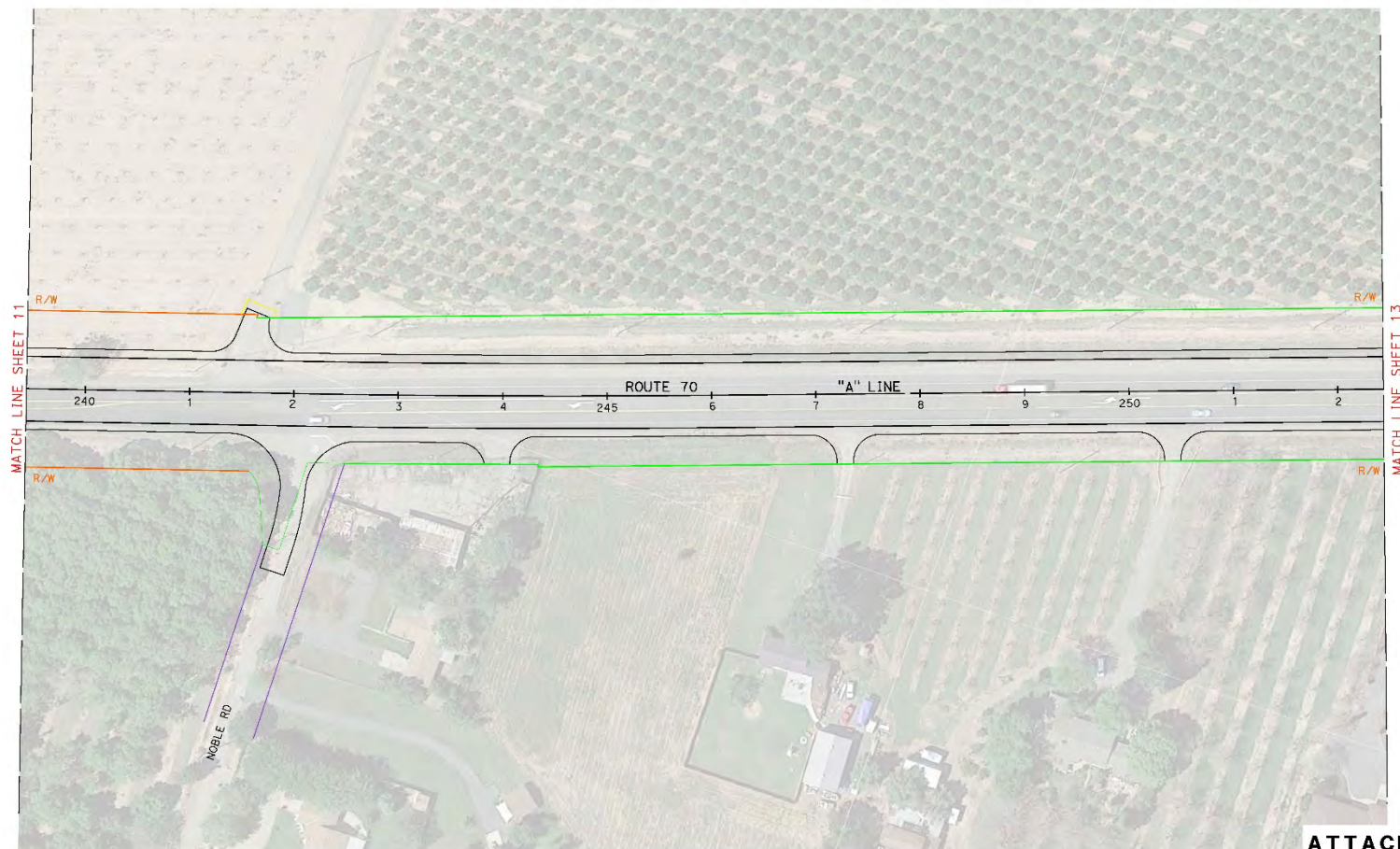
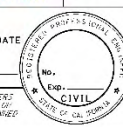
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS DO NOT WARRANT, GUARANTEE, OR ACCEPT ANY LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THE DATA OR THE INFORMATION CONTAINED HEREIN.</small>				

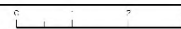


ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-12

ORDER LAST REVISED 7/2/2010

USERNAME => AT12608
DGN FILE => AT126012.dgn

RELATIVE BORDER SCALE
1"=100'-0"



UNIT 0323

PROJECT NUMBER & PHASE

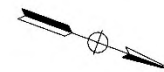
03180000186

DATE PLOTTED => 07-11-2010
TIME PLOTTED => 14:11

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO

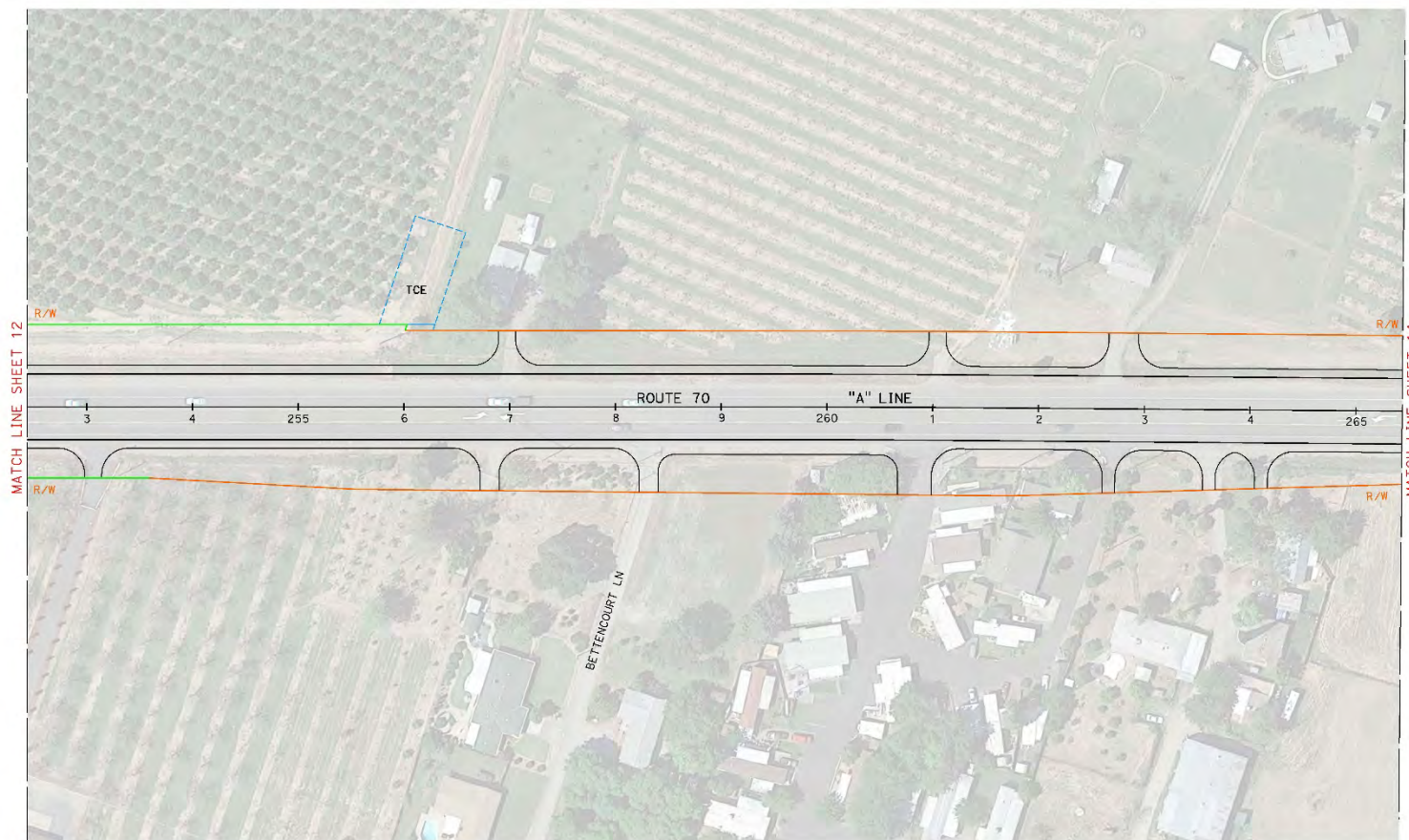


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	

REGISTERED CIVIL ENGINEER	DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS:
I DO HEREBY CERTIFY THAT THE ENGINEER'S SEAL
THE ACCURACY OR COMPLETENESS OF SHOWN
EIGHTH OF THIS PLAN SHEET.



**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET-13

SD 4LR LRS H-VISLJ 7/2/2010

USERNAME => 12009
DGN FILE => A_1ec013.dgn

RELATIVE BORDER SCALE
1/5 IN. N-E-S



UNIT 0323

PROJECT NUMBER & PHASE

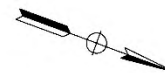
03180000186

DATE PLOTTED 03/01/2010
TIME PLOTTED 11:15

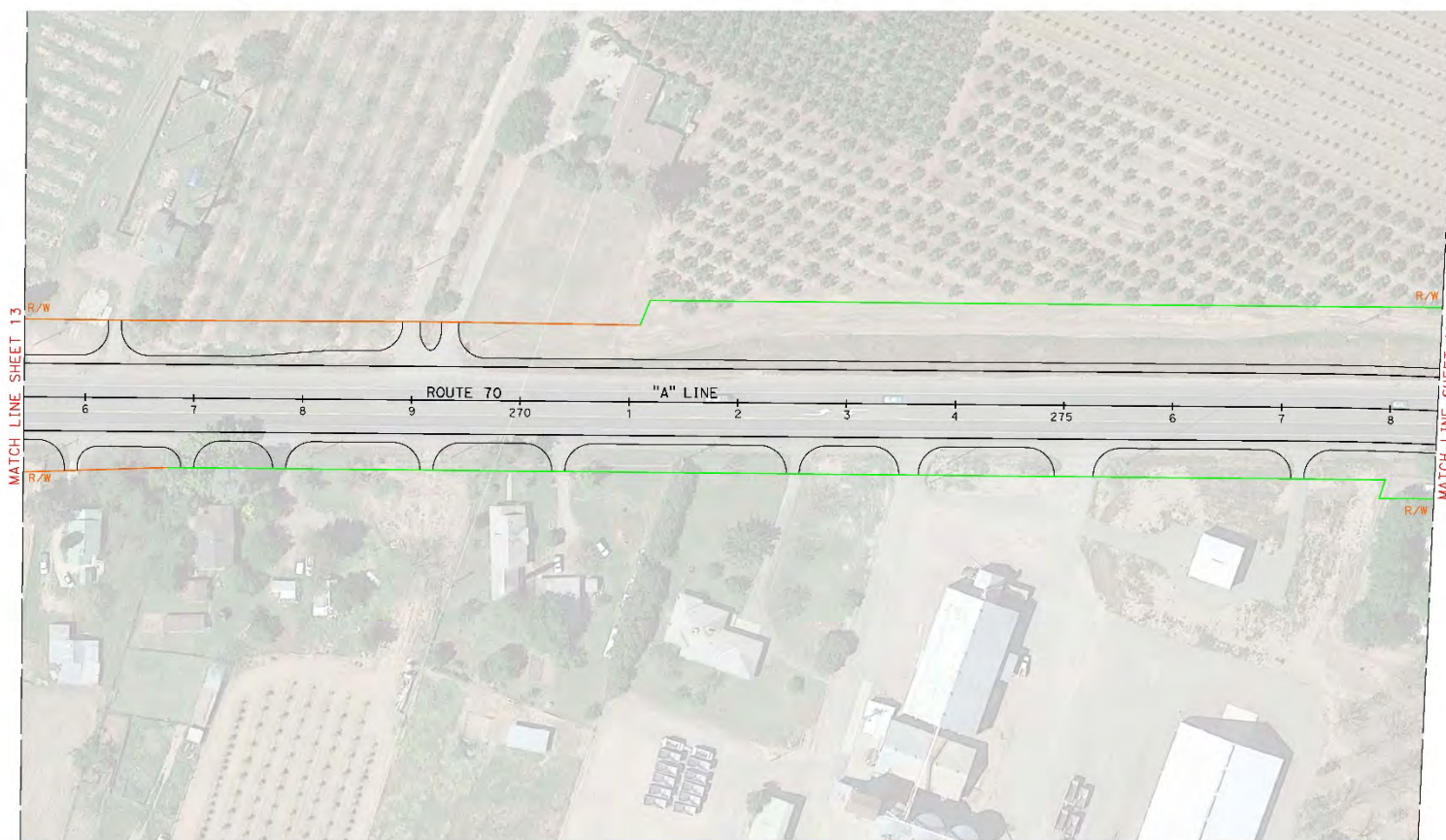
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS DO NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF SCALED COPIES OF THIS PLANS SET.</small>				

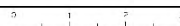


**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET - 14

BORDER LAST REVISED: 7/2/2010

USERNAME => K11760R
DGN FILE => A_T1600_2.dgn

RELATIVE BORDER SCALE
1" = 100'



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED => 07-25-2010
TIME PLOTTED => 4:17

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR	KEN KEATON	CHECKED BY	A. ANTHONY JONES	REVIEWED BY	R. SCOTT FOSTER	DATE (REVISED)

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				

No. _____
 Exp. _____
 CIVIL
 State of California

THE SEAL OF CALIFORNIA ON THIS DOCUMENT IS THE PROPERTY OF THE BOARD OF CIVIL ENGINEERS AND SURVEYORS. IT IS TO BE USED ONLY FOR THE PROJECT AND NOT BE REPRODUCED FOR ANY OTHER PROJECT. THE ENGINEER OR SURVEYOR IS RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION SHOWN ON THIS PLAN SHEET.



ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET - 15

ROAD: 31 EAST REV 5/11 7/27/2010

USERNAME => a17808
GDN FILE => alt16005.dgn

1" = 100' 0" 1" 2" 3"

UNIT 0323

PROJECT NUMBER & PHASE

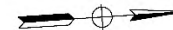
03180000186

DATE PLOTTED: 01-31-20
TIME PLOTTED: 14:20

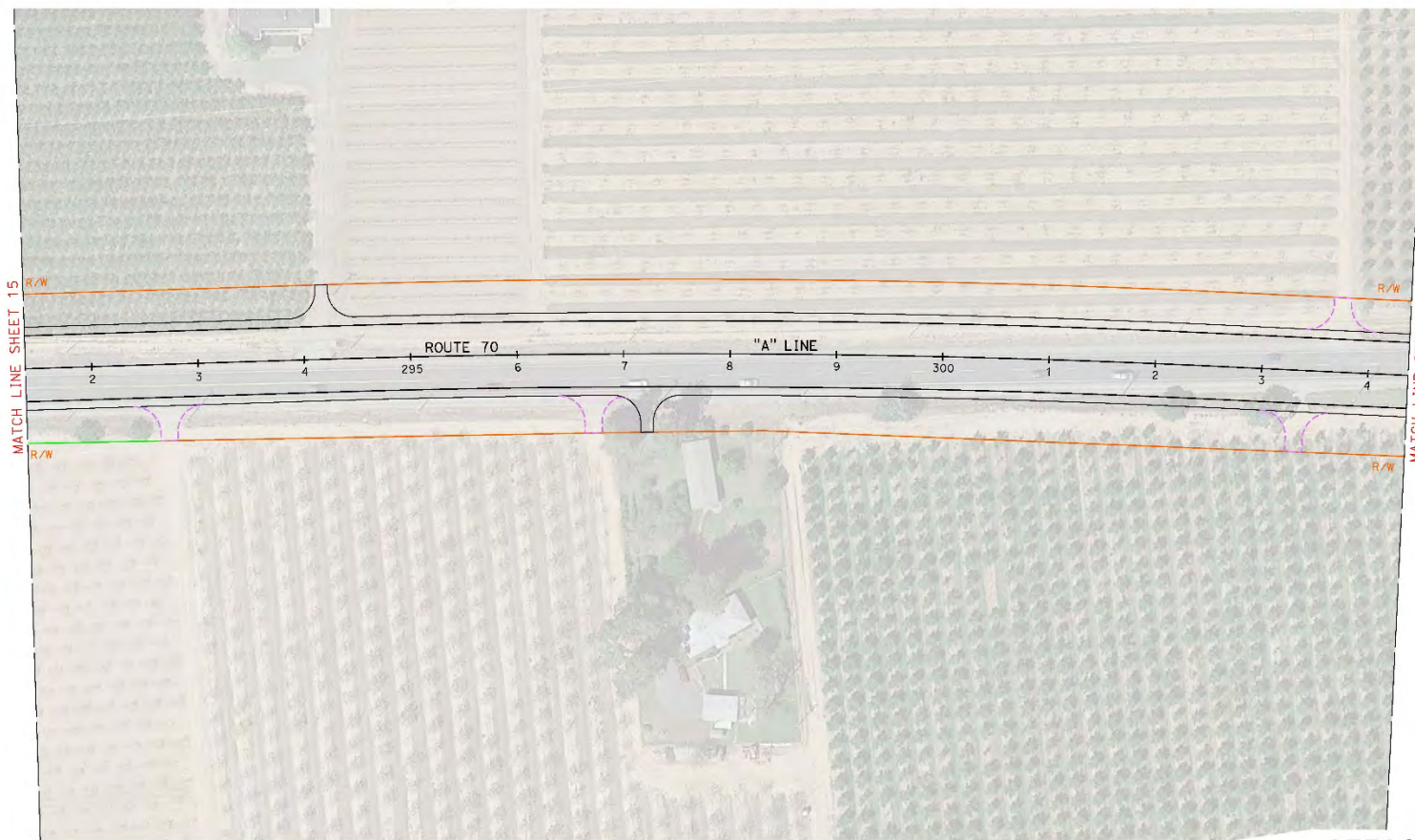
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS DO NOT WARRANT, GUARANTEE, OR ACCEPT ANY LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION OF THIS PLAN SHEET.</small>				



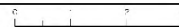
ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-16

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	KEN KEATON	CHECKED BY	A. ANTHONY JONES R. SCOTT FOSTER	REVISION	DATE REVISION

ORDER LAST REVISED 7/2/2010

USERNAME => AT2608
DGN FILE => ALT-ec016.dgn

RELATIVE BORDER SCALE
IS IN INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLANNED => 01-JAN-2020
DATE ROUTED => 01-JAN-2020

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	U.S. NATIONAL SUPERHIGHWAY	CECILIA A. JONES CALIFORNIA	RECEIVED BY
ET-Celltrans®	DESIGN	KEEN KEATON	DATE RECEIVED
		R SCOTT FOSTER	

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.



031 800001 86

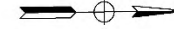
• 212

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR	CHECKED BY	DESIGNED BY	REVISED BY	DATE REVISED
Gibbons		KEN KEATON		A. ANTHONY JONES	R. SCOTT FOSTER	

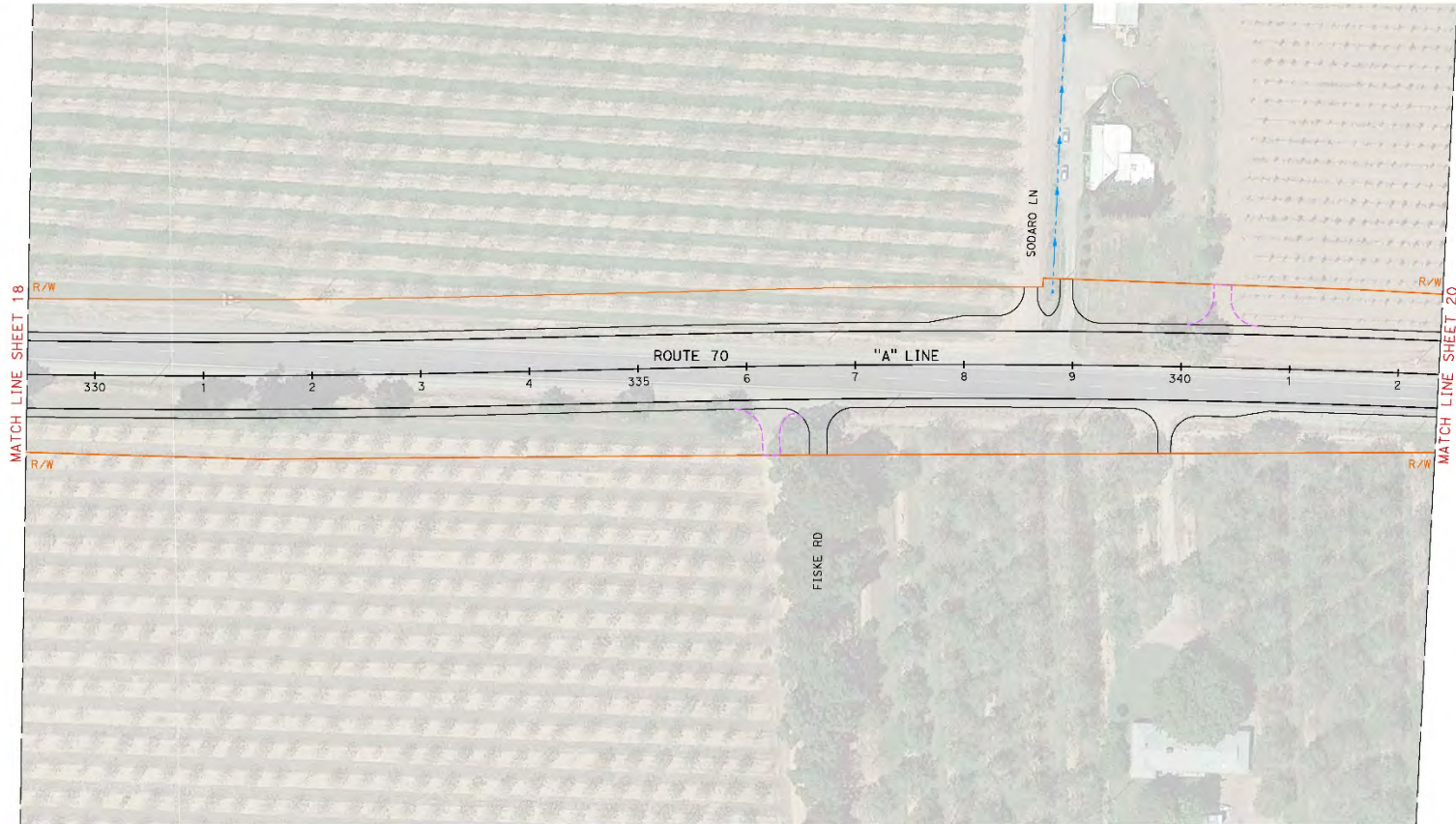
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF REPRODUCED COPIES OF THIS PLAN SHEET.				



ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET -19

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	CHECKED BY	REVISIONS	DATE
ST. GIBBONS	KEN KEATON	A. ANTHONY JONES	R. SCOTT FOSTER		
DESIGN					

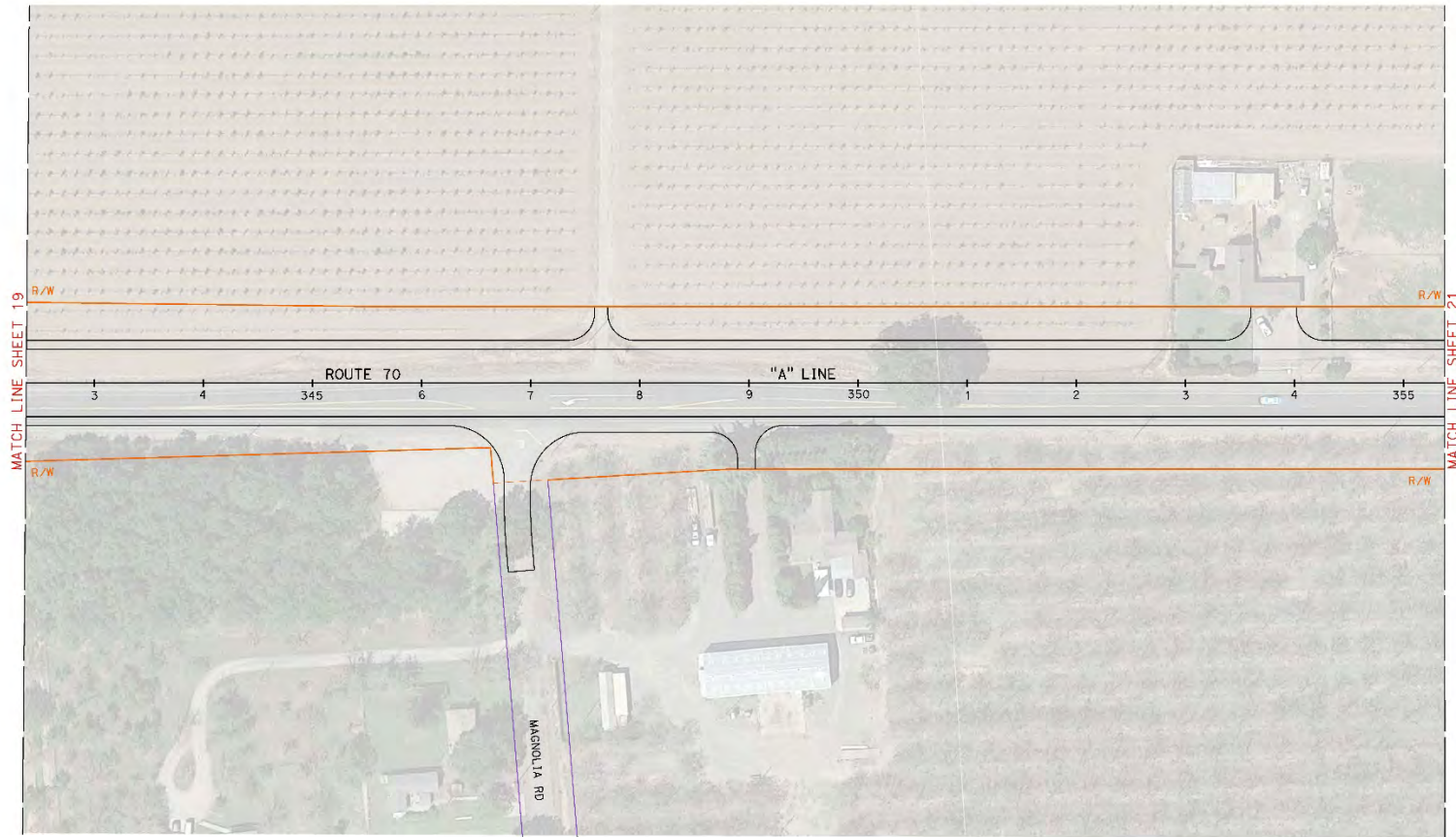
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF REPRODUCED COPIES OF THIS PLAN SHEET.				

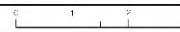


ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-20

DDPFR AST REVISED 7/2/2010

USERNAME => nt17808
DGN FILE => d171ec020.dgn

17: A ERI ECH B E SCA
15: B: NETS



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

LAST MODIFIED DATE PLOTTED 01-31-20 TIME PLOTTED 01:15:12

NOTES:

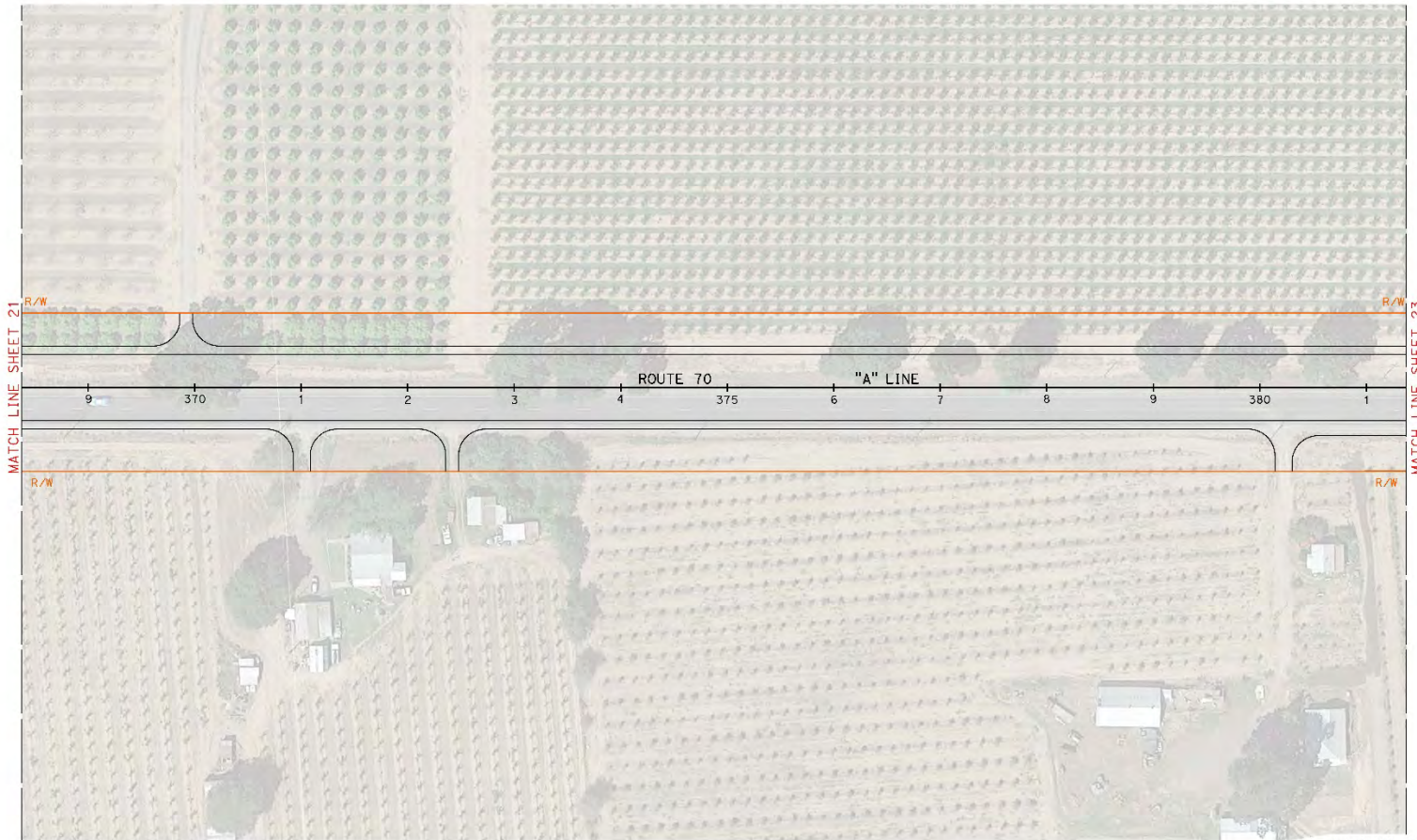
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA ON ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>				

PROFESSIONAL ENGINEER
No. _____
EXP. _____
CIVIL
STATE OF CALIFORNIA



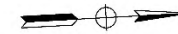
ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET - 22

01-31-20 THE PLOTTED => 11:20
 DATE PLOTTED => 01/21/2009

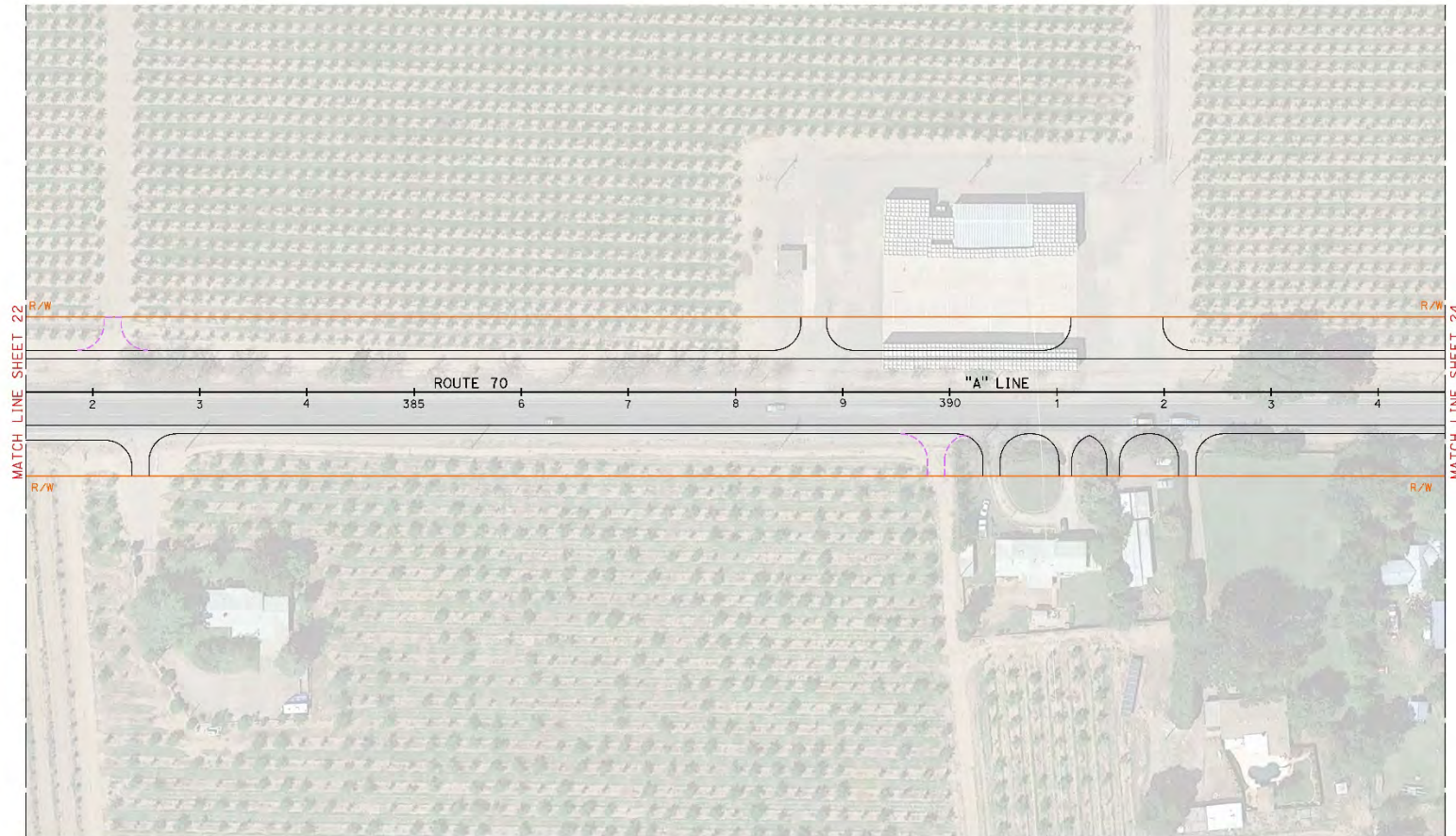
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				

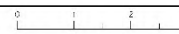


**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET -23

SOURCE: LAS FILE: 17/2/2010

USERNAME => 12508
DGN FILE => AL100023.dgn

RELATIVE BORDER SCALE
15' = 1" (NAD83)



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED => 27-JAN-2020
TIME PLOTTED => 10:28

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	KEN KEATON	CALCULATED BY CH-CELESTIN TY	A. ANTHONY JONES R. SCOTT FOSTER	INVESTIGATED BY DATE REVISED

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



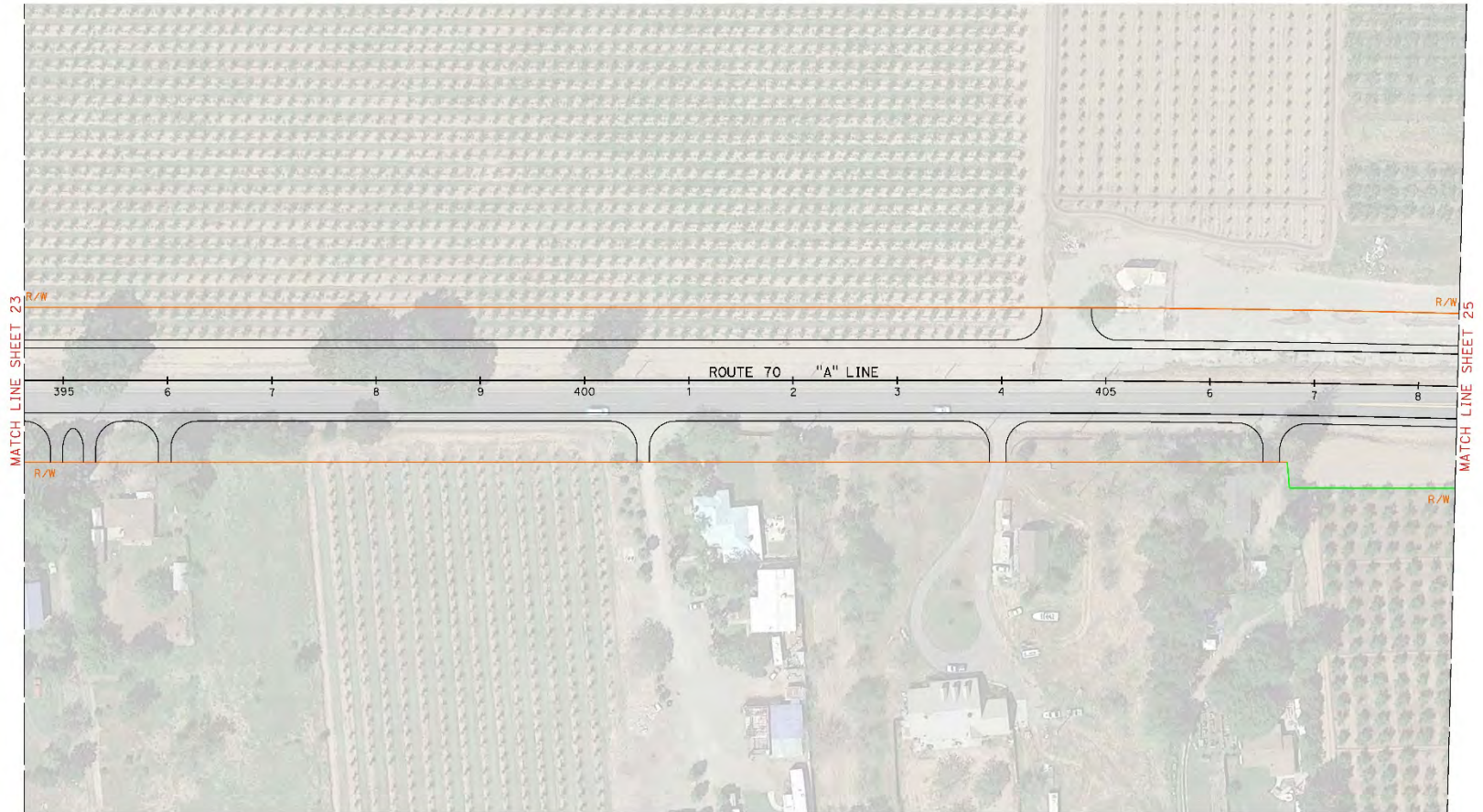
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	70	16.2/25.8		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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.

EXP. CIVIL



**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET-24

BORDER LAST REVISED 7/2/2010

USERNAME => 3112009
DGN FILE => AL1100024.dgn

RELATIVE BORDER SCALE
15' = 1" NCHFS



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED => 07-JAN-2010
01-31-20 TIME PLOTTED => 9:16:30

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	KEN KEATON	CALCULATED- REVISION: 14	CHECKED BY	A. ANTHONY JONES R. SCOTT FOSTER	REVISED BY	DATE	REVISED

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

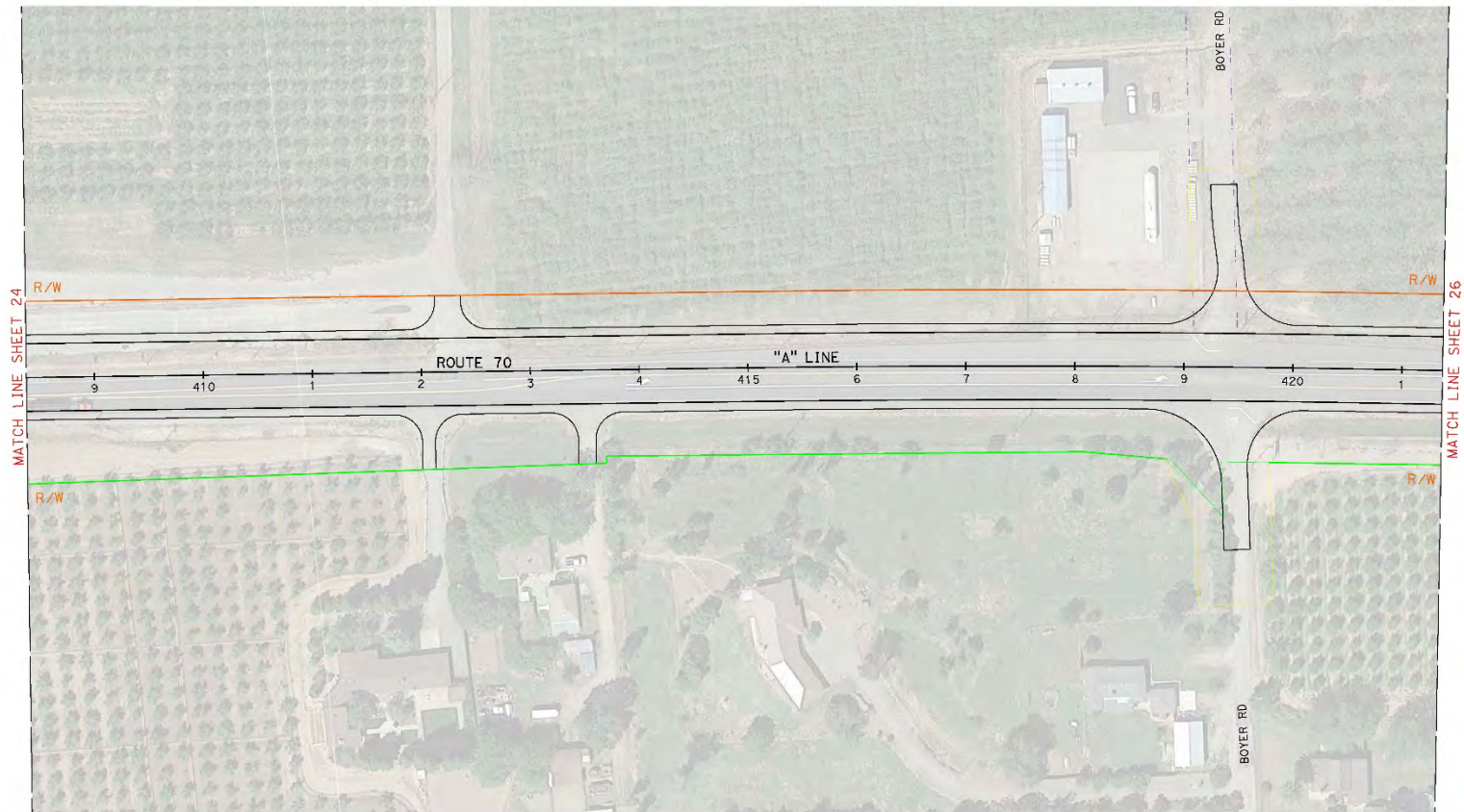
YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	70	16.2/25.8		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

THE STATE OF CALIFORNIA DOES NOT GUARANTEE THE ACCURACY OF THE INFORMATION CONTAINED HEREIN FOR ANY PURPOSE.
--

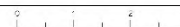


**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET-25

HOURLY R AS4 R W S 3 1/2/2000

USERNAME => a112008
DGN FILE => AL100025.dgn

RELATIVE BORDER SCALE
15" = 1" IN PLANS



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED => 01-31-20
TIME PLOTTED => 1:15:25

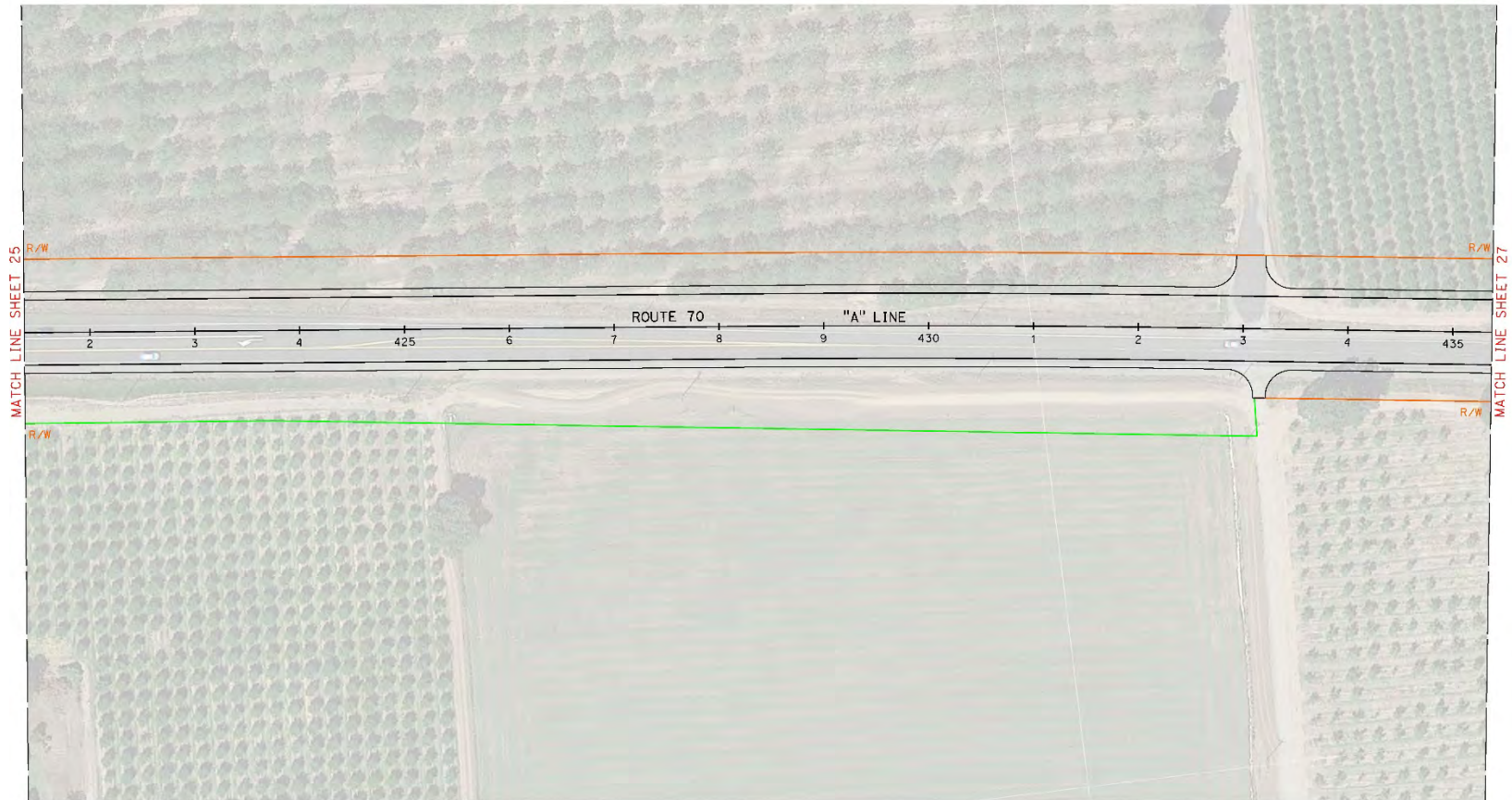
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	70	16.2/25.8		
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE			No. _____ EXP. _____ CIVIL		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS DO NOT WARRANT, GUARANTEE, OR ACCEPT ANY LIABILITY FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

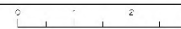


ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-26

RECORD LAST REVISED 7/27/2010

USERNAME => 0112008
DGN FILE => AL 100026.dgn

RELATIVE BORDER SCALE
IS IN INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

01-31-20 THE PLOTTED => 1:14 PM 2020

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR	CHECKED BY	DESIGNED BY	REVISED BY	DATE REVISED
Gibbons		KEN KEATON		A. ANTHONY JONES	R. SCOTT FOSTER	

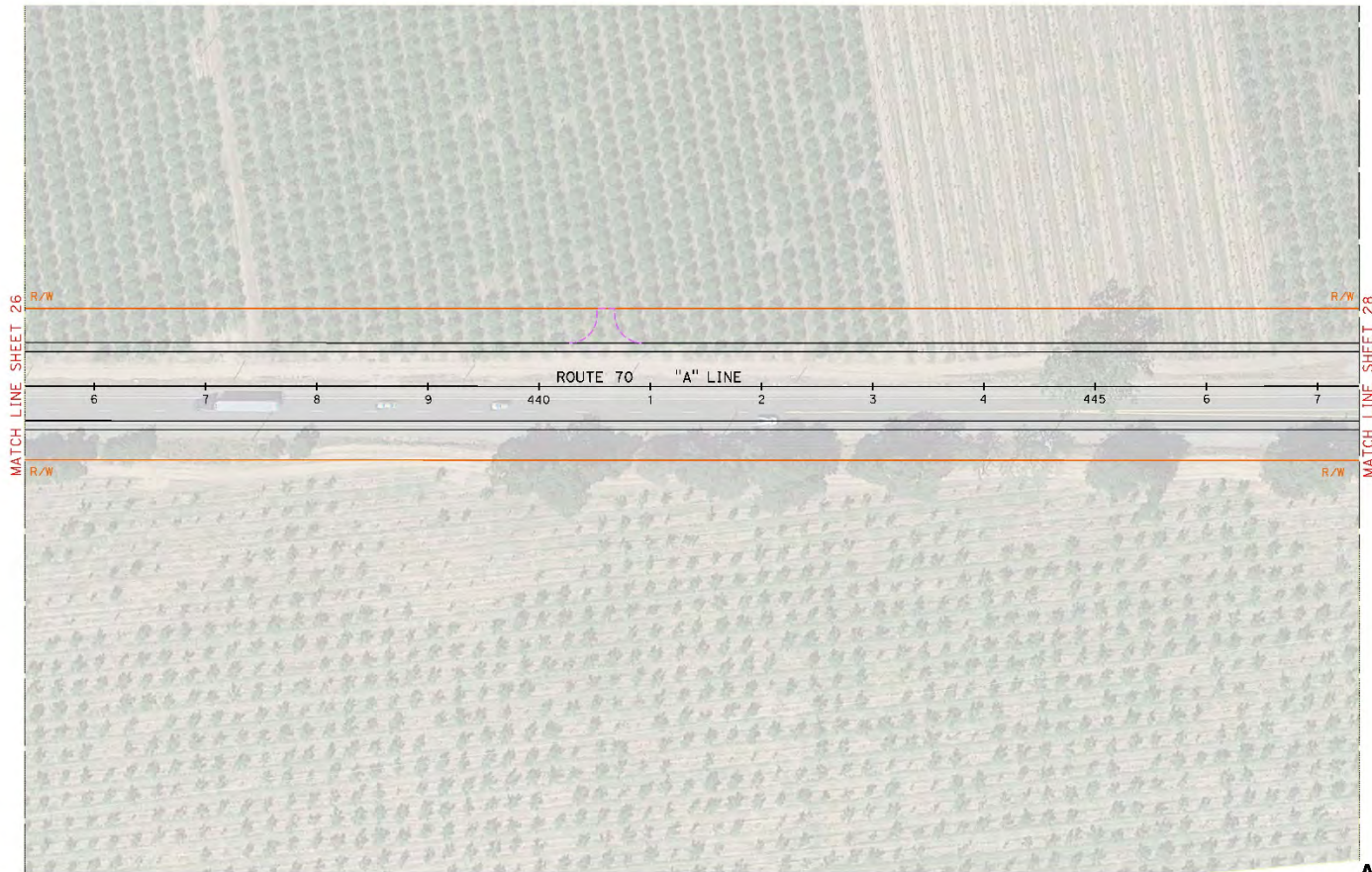
NOTES

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF REPRODUCED COPIES OF THIS PLAN SHEET.				



ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-27

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



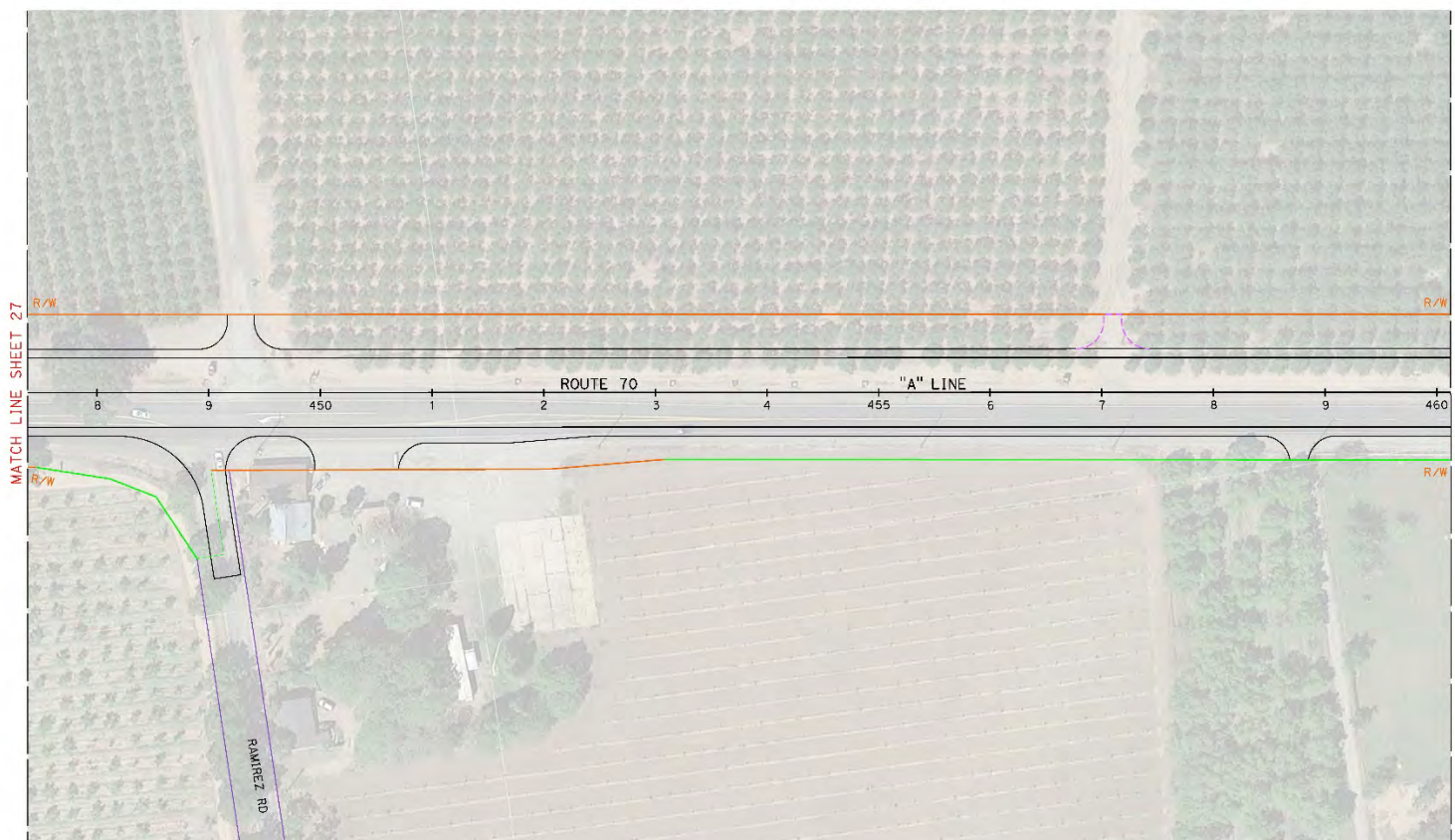
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
DO NOT WARRANT, GUARANTEE, OR
ACCEPT ANY LIABILITY FOR THE
USE OF THIS INFORMATION FOR ANY
PURPOSE OTHER THAN THAT
SPECIFICALLY STATED HEREON.

PROFESSIONAL SEAL
No.
Exp.
CIVIL
STATE OF CALIFORNIA

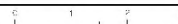


**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET-28

ORDER: LAST REVISED: 7/2/2010

USERNAME => x119608
DGN FILE => A_T160228.dgn

RELATIVE HORZ. SCALE
IS IN INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

LAST MODIFIED: DATE PLOTTED: 07/27/2010
01-31-20 TIME PLOTTED: 09:51:45

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL S. TRIPKES	A. ANTHONY JONES	REVISED BY
Caltrans®	DESIGN	KEN KEATON	CHECKED BY
		R SCOTT FOSTER	DATE REVISED

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.



03180000186

• 225

NOTES:

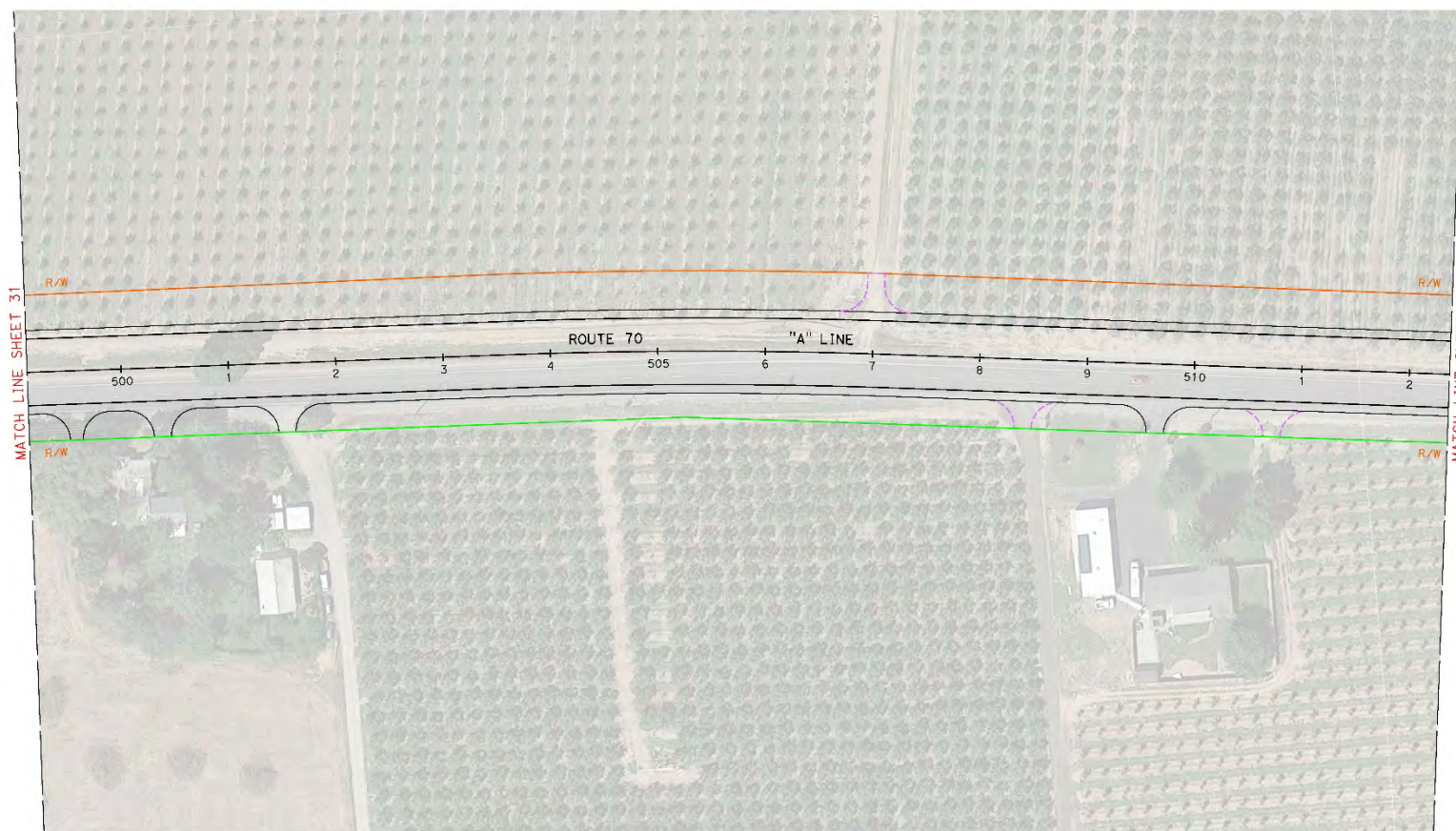
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	70	16.2/25.8		
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE			No.		
			EXP. CIVIL		

THE STATE OF CALIFORNIA OF ITS OFFICIALS
FOR ALL ITS SURVEYING AND PLANNING
THE ACCURACY OF THE COMPLETION OF THE
CITY OF YUBA, PLAN 107-12



**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET-32

10/20/21 1:45 PM VISIT 1/22/2020

USERNAME => a117658
IGN FILE => ALT00032.dgn

FILE NAME: PROJECT 4 SHEET 32.dgn

0 1 2 3

UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED => 01-JAN-2020
TIME PLOTTED => 27:12

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	70	16.2/25.8		

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

THE STATE OF CALIFORNIA OF ITS OFFICIALS
FOR ALL ITS WORKS, AND NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SHOWN
WORKS OF THIS PLAN SET.

EXP. CIVIL



**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET -34

10/20/21 1:55 PM VIS 1 1/2/2020

USERNAME => a117658
IGN FILE => A11765834.dgn

FILE A11765834.dgn
15.76 MB

0 1 2 3


UNIT 0323

PROJECT NUMBER & PHASE

03180000186

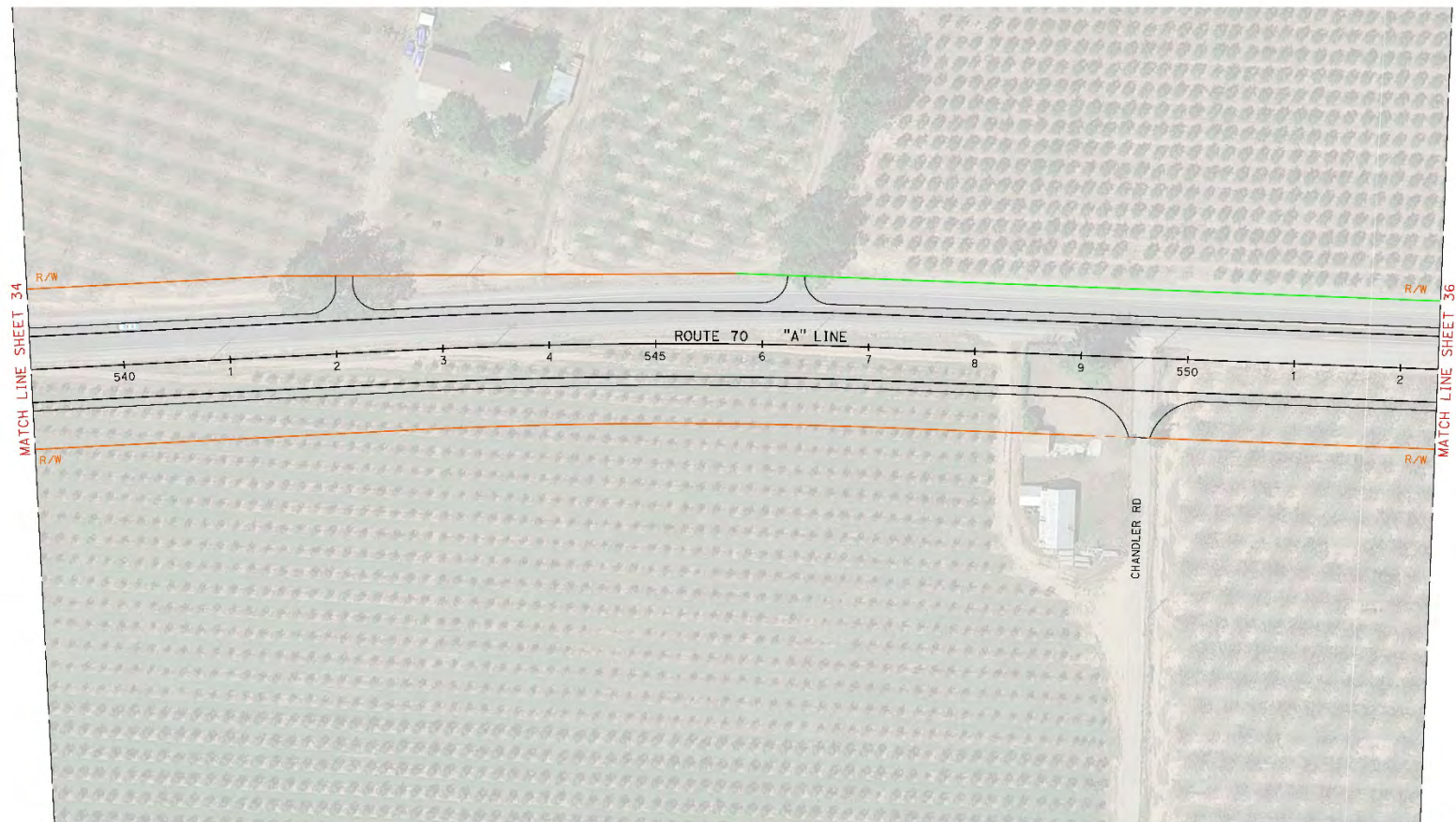
DATE PLOTTED => 01/31/20
TIME PLOTTED => 21:14

REGISTERED CIVIL ENGINEER _____	DATE _____
PLANS APPROVAL DATE _____	



THE STATE OF CALIFORNIA ON ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OR SO-CALLED COPIES OF THIS PLAN SHEET.

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.



**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET-35

DATE PLOTTED => 08 JAN 2020
TIME PLOTTED => 07:57

```

USERNAME => 0112608
DGN FILE => AL 100035.dgn

```

RELATIVE BORDER SCALE
IS IN INCHES

UNIT 0323

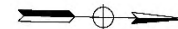
PROJECT NUMBER & PHASE

03180000186

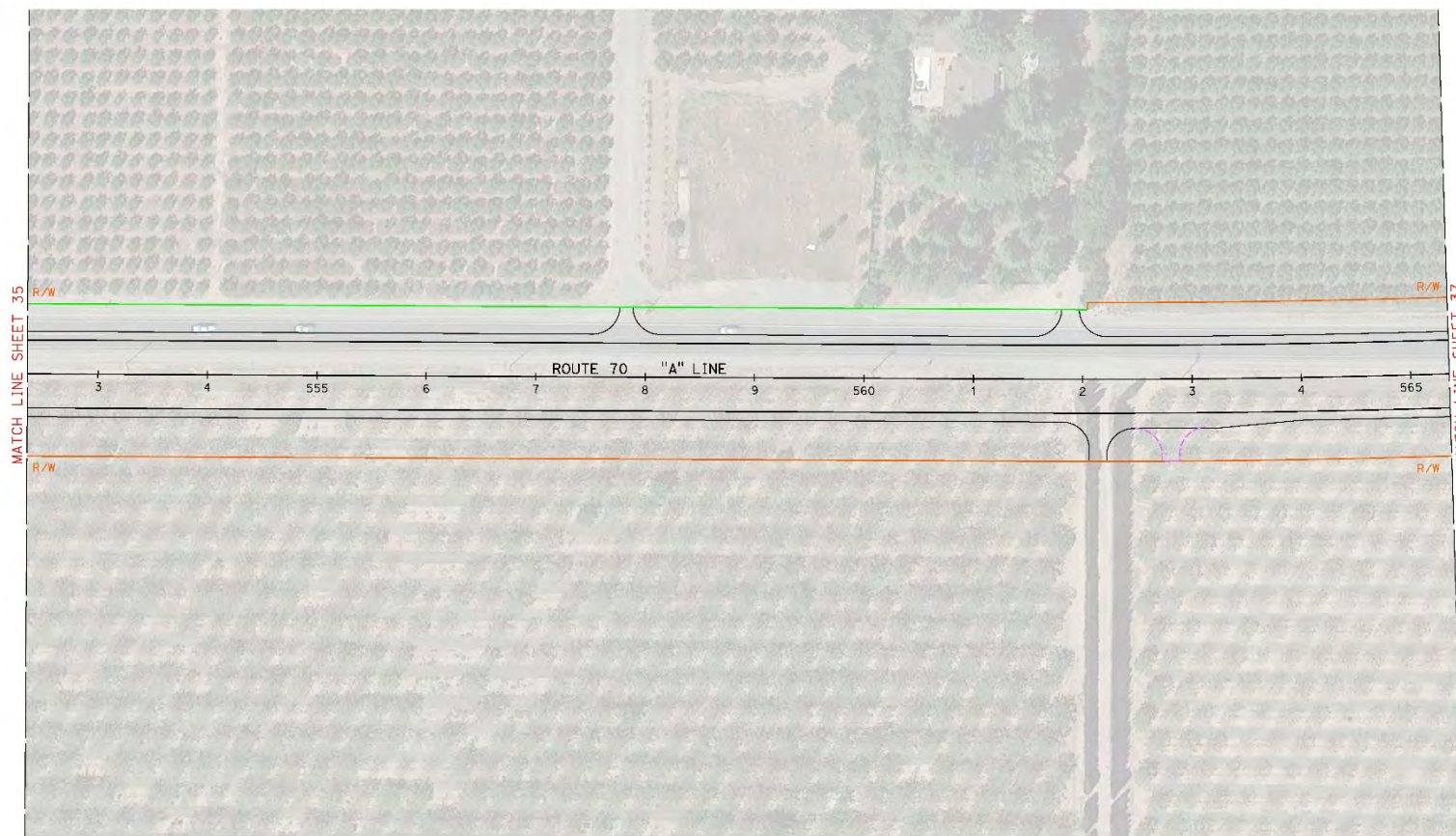
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	70	16.2/25.8		
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE					
THE STATE OF CALIFORNIA ON ITS OFFICERS USE AND/OR SIGNATURE IS RESPONSIBLE FOR THE ACCURACY AND COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.			PROFESSIONAL ENGINEER No. _____ Exp. _____ CIVIL State of California		

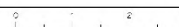


ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-36

RECORD LAST REVISED 4/22/2010

USERNAME => 0112008
DGN FILE => AL 10000.dgn

RELATIVE BORDER SCALE
IS IN INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

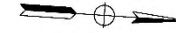
01-31-20 THE PLOTTED 01/12

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR	DESIGNED BY	CHECKED BY	A. ANTHONY JONES R. SCOTT FOSTER	REVISIONS	DATE

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS AGENTS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED IN THIS PLAN SHEET.

END CIVIL



**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET -37

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	70	16.2/25.8		

REGISTERED CIVIL ENGINEER	DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OR SCALED COPIES OF THIS PLAN SHEET.

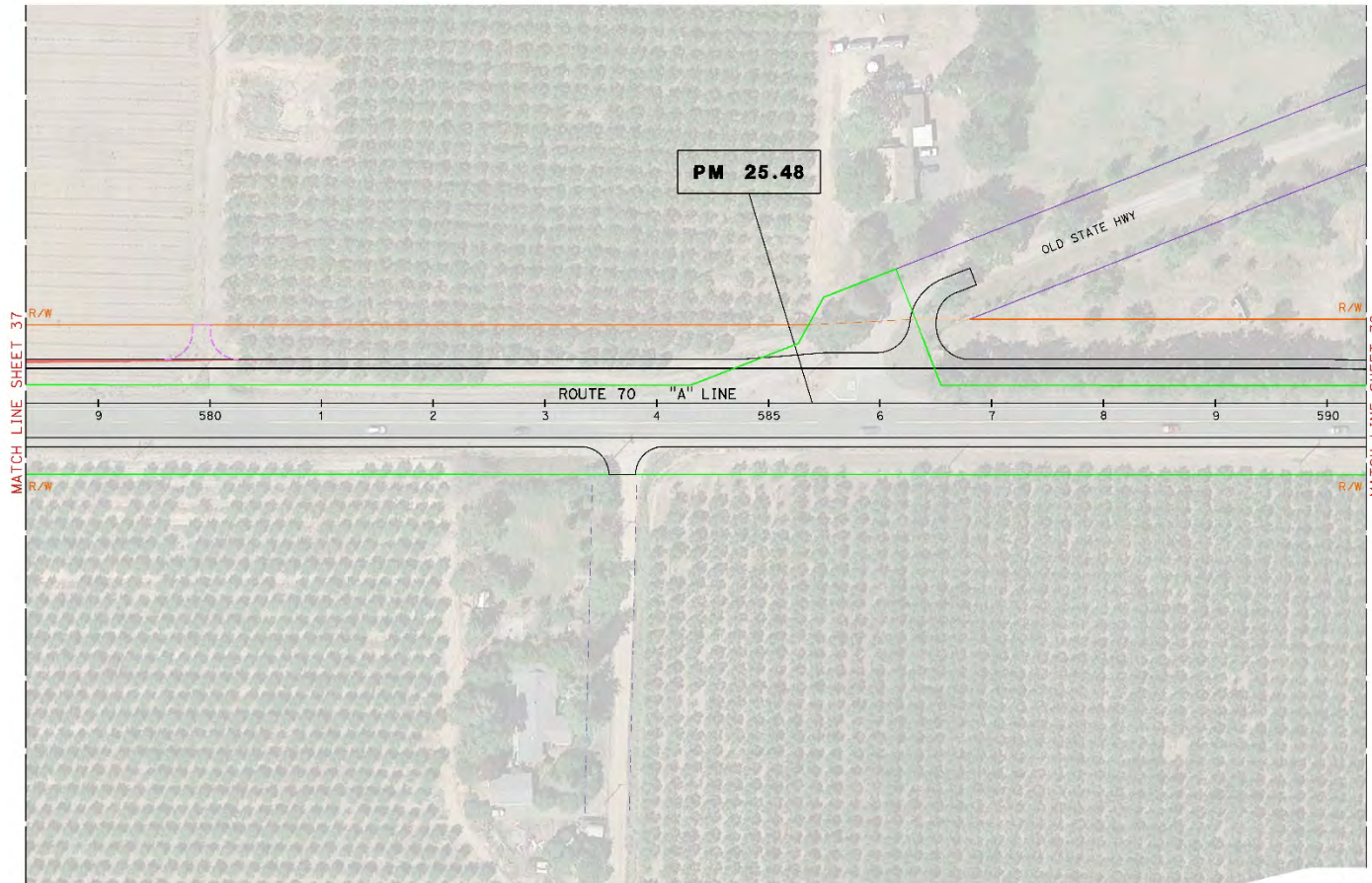
REGISTERED PROFESSIONAL ENGINEER

No. _____

Exp. _____

CIVIL

STATE OF CALIFORNIA

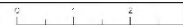


**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET-38

DATE: 01/11/2010

USERNAME => a112608
DGN FILE => AL_100058.dgn

ALTERNATIVE BORDER SCALE
15 IN. = 100 FT.



UNIT 0323

PROJECT NUMBER & PHASE

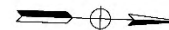
03180000186

DATE PLOTTED => 01/11/2010
TIME PLOTTED => 01:31

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO

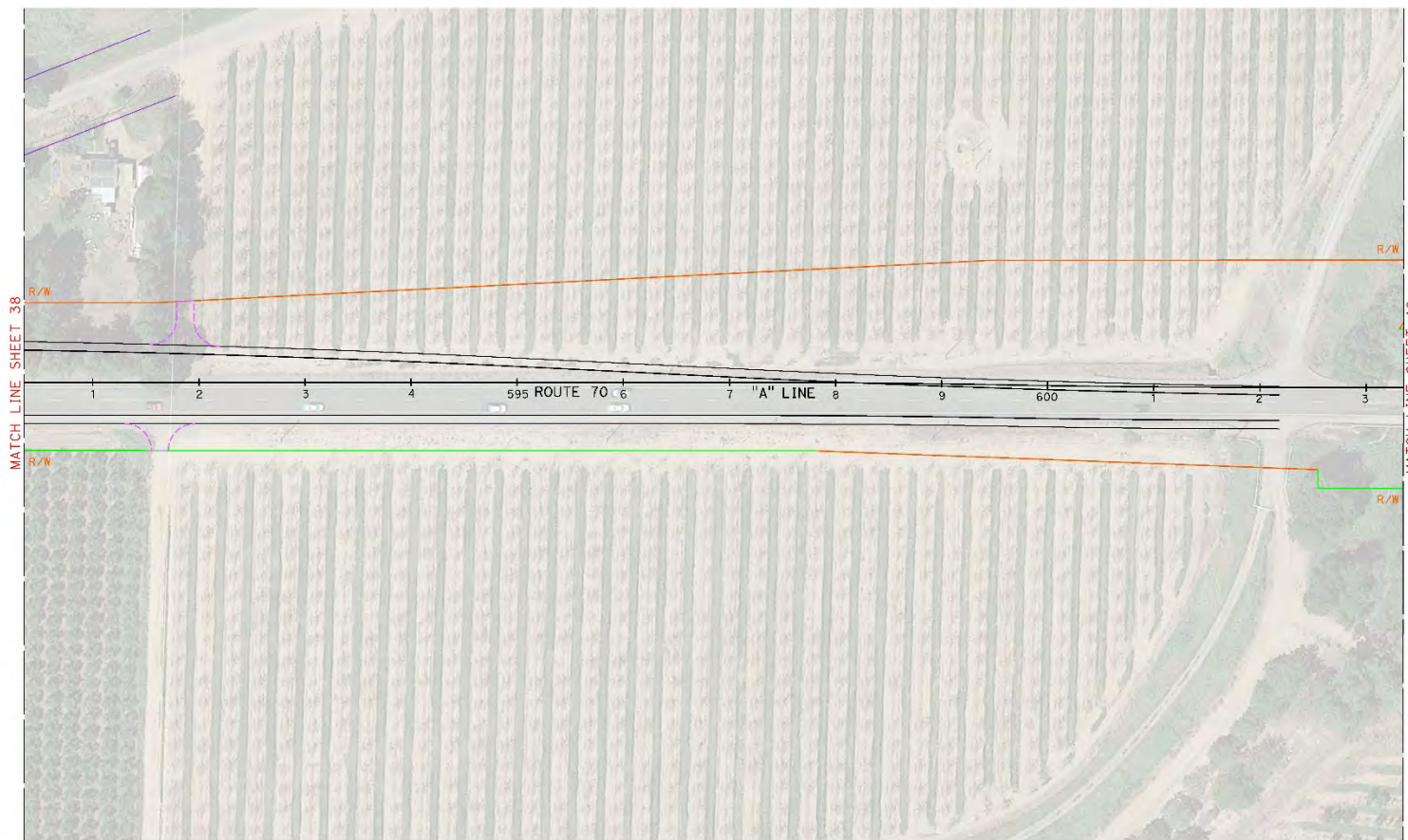


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	

REGISTERED CIVIL ENGINEER	DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
DO NOT WARRANT, GUARANTEE, OR
ACCEPT ANY LIABILITY FOR THE
ACCURACY OR COMPLETENESS OF SHOWN
CONDITIONS OF THIS PLAN SHEET.



ATTACHMENT B
ALTERNATIVE 1
SCALE: 1"=100'
SHEET-39

ORDER LAST REVISED 7/2/2010

USERNAME => AT12608
DGN FILE => AT126038.dgn

RELATIVE BORDER SCALE
15.0 IN. 150'-ES



UNIT 0323

PROJECT NUMBER & PHASE

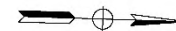
03180000186

DATE PLOTTED => 05-JAN-2020
TIME PLOTTED => 17:16

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Yub	70	16.2/25.8		

REGISTERED CIVIL ENGINEER	DATE

PLANS APPROVAL DATE

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

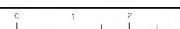


**ATTACHMENT B
ALTERNATIVE 1**
SCALE: 1"=100'
SHEET-40

10/17/10 15" REVISED 7/2/2010

USERNAME => 12008
DGN FILE => 411100000.dgn

RELATIVE HORIBLE SCALE
S IN INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

LAST REVISED: DATE PLOTTED => 28-JAN-2022
01-31-20 TIME PLOTTED => 08:23

Alternative 2

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. MATCH EXISTING SUPERELEVATION OR AS DIRECTED BY THE ENGINEER.
3. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
4. PROFILE GRADE LOCATED AT TOP OF HMA (TYPE A)

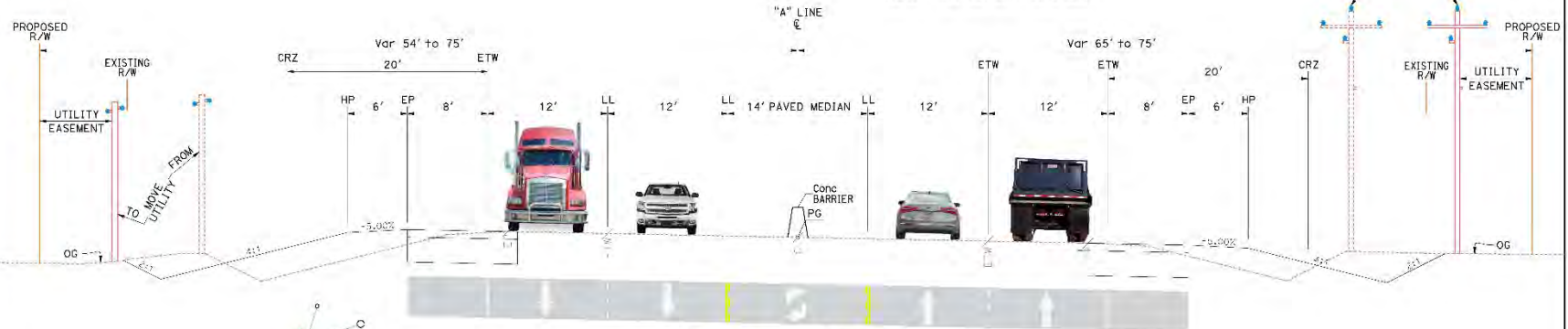
STRUCTURAL SECTIONS:

- | | | | |
|--|----------------------------------|--|---|
| 1 0.10' RHM-0
0.60' HMA (TYPE A)
2.25' CI 2 AB | 3 0.50' HMA (TYPE A)
0.75' AB | 4 EXISTING STRUCTURAL SECTION
MAINLINE
0.05' OPEN GRADED PMS
0.20' TYPE "B" PMS
0.67' CLA CTB
0.50' ISM | SHOULDERS
0.20' TO 0.17' TYPE "B" PMS
0.67' UB
0.50' ISM |
| 2 0.10' RHM-0
0.15' HMA-A OVERLAY
0.00' - 0.75' HMA (TYPE A) LEVELING COURSE | | | |

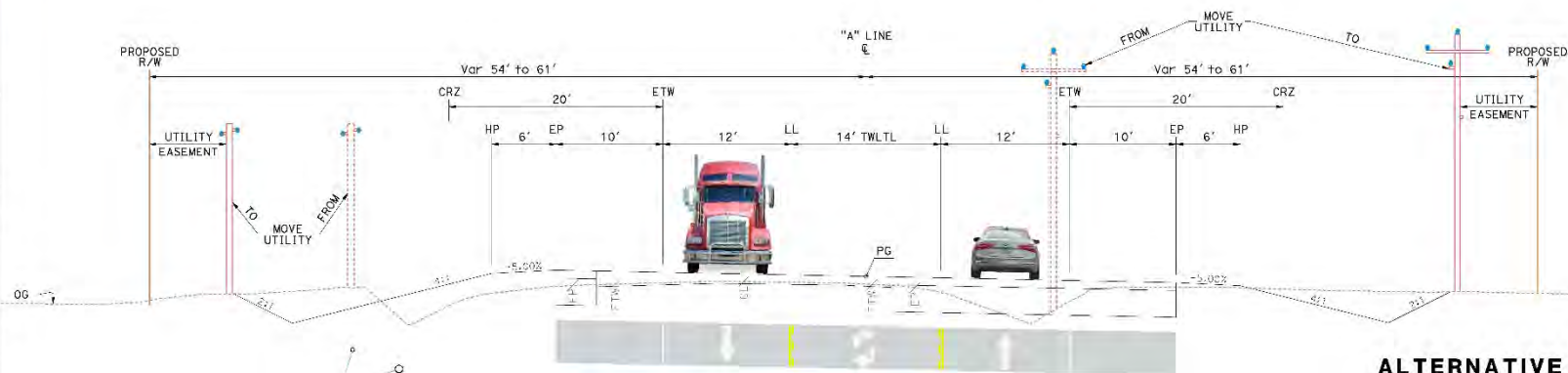
ABBREVIATIONS

CRZ - CLEAR RECOVERY ZONE
TWLTL - TWO WAY LEFT TURN LANE

DIST	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER DATE				
PLANS APPROVAL DATE				
THE ENGINEER OR ARCHITECT SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION SHOWN ON THIS PLAN SHEET. DATE OF THIS PLAN SHEET: 01/27/21				



"A" LINE (ROUTE 70)
CONSTRUCTED WITH YUBA 70 SHOPP 03-3F283K
(WIDEN LEFT AND RIGHT AND ADD CONCRETE BARRIER)



"A" LINE (ROUTE 70)
CONSTRUCTED WITH YUBA 70 SHOPP
(YUBA 70 SAFETY PROJECT EA 03-4F380)

**ALTERNATIVE 2
TYPICAL CROSS SECTIONS**
NO SCALE

X-1

ORDER: 0321-27-21

USERNAME: 0321-27-21
DON FILE: 0321-27-21

SCALE: 1" = 10' HORIZONTAL
1" = 10' VERTICAL

UNIT: 0322

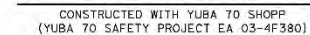
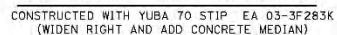
PROJECT NUMBER & PHASE

03120000681

DATE PLOTTED: 01/27/21
TIME PLOTTED: 10:12

THE ACCURACY OF COMPLETIONS OF SWORN
COPIES OF THIS PLAN SHEET.

3. PROFILE GRADE LOCATED AT TOP OF HMA (TYPE A).



X-3

03120000681

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 03/28/2014	DESIGNED BY: A. ANTHONY JONES	REVIEWED BY: R. SCOTT FOSTER	DATE: 03/28/2014
Caltrans			KEN KEATON			

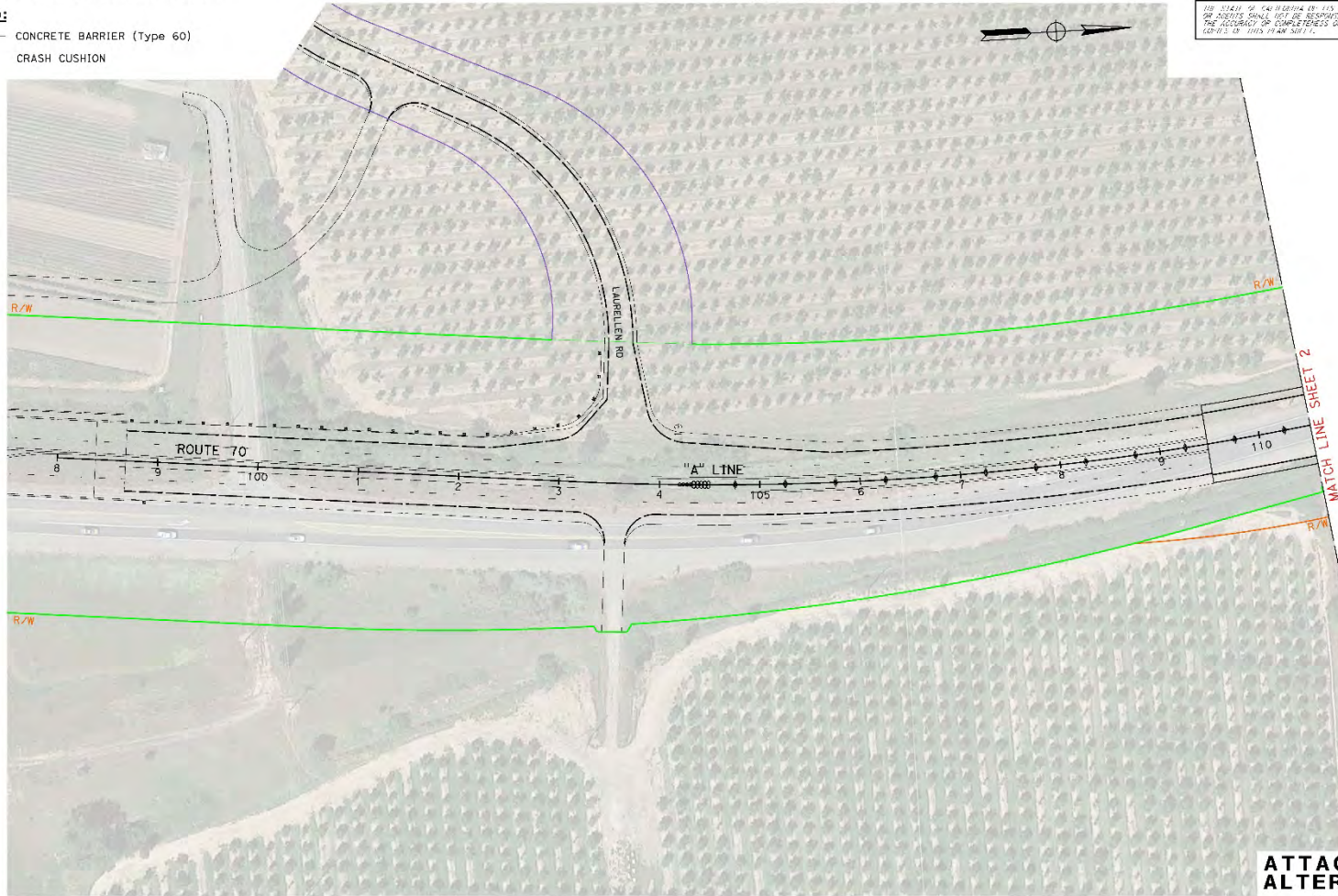
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

LEGEND:

- CONCRETE BARRIER (Type 60)
- CRASH CUSHION

YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER J.A.L.				
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON PROVIDED BY ANY OTHER PARTY.</small>				

ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-1

DORDER AST REVISED 7/2/2010

USER: JMT -> 01126008
DYN FILE -> A:\2000\01.dgn

RELATIVE BORDER SCALE
15 IN. INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 03/28/2014
TIME PLOTTED: 11:11:11

STATE OF CALIFORNIA Caltrans	DEPARTMENT OF TRANSPORTATION DESIGN	PROJECT NUMBER 03180000186	DESIGNED BY KEN KEATON	CHECKED BY A. ANTHONY JONES R SCOTT FOSTER	REVISIONS DATE BY

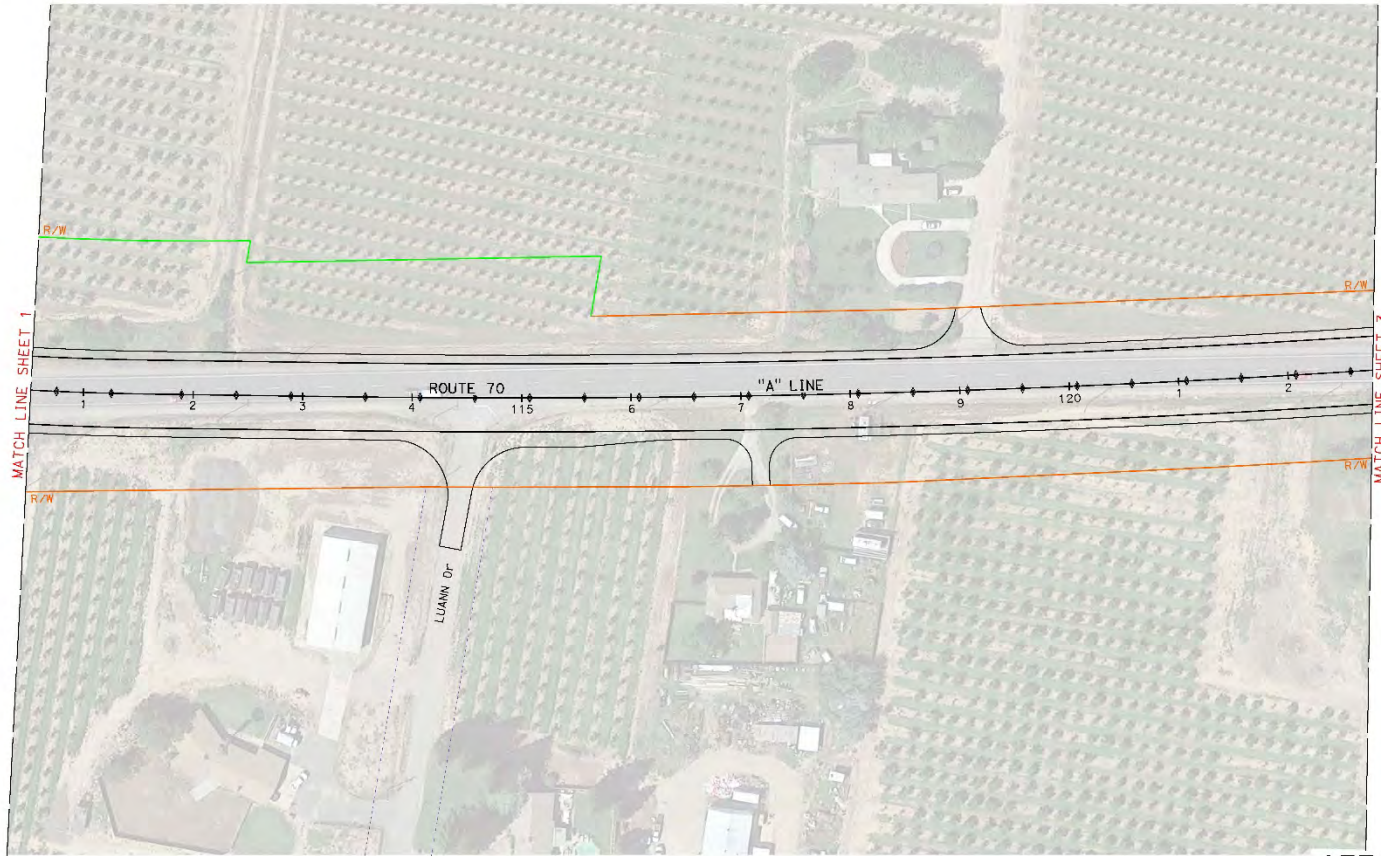
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON PROVIDED UNLESS SPECIFICALLY STATED OTHERWISE.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-2

ORDER: AST REF: SF 7/2/2010

USERNAME: >>A:\P\KOR
DON FILE: >>A:\72cu022.dgn

RE: ALTERNATIVE BOREHOLE SCALE
15 IN. INCHES



UNIT

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 07/27/2010
TIME PLOTTED: 11:17
01-31-20

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT SUPERVISOR	DESIGNED BY	REVIEWED BY	DATE
			KEN KEATON	DAVID A. JONES	A. ANTHONY JONES	04.11.2017
				DAVID A. JONES	R SCOTT FOSTER	04.11.2017

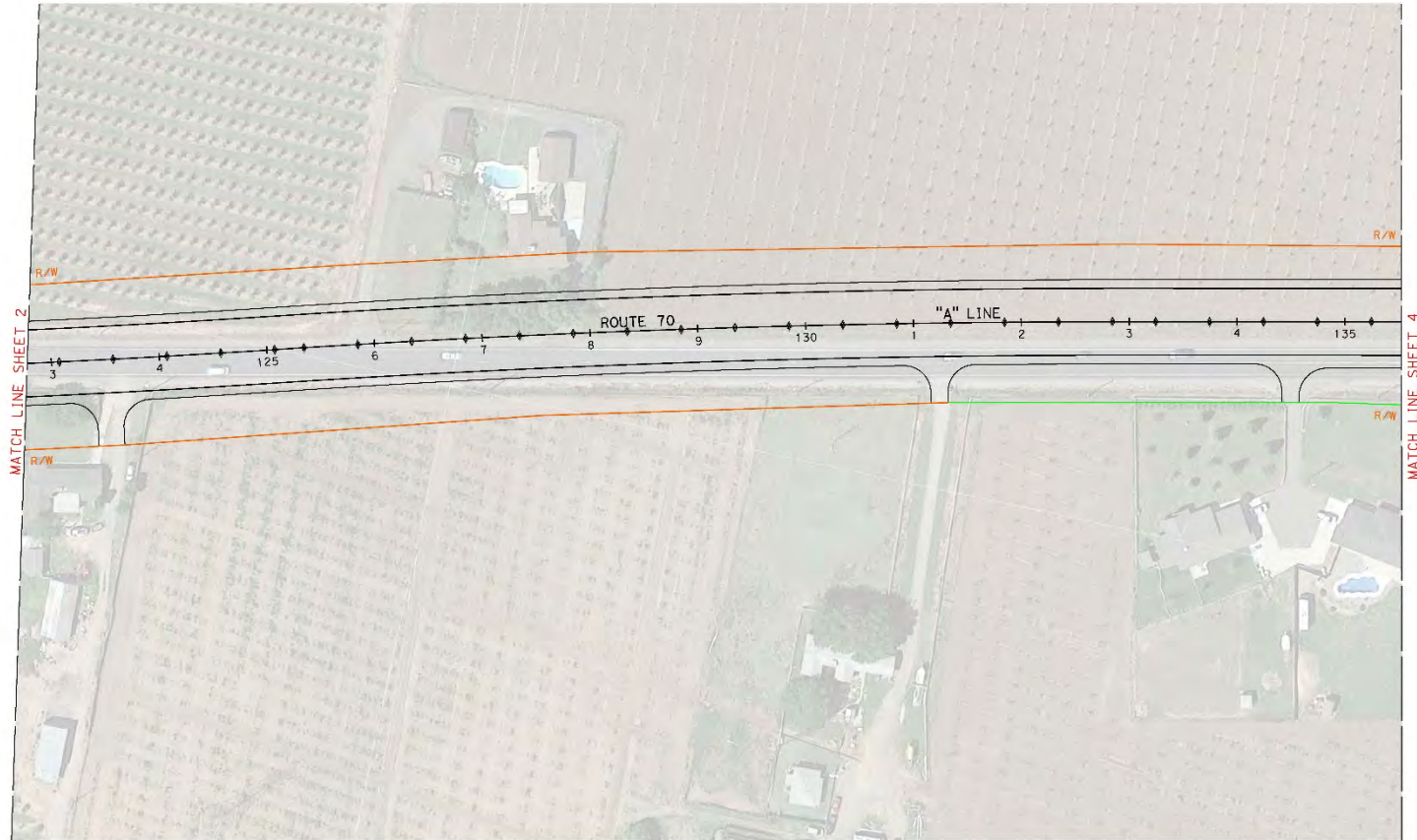
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON PROVIDED UNLESS SPECIFICALLY STATED OTHERWISE.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -3

ORDER: 03180000186

USERNAME: 03180000186
DON FILE: 03180000186.dgn

RE: A-100, 100' SCALE
15 IN. X 11 IN.

0 1 2

UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 04/11/2017
TIME PLOTTED: 09:28:14
01-31-20

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT NUMBER: 03180000186	DESIGNED BY: A. ANTHONY JONES	REVIEWED BY: DAVID REY
			KEN KEATON	R SCOTT FOSTER	

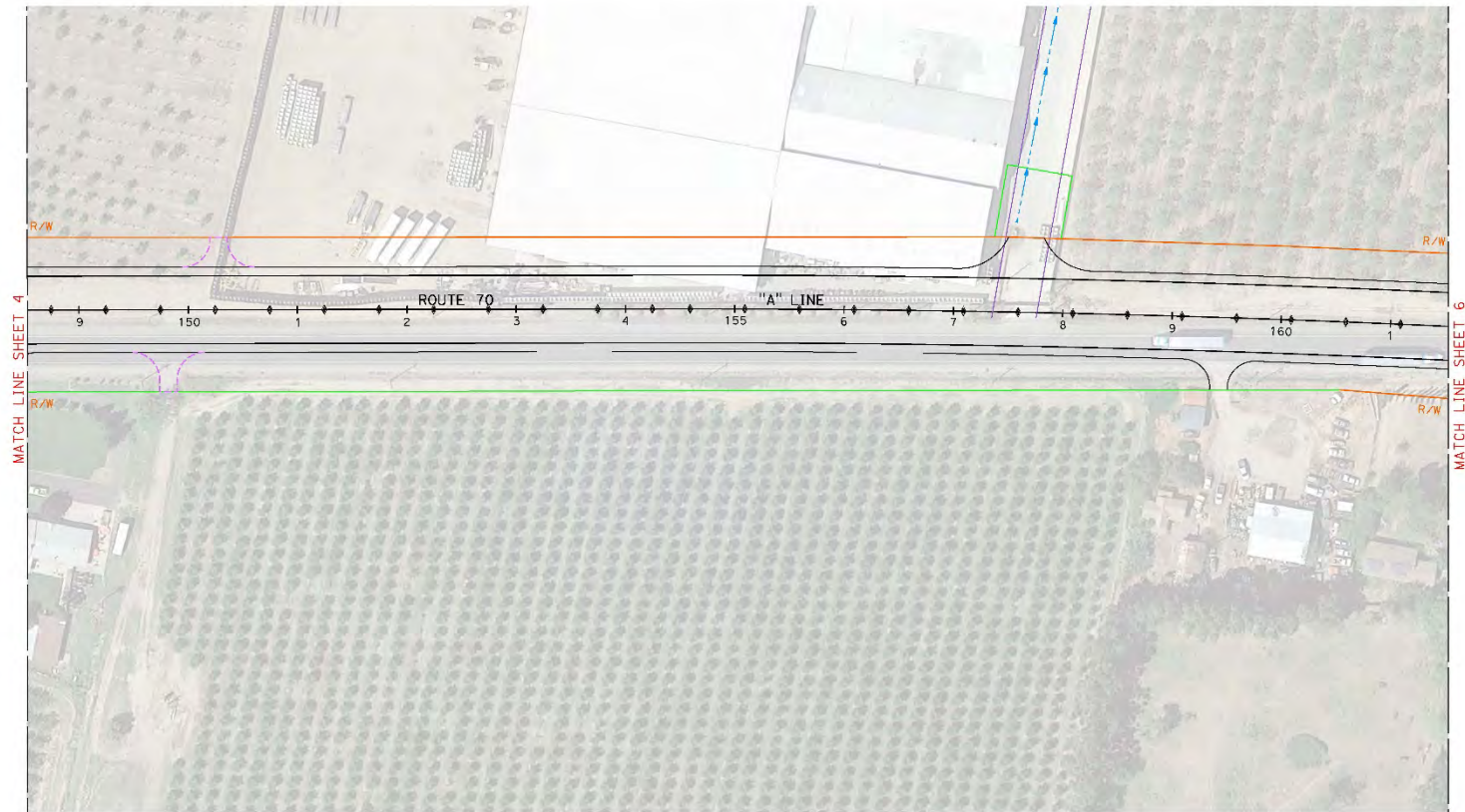
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON PROVIDED UNLESS SPECIFICALLY NOTED OTHERWISE.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -5

ORDER: AST REVISED 7/2/2010

USERNAME: >>A1111111
DON FILE: >>A1111111.dgn

RE: A1111111, BORDED SCALE
15 IN. X 11 IN.



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 01-31-20
TIME PLOTTED: 03:10:00

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT NUMBER: 03180000186	DESIGNED BY: A. ANTHONY JONES	REVIEWED BY: R. SCOTT FOSTER	DATE: 04/11/2019	DATE: 04/11/2019
CD	CD	CD	CD	CD	CD	CD	CD

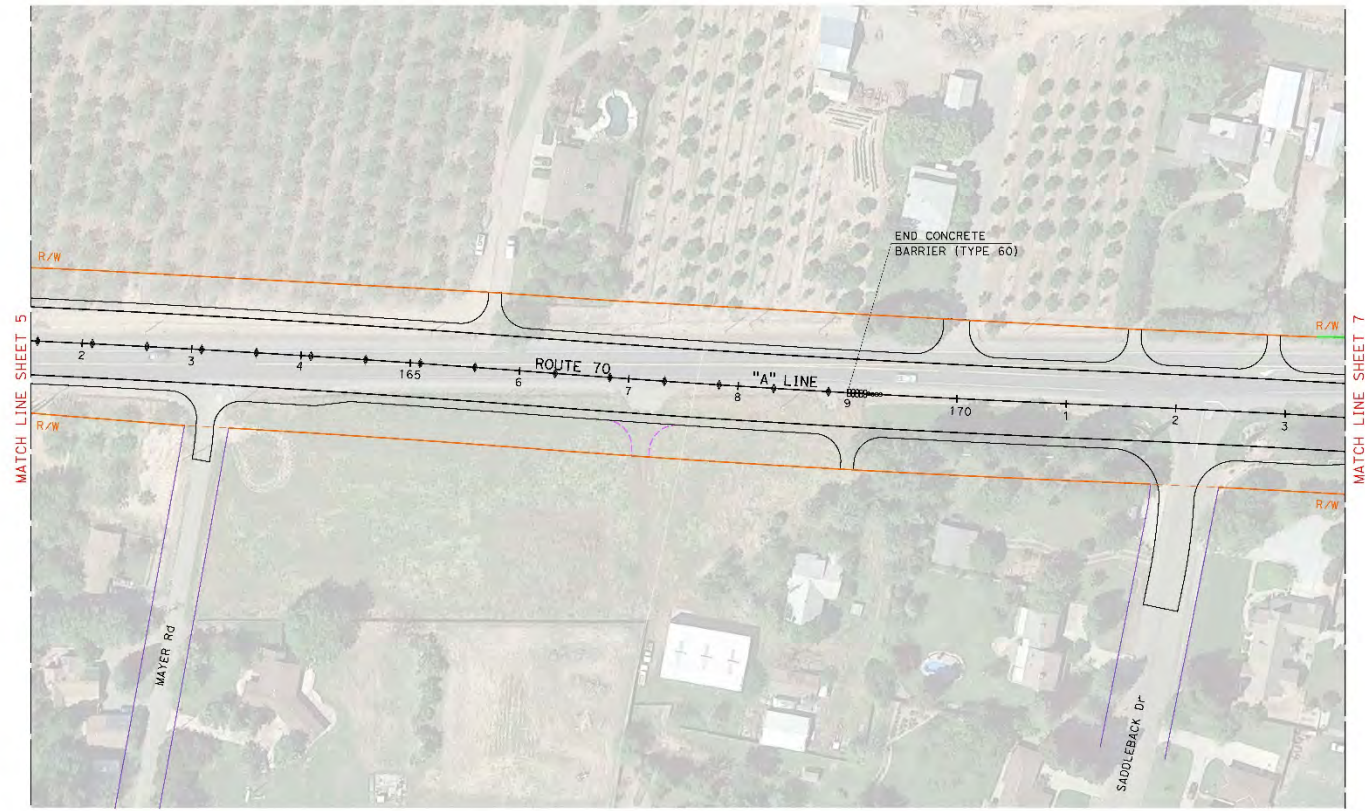
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T15N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA PROVIDED BY ANY OTHER PARTY. THE USER SHALL BE RESPONSIBLE FOR THE ACCURACY OF ANY INFORMATION OR DATA PROVIDED BY ANY OTHER PARTY.</small>				

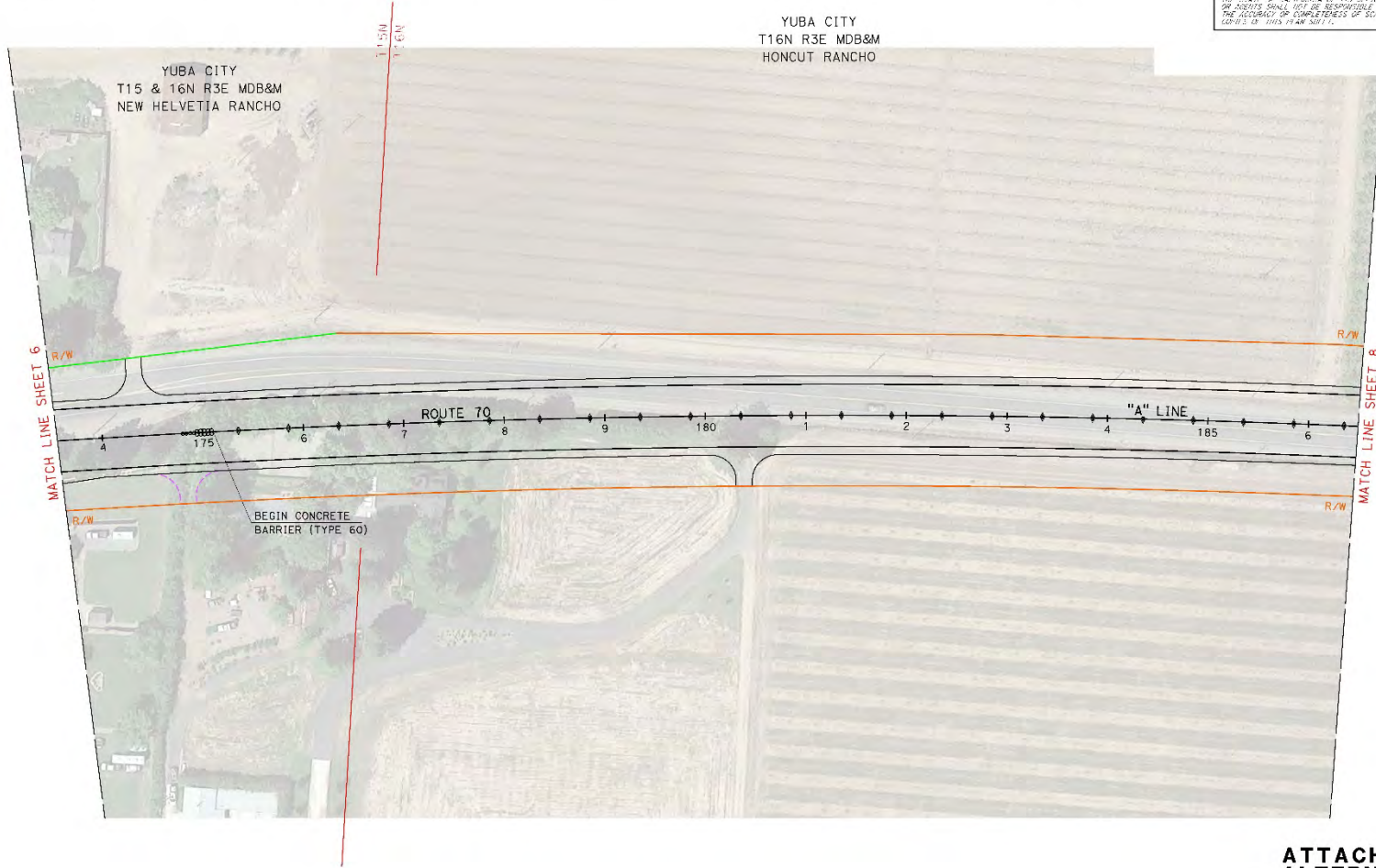


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -6

STATE OF CALIFORNIA Caltrans	DEPARTMENT OF TRANSPORTATION DESIGN	PROJECT NUMBER 0323	PROJECT NAME NEW HELVETIA RANCHO	DESIGNED BY KEN KEATON	CHECKED BY KEN KEATON	DESIGNED BY A. ANTHONY JONES	CHECKED BY R SCOTT FOSTER	REVISIONS DATE	BY	DATE

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON PROVIDED BY ANY OTHER PARTY.</small>				
<div style="text-align: center;"> </div>				

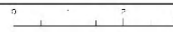
**ATTACHMENT B
ALTERNATIVE 2
SHEET -7**

SCALE: 1"=100'

ORDER: AST REVISED 7/2/2010

USERNAME: >>X12ROW
DON FILE: >>A_72cu027.dgn

HE-A-TIVE BORDER SCALE
15 IN. INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

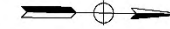
DATE PLOTTED: 01-31-20
TIME PLOTTED: 09:23:05

STATE OF CALIFORNIA <i>Caltrans</i>	DEPARTMENT OF TRANSPORTATION DESIGN	FILED: 2024-03-20 10:04 KEN KEATON	CALTRANS DESIGNED BY CHECKED BY	A. ANTHONY JONES R SCOTT FOSTER	REVISED BY DATE REVISED

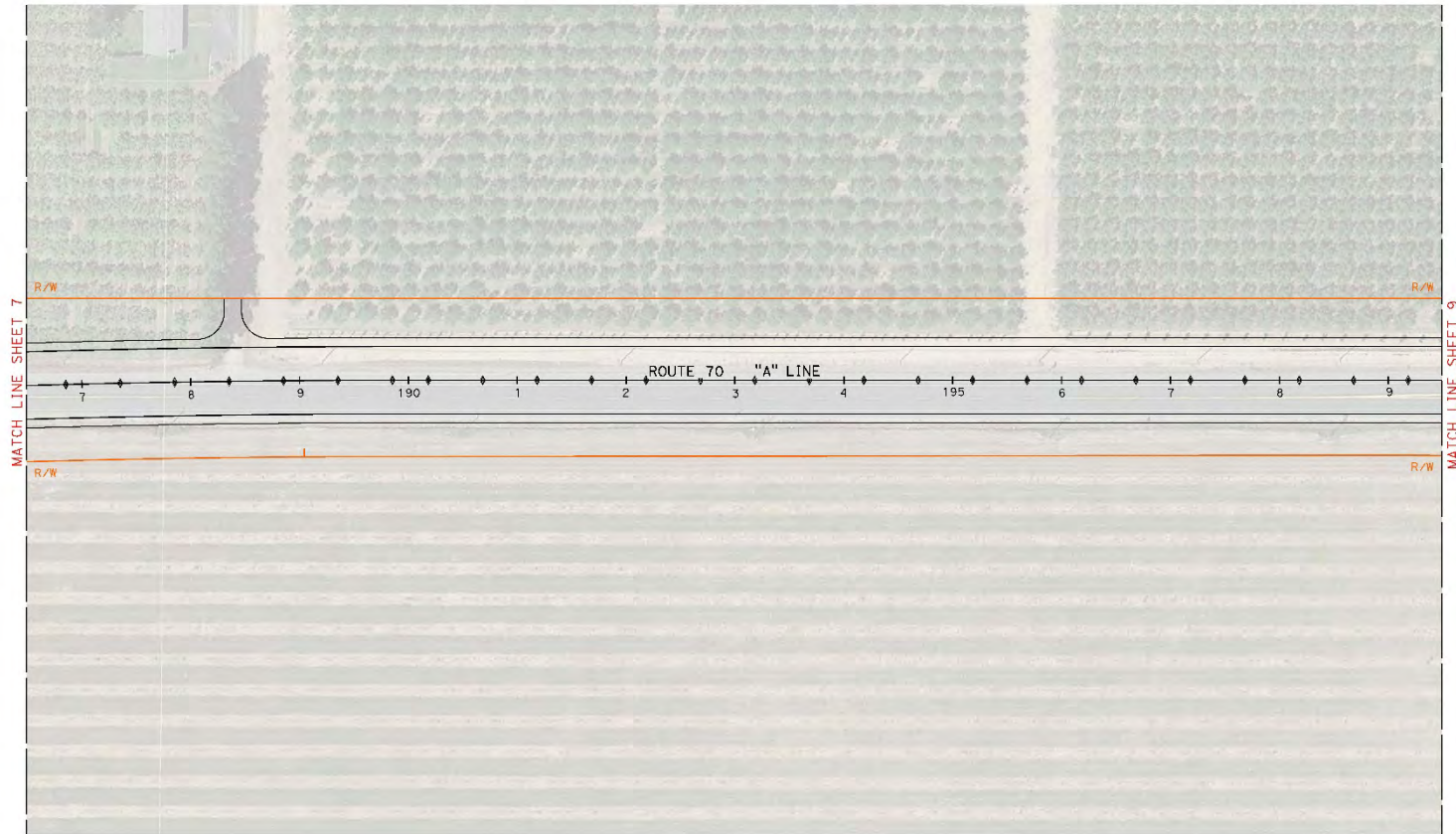
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION SHOWN ON THIS PLAN SHEET.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -8

ORDER: AST REVISED 7/2/2010

USERNAME: >>X12KOR
DON FILE: >>A_72cu028.dgn

RELATIVE BORDER SCALE
15 IN. INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

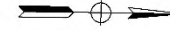
DATE PLOTTED: 01-31-20
TIME PLOTTED: 23:07

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT NUMBER: 03180000186	DESIGNED BY: A. ANTHONY JONES	REVIEWED BY: R. SCOTT FOSTER	DATE: 04/11/2019	DATE: 04/11/2019
03	Yub	70	16.2/25.8				

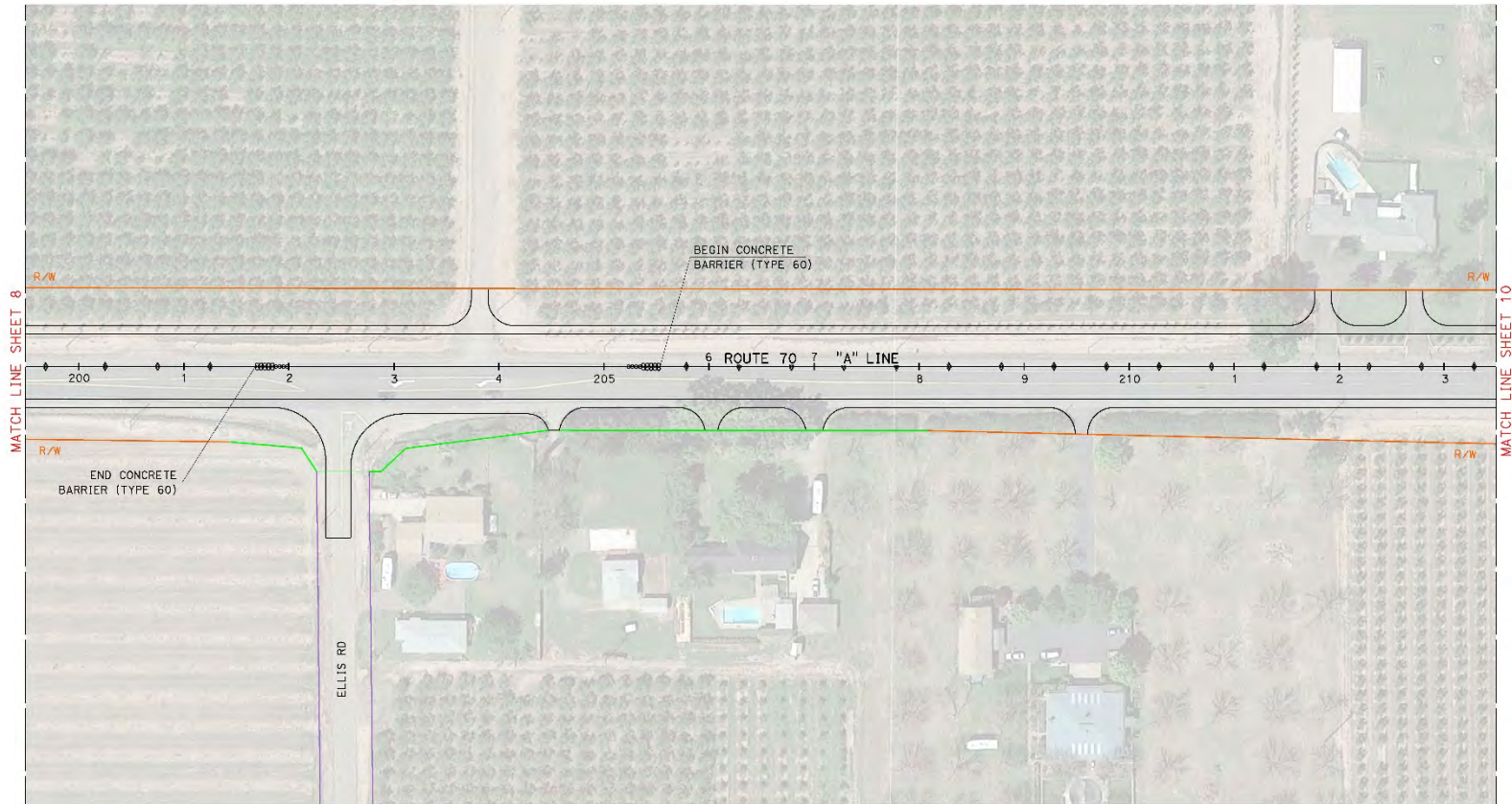
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THESE PLANS OR ANY PART THEREOF SHALL NOT BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE ENGINEER. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OF THE DATA OR THE COMPLETION OF THE PROJECT.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -9

ORDER: 03180000186

USERNAME: 03180000186
DON FILE: 03180000186.dgn

RELATIVE BORDER SCALE
15 IN. INCHES

0 1 2

UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 04/11/2019
TIME PLOTTED: 01:31:20

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 2024-03-20 10:50 AM	DESIGNED BY: KEN KEATON	CHECKED BY: A. ANTHONY JONES	REVIEWED BY: R SCOTT FOSTER	DATE: 04/11/2024
--	--------	----------------------------	-------------------------	------------------------------	-----------------------------	------------------

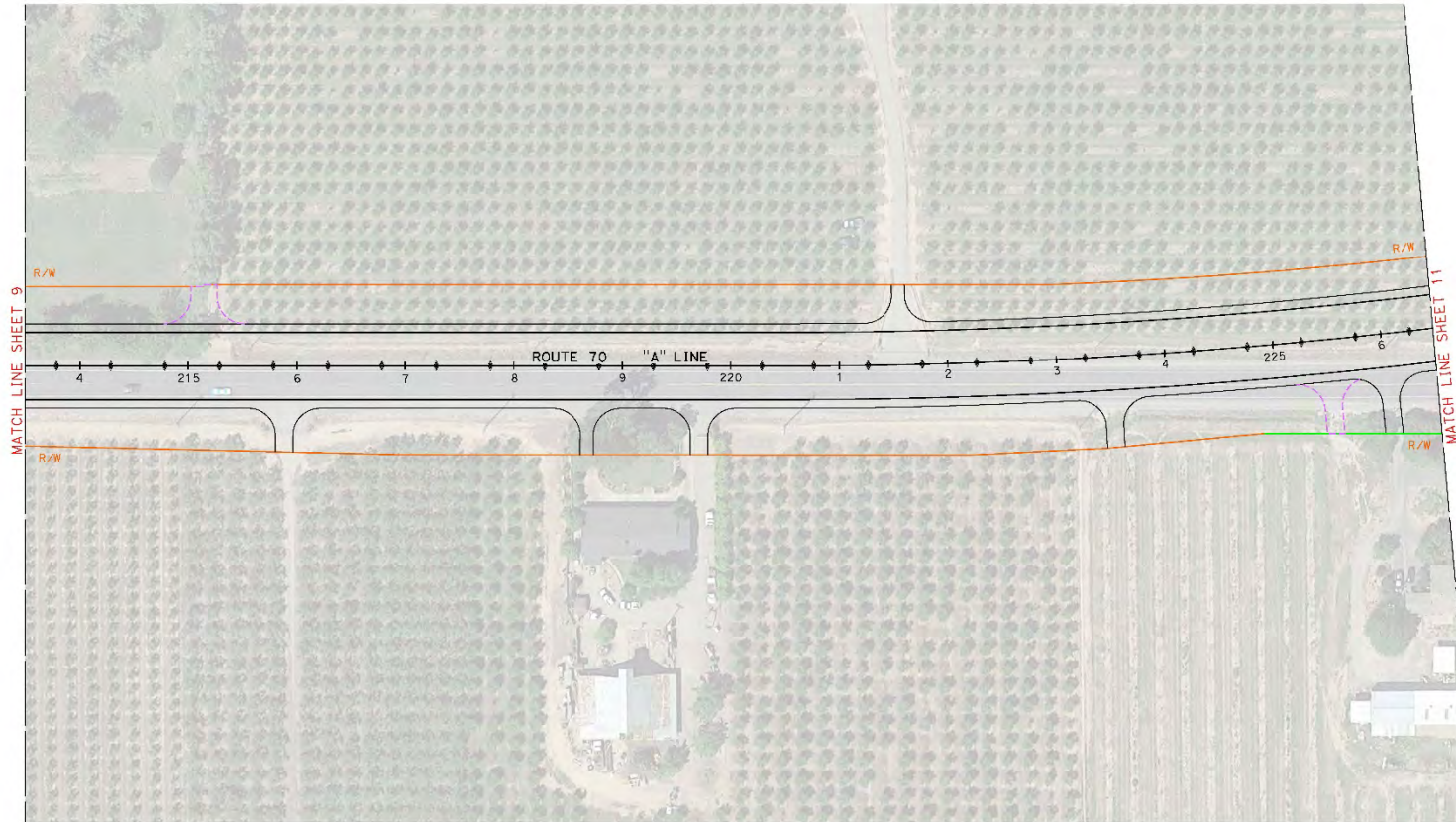
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE		NO. EXP. CIVIL		
<small>THE STATE OF CALIFORNIA IS NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION SHOWN ON THIS PLAN SHEET.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-10

ORDER: 0323 REVISED 7/2/2010

USERNAME: 0323
DON FILE: 0323

RELATIVE BOXED SCALE
15 IN. INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

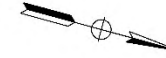
DATE PLOTTED: 01-31-20
TIME PLOTTED: 03:10:00

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 03/11/2014	DESIGNED BY: A. ANTHONY JONES	REVIEWED BY: DAVID REY
Ken Keaton	DESIGNED BY: R SCOTT FOSTER	FILED: 03/11/2014	FILED: 03/11/2014	FILED: 03/11/2014

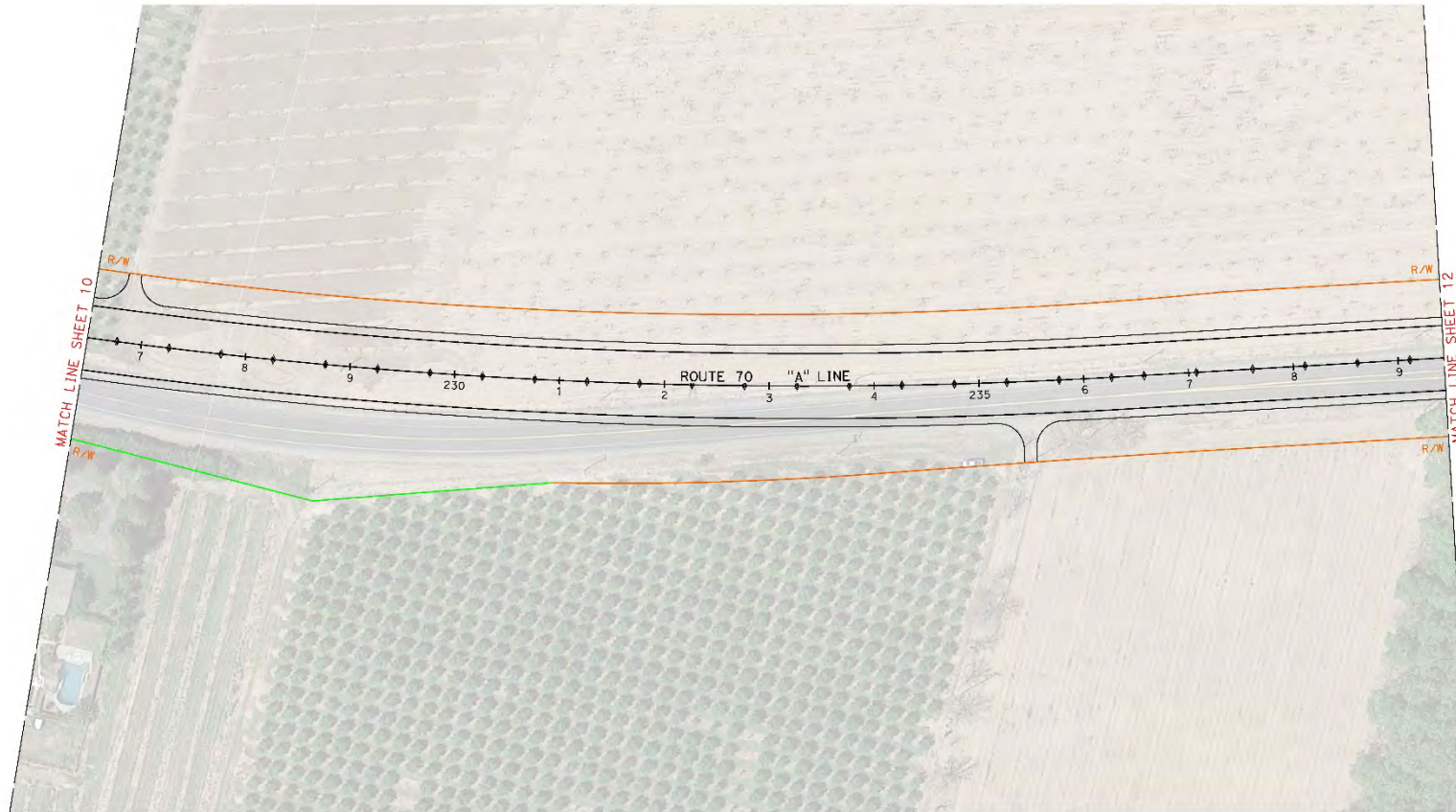
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY DATA OR THIS PLAN SHEET.</small>				

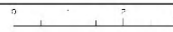


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -11

ORDER: 03/11/2014

USERNAME: 03/11/2014
DON FILE: 03/11/2014

RELATIVE BOXED SCALE
15 IN. INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

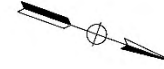
DATE PLOTTED: 03/11/2014
TIME PLOTTED: 03:17:27

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT NUMBER: 0323	DESIGNED BY: A. ANTHONY JONES	REVIEWED BY: R. SCOTT FOSTER	DATE: 04/11/2017
Caltrans						

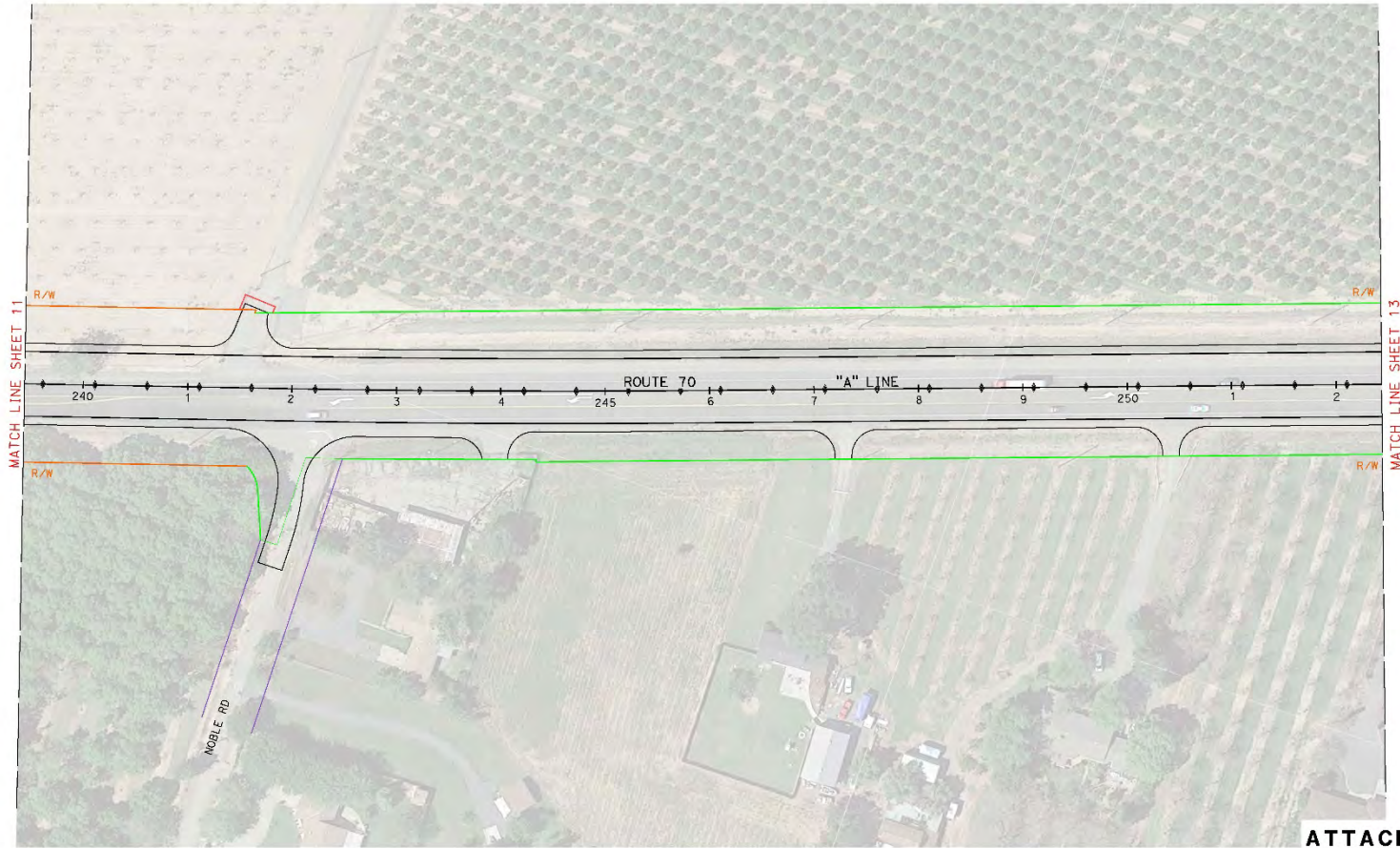
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA IS NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION SHOWN ON THIS PLAN SHEET.</small>				

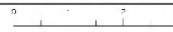


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -12

ORDER: 0323 REVISED: 7/2/2017

USERNAME: 0323
DON FILE: 0323

RELATIVE BOXED SCALE
15 IN. INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

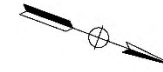
DATE PLOTTED: 07/2/2017
TIME PLOTTED: 01:31:20

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION Caltrans	PROJECT MANAGER KEN KEATON	DESIGNED BY A. ANTHONY JONES	CHECKED BY R SCOTT FOSTER	REVISIONS BY DATE

NOTES:

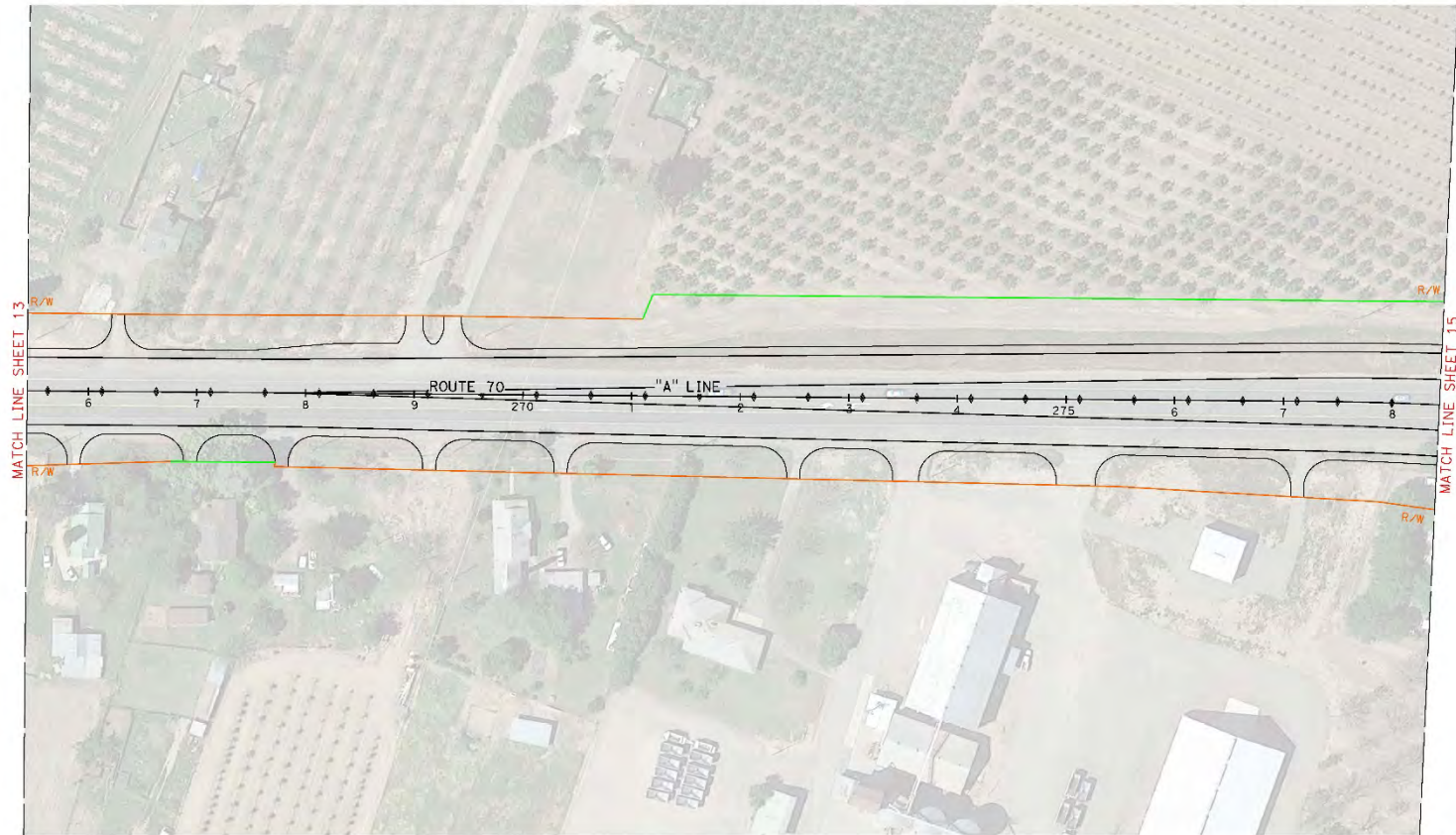
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY DATA OR DATA FROM ANY SOURCE</small>				

PROFESSIONAL ENGINEER
NO.
EXP.
CIVIL

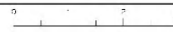


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -14

DORDER AST REVISED 7/2/2010

USERNAME => A:\P\KOR
DON FILE => A:\2007\4.dgn

HE-A-TIVE BORDER SCALE
15 IN. INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED => 01/31/20
TIME PLOTTED => 20:13

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 03/28/2014	DESIGNED BY	CHECKED BY	REVIEWED BY	DATE
			KEN KEATON			A. ANTHONY JONES	04/11/2014
						R SCOTT FOSTER	

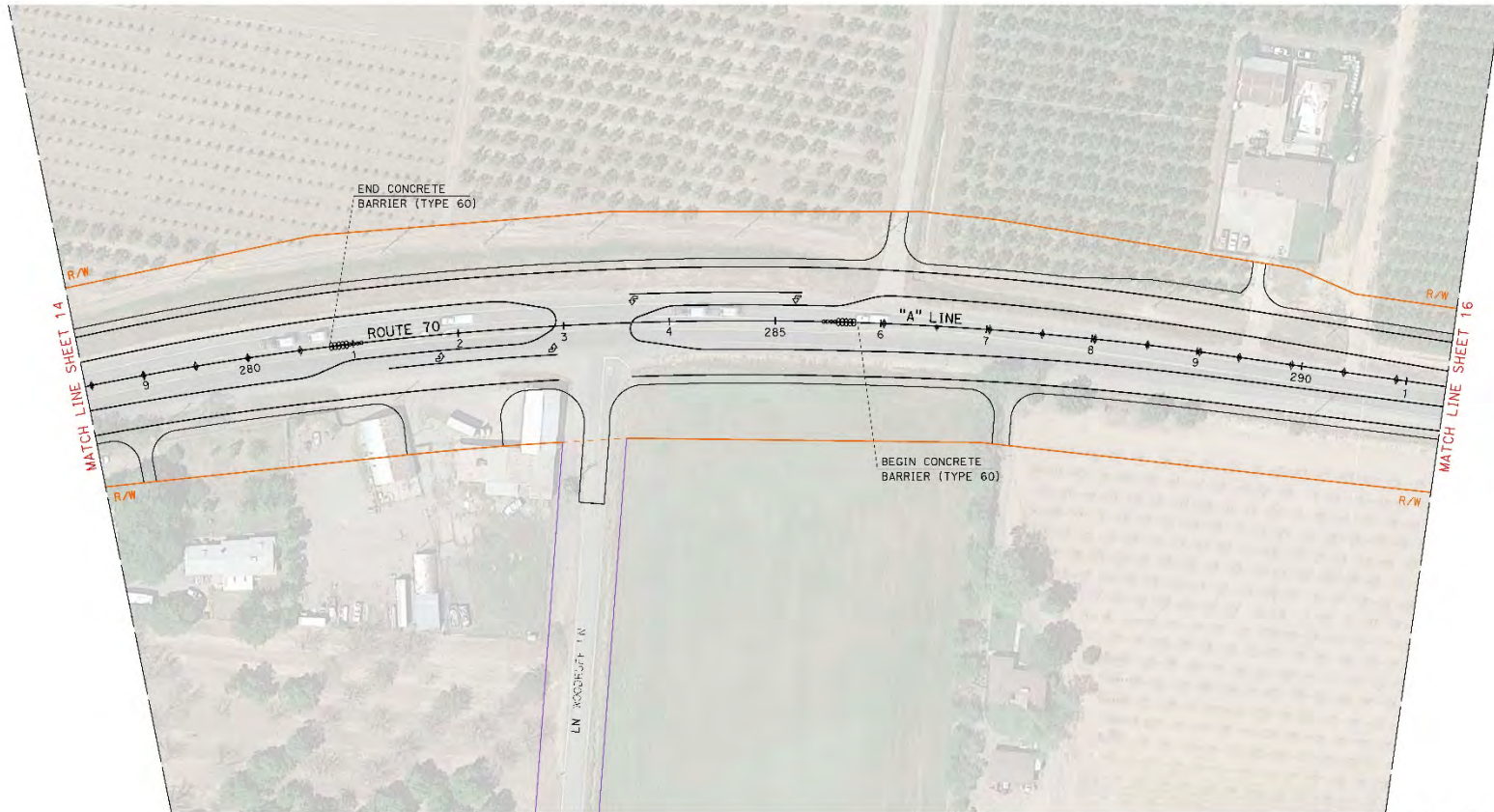
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON UNLESS SPECIFICALLY STATED OTHERWISE.</small>				

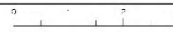


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -15

ORDER: AST REF: SF 7/2/2010

USERNAME: >>A1190R
DON FILE: >>A11200015.dgn

HEAT: 1/16, BORDER: SCALE
15 IN. INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 01/31/20
TIME PLOTTED: 20:13

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 2024-03-04	DESIGNED BY: KEN KEATON	CHECKED BY: A. ANTHONY JONES	REVISED BY: R SCOTT FOSTER	DATE: 04/11/2024
--	--------	-------------------	-------------------------	------------------------------	----------------------------	------------------

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY DATA OR THIS PLAN SHEET.				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -16

ORDER: 0323 REF: 0323 7/2/2010

USERNAME: 0323
DON FILE: 0323

RELATIVE BORDER SCALE
15 IN. INCHES

0 1 2

UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 03/11/2024
TIME PLOTTED: 03:15

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 2024-03-20 10:00 AM	DESIGNED BY: KEN KEATON	CHECKED BY: A. ANTHONY JONES	REVIEWED BY: R. SCOTT FOSTER	DATE: 03/20/2024
---------------------	------------------------------	--------	----------------------------	-------------------------	------------------------------	------------------------------	------------------

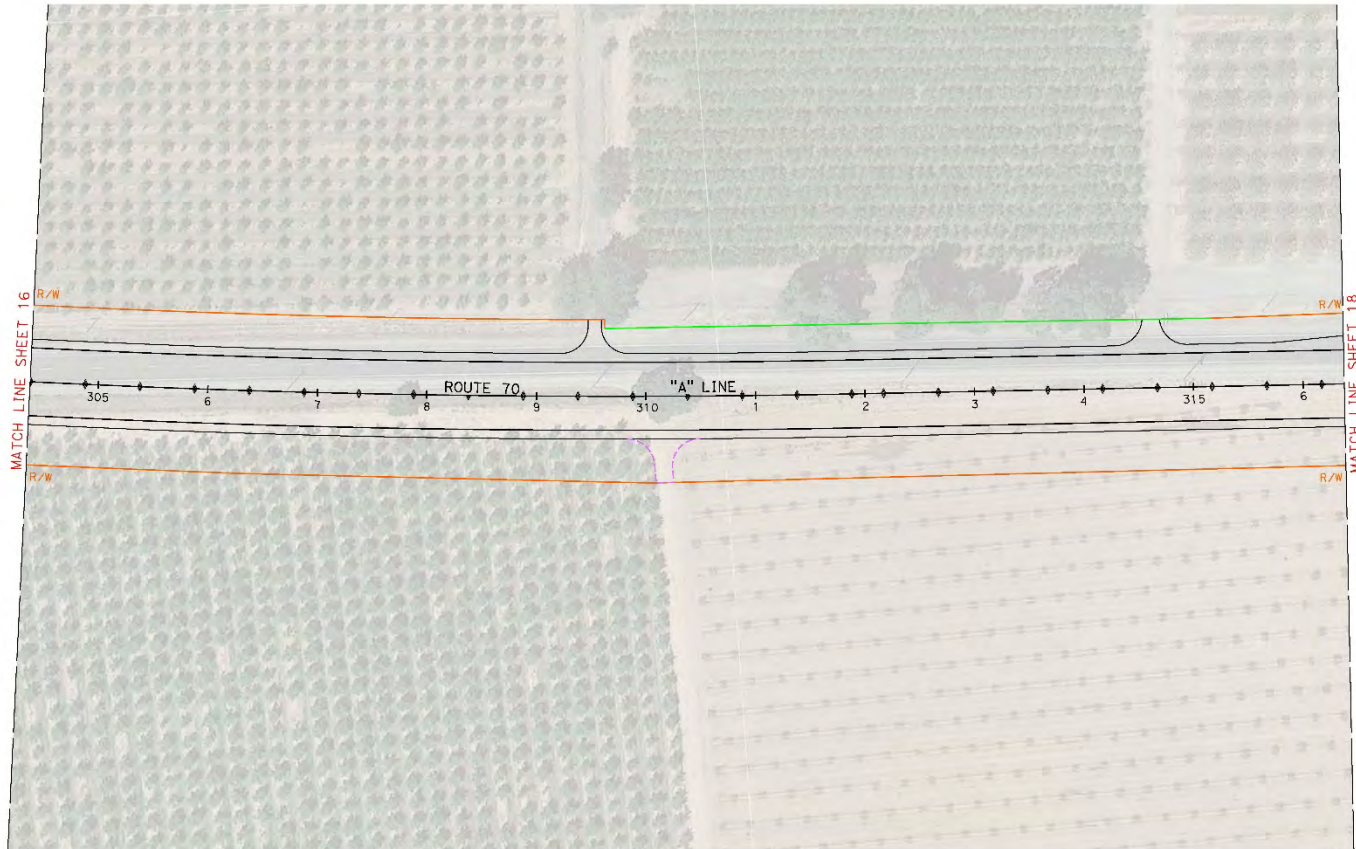
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	Yub	70	16.2/25.8		
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE					
<small> THE STATE OF CALIFORNIA DOES NOT GUARANTEE OR WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, DATA, OR OTHER MATERIALS HEREON. THE USER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION, DATA, OR OTHER MATERIALS HEREON. </small>					



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -17

ORDER: 03180000186

USERNAME: 03180000186
DON FILE: 03180000186

RELATIVE BOXED SCALE
15 IN. INCHES

0 1 2

UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

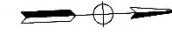
DATE PLOTTED: 03/20/2024
TIME PLOTTED: 10:00 AM

STATE OF CALIFORNIA Caltrans	DESIGN	PROJECT SUPERVISOR KEN KEATON	DESIGNED BY A. ANTHONY JONES	CHECKED BY R SCOTT FOSTER	REVISIONS BY DATE

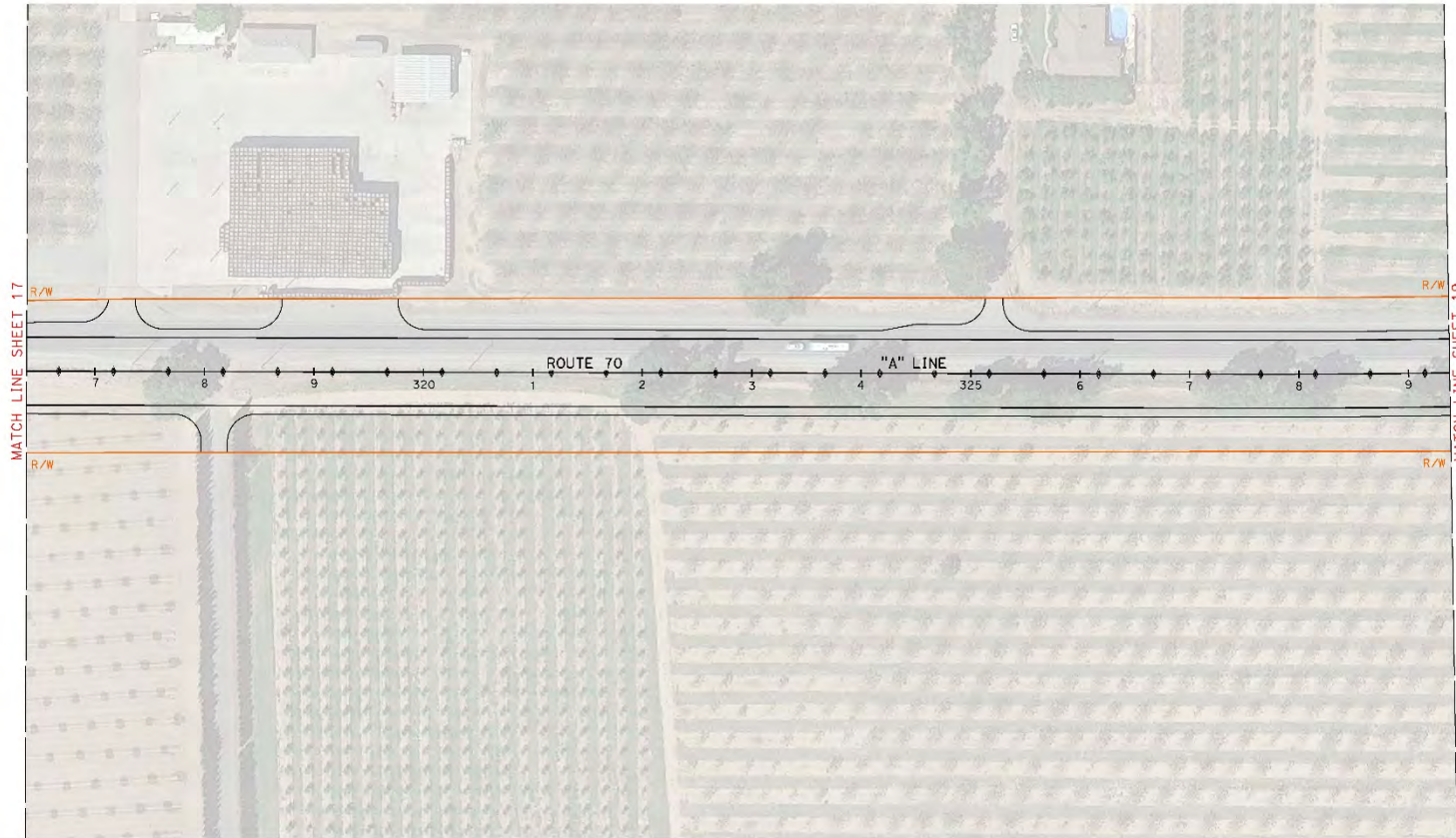
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small> THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON PROVIDED BY ANY OTHER PARTY. </small>				
NO. OF SHEETS: 25 NO. OF SHEETS USED: 25		CIVIL STATE OF CALIFORNIA		



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -18

ORDER: AST REVISED 7/2/2010

USERNAME: >>A12ROR
DON FILE: >>A12ROR.dwg

RELATIVE BORDER SCALE
15 IN. INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

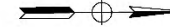
DATE PLOTTED: 01-31-20
TIME PLOTTED: 23:41

STATE OF CALIFORNIA Caltrans	DESIGN	PROJECT SUPERVISOR KEN KEATON	DESIGNED BY A. ANTHONY JONES	CHECKED BY R SCOTT FOSTER	REVISED BY UA 1 REVISED

NOTES:

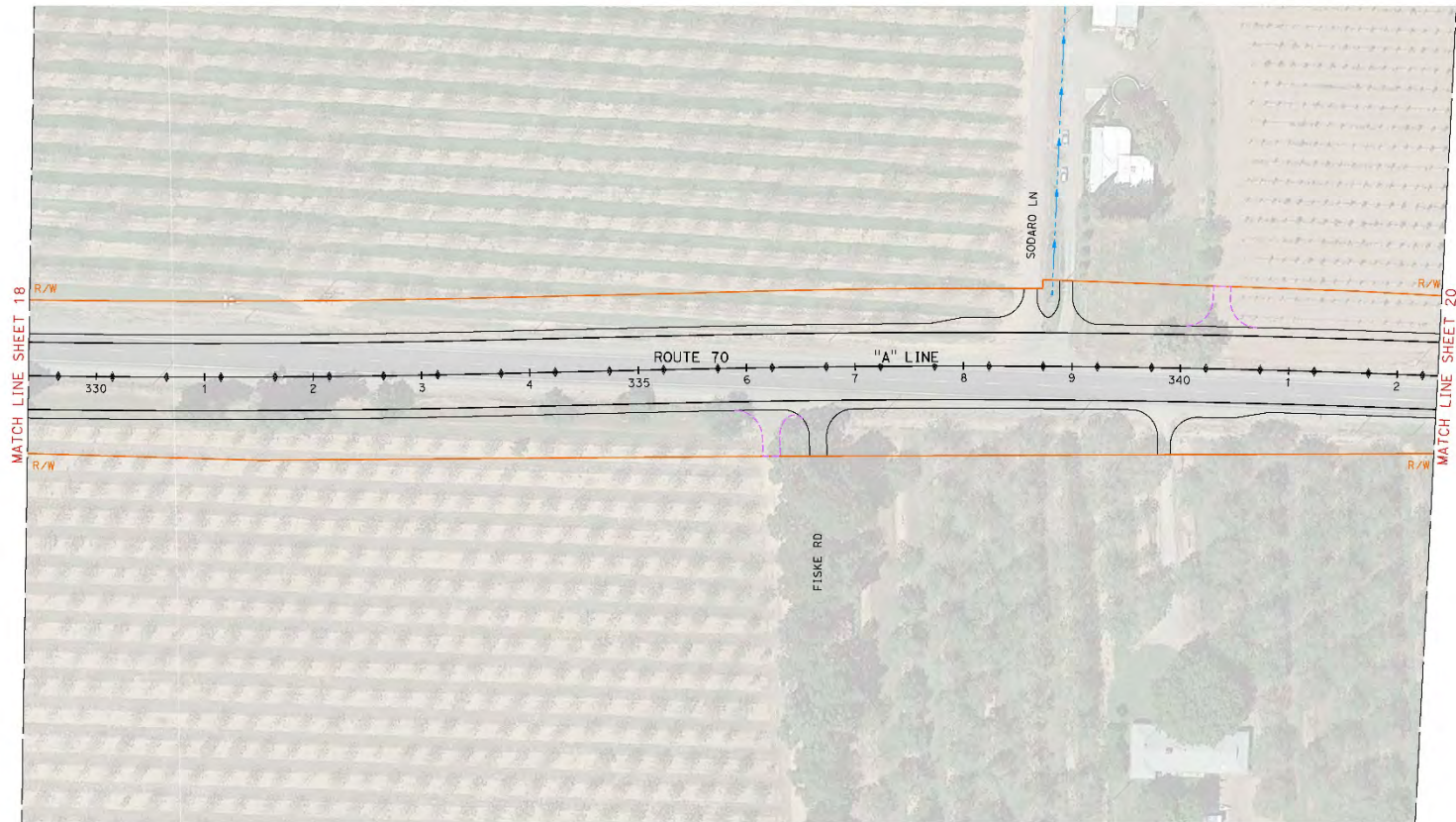
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY DATA OR THIS PLAN SHEET.</small>				

NO.
EXP. CIVIL
DATE OF EX. PENDING



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -19

ORDER: AST REVISED 7/2/2010

USERNAME: >>A12KOR
DGN FILE: >>A12KOR.dgn

RELATIVE BORDER SCALE
15 IN. INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 01-31-20
TIME PLOTTED: 00:00

STATE OF CALIFORNIA Caltrans	DESIGN	PROJECT NUMBER 0323	DESIGNED BY KEN KEATON	CHECKED BY A. ANTHONY JONES R SCOTT FOSTER	REVISIONS BY DATE

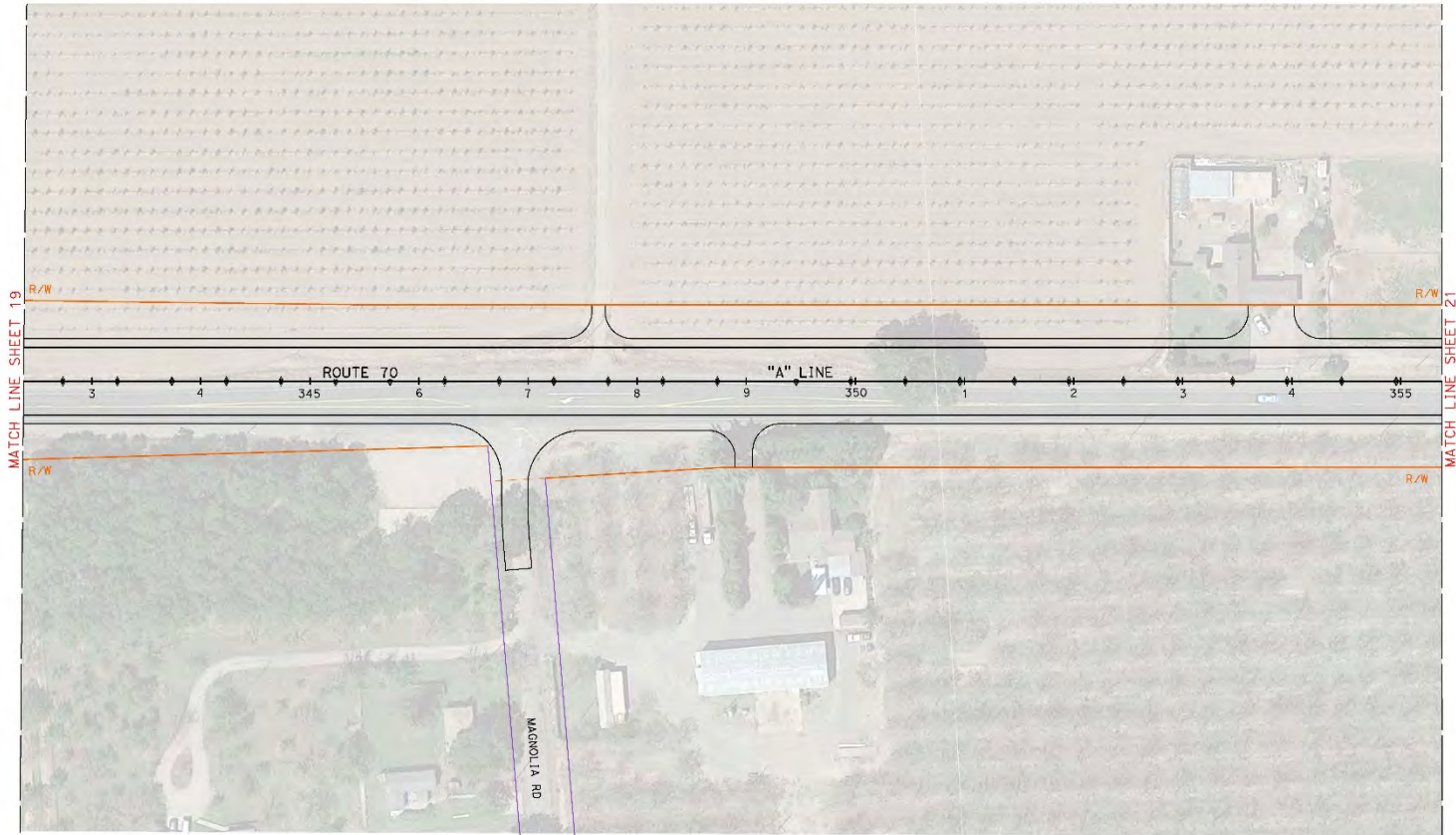
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA OR ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY DATA OR DATA SOURCES OR INFORMATION OBTAINED BY THIS PLAN SHEET.</small>				

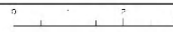


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-20

ORDER: AST REVISED 7/2/2010

USERNAME: >>A19KOR
DON FILE: >>A172u020.dgn

RE-A-100, 100' SCALE
15 IN. X 11 IN.



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 01-31-20
TIME PLOTTED: 03:16

STATE OF CALIFORNIA Caltrans	DEPARTMENT OF TRANSPORTATION DESIGN	PROJECT NUMBER 0323	DESIGNED BY KEN KEATON	CHECKED BY A. ANTHONY JONES	REVISIONS BY DATE

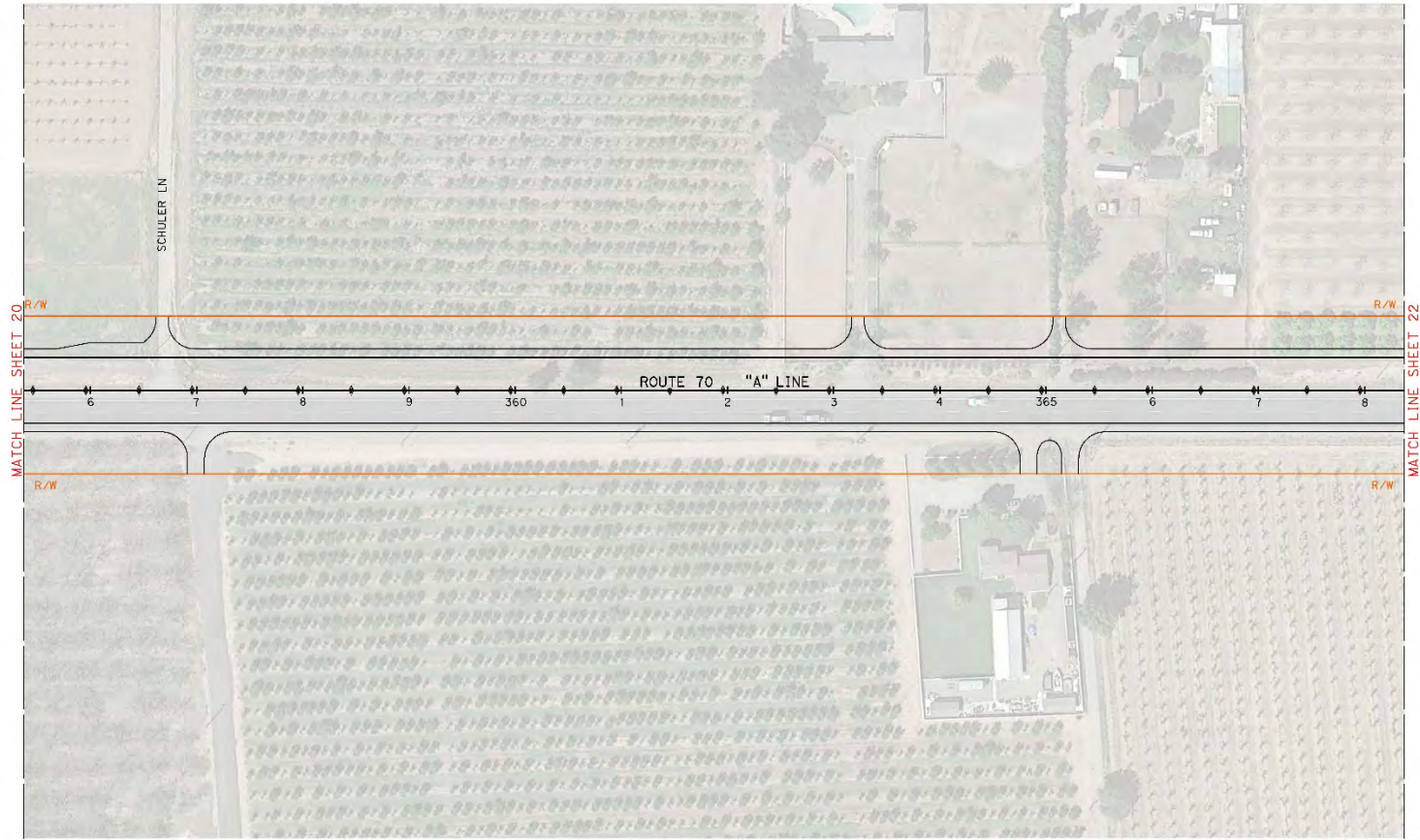
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small> I, THE ENGINEER, CERTIFY THAT I AM A LICENSED CIVIL ENGINEER IN THE STATE OF CALIFORNIA. MY LICENSE NO. IS 11157. I HAVE REVIEWED THE PLANS AND SPECIFICATIONS FOR THIS PROJECT. I AM NOT PROVIDING ANY GUARANTEE OR WARRANTY FOR THE ACCURACY OR COMPLETION OF THE PROJECT. </small>				

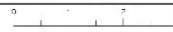


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -21

ORDER: 0323 REVISED 7/2/2010

USERNAME: 0323
DON FILE: 0323.dgn

RELATIVE BORDER SCALE
IN INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

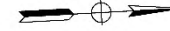
DATE PLOTTED: 01-31-20
TIME PLOTTED: 03:47

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT NUMBER: 0323	CHECKED BY: KEN KEATON	DESIGNED BY: A. ANTHONY JONES	REVISED BY: R SCOTT FOSTER	DATE: 04-11-2013

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
I, THE ENGINEER, CERTIFY THAT THE DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION SHOWN ON THIS PLAN SHEET.				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-22

ORDER: AST REVISED 7/2/2010

USERNAME: >>X12KOR
DON FILE: >>A_72cu22.dgn

RELATIVE BORDER SCALE
IN INCHES

0 1 2

UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 01-31-20
TIME PLOTTED: 23:43

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 2024-03-20 10:00 AM	DESIGNED BY: KEN KEATON	CHECKED BY: A. ANTHONY JONES	REVISED BY: R SCOTT FOSTER	DATE: 04-11-2024
---------------------	------------------------------	--------	----------------------------	-------------------------	------------------------------	----------------------------	------------------

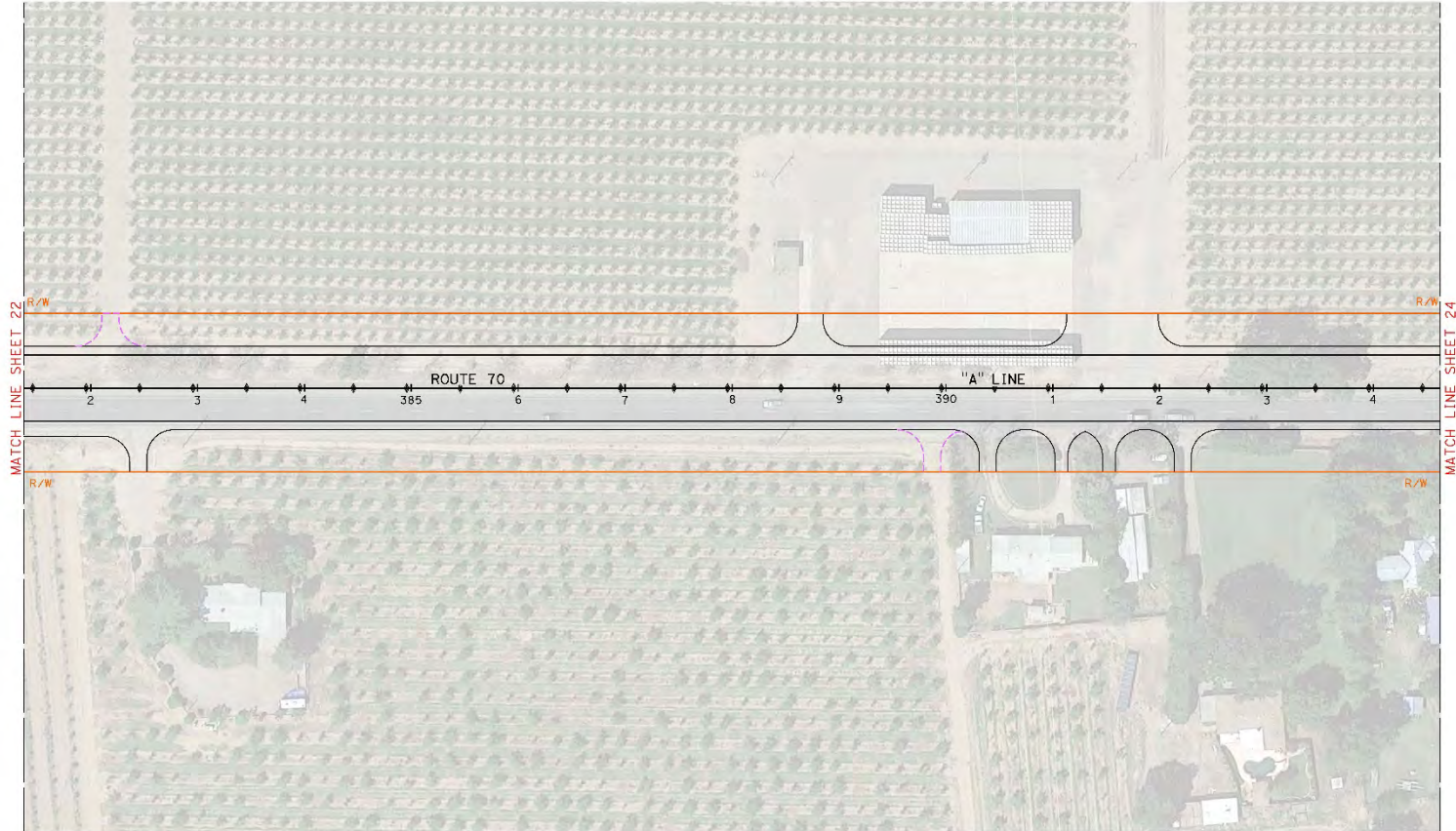
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small> I, THE ENGINEER, CERTIFY THAT I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF CALIFORNIA. MY LICENSE NO. IS 11511. I HAVE REVIEWED THE PLANS AND SPECIFICATIONS AND AM Satisfied THAT THEY COMPLY WITH THE REQUIREMENTS OF THE CALIFORNIA PUBLIC WORKS ACT. I AM NOT PROVIDING ANY GUARANTEE OR WARRANTY FOR THE ACCURACY OR COMPLETENESS OF THE PLANS. </small>				

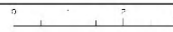


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-23

ORDER: 0323 REVISED: 7/2/2020

USERNAME: 11511
DON FILE: 11511.dgn

RELATIVE BOXED SCALE
1"=100'



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

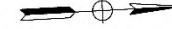
DATE PLOTTED: 01-31-20
TIME PLOTTED: 20:15

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 2024-03-29 10:04	DESIGNED BY: KEN KEATON	CHECKED BY: A. ANTHONY JONES	REVISED BY: R SCOTT FOSTER	REVISIONS: 04.1 REVISED
--	--------	-------------------------	-------------------------	------------------------------	----------------------------	-------------------------

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION AND ITS AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED DATA OR THIS PLAN SHEET.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-24

ORDER: AST REVISED 7/2/2010

USERNAME: >>A12ROR
DON FILE: >>A12cu024.dgn

RELATIVE BORDER SCALE
15 IN. INCHES

0 1 2

UNIT 0323

PROJECT NUMBER & PHASE

03180000186

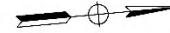
DATE PLOTTED: 01-31-20
TIME PLOTTED: 20:15

STATE OF CALIFORNIA Caltrans	DESIGN	PROJECT SUPERVISOR KEN KEATON	DESIGNED BY A. ANTHONY JONES	CHECKED BY R SCOTT FOSTER	REVIEWED BY DAVID REYES

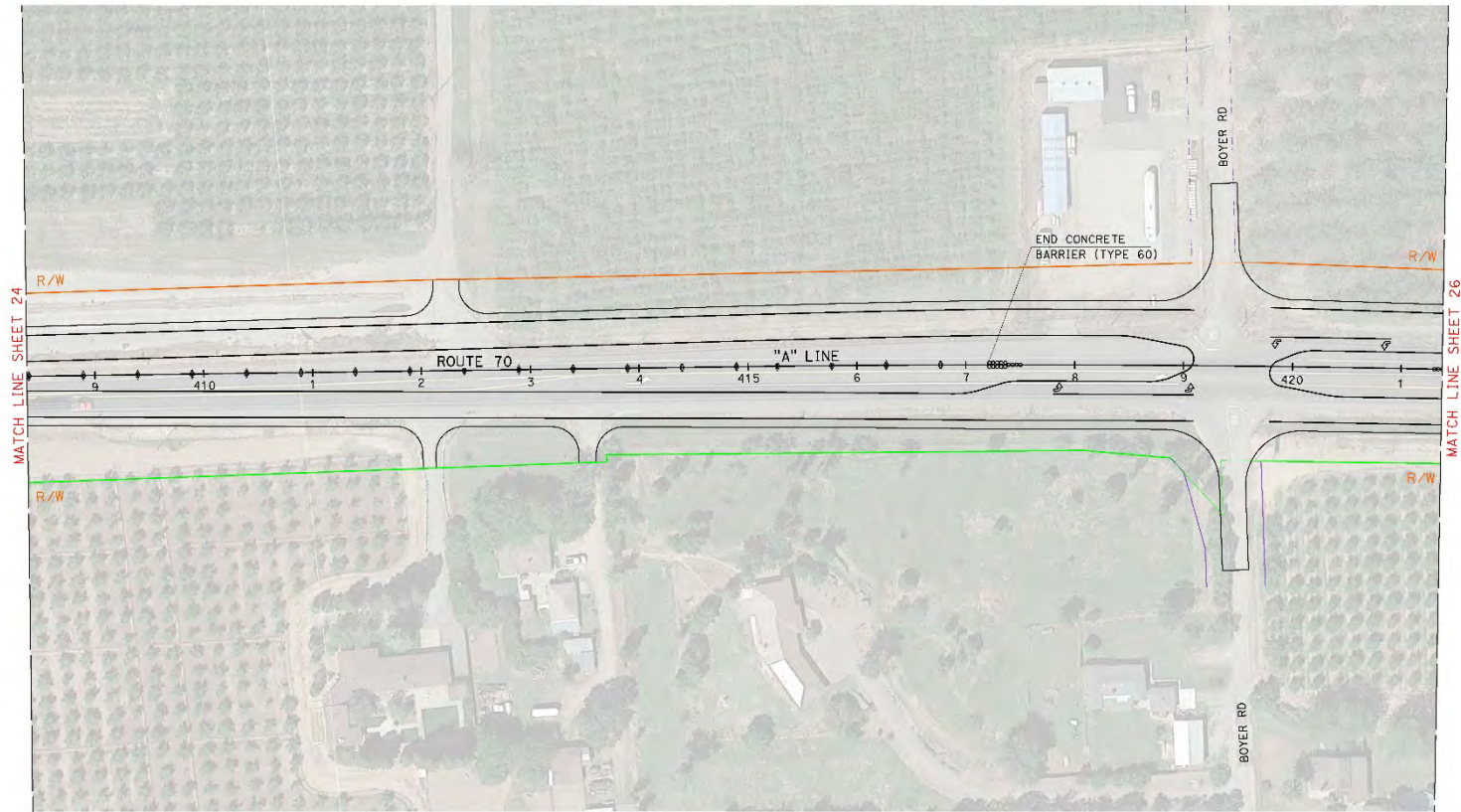
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION SHOWN ON THIS PLAN SHEET.</small>				

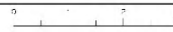


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -25

ORDER: 0321 REVISED 7/2/2010

USERNAME: 0321
DON FILE: 0321

RELATIVE BOXED SCALE
15 IN. INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 01-31-20
TIME PLOTTED: 03:17

STATE OF CALIFORNIA <i>Caltrans</i>	DEPARTMENT OF TRANSPORTATION DESIGN	PROJECT SUPERVISOR KEN KEATON	DESIGNED BY DAVID A. D.	CHECKED BY R SCOTT FOSTER	REVISED BY DAVID A. D.

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON SHOWN.</small>				

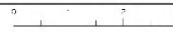


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-26

ORDER: AST REF: SF 7/2/2010

USERNAME: >>A12KOR
DON FILE: >>A12cu22.dgn

RE: A12KOR SCALE
15 IN. INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 07/21/2010
TIME PLOTTED: 01:31:20

STATE OF CALIFORNIA <i>Caltrans</i>	DEPARTMENT OF TRANSPORTATION DESIGN	PROJECT MANAGER KEN KEATON	DESIGNED BY DAVID L. JONES	CHECKED BY R SCOTT FOSTER	REVISIONS DATE REVISION

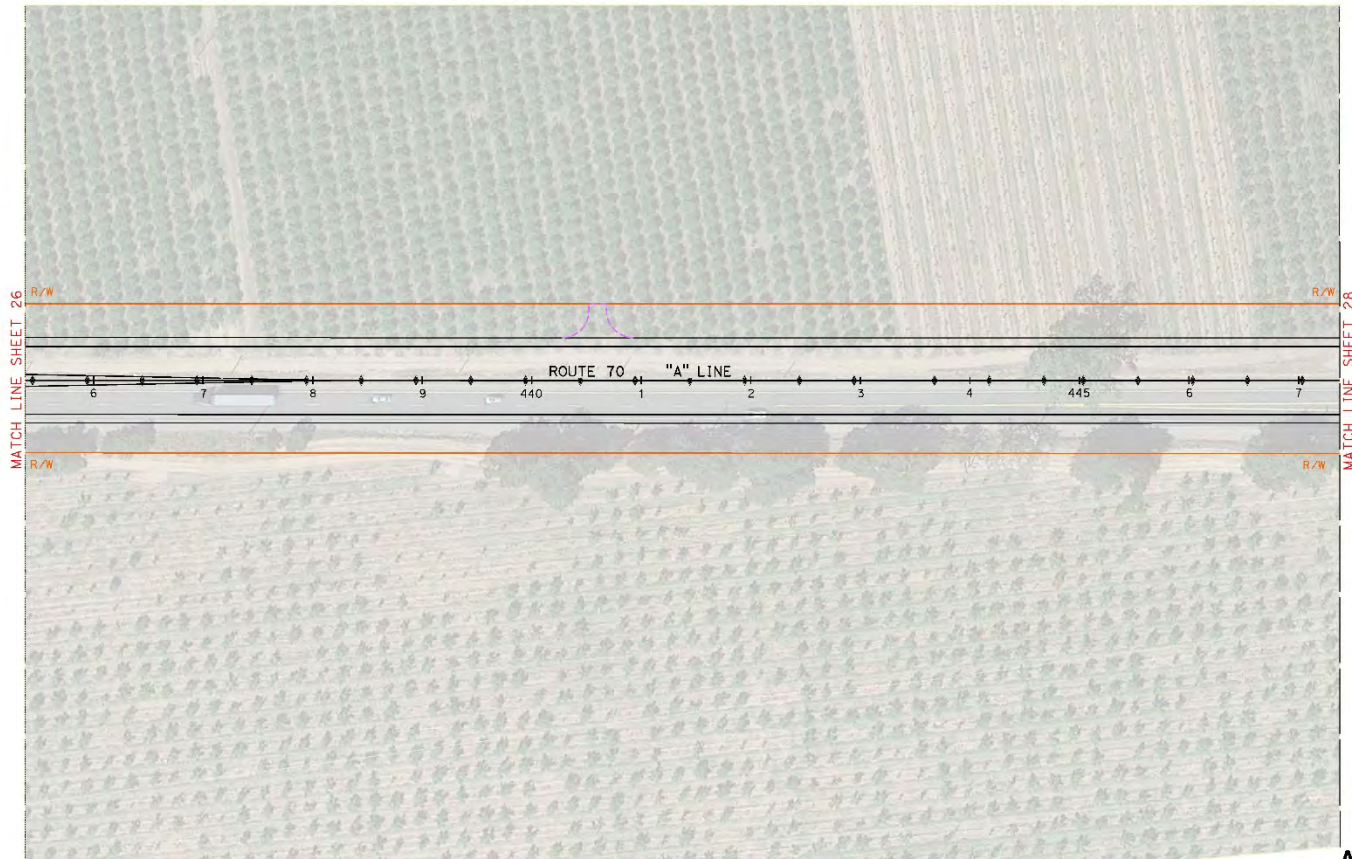
NOTES

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small> THE STATE OF CALIFORNIA DOES NOT GUARANTEE OR WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION OR DATA FURNISHED HEREON. </small>				

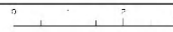


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-27

ORDER: 03180000186

USERNAME: 03180000186
DON FILE: 03180000186.dgn

RELATIVE BOXED SCALE
15 IN. INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 01-31-20
TIME PLOTTED: 11:07

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 2024-03-27 10:04	DESIGNED BY: KEN KEATON	CHECKED BY: KEN KEATON	REVISIONS BY: A. ANTHONY JONES	DATE: 04/11/2024
03	Yub	70	16.2/25.8	REGISTERED CIVIL ENGINEER	DATE	PLANS APPROVAL DATE	NO. CIVIL

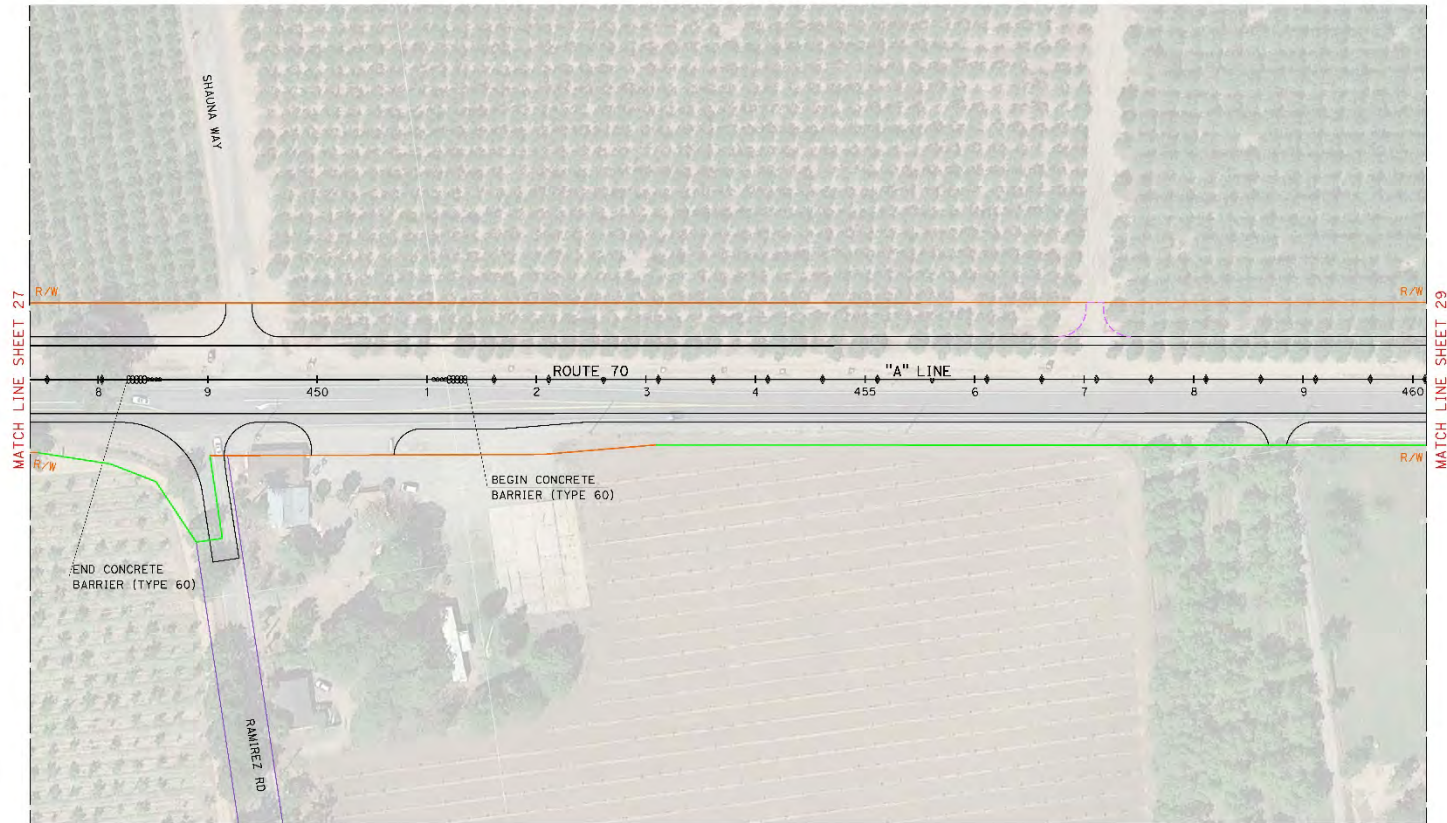
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE		NO. CIVIL		

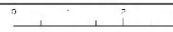


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-28

ORDER: 03180000186

USERNAME: 03180000186
DON FILE: 03180000186.dgn

RELATIVE BOXED SCALE
15' IN INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 03/27/2024
TIME PLOTTED: 11:10

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT SUPERVISOR KEN KEATON	DESIGNED BY CHECKED BY	A. ANTHONY JONES R SCOTT FOSTER	REVISED BY DATE REVISED

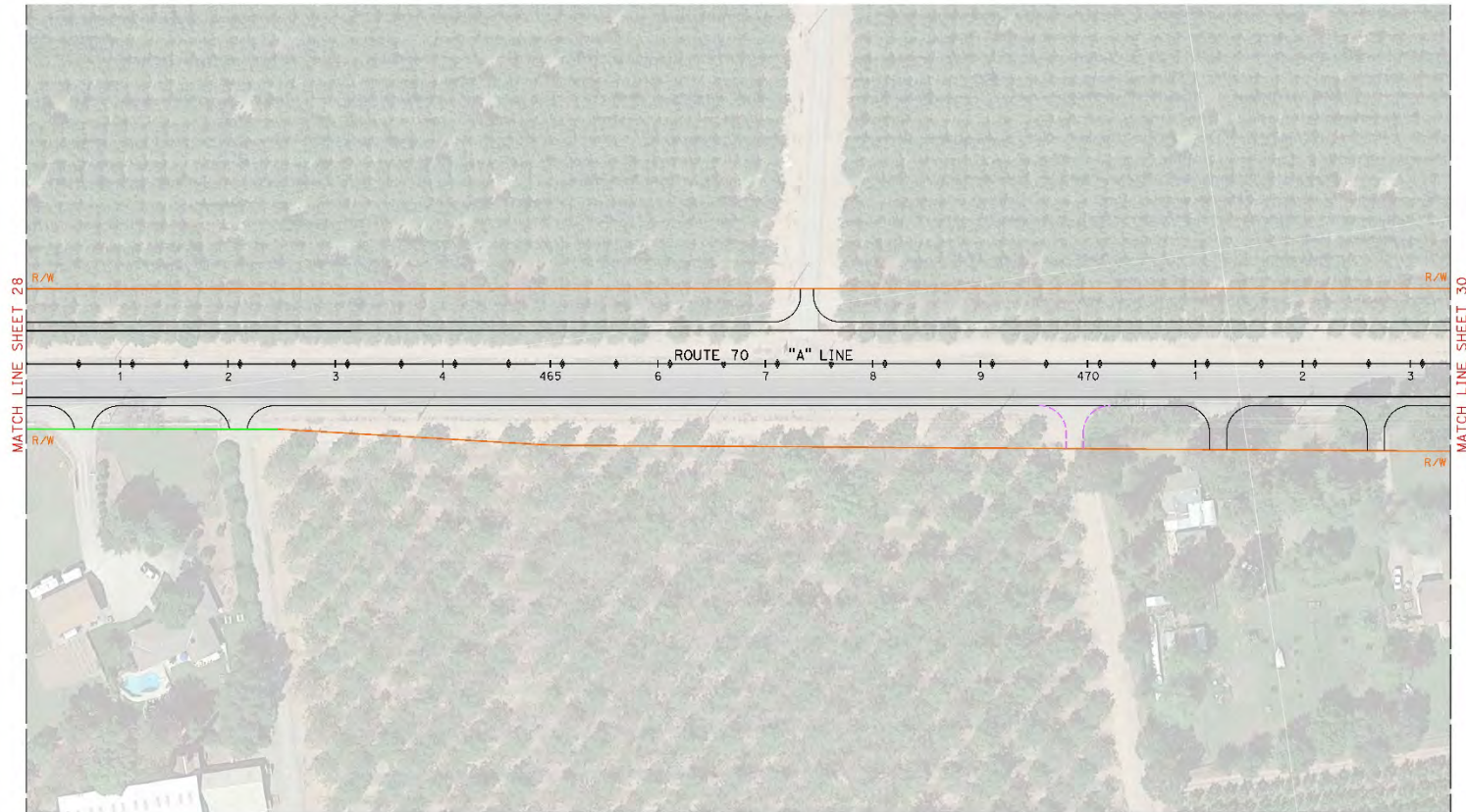
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small> THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY DATA OR INFORMATION SUBMITTED. </small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -29

ORDER: AST REF: SF 7/2/2010

USERNAME: >>A12KOR
DON FILE: >>A12cu020.dgn

RELATIVE BORDER SCALE
15 IN. INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

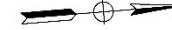
DATE PLOTTED: 01-31-20
TIME PLOTTED: 11:03

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT NUMBER: 0323	CHECKED BY: KEN KEATON	DESIGNED BY: A. ANTHONY JONES	REVISED BY: DAVID REYSE

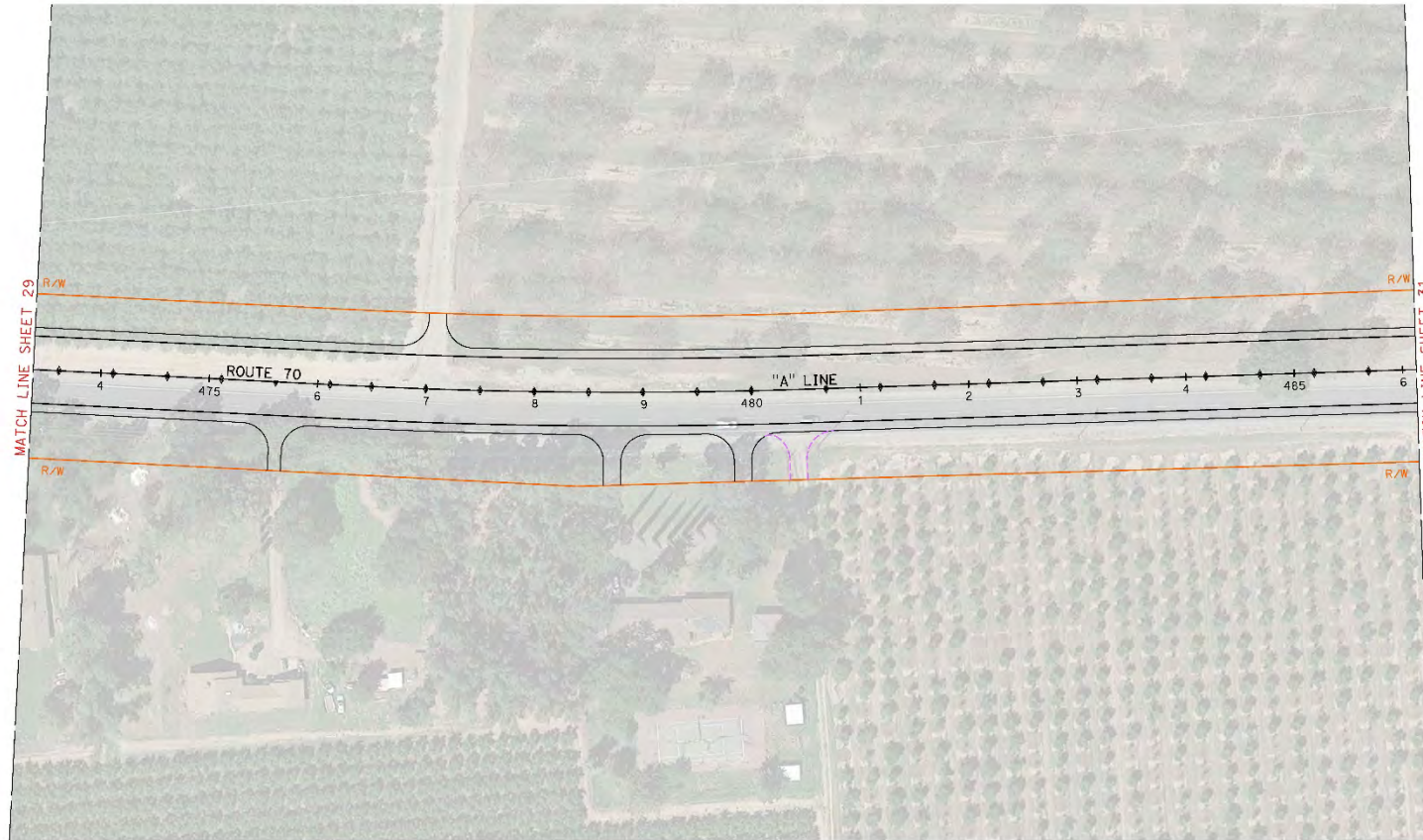
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small> THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON SHOWN. </small>				

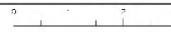


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-30

ORDER: AST REVISED 7/2/2010

USERNAME: >>X12KOR
DON FILE: >>A_72cu030.dgn

RELATIVE BORDERED SCALE
15 IN. INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 01-31-20
TIME PLOTTED: 11:05

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 2024-03-20 10:04	DESIGNED BY: KEN KEATON	CHECKED BY: R SCOTT FOSTER	REVIEWED BY: A. ANTHONY JONES	REVISED BY: DALE REYSE
--	--------	-------------------------	-------------------------	----------------------------	-------------------------------	------------------------

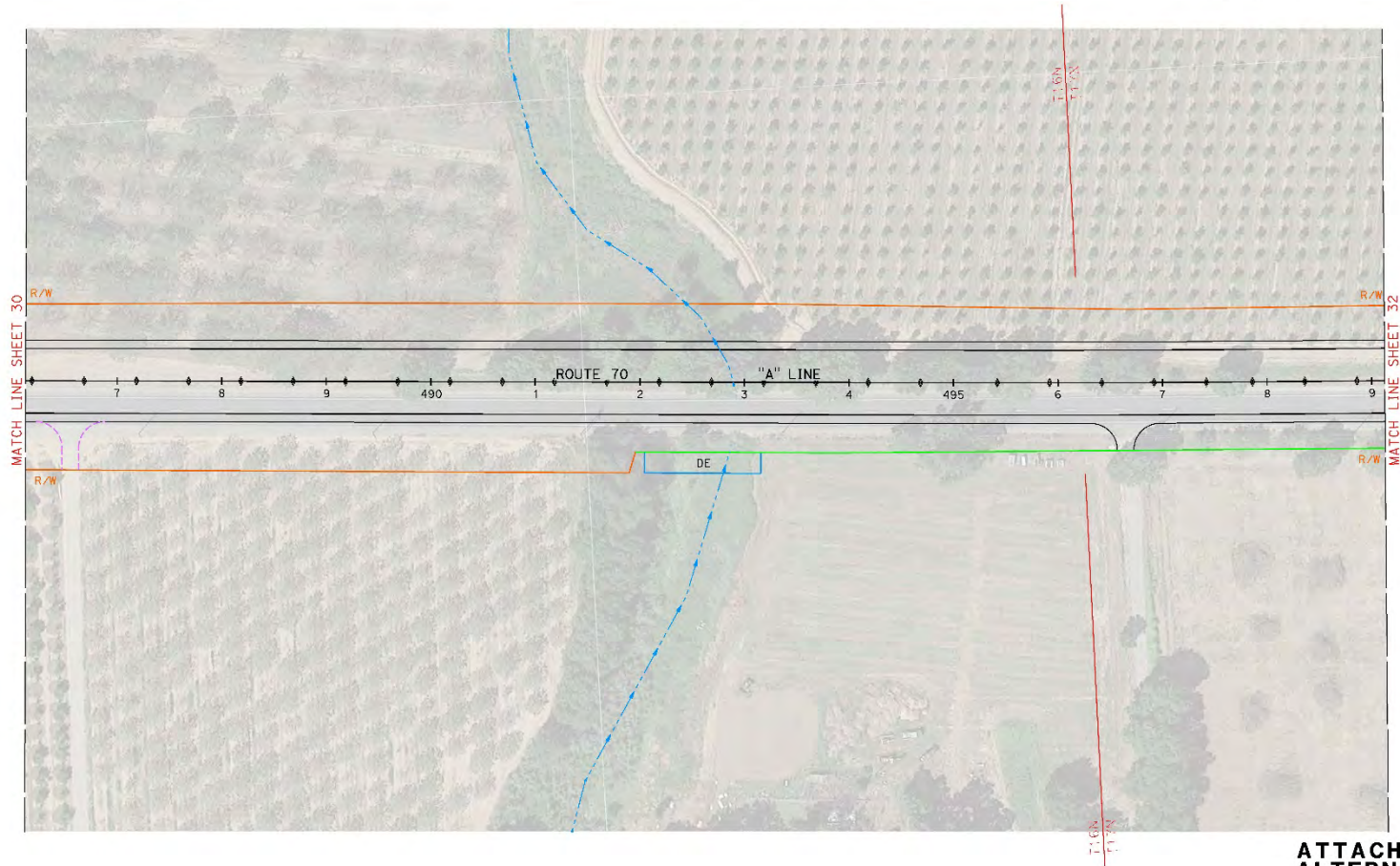
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T16 & 17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON SHOWN.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -31-

ORDER: AST REVISED 7/2/2010

USERNAME: >>A12KOR
DON FILE: >>A12cu031.dgn

RELATIVE BORDER SCALE
15 IN. INCHES

0 1 2

UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 01-31-20
TIME PLOTTED: 11:05

STATE OF CALIFORNIA Caltrans	DEPARTMENT OF TRANSPORTATION DESIGN	PROJECT NUMBER 0318000186	DESIGNED BY KEN KEATON	CHECKED BY A. ANTHONY JONES R SCOTT FOSTER	REVISIONS DATE BY

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small> THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SURVEY DATA OR THIS PLAN SHEET. </small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-32

ORDER: 0318000186

USERNAME: 0318000186
DON FILE: 0318000186.dgn

RE: Aerial, DOWNS SCALE
15 IN. INCHES

0 1 2

UNIT: 0323

PROJECT NUMBER & PHASE

0318000186

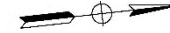
DATE PLOTTED: 01-31-20
TIME PLOTTED: 11:11

STATE OF CALIFORNIA Caltrans	DEPARTMENT OF TRANSPORTATION DESIGN	FILED: 2024-03-29 10:54 KEN KEATON	DESIGNED BY KEVIN KEATON	CHECKED BY R SCOTT FOSTER	DESIGNED BY A. ANTHONY JONES	REVIEWED BY DAVID REYER

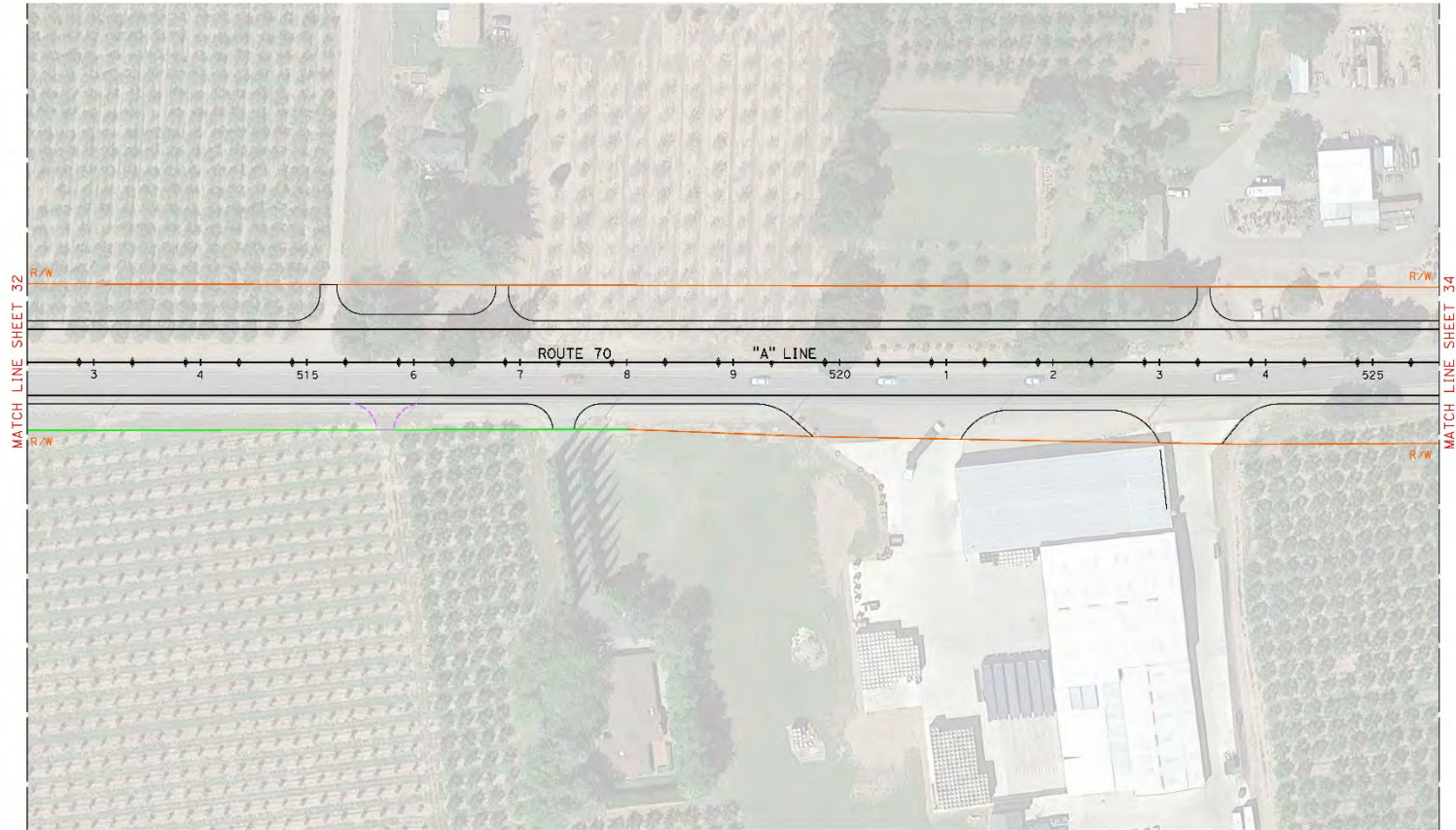
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY DATA OR INFORMATION SUBMITTED.</small>				

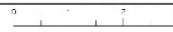


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-33

ORDER: 2024-03-29 10:54

USERNAME: kevin.keaton
DON FILE: 2024-03-29 10:54

RELATIVE BORDER SCALE
15 IN. INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

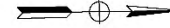
DATE PLOTTED: 2024-03-29 10:54
TIME PLOTTED: 10:54

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 03/11/2014 10:54 AM	DESIGNED BY: A. ANTHONY JONES	REVIEWED BY: DAVID REYES
Ken Keaton	DESIGNED BY: R SCOTT FOSTER	CHECKED BY: KEN KEATON	DESIGNED BY: A. ANTHONY JONES	REVIEWED BY: DAVID REYES

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION SHOWN ON THIS PLAN SHEET.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-34

ORDER: 03180000186

USERNAME: 03180000186
DON FILE: 03180000186.dgn

RELATIVE BOXED SCALE
15' IN INCHES

0 1 2

UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 03/11/2014 10:54 AM
TIME PLOTTED: 11:17

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 02/28/2014	DESIGNED BY: KEN KEATON	CHECKED BY: A. ANTHONY JONES	REVISED BY: R SCOTT FOSTER	DATE: 04/14/2014
---------------------	------------------------------	--------	-------------------	-------------------------	------------------------------	----------------------------	------------------

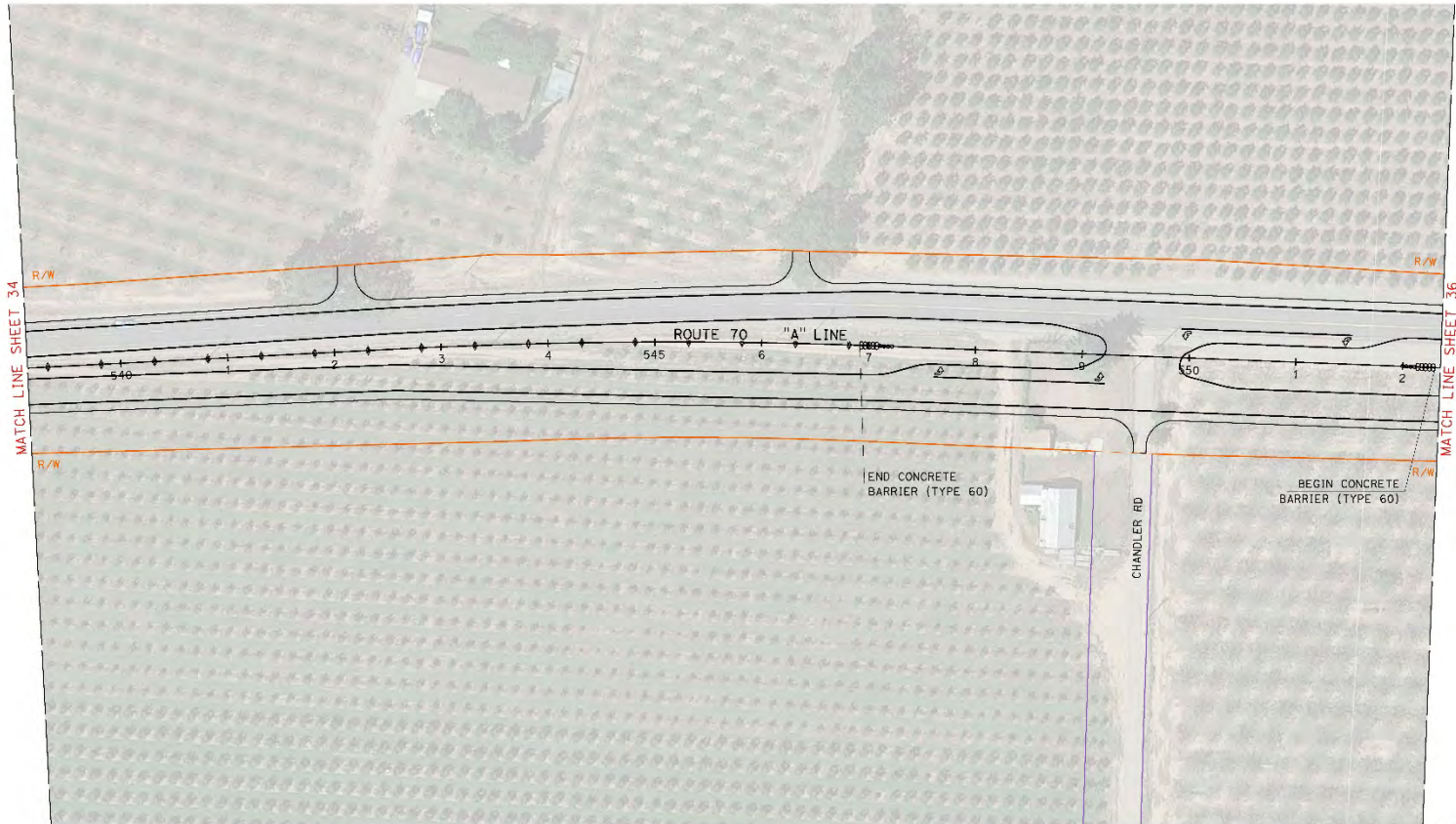
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION AND PUBLIC UTILITIES OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF RECORDS DATE OF THIS PLAN SHEET</small>				

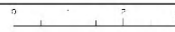


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-35

ORDER: 0323 REVISED 7/2/2010

USERNAME: 0323
DON FILE: 0323.dgn

RELATIVE BOXED SCALE
1"=100'



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

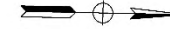
DATE PLOTTED: 01-31-20
TIME PLOTTED: 11:01

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT NUMBER: 0323	DESIGNED BY: KEN KEATON	CHECKED BY: R SCOTT FOSTER	REVISIONS BY: A. ANTHONY JONES	DATE: 04/11/2013

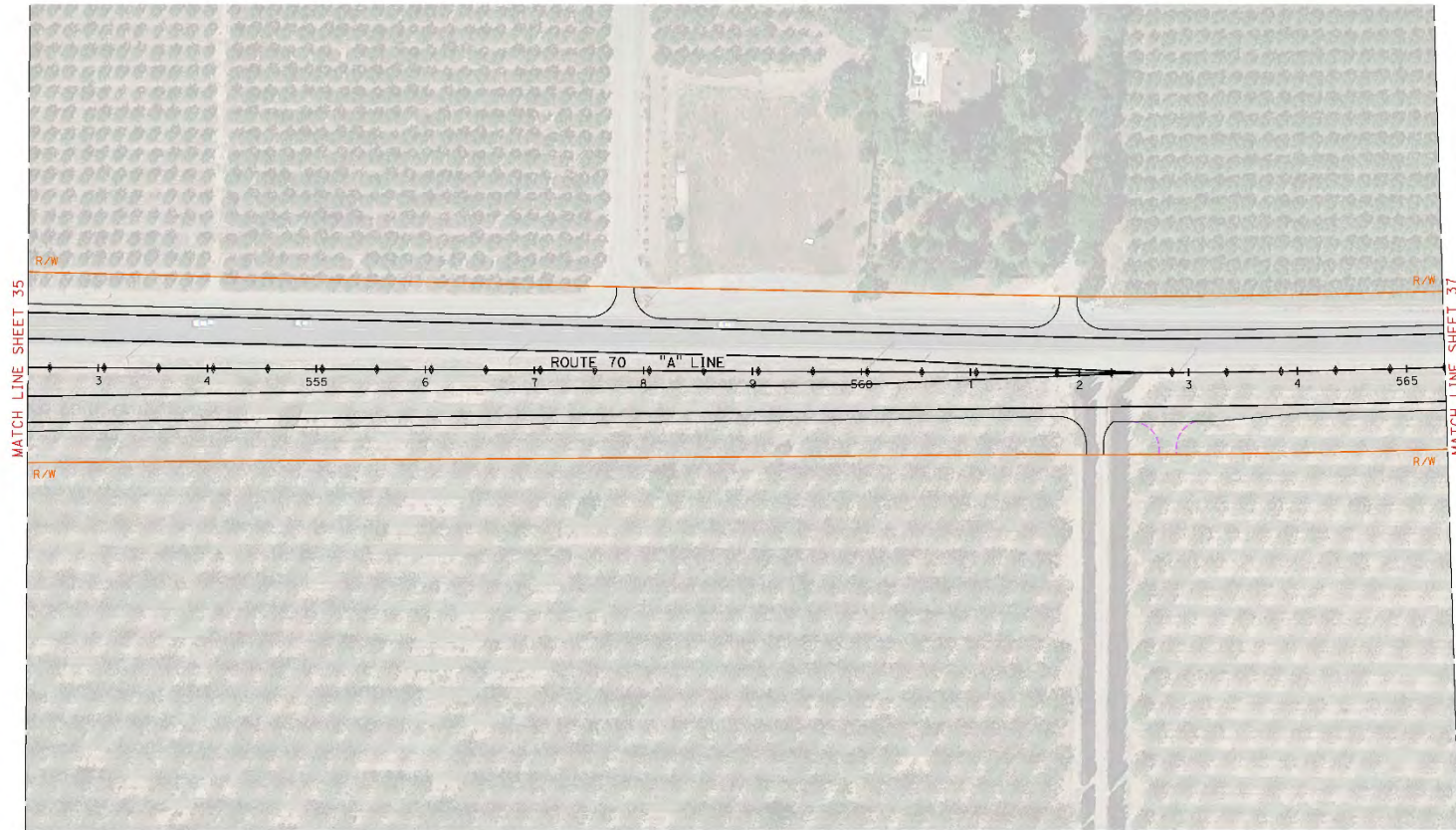
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small> THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY DATA OR INFORMATION PROVIDED BY ANY OTHER PARTY. </small>				

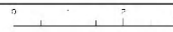


ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -36

ORDER: AST REF: SF 7/2/2010

USERNAME: >>A112KOR
DON FILE: >>A112cu036.dgn

RE: Aerial, BORDED SCALE
15 IN. INCHES



UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

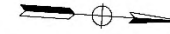
DATE PLOTTED: 01-31-20
TIME PLOTTED: 11:03

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT NUMBER: 0323	PROJECT NAME: YUBA CITY T17N R3E MDB&M HONCUT RANCHO	DESIGNED BY: R SCOTT FOSTER	CHECKED BY: A. ANTHONY JONES	REVISIONS BY: DAVID REY/SEL

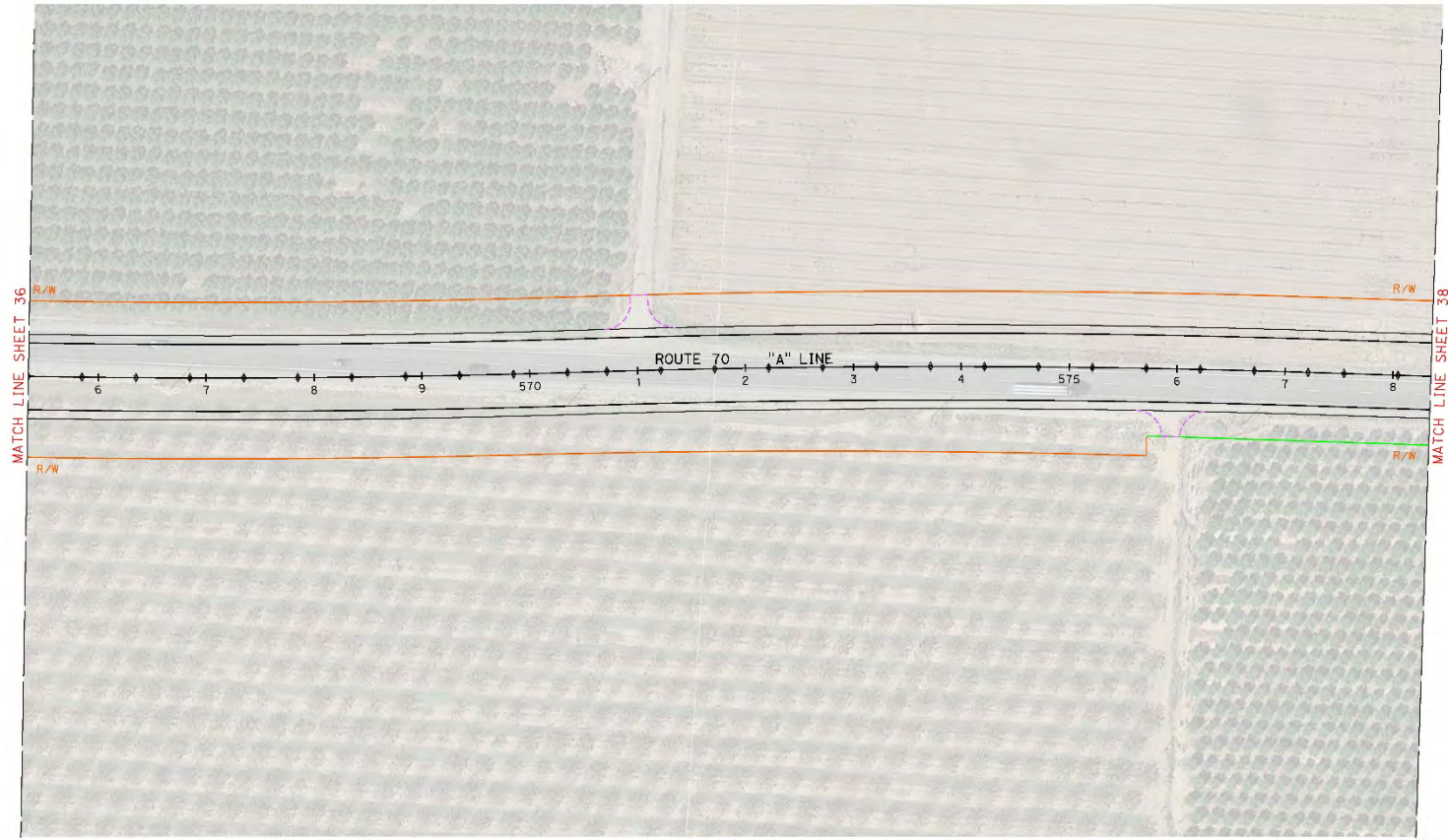
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA DOES NOT GUARANTEE OR WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, DATA, OR OTHER MATERIALS HEREON. THE USER SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION, DATA, OR OTHER MATERIALS HEREON.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -37

ORDER: AST REF: SF 7/2/2010

USERNAME: >>A119KOR
DON FILE: >>A119KOR037.dgn

RELATIVE BORDER SCALE
15 IN. INCHES

0 1 2

UNIT 0323

PROJECT NUMBER & PHASE

03180000186

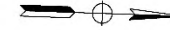
DATE PLOTTED: 01-31-20
TIME PLOTTED: 11:03

STATE OF CALIFORNIA	DEPARTMENT OF TRANSPORTATION	DESIGN	FILED: 2024-03-20 10:04 AM	DESIGNED BY: A. ANTHONY JONES	REVIEWED BY: R. SCOTT FOSTER	DATE: 03/20/24	DATE: 03/20/24

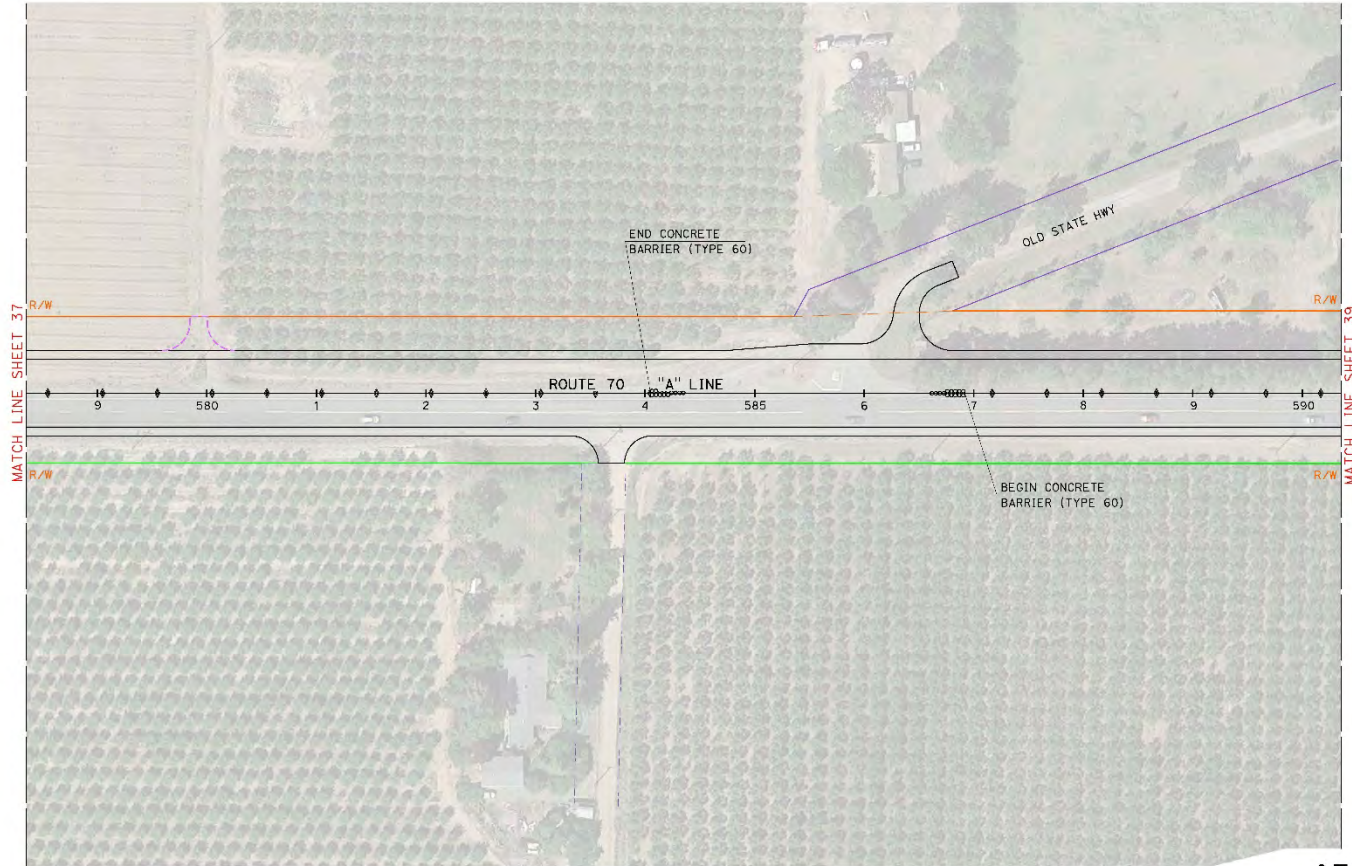
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER		DATE		
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA PROVIDED BY ANY OTHER PARTY. THE USER SHALL BE RESPONSIBLE FOR THE ACCURACY OF ANY INFORMATION OR DATA PROVIDED BY ANY OTHER PARTY.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -38

ORDER: 03180000186

USERNAME: 03180000186
DON FILE: 03180000186.dgn

RELATIVE BORDER SCALE
15 IN. INCHES

0 1 2

UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 03/20/24
TIME PLOTTED: 11:03 AM

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	PROJECT NUMBER: 03180000186	DESIGNED BY: KEN KEATON	CHECKED BY: R SCOTT FOSTER	REVISED BY: A. ANTHONY JONES	REVISIONS:

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
HONCUT RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON PROVIDED UNLESS IT IS SPECIFICALLY STATED TO THE CONTRARY.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET -39-

ORDER: 03180000186

USERNAME: 03180000186
DON FILE: 03180000186.dgn

RELATIVE BORDER SCALE
15 IN. INCHES

0 1 2 3 4 5 6 7 8 9 10

UNIT: 0323

PROJECT NUMBER & PHASE

03180000186

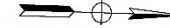
DATE PLOTTED: 01/31/20
TIME PLOTTED: 11:13

STATE OF CALIFORNIA Caltrans	DEPARTMENT OF TRANSPORTATION DESIGN	PROJECT NUMBER 03180000186	DESIGNED BY KEN KEATON	CHECKED BY A. ANTHONY JONES	REVISIONS DATE

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS83 ZONE 2. MULTIPLY BY 0.99995 TO OBTAIN GROUND DISTANCES.
3. LOCATION TO BE DETERMINED BY ENGINEER.

YUBA CITY
T17N R3E MDB&M
NEW HELVETIA RANCHO



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
03	Yub	70	16.2/25.8	
REGISTERED CIVIL ENGINEER			DATE	
PLANS APPROVAL DATE				
<small>THE STATE OF CALIFORNIA BY ITS OFFICIALS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION OR DATA HEREON PROVIDED BY ANY OTHER PARTY.</small>				



ATTACHMENT B
ALTERNATIVE 2
SCALE: 1"=100'
SHEET-40

ORDER: AST REF: SF 7/2/2010

USERNAME: >>X12ROR
DGN FILE: >>A_72cu040.dgn

RELATIVE BOXED SCALE
15 IN. INCHES



UNIT 0323

PROJECT NUMBER & PHASE

03180000186

DATE PLOTTED: 01-31-20
TIME PLOTTED: 11:14

Appendix D - Notice of Preparation

To: Responsible/Trustee Agency

From: California Dept. of Transportation
703 B Street
Marysville, CA 95901

Subject: Notice of Preparation of a Draft Environmental Impact Report

Reference: California Code of Regulations, Title 14, (CEQA Guidelines)
Sections 15082(a), 15103, 15375.

Project Title: Yuba 70 Continuous Passing Lane Project (EA: 03-3F283)

Project Location: The proposed project is located on State Route (SR) 70 in Yuba County, California between post miles (PM) 16.20-25.80.

Project Description: The California Department of Transportation proposes to widen SR 70 between Laurellen Road and the Butte/Yuba County line to provide a five-lane cross-section within the full postmile limits; PM 16.2-25.8. Two 12-foot travel lanes and 8-foot shoulder would be provided in each direction with a 14-foot wide continuous center Two Way Left Turn Lane (TWLTL) bounded by a minimum 20-foot Clear Recovery Zone (CRZ).

This is to inform you that the California Department of Transportation will be the lead agency and will prepare an environmental impact report for the project described below. Your participation as a responsible agency is requested in the preparation and review of this document.

We need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

A more detailed project description, location map, and the potential environmental effects are contained in the attached materials.

A copy of the Initial Study is not attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Please direct your response to Cara Lambirth Telephone (530) 741-4549 at the address shown above. Please supply us with the name for a contact person in your agency.

Date: 2/1/20

Signature: Kelly McNally
Title: Supervising Environmental Planner

Notice of Preparation

Project Title

Yuba 70 Continuous Passing Lane Project (EA: 03-3F283)

Project Location

The proposed project is located on State Route (SR) 70 in Yuba County, California between post miles (PM) 16.2-25.80.

Project Background

Overview of SR 70 in the Project Limits

SR 70 is an interregional Road System (IRRS) route. This route primarily serves to move people or goods from outside the immediate region through Yuba County. Transporting agricultural commodities to markets has made SR 70 a vital economic link to local farmers and agriculture-related businesses. Additionally, SR 70 has become a "gateway" route used to access multiple recreational destinations in the Sierra Nevada and serves as an alternative route to and from Nevada when Interstate 80 is closed due to an accident or weather conditions.

SR 70, north of Marysville in Yuba County is a two-lane rural highway through agricultural land. The highway presently has standard 12-foot lanes, with shoulder widths less than 8 feet in most areas. There are currently left-turn lanes at county road intersections. This portion of SR 70 runs through what is commonly called District 10, which is short for Reclamation District 10. This area encompasses approximately 12,000 acres and includes 23 miles of levees. Forming the District's boundaries are Honcut Creek to the north, the Marysville Levee to the south, the Feather River to the west, and the Union Pacific Railroad tracks to the east. The area includes 50 businesses (31 farms, 13 agriculture-related businesses, and 6 other) and over 450 residences. Since extensive farming activities take place throughout the project limits, farming and harvesting equipment share the road with the traveling public. Clusters of houses share frontage with the highway throughout the project limits.

The project limits include a section of SR 70 north of Marysville with a cross section that does not meet current standards for shoulder width and clear recovery zone (CRZ). In 2007, between PM 18.9/20.0, the highway was widened, and a two-way left-turn lane (TWLTL) was installed under Contract 03-4A570. In 2009, centerline ground-in rumble strips were also installed through the project limits, but cross-centerline collisions have continued to occur.

On March 30, 2015, a Project Study Report (PSR) was approved for proposed safety improvements on SR 70. Improvements consisted of two standard 12-foot lanes, 8-foot shoulders a TWLTL where feasible, left-turn pockets at all county-maintained roads, and a 20-ft CRZ. This proposed safety project included two alternatives, a 3-lane and 5-lane

widening with standard 8-foot shoulders and a TWLTL where feasible, as well as providing for a 20-foot CRZ.

Subsequently, Caltrans approved a Project Study Report (PSR) for the Yuba 70 Safety Project (EA: 03-4F380) on June 20, 2019. Initially, this project was a combined Safety/State Transportation Improvement Project or STIP job. The scope of work included capacity increasing features, resulting in a five-lane design. After feedback from a series of public meetings and due to lack of funding for the STIP portion, the project was rescope as a Safety-only project providing signed slow-moving vehicles lanes less than 1 mile long at up to three locations in each direction.

On February 27 and 28, 2019, a State Route (SR) 70 Safety Audit Workshop was held as a collaborative effort of Caltrans District 3, the California Transportation Commission (CTC), the Sacramento Area Council of Governments (SACOG) and the Butte County Association of Governments (BCAG). One of the primary purposes of the study was to determine the net safety benefits of widening the corridor to the 5-lane ultimate concept facility on State Route 70 from Laurellen Road, north of Marysville, to the Butte/Yuba County Line (Post Mile 16.2 to 25.8). The SR 70 Safety Assessment Report concludes that an additional reduction of approximately 34 percent (from 4.06 to 2.68 collisions per MVM) for fatality and injury collisions could be expected with the conversion from a 3-lane to a 5-lane cross section based on the comparison of similar sites.

EA 03-1E060, The Simmerly Slough Bridge Replacement Project, EA 03-1E060, began construction in summer of 2019 and will construct a three-lane facility which this project will tie-in to at its southern end. In 2022, EA 03-3H930, the Butte 70- Safety Project, will construct a five-lane facility that will tie-in to the north end of this project.

Project Description

The project involves widening SR 70 between Laurellen Road and the Butte/Yuba County line to provide a five-lane cross-section within the full postmile limits; PM 16.2 - 25.8. Two 12-foot travel lanes and 8-foot shoulder would be provided in each direction with a 14-foot wide continuous center Two Way Left Turn Lane (TWLTL) bounded by a minimum 20-foot Clear Recovery Zone (CRZ). The CRZ will incorporate side slopes of 4:1 or flatter and necessitate removal of any physical obstructions such as trees, utility poles, and other fixed objects.

Additional project elements include the following:

- Construction of roadside ditches outside the CRZ.
- Construction of County-maintained road intersections to facilitate the movement of tractor trailers and farming equipment.
- Extension or replacement of existing cross culverts as needed.
- Replacement of driveway culverts to convey drainage flows to the roadside ditches, as warranted.

- Minor shifting of the vertical profile and horizontal alignment as needed.
- Modification of existing driveways along the corridor, where needed, to conform to the widened highway.
- Relocation of utilities.

Alternatives

Under evaluation for this project are two build alternatives - Alternative 1 and Alternative 2, as described in the subsection below, as well as a No-Build (or No-Action) Alternative.

Regardless of the build alternative, the proposed project would contain standardized project measures that are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact that could potentially result from the proposed project. These measures are detailed in the *Environmental Consequences* subsections of Chapter 2, *Affected Environment, Environmental Consequences, and Avoidance, Minimization and/or Mitigation Measures*.

Common Design Features of the Build Alternatives

The construction approach would be the same for both alternatives. Both build alternatives contain the following design features:

- Two 12-foot travel lanes and 8-foot shoulder would be provided in each direction.
- A minimum 20-foot Clear Recovery Zone (CRZ). The CRZ will incorporate side slopes of 4:1 or flatter and necessitate removal of any physical obstructions such as trees, utility poles, and other fixed objects.
- Construction of roadside ditches outside the CRZ.
- Construction of County-maintained road intersections to facilitate the movement of tractor trailers and farming equipment.
- Extension or replacement of existing cross culverts as needed.
- Replacement of driveway culverts to convey drainage flows to the roadside ditches, as warranted.
- Minor shifting of the vertical profile and horizontal alignment as needed.
- Modification of existing driveways along the corridor, where needed, to conform to the widened highway.

- Relocation of utilities.

Unique Features of Build Alternatives

Alternative 1

Alternative 1 proposes the addition of a 14-foot-wide paved median, striped as a continuous TWLTL. This TWLTL would create a refuge for drivers turning left in and out of traffic. At county-maintained roads and certain agriculture-related businesses, the TWLTL would be striped as a left-turn lane.

Alternative 2

Alternative 2 would separate traffic with a paved 14-foot wide median containing a concrete barrier. Vehicles entering the highway from homes and businesses could only turn right onto SR 70. There would be median openings at major county road intersections with left- and U-turn lanes.

Probable Environmental Effects

The proposed project is expected to result in temporary and permanent environmental effects. The draft Environmental Impact Report/Environmental Assessment will determine what resources would be affected, the level of significance, and feasible measures to reduce impacts. Probable environmental effects of the proposed project are outlined below.

Aesthetics

The proposed project could degrade the existing visual character or quality of the site and its surroundings, however the impacts are not expected to be substantial.

During the environmental phase of the project, Caltrans will identify all feasible measures to avoid and minimize impacts to visual resources.

Agricultural and Forest Resources

The proposed project is expected to require conversion of prime farmland, unique farmland and/or farmland of statewide importance to non-agriculture use pursuant to the Farmland Mapping and Monitoring Program of the California Department of Conservation. During the environmental phase of the project, Caltrans will identify all feasible measure to avoid impacts to farmlands.

Air Quality

The proposed project is expected to result in temporary short-term air quality impacts from construction activities; however, these impacts will be minimized with incorporation of minimization measures. During the environmental phase, Caltrans will analyze project impacts to air quality including criteria pollutants and operational air quality.

Biological Resources

The proposed project may result in impacts to biological resources. During the environmental phase of the project, potential impacts on special-status plant and animal species and associated

critical habitat will be conducted as well as analysis of potential effects on riparian vegetation and Waters of the State/United States.

Cultural and Paleontological Resources

There is potential for Cultural Resources to be located within the project area. Analysis of the design will be conducted during the environmental phase to determine the potential impacts to these resources.

There is potential for Paleontological resources to be located within the project area. Analysis of the design will be conducted during the environmental phase to determine the potential impacts to Paleontological resources.

Geology and Soils

No impacts anticipated.

Hazards/Hazardous Materials

There is potential for hazards/hazardous materials to be located within the project area.. During the environmental phase of the project, analysis will be conducted to determine potential impacts.

Hydrology and Water Quality

Due to the anticipated quantity of soil disturbance during construction, the project will be regulated under the Construction General Permit (CGP). The CGP contains specific requirements meant to address potential erosion, sedimentation, and the transportation of potential pollutants to receiving waters. In accordance with the CGP, it is anticipated that field Best Management Practices (BMPs) will be implemented, monitored, and evaluated to the maximum extent practicable to reduce or prevent potential impacts to water bodies within the project limits.

Analysis will be conducted during the environmental phase to evaluate water quality impacts or degradation to receiving waters to occur as a result of project activities.

Land Use/Planning

The proposed project would not conflict with any applicable land use plan, policy, or regulation of any agencies with jurisdiction over the project (including, but not limited to the general plan, specific plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Mineral Resources

No impacts anticipated.

Noise

The proposed project could result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. Analysis will be conducted during the environmental phase to evaluate the potential noise impacts

Population/Housing

The proposed project could displace existing housing. During the environmental phase of the project, Caltrans will identify all feasible measures to avoid and minimize impacts to housing.

Greenhouse Gases

The project may contribute to CO2 emissions. During the environmental phase of the project, analysis will be conducted to evaluate impacts to CO2 emissions.

Public Services

No Impacts Anticipated.

Recreation

No Impacts Anticipated.

Transportation/Traffic

The project is not anticipated to conflict with any applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, or conflict with an applicable congestion management program or conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Utilities/Service Systems

The proposed project could require the relocation of existing facilities; including, but not limited to gas, electric and fiber optic. Through the design of the project, Caltrans will identify feasible measures to avoid and minimize impacts to utilities and service systems.

Tribal Cultural Resources No

impacts anticipated. Wildfire

No impacts anticipated.

Energy

The project may result in impacts to energy resources during project construction and/or operation. Analysis will be conducted during the environmental phase of the project to evaluate impacts to Energy.

Appendix E – Special Status Species Lists



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad> IS (Yuba City (3912125)> OR Honcut (3912135))



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Ahart's dwarf rush <i>Juncus leospermus</i> var. <i>ahartii</i>	PMJUN011L1	None	None	G2T1	S1	1B.2
Ahart's paronychia <i>Paronychia ahartii</i>	PDCAR0L0V0	None	None	G3	S3	1B.1
bank swallow <i>Riparia riparia</i>	ABPAU08010	None	Threatened	G5	S2	
chinook salmon - Central Valley spring-run ESU <i>Oncorhynchus tshawytscha</i> pop. 6	AFCHA0205A	Threatened	Threatened	G5	S1	
Ferris' milk-vetch <i>Astragalus tener</i> var. <i>ferrisiae</i>	PDFAB0F8R3	None	None	G2T1	S1	1B.1
Great Valley Cottonwood Riparian Forest <i>Great Valley Cottonwood Riparian Forest</i>	CTT61410CA	None	None	G2	S2.1	
Great Valley Mixed Riparian Forest <i>Great Valley Mixed Riparian Forest</i>	CTT61420CA	None	None	G2	S2.2	
Great Valley Valley Oak Riparian Forest <i>Great Valley Valley Oak Riparian Forest</i>	CTT61430CA	None	None	G1	S1.1	
Hartweg's golden sunburst <i>Pseudobahia bahiifolia</i>	PDAST7P010	Endangered	Endangered	G1	S1	1B.1
least Bell's vireo <i>Vireo bellii pusillus</i>	ABPBW01114	Endangered	Endangered	G5T2	S2	
Northern Hardpan Vernal Pool <i>Northern Hardpan Vernal Pool</i>	CTT44110CA	None	None	G3	S3.1	
recurved larkspur <i>Delphinium recurvatum</i>	PDRAN0B1J0	None	None	G2?	S2?	1B.2
song sparrow ("Modesto" population) <i>Melospiza melodia</i>	ABPBXA3010	None	None	G5	S3?	SSC
steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i> pop. 11	AFCHA0209K	Threatened	None	G5T2Q	S2	
Swainson's hawk <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T2	S2	
veiny monardella <i>Monardella venosa</i>	PDLAM18082	None	None	G1	S1	1B.1
vernal pool tadpole shrimp <i>Lepidurus packardii</i>	ICBRA10010	Endangered	None	G4	S3S4	
western spadefoot <i>Spea hammondi</i>	AAABF02020	None	None	G3	S3	SSC
western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	ABNRB02022	Threatened	Endangered	G5T2T3	S1	

Record Count: 21



*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)




Plant List

10 matches found. [Click on scientific name for details](#)

Search Criteria

Found in Yuba County, Found in Quads 3912146, 3912145, 3912144, 3912136, 3912135, 3912134, 3912126, 3912125 and 3912124;

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Remove Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank	Photo
Astragalus pauperculus	depauperate milk-vetch	Fabaceae	annual herb	Mar-Jun	4.3	S4	G4	 1988 Dean Wm. Taylor
Brodiaea rosea ssp. vallicola	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr-May(Jun)	4.2	S3	G5T3	no photo available
Brodiaea sierrae	Sierra foothills brodiaea	Themidaceae	perennial bulbiferous herb	May-Aug	4.3	S3	G3	 2006 Robert E. Preston, Ph.D.
Clarkia biloba ssp. brandegeae	Brandegee's clarkia	Onagraceae	annual herb	May-Jul	4.2	S4	G4G5T4	 2008 Virginia Moran
	dwarf	Campanulaceae	annual herb	Mar-May	2B.2	S2	GU	

12/5/2019

CNPS Inventory Results

[Downingia
pusilla](#)

downingia



2011 Dylan Neubauer

[Juncus
leiospermus
var. ahartii](#)

Ahart's dwarf
rush

Juncaceae

annual herb

Mar-May

1B.2

S1

G2T1



2004 Carol W. Witham

[Legenere
limosa](#)

legenere

Campanulaceae

annual herb

Apr-Jun

1B.1

S2

G2



1993 Dean Wm. Taylor

[Monardella
venosa](#)

veiny
monardella

Lamiaceae

annual herb

May,Jul

1B.1

S1

G1

no photo available

[Pseudobahia
bahiifolia](#)

Hartweg's
golden
sunburst

Asteraceae

annual herb

Mar-Apr

1B.1

S2

G2



2001 John Game

[Sagittaria
sanfordii](#)

Sanford's
arrowhead

Alismataceae

perennial
rhizomatous
herb
(emergent)

May-
Oct(Nov)

1B.2

S3

G3



2007 Wendy Fisher

Suggested Citation

rareplants.cnps.org/result.html?adv=t&cd=YUB&quad=3912146:3912145:3912144:3912136:3912135:3912134:3912126:3912125:3912124#odisp=1,... 2/3

12/5/2019

CNPS Inventory Results

California Native Plant Society, Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 05 December 2019].

Search the Inventory

[Simple Search](#)

[Advanced Search](#)

[Glossary](#)

Information

[About the Inventory](#)

[About the Rare Plant Program](#)

[CNPS Home Page](#)

[About CNPS](#)

[Join CNPS](#)

Contributors

[The Calflora Database](#)

[The California Lichen Society](#)

[California Natural Diversity Database](#)

[The Jepson Flora Project](#)

[The Consortium of California Herbaria](#)

[CalPhotos](#)

Questions and Comments

rareplants@cnps.org

© Copyright 2010-2018 California Native Plant Society. All rights reserved.

NMFS Query Results
Thursday, December 5, 2019

Yuba City Quad & Honcut Quad

Quad Name **Yuba City**

Quad Number **39121-B5**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - **X**
SRWR Chinook Salmon ESU (E) - **X**
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - **X**
Eulachon (T) -
sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat - **X**
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat - **X**
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat - **X**

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

X

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

**See list at left and consult the NMFS Long Beach office
562-980-4000**

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Honcut**

Quad Number **39121-C5**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) - **X**

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

CCV Steelhead DPS (T) - **X**

Eulachon (T) -

sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat - **X**

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat - X
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat - X

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH - X

Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

**See list at left and consult the NMFS Long Beach office
562-980-4000**

MMPA Cetaceans -
MMPA Pinnipeds -



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

Phone: (916) 414-6600 Fax: (916) 414-6713



In Reply Refer To:

December 05, 2019

Consultation Code: 08ESMF00-2020-SLI-0509

Event Code: 08ESMF00-2020-E-01515

Project Name: Caltrans: 03-4F380 Yuba-70 Safety Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

12/05/2019

Event Code: 08ESMF00-2020-E-01515

00

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2020-SLI-0509

Event Code: 08ESMF00-2020-E-01515

Project Name: Caltrans; 03-4F380 Yuba-70 Safety Project

Project Type: TRANSPORTATION

Project Description: Caltrans is proposing a safety project on State Route (SR) 70 [Post Mile (PM) 16.2/25.8] from 0.2 miles north of Laurellen Road to Honcut Creek Bridge [Bridge No. 16 0020] in Yuba County, California, north of Marysville. The safety project will construct eight-foot shoulders and establish a Clear Recovery Zone (CRZ) with a minimum width of 20 feet. The CRZ may incorporate side slopes of 4:1 or less, and remove any physical obstructions, such as trees, utility poles, and other fixed objects. Roadside ditches may be constructed outside the CRZ. Should the project include a 14-foot-wide paved striped median barrier, it would allow a refuge for drivers turning left across traffic. . Where dense clusters of homes occur, the median may be a Two Way Left Turn Lane (TWLTL). At County maintained roads, and certain ag-related businesses, the median may be a designated left turn pocket. In areas with fewer homes, the median may be used to construct a road which consists of two lanes in one direction and one lane in the other direction (2+1). The project team is considering increasing the shoulder backing width to six feet, which would allow farm equipment to travel on the shoulder instead of in the travel way, provide Caltrans maintenance crews a safer work zone and allow California Highway Patrol officers an enforcement area. At County maintained roads and certain ag-related businesses, Caltrans is considering deceleration lanes/right turn pockets, as well as acceleration lanes to allow merging traffic to match highway speeds. There are numerous school bus stops throughout the project limits; therefore, designated areas may have the shoulder width increased to 14-feet to provide areas for buses to pull over and give students safer access on and off the bus. Where needed, existing driveways along the corridor may be modified to conform to the new design. As warranted, driveway culverts will be replaced to convey drainage flows in the roadside ditches. In addition, there may be minor shifts in the horizontal alignment and minor adjustments in vertical profile to correct existing non-standard features. Existing cross culverts will be extended or replaced as needed.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/39.23992668965967N121.59957863349877W>



Counties: Butte, CA | Yuba, CA

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS There is proposed critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/205/office/11420.pdf	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850 Habitat assessment guidelines: https://ecos.fws.gov/ipac/guideline/assessment/population/436/office/11420.pdf	Threatened

Crustaceans

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8246	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered

Flowering Plants

NAME	STATUS
Hartweg's Golden Sunburst <i>Pseudobahia bahiifolia</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1704	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix F - NRCS Consultation

FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 2/5/20	4. Sheet 1 of 1	
1. Name of Project SR70 Continuous Passing Lane Project - Segment 4 & 5		5. Federal Agency Involved Caltrans for FHWA - NEPA Assignment		
2. Type of Project Safety Improvement and Capacity Increase		6. County and State Yuba County, California		
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 2/28/20	2. Person Completing Form Lt. Col. J. Lopez Ramos	
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form).		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated 82,475
5. Major Crop(s) Walnuts, Prunes & Peaches		6. Farmable Land in Government Jurisdiction Acres: 89,761 % 21.8%		7. Amount of Farmland As Defined in FPPA Acres: 107,315 % 26.1%
8. Name Of Land Evaluation System Used CA - Storie Index		9. Name of Local Site Assessment System None		10. Date Land Evaluation Returned by NRCS 3/18/20
PART III (To be completed by Federal Agency)		Alternative Corridor For Segment - SR70 - Segs 4 & 5		
		Corridor A	Corridor B	Corridor C
A. Total Acres To Be Converted Directly		6.34		
B. Total Acres To Be Converted Indirectly, Or To Receive Services		0		
C. Total Acres In Corridor		6.34		
PART IV (To be completed by NRCS) Land Evaluation Information				
A. Total Acres Prime And Unique Farmland		4.2		
B. Total Acres Statewide And Local Important Farmland		0.7		
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		0.00006		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		N/A		
PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)		56.0		
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))		Maximum Points		
1. Area In Nonurban Use		15	15	
2. Perimeter In Nonurban Use		10	10	
3. Percent Of Corridor Being Farmed		20	20	
4. Protection Provided By State And Local Government		20	0	
5. Size of Present Farm Unit Compared To Average		10	10	
6. Creation Of Nonfarmable Farmland		25	0	
7. Availability Of Farm Support Services		5	4	
8. On-Farm Investments		20	20	
9. Effects Of Conversion On Farm Support Services		25	0	0
10. Compatibility With Existing Agricultural Use		10	0	0
TOTAL CORRIDOR ASSESSMENT POINTS		160	79	0
PART VII (To be completed by Federal Agency)				
Relative Value Of Farmland (From Part V)		100	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)		160	79	0
TOTAL POINTS (Total of above 2 lines)		260	79	0
1. Corridor Selected: SR70 - Yuba County PM 16.2/25.8		2. Total Acres of Farmlands to be Converted by Project: Alternative 1: 6.34 acres	3. Date Of Selection: 2/6/20	4. Was A Local Site Assessment Used? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
5. Reason For Selection:				

Signature of Person Completing this Part:

Cara Lambirth **Cara Lambirth**

DATE

2/6/20

NOTE: Complete a form for each segment with more than one Alternate Corridor

FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 2/5/20		4. Sheet 1 of 1	
1. Name of Project Segments 4 & 5 SR70 Continuous Passing Lane Project -		5. Federal Agency Involved Caltrans for FHWA - NEPA Assignment			
2. Type of Project Safety Improvement and Capacity Increase		6. County and State Yuba County, California			
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 2/28/20		2. Person Completing Form Lizeta Y. Lopez Ramos	
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form).		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		4. Acres Irrigated 82,475	
5. Major Crop(s) Walnuts, Prunes & Peaches		6. Farmable Land in Government Jurisdiction Acres: 89,761 % 21.8%		7. Amount of Farmland As Defined in FPPA Acres: 107,315 % 26.1%	
8. Name Of Land Evaluation System Used CA - storie Index		9. Name of Local Site Assessment System None		10. Date Land Evaluation Returned by NRCS 3/18/20	
PART III (To be completed by Federal Agency)		Alternative Corridor For Segment 3 - SR70			
		Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly		10.43			
B. Total Acres To Be Converted Indirectly, Or To Receive Services		0			
C. Total Acres In Corridor		10.43			
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland		8.8			
B. Total Acres Statewide And Local Important Farmland		2.6			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted		0.00009			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value		N/A			
PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)		56.6			
PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))		Maximum Points			
1. Area in Nonurban Use	15	15			
2. Perimeter in Nonurban Use	10	10			
3. Percent Of Corridor Being Farmed	20	20			
4. Protection Provided By State And Local Government	20	0			
5. Size of Present Farm Unit Compared To Average	10	10			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availability Of Farm Support Services	5	4			
8. On-Farm Investments	20	20			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	0			
TOTAL CORRIDOR ASSESSMENT POINTS		160	79	0	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	0	0	0
Total Corridor Assessment (From Part VI above or a local site assessment)		160	79	0	0
TOTAL POINTS (Total of above 2 lines)		260	79	0	0
1. Corridor Selected: SR70 - Yuba County PM 16.2/25.8		2. Total Acres of Farmlands to be Converted by Project: Alternative 2: 10.43 acres		3. Date Of Selection: 2/6/20	
4. Was A Local Site Assessment Used?		YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			
5. Reason For Selection:					

Signature of Person Completing this Part: Cara Lambirth DATE: 2/6/20
NOTE: Complete a form for each segment with more than one Alternate Corridor