



**SOUTH YUBA TRANSPORTATION
IMPROVEMENT AUTHORITY
915 Eighth Street, Suite 109A
Marysville, California**



**OCTOBER 7, 2025 – 4:00 P.M.
MEETING AGENDA**

Welcome to the South Yuba Transportation Improvement Authority meeting. As a courtesy to others, please turn off cell phones or other electronic devices, which may disrupt the meeting. The public will be given opportunity to comment on action items on the agenda when the item is heard and comments shall be limited to three minutes per individual or group.

CALL TO ORDER: Welcome. As a courtesy to others, please turn off cell phones or other electronic devices which might disrupt the meeting. Thank you.

I **ROLL CALL** – Directors Bradford, Coe, Vasquez, West

II **PUBLIC COMMUNICATIONS:** Any person may speak about any subject of concern within the jurisdiction of the authority which is not on today's agenda. The total amount of time allotted shall be limited to a total of 15 minutes and each individual or group will be limited to no more than 3 minutes. Prior to this time, speakers are requested to fill out a "Request to Speak" card and submit it to the secretary.

III **ACTION ITEMS**

- A. Approve meeting minutes of June 3, 2025.
- B. Approve amendment No. 1 with Dokken Engineering for the East Wheatland Expressway Project, refining the scope of services based on current project conditions, and authorize Chair to execute.
- C. Approve South Beale Road Railroad Grade Separation Project Study Report (PSR-PDS), and authorize Chair to execute; authorize Dokken Engineering for Project Approval and Environmental Documents (PA&ED) phase of the project.
- D. Adopt resolution authorizing Executive Director to execute cooperative agreements with California Department of Transportation (Caltrans), and to conduct negotiations and execute and submit any and all further documents.

IV **BOARD AND STAFF MEMBERS REPORTS**

V **ADJOURN**

In compliance with the Americans with Disabilities Act, the meeting room is wheelchair accessible and disabled parking is available. If you have a disability and need disability-related modifications or accommodations to participate in this meeting, please contact the Clerk of the Board's office at (530) 749-7510 or (530) 749-7353 (fax). Requests must be made two full business days before the start of the meeting.



SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

**MINUTES
JUNE 18, 2024**



Called to order at 4:02 p.m. with a quorum being present as follows: Directors Abe, Bradford, and Vasquez. Director Coe was absent. Also present were Deputy County Counsel Chase Steele and Board Clerk Natalie Allen. Chair Bradford presided.

I ROLL CALL – Directors Abe, Bradford, Coe, Vasquez – Director Coe was absent

II PUBLIC COMMUNICATIONS: None

III ACTION ITEMS

A. Approve meeting minutes of June 18, 2024.

MOTION: Move to approve as written

MOVED: Andy Vasquez SECOND: Brian Abe

AYES: Brian Abe, Gary Bradford, Andy Vasquez

NOES: None

ABSENT: Bob Coe

ABSTAIN: None

Approved via unanimous Vote

B. Receive project status update on Plumas Lake Boulevard Phase II. Public Works Director Sam Bunton provided a PowerPoint presentation recapping the following, and responded to Board inquiries:

- Projects identified in implementation strategy
- Negotiation status of Right of Ways
- Federal grant status
- Timeline for project bids

C. Approve Budget for Fiscal Year 2025/2026. Community Development and Services Director Mike Lee recapped the following, and responded to Board inquiries:

- \$9,524,000.00 projected carry over balance
- \$2,500,000.00 projected revenue
- \$2,300,000.00 for Right of Way acquisition
- \$2,000,000.00 for consultant services

MOTION: Move to approve
MOVED: Andy Vasquez SECOND: Brian Abe
AYES: Brian Abe, Gary Bradford, Andy Vasquez
NOES: None
ABSENT: Bob Coe
ABSTAIN: None

Approved via unanimous Roll Call Vote

IV BOARD AND STAFF MEMBERS REPORTS – None

V ADJOURN: 4:21 pm

Chair

SECRETARY ATTEST:
MARY PASILLAS
CLERK OF THE BOARD OF SUPERVISORS

Approved: _____

The County of Yuba

Community Development & Services Agency

Michael Lee, Director

Phone – (530) 749-5430 • Fax – (530) 749-5434

915 8th Street, Suite 123

Marysville, California 95901

www.co.yuba.ca.us



BUILDING

749-5440 • Fax 749-5616

CODE ENFORCEMENT

749-5455 • Fax 749-5464

ENVIRONMENTAL HEALTH • CUPA

749-5450 • Fax 749-5454

PLANNING

749-5470 • Fax 749-5434

PUBLIC WORKS • SURVEYOR

749-5420 • Fax 749-5424

FINANCE AND ADMINISTRATION

749-5430 • Fax 749-5434

To: South Yuba Transportation Improvement Authority (SYTIA)

From: Dane Schilling, Wheatland Contract City Engineer

Subject: Approve Amendment No. 1 to the agreement with Dokken Engineering for the East Wheatland Expressway Project and authorize Chair to sign.

Date: October 7th, 2025

RECOMMENDATION:

It is recommended that the Board approve and authorize Chair to sign Amendment No. 1 to the agreement with Dokken Engineering for the East Wheatland Expressway Project.

BACKGROUND:

On August 2, 2022, the SYTIA Board approved a professional services agreement with Dokken Engineering to prepare a Project Study Report (PSR-PDS) for the East Wheatland Expressway Project. The agreement included authorization of the PSR tasks and allowed for a future authorization of the Project Approval and Environmental (PA&ED) phases of the project.

On June 18, 2024, the SYTIA Board approved renaming of the project to the Beale Expressway, approved the PSR-PDS, and authorized Dokken Engineering's optional task for PA&ED.

DISCUSSION:

When the project was started 3 years ago, the scope of services was created with assumptions of what the project would later need. As the project moved through the planning stage (PSR-PDS), it was realized we could better refine the scope of services based on the current project conditions. Amendment No. 1 ultimately removes unnecessary scope, reduces PA&ED timeline, reduces the current cost, and slightly increases effort in areas to make the project more competitive for funding.

Services that are proposed to be removed or reduced from the original PA&ED scope include the following:

- Risk Register – Not required since the project is outside of Caltrans right of way.
- Preliminary Foundation Report – Scope is being deferred until after PA&ED.
- Location Hydraulic Study – Deferred since reliable water surface elevations are currently available.

- Value Analysis – Deferred until federal funds are available.
- Bridge Type Selection – Deferred until funding is available.
- Permits for Borings – Delayed until funding is available.
- Public Outreach – Level of effort has been reduced.

Services that are proposed to be added or increased from the original PA&ED scope include the following:

- Coordination with Placer County – Additional efforts to work towards obtaining a Cooperative Agreement.
- Topography – Additional design level topography for Alternative 3. This was deferred during the PSR-PDS that will need to be included now so Alternative 3 can be further evaluated.
- Population and Employment Forecast – To provide detailed forecasts to support the Build and No Build Alternative Traffic Analysis.

Additionally, since the project alternatives moved forward through the PSR-PDS do not include connecting to the State Highway System, Caltrans would not serve as our NEPA lead agency. In order to address this, the proposed revised PA&ED strategy includes:

1. Complete, circulate, and approve a CEQA Environmental Impact Report (EIR) with the plan to complete NEPA under a separately authorized amendment.
2. Utilize Army Corp of Engineers with jurisdiction for a 404 Permit at the Bear River and Waters of the US to perform agency consultations regarding endangered species and cultural resources to the greatest extent possible.
3. Prepare environmental studies only needed to support the CEQA document. More work will be required to achieve NEPA once a NEPA lead agency is established.
4. Within the next 6 months decide on either Caltrans (FHWA delegation) or US Department of Defense standards for documentation of the environmental studies in anticipation of receiving federal funding for the project in future phases.

FISCAL IMPACT:

The cost of advancing the Beale Expressway Project through Project Approval & Environmental Documents (PA&ED) with Amendment No. 1 is \$2,169,294.00 (including the PSR-PDS). This is currently a reduction from the previously executed agreement of \$2,454,562.00.

ATTACHMENTS:

Amendment No. 1

**PROFESSIONAL SERVICES AGREEMENT
YUBA COUNTY ENGINEERING SERVICES**

AMENDMENT # 1

This is the FIRST amendment to the agreement, dated August 2nd, 2022, for engineering services between the South Yuba Transportation Authority (SYTIA) and Dokken Engineering (CONSULTANT) for the East Wheatland Expressway Project.

Pursuant to Operative Provision D.22, "Change in Terms," of the basic agreement, the following changes are hereby made:

1. Operative Provisions, Term, Section 2 is changed to read:

Commencement Date: Date of Execution of this Agreement

Termination Date: Date of Execution of this Agreement plus 7 (seven) years

The term of this Agreement shall become effective on the date of this Agreement, and shall continue in force and effect for 7 (seven) years after the date of this Agreement, unless sooner terminated in accordance with the terms of this Agreement or extended by contract amendment. CONSULTANT is advised that any recommendation for contract award is not binding on COUNTY until the contract is fully executed and approved by the COUNTY.

Notwithstanding the term set forth above, and unless this contract is terminated by either party prior to its termination date, the term of the Agreement may be automatically extended up to ninety (90) days. Any Notice of Termination during this automatic extension period shall be effective upon a ten (10) day written notice to the other party. The purpose of this automatic extension is to allow for continuation of services, and to allow County time in which to complete a novation or renewal contract for CONSULTANT AND COUNTY approval.

CONSULTANT understands and agrees that there is no representation, implication, or understanding that the services provided by CONSULTANT pursuant to this Agreement will be purchased by COUNTY under a new agreement following expiration or termination of this Agreement, and CONSULTANT waives all rights or claims to notice or hearing respecting any failure to continue purchase of all or any such services from CONSULTANT.

2. Attachment B, Payment, Section B.1 is changed to read:

COUNTY shall pay CONSULTANT a contract fee not to exceed TWO MILLION, ONE HUNDRED SIXTY-NINE THOUSAND, TWO HUNDRED NINETY-FOUR DOLLARS AND ZERO CENTS (\$2,169,294.00); CONSULTANT shall submit requests for payment after completion of services or no later than the tenth (10th) day of the month following provision of

services. In no event shall total compensation paid to CONSULTANT under this Provision B.1 exceed TWO MILLION, ONE HUNDRED SIXTY-NINE THOUSAND, TWO HUNDRED NINETY-FOUR DOLLARS AND ZERO CENTS (\$2,169,294.00) without formal written amendment to this Agreement approved by the COUNTY.

Upon approval of the contract, CONSULTANT is authorized to proceed with the Project Study Report – Project Development Study (PSR-PDS) phase of the work (Exhibit 1 Scope of Services, Tasks 1 to 8, inclusive, and Exhibit 2 PSR-PDS Costs).

COUNTY will issue a separate notice to proceed for the Project Approval and Environmental Document (PA&ED) phase of work (Exhibit 1 Scope of Services, Tasks 9 to 16, inclusive, and Exhibit 3 PA&ED Costs).

3. Exhibit 1, Scope of Services, Tasks 9 to 16 shall be modified and replaced with the attached Exhibit A1:
4. Exhibit 3, PA&ED Cost, shall be modified and replaced with the attached Exhibit 3 PA&ED Cost:

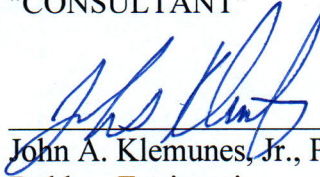
All other terms and conditions remain unchanged.

In witness thereof, the parties hereto have executed this Amendment # 1 to the Agreement on _____, 2025.

"COUNTY"

Board Chair
South Yuba Transportation
Improvement Authority (SYTIA)

"CONSULTANT"



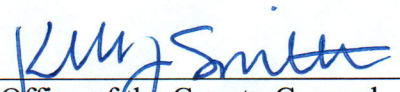
John A. Klemunes, Jr., President
Dokken Engineering

INSURANCE PROVISIONS APPROVED

for 

Tiffany Manuel,
Risk Manager

APPROVED AS TO FORM



Office of the County Counsel

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

EXHIBIT A1

AMENDMENT 1 - PA&ED PHASE SCOPE OF SERVICES

To the Contract for:

**Engineering Services for Project Study Report-Project Development Study
East Wheatland Expressway**

Revised September 30, 2025

This Amendment 1 formally changes the name of the project to Beale Expressway (BX), formerly the East Wheatland Expressway (EWX).

This following scope of services (Tasks 9 through 16) are intended to complete the environmental and engineering work necessary to complete an approved CEQA EIR and Project Report for the Alternative 3 recommended in the project PSR-PDS. At this time there is no lead agency available to complete NEPA and no Caltrans involvement is planned as part of this PA&ED scope. The CEQA approving agency will be the City of Wheatland, Yuba County or SYTIA. An attempt will be made to get Placer County concurrence with the CEQA approval, but no such guarantee of a Placer County approval is implied with this scope of work.

A future scope of work is recommended in advance of the Plans, Specifications and Estimate (PS&E) phase of the project once funding for the PS&E is identified. The pre-PS&E scope to be completed at that time may include: 1) a grant application for Federal or State funds, 2) completion of NEPA, 3) preparing bridge type selection studies, 4) permitting for geotechnical borings, 5) performing borings for the planned bridge structures and 6) preparation of a Location Hydraulic Study and Floodplain Assessment. Items 1, 4 and 5 are long lead time items that often control the critical path of projects with major structures.

In the following scope descriptions, the term "SYTIA" should be interpreted to mean the County of Yuba and the City of Wheatland when it refers to collaboration, review of deliverables and oversight of the project.

TASK 9 PROJECT MANAGEMENT

9.1 Project Meetings

DOKKEN will organize, attend, and facilitate meetings as necessary to provide progress updates, coordinate between technical disciplines, and facilitate overall project communication. For each meeting, DOKKEN will provide meeting notices, prepare meeting materials and agenda, attend, and facilitate the meeting and prepare meeting minutes. DOKKEN will consult with the SYTIA's project manager prior to each meeting to get input regarding the agenda. The following meetings are anticipated for this project:

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

- **Kickoff Meeting:** At the start of the project, DOKKEN will organize a kickoff meeting with all key personnel on the project. The purpose of this meeting will be to review the goals and objectives of the project, discuss each team member's roles and responsibilities, identify critical project issues and obtain consensus on task durations, particularly reviews. The kickoff meeting will ensure that everyone on the project team is on the same page regarding project delivery and execution.
- **PDT Meetings:** The project development team (PDT) meetings will serve as the primary forum for reviewing the status of the project and identifying and resolving project issues. Attendees will include DOKKEN's Project Manager, DOKKEN task leads as needed, Yuba and Placer Counties, the City, and other stakeholders as necessary.
- **Technical Coordination Meetings:** DOKKEN will coordinate technical issues with the City, County, Beale Air Force Base and others through meetings and correspondence.

Deliverables: Meeting Notices, Agendas, Exhibits, and Minutes

9.2 Project Management & Schedule

DOKKEN will prepare Progress Reports to record the progress of the project and as supporting data for invoices presented monthly to SYTIA. The Progress Report will include accomplished tasks for the month, anticipated progress for the next month, pending issues/resolutions, and schedule completion target dates. DOKKEN will include Progress Reports with the monthly invoices.

Deliverables: Monthly Progress Reports

Progress Schedule

DOKKEN will, within 2 weeks of Notice to Proceed, provide a detailed baseline schedule to SYTIA for review and comment. The schedule will be prepared using Microsoft Project and will show contracted tasks/milestones with dependencies and durations, critical path tasks and responsibility assignments. Subsequent to establishing the baseline schedule, DOKKEN will update the schedule on a monthly basis, to coincide with the PDT meetings.

Deliverables: Project Schedule

Project Administration

DOKKEN will monitor and control the effort and progress of the proposed services as follows:

- **Set up project accounting system:** DOKKEN will structure the accounting system in accordance with the County's invoicing and tracking needs.
- **Prepare Subconsultant agreements:** DOKKEN will execute contracts with the proposed subconsultants for the scope of services described herein.
- **Monitor Subconsultant progress and review/approve invoices:** DOKKEN will track the work progress of the proposed subconsultants and review their invoices for format and content compliance.

Deliverables: Monthly Project Invoices

9.3 Quality Control

DOKKEN will have a quality management plan in effect during the entire course of the project and will develop a plan establishing a process to ensure design calculations are independently checked. Exhibits and plans will also be checked, corrected, and backchecked for accuracy and completeness. DOKKEN will review subconsultant submittals to ensure that appropriate background information, study methodology, interpretation of data, format and content are completed in accordance with current standards and the quality management plan.

Deliverables: Quality Management Plan

TASK 10 SURVEYING AND RIGHT OF WAY MAPPING

10.1 Topographic Surveys

R.E.Y. will coordinate aerial photogrammetric mapping and provide control and conventional ground surveys along the Alternative 3 preferred alignment. Items to locate will include but are not limited to eight cross-sections of the Bear River, drainage features, waterways, utilities, roadway improvements, conforms, overhead transmission lines (location and clearances) and top of rail elevations, and other key design features not visible in the aerial photography and compiled in the photogrammetric mapping.

R.E.Y. will facilitate the delivery of aerial photogrammetric mapping for the proposed project. The width of the survey will cover an approximately 350' wide strip along the alignment and widened to capture the proposed intersections. The photogrammetric survey will include a 0.15' pixel resolution color orthophoto, full planimetrics compiled at 1"=50', 1' contours and a 3D surface. The control survey will include the setting of ground control aerial panels along the project limits and random survey check shots to confirm contours and surface details.

DOKKEN will work with SYTIA and Placer County to coordinate access onto private properties to perform aerial control surveys as needed.

Control will be based on State Plane Coordinates, NAD83(2011)-EPOCH 2010.00, NAVD88.

Deliverables: Photogrammetric Topographic Base File; Color Orthophoto; Point Files; DTM and 3D Surface File; Supplemental Topographic Mapping

10.2 Preliminary Boundary and Right of Way Surveys

To gain a good understanding of the properties and level of effort involved, including the Caltrans right of way, Johnson Rancho and the Yuba / Placer County line, R.E.Y. has already done a substantial amount of records research. The research will be completed and a thorough review of right-of-way maps, record maps and deed documents will take place. Field surveys will be performed to locate sufficient monuments of record to resolve and map the record right of ways and affected property boundaries.

For this phase of the project, R.E.Y. will map the record right-of-way and adjacent properties from readily available maps, deeds, subdivision maps, and other public records to prepare

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

a preliminary boundary and right-of-way base map. R.E.Y. will prepare a right-of-way and boundary base drawing in AutoCAD format that will include right of way details, property owner information such as assessor's parcel numbers, street address and current ownership references. R.E.Y. will confer with the Yuba County Surveyor's Office to discuss any concerns and glean any undocumented historical knowledge of the Johnson Rancho or Yuba/Placer County line. DOKKEN will work with the design team, SYTIA and Placer County to coordinate access onto private properties to perform boundary surveys as needed.

Title reports are not expected to be used for this phase of the project. Title reports will become necessary in future phases of the project to fully resolve all properties, exceptions, dedications, easements, and other constraints. The majority of the work performed for this phase will be valid for use in the PS&E phase.

Deliverables: Right of Way Base File; Maps and Property Documents

TASK 11 ENVIRONMENTAL TECHNICAL STUDIES

This scope and fee assumes that one build alternative will be evaluated in the technical studies and CEQA environmental document. Should two or more unique build alternatives need to be evaluated, additional scope may be necessary. Any effort not included in this scope for environmental tasks will be negotiated with SYTIA and approved prior to commencing work for out-of-scope work.

11.1 Natural Environment Study

A DOKKEN biologist will conduct fieldwork to assess the presence/absence of sensitive biological resources (e.g., species or habitats), or to determine the potential for occurrence of such resources that may not be detectable when the fieldwork is conducted. In addition, literature research will be conducted to determine the potential for sensitive plant and animal species in the project area. The location of any sensitive biological resources present on site, including plants and plant communities, will be mapped. Based on initial research and experience with projects in this area, tricolored blackbird, Swainson's hawk, vernal pool fairy shrimp, and Valley Elderberry Longhorn Beetle (VELB), are expected to be found in the project area. The Bear River also provides habitat for federally protected salmonids and is classified as critical habitat for California Central Valley steelhead. DOKKEN will conduct fieldwork appropriate to the season to maximize the ability to detect and positively identify sensitive species.

DOKKEN will prepare a Natural Environment Study in accordance with the Caltrans approval format (if a different potential NEPA lead agency is identified, DOKKEN will instead prepare the biological report in their format). This study will include a description of the field methods used and the results of the biological surveys of the project area. The report will list plant and animal species present, along with a general description of the plant communities occurring within the project area. If any sensitive resources are found on the site, DOKKEN will prepare and include in the study a graphic displaying the location of the sensitive plant communities on site and any sensitive biological resources observed. The report also will contain tables describing sensitive species and their

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

habitats that are present or potentially present; it also will identify and assess project impacts on the existing biological resources, including any sensitive species. Mitigation measures will be included as necessary.

Deliverables: Natural Environment Study

11.1.1 Aquatic Resources Delineation Report

In addition to the general biological surveys for the Natural Environment Study, DOKKEN will conduct a delineation of jurisdictional aquatic resources including Waters of the United States, Waters of the State, and CDFW jurisdictional habitats. The delineation will be conducted in accordance with U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board and California Department of Fish and Wildlife protocols for delineation of the Ordinary High Water Mark and wetland indicators. DOKKEN will record delineation efforts in the field with GPS including the boundaries of each aquatic resource within the proposed project area.

Deliverables: Aquatic Resources Delineation Report

11.2 Biological Assessment for USFWS

Consistent with Section 7 of the Endangered Species Act, a Biological Assessment will be prepared to initiate consultation with the United States Fish and Wildlife Service (USFWS) for impacts to federally listed species including vernal pool fairy shrimp and/or VELB. The Biological Assessment will include a special discussion of construction methods and special design considerations that were selected to minimize potential impacts to federally listed species. The Biological Assessment will be submitted to the project's federal nexus for review and approval prior to sending it to USFWS to initiate Section 7 Consultation. At this time, it is anticipated that the federal nexus will be USACE. Depending upon how much of the project USACE will take jurisdiction over, the Biological Assessment and Opinion may cover all or a portion of the project.

After the Biological Assessment is approved and submitted for review and concurrence at USFWS, DOKKEN will provide environmental and engineering support to ensure that the Section 7 Consultation process is completed on schedule.

Section 7 Consultation will address potential impacts to individual special status species during construction. Modification of the design or construction methodology may become part of the avoidance and minimization strategy to ensure that potential impacts to the protected species are reduced to the greatest extent possible. At the completion of the consultation process, USFWS will issue a Biological Opinion for the species.

Deliverables: Biological Assessment for USFWS

11.3 Biological Assessment for NMFS

Consistent with Section 7 of the Endangered Species Act, a Biological Assessment will be prepared to initiate consultation with the National Marine Fisheries Service (NMFS) for impacts to federally listed salmonid species and critical habitat for California Central Valley steelhead. The Biological Assessment will include a special discussion of construction methods and special design considerations that were selected to minimize potential impacts to federally listed species. The Biological Assessment will be submitted

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

to the project's federal nexus for review and approval prior to sending it to USFWS to initiate Section 7 Consultation. At this time, it is anticipated that the federal nexus will be USACE.

After the Biological Assessment is approved and submitted for review and concurrence at NMFS, DOKKEN will provide environmental and engineering support to ensure that the Section 7 Consultation process is completed on schedule. Section 7 Consultation will address potential impacts to individual special status species during construction. Modification of the design or construction methodology may become part of the avoidance and minimization strategy to ensure that potential impacts to the protected species are reduced to the greatest extent possible. At the completion of the consultation process, NMFS will issue a Biological Opinion for the species.

Deliverables: Biological Assessment for NMFS

11.4 Cultural Resources Inventory Report

DOKKEN will complete cultural resource efforts in compliance with Section 106 of the National Historic Preservation Act (NHPA). At this time, it is anticipated that the project's current federal nexus will be USACE. As such, the cultural report will be prepared to meet the requirements of USACE. However, if a different potential NEPA lead agency is identified, DOKKEN will instead prepare the cultural report in their format.

A DOKKEN archaeologist will prepare a Cultural Resources Inventory Report. This report will describe the results of Native American Consultation, research and field methods used in identifying cultural resources, the archaeological and historic resources identified in the project vicinity, and the potential of the project to adversely impact any archaeological or historic resources.

Deliverables: Cultural Resources Inventory Report

11.4.1 Native American Consultation

DOKKEN will contact the Native American Heritage Commission (NAHC) to initiate Native American consultation under Section 106 and AB 52. The NAHC will provide a list of Native American groups to contact regarding this project. DOKKEN will coordinate with USACE and the PDT to consult with the tribes. With PDT and USACE approval, DOKKEN will contact each tribe via certified mail. After 28 days, DOKKEN will follow up with those groups that have not commented via telephone. DOKKEN will document all efforts to consult with each tribe. Consultation will be completed in compliance with Section 106 and AB 52.

Deliverables: Native American Consultation Log

11.4.2 Extended Phase I (cost not included)

Based on the potential high sensitivity associated with the Bear River floodplain, DOKKEN anticipates that Extended Phase I testing may be required. The XPI would determine the presence or absence of archaeological materials within the Project Area. If subsurface archaeological deposits are encountered during excavation, then additional fieldwork may be required to determine the significance of the find. Results of the fieldwork will be

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

documented in a report and, if necessary, Department of Parks and Recreation 523 (DPR 523) site forms. Since the number of tests and the extent of testing is not able to be determined at this time, the cost associated with this task is not included.

Deliverables: Extended Phase I Proposal & Extended Phase I Report

Task 11.5 Historic Resources Report / Finding of Effect (FOE)

The project has the potential to impact the Union Pacific Railroad (UPRR) tracks that run parallel to SR 65, the old portion of SR 65 near Riosa Road, the South Sutter Canal and the Camp Far West Canal, as well as the two levee systems, RD 1001 built in 1952 and RD 0817/RD 2103 originally built in 1941. These resources are more than 45 years of age and therefore require evaluation to determine if it is a historic property as defined by Section 106 of the National Historic Preservation Act or a historical resource as defined by CEQA. If the evaluation determines that the line is a historic property or historical resource, then an analysis of the project's potential to adversely affect it will be required. ESA will prepare a report and FOE to evaluate all historic (non-Native American) resources present within the project area (format will be for USACE or whoever the PDT determines it the most likely NEPA lead agency at the time of report preparation). These resources will be documented and evaluated for its eligibility to be listed in the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR). A FOE will be issued based on these evaluations.

Deliverables: Historic Resources Evaluation Report/Finding of Effect

11.6 Noise Study Report

DOKKEN will prepare a Noise Study Report consistent with the Caltrans Noise Analysis Protocol and Technical Noise Supplement (TeNS) to address the project's potential effects on existing and future noise conditions, including construction impacts. Should a different NEPA lead agency be likely, this noise report can instead be prepared to match a different format. DOKKEN has identified potential sensitive receptors to the east of old SR 65 and at the Jasper Lane/Spenceville Road intersection. Focused attention will be given to these sensitive receptor groups during noise analysis conducted for the Noise Study Report. Also, since this noise analysis is needed to support the standalone CEQA EIR, the noise report will analyze conditions against local ordinances and will utilize CEQA measurement standards.

A DOKKEN noise specialist will conduct ambient noise level measurements to establish the existing noise environment at representative receptor locations. Short-term (15-minute) noise level field measurements will be made at up to four locations to document the existing noise environment and to calibrate the traffic noise model. Observations of barriers, terrains, building heights, and other site-specific information will be noted during each measurement period.

Noise impacts from construction sources will be analyzed based on the equipment expected to be used, length of a specific construction task, equipment power type (gasoline or diesel engine), horsepower, load factor, and percentage of time in use. The construction noise impact will be evaluated in terms of maximum levels (Lmax) and the frequency of

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

occurrence at adjacent receptor locations. Analysis requirements will be based on the sensitivity of the project study area and the Noise Ordinance specifications.

The Federal Highway Administration (FHWA) Traffic Noise Model (TNM), Version 2.5, will be used to evaluate the traffic noise levels associated with the Existing, Future No Build, and Build Alternative. Model input data include peak-hour traffic volumes, vehicle mix among autos, medium and heavy trucks, vehicle speeds, ground attenuation factors, and roadway configurations. Existing roadway traffic noise will be calculated as baseline conditions, using concurrent traffic counts obtained during ambient noise level measurement. The future traffic conditions will assume either the worst-case traffic condition or the projected traffic volumes provided in the traffic study, whichever is lower.

Noise abatement measures (noise barriers) designed to reduce long-term traffic noise impacts will be evaluated. An evaluation of noise abatement options will be included within the Noise Study Report as applicable.

Deliverables: Noise Study Report

TASK 12 CEQA ENVIRONMENTAL DOCUMENT

12.1 Notice of Preparation

DOKKEN will prepare a Notice of Preparation (NOP) for the Environmental Impact Report (EIR) which will be circulated to all CEQA responsible agencies. The NOP will provide responsible agencies with a description, location, and potential environmental impacts for the project. The NOP will be certified mail to each responsible agency as well as every federal agency that is involved in approving or funding the project. Additionally, each Trustee Agency responsible for natural resources affected by the project will also be mailed a copy of the NOP. Newspaper posting fees are not included in the DOKKEN fee at this time.

DOKKEN will conduct outreach and organize an NOP Scoping Meeting. The meeting will have DOKKEN staff in attendance to meet with participants and answer questions. DOKKEN will provide meeting material, including maps, exhibits, and comment forms. A summary of comments and meeting minutes will be provided to the PDT and Caltrans after the Scoping Meeting and these records will be included as an attachment to the draft EIR.

Deliverables: Notice of Preparation and Summary of Public/Agency Comments

12.2 Draft Environmental Impact Report

DOKKEN will incorporate the purpose and need, project description, and the technical studies into the draft EIR. DOKKEN will prepare sections for Human Environment, Physical Environment, Biological Environment, and Cumulative Impacts. The draft EIR will determine if the project has any other significant impacts on the environment under State standards, identify potential mitigation measures for such impacts, and determine all feasible mitigation measures to reduce all other impacts below a level of significance.

Deliverables: Draft Environmental Impact Report

12.2.1 CEQA-Level Resource Investigation

Since many standalone Caltrans environmental technical studies will not be prepared under the scenario associated with Amendment 1, this task was created to provide budget to conduct a detailed investigation and analysis of impacts for the following environmental resources: Air Quality, Community Impacts, Visual Impacts, Water Quality, Farmlands, and Cumulative Impacts. Up to 5 visual simulations are included in this scope.

DOKKEN will summarize all findings and appropriate avoidance, minimization, and mitigation measures associated with these resources within the draft CEQA Environmental Impact Report.

Deliverables: Air, Community, Visual, Water Quality, Farmland, and Cumulative Sections of Draft Environmental Impact Report

12.3 Public Circulation

Once the draft EIR has been approved by the PDT, it will be circulated for public review for a period of 45 days. The EIR has a critical objective of providing a means by which the general public and responsible agencies can participate in the environmental process by providing written comments on issues addressed in the EIR. DOKKEN will coordinate the preparation of the distribution list with the PDT. Pursuant to CEQA requirements, DOKKEN will prepare a Notice of Availability (NOA) for the draft EIR. This notice, along with the draft EIR and technical studies, will be made available at the County offices, the Public Library, and electronically during a 45-day public circulation and review period. In addition, the document will be distributed to other reviewing government agencies through the California State Clearinghouse. Newspaper posting fees are not included in the CONSULTANT fee at this time.

Deliverables: Notice of Completion, Notice of Availability, and Notice of Intent

12.3.1 Public Hearing

To satisfy the requirements of the EIR, DOKKEN will conduct a public hearing during the 45-day circulation of the environmental document. This hearing will explain the purpose of the project, why it is needed, what is being proposed, and the environmental impacts of the project. DOKKEN will advertise the hearing in the local newspaper, with posted fliers, and direct mailings, as needed, to ensure maximum attendance and participation at the meeting. The hearing will either be in-person or virtual and will consist of a brief presentation followed by questions directed to technical experts on the project. Comments will be collected and summarized for the PDT's consideration. DOKKEN will produce a Record of Public Hearing for the project files.

Deliverables: Public Hearing Mailers and Materials and Record of Public Hearing

12.4 Response to Public Comments

At the close of the public review period for the draft EIR, DOKKEN will meet with the PDT to review any comments on the EIR that were received, and to discuss potential responses to these comments. DOKKEN will then formulate responses to the comments on the EIR. Once draft responses to comments are completed, they will be submitted to the agencies' staff for review and comment. The agencies' comments will be incorporated into the

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

response to comments document, which will be submitted to the PDT as an appendix in the EIR.

Deliverables: Response to Public Comments

12.5 Final Environmental Impact Report

Following public review of the draft EIR, the final EIR will be prepared by DOKKEN. Prior to action on the EIR, DOKKEN will assist the PDT to prepare appropriate findings and the Administrative Record. The Final EIR will include a Mitigation Monitoring and Reporting Matrix.

Deliverables: Final Environmental Impact Report

12.6 CEQA Finding of Fact and Statement of Overriding Considerations

DOKKEN will draft findings of fact pursuant to State CEQA Guidelines Section 15091 for each of the significant effects identified in the final EIR. The findings will describe the effect, cite one or more applicable findings under Section 15091, and describe the evidence that supports the selected findings. The findings will also explain why other project alternatives have been found infeasible by the PDT. DOKKEN will coordinate the drafting of these findings with PDT.

DOKKEN will also prepare a Statement of Overriding Considerations, if needed, to address any significant effects of the project that are unavoidable, explaining the economic, legal, social, technological, or other benefits of the project that outweigh its unavoidable environmental impacts. The statement will be based on substantial evidence in the record. DOKKEN will work with the PDT in preparing the findings and statement of overriding considerations. DOKKEN will also assist the PDT with up to two (2) Staff Reports and Resolutions. The Final EIR will be reviewed and adopted by the SYTIA Board at a regular meeting. To complete the CEQA process, DOKKEN will file a Notice of Determination (NOD) with the County Recorder's Office within 5 days of approval of the final EIR (pursuant to CEQA guidelines). NOD filing fees are not included in the CONSULTANT fee at this time.

Deliverables: Finding of Fact, Statement of Overriding Considerations, Staff Reports, and NOD

TASK 13 ENGINEERING STUDIES

13.1 Transportation Analysis Report

13.1.1 Data Collection

The study area for the Beale Expressway includes the following study intersections.

1. McDevitt Dr/SR 65
2. 1st Street/SR 65
3. Main Street/SR 65
4. Main Street/State Street
5. Main Street/Olive Street/Spenceville Road
6. McCurry Street/Spenceville Road
7. Spenceville Road/Jasper Lane
8. State Street/SR 65
9. Riosa Road/SR 65

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

10. Riosa Road/Sheridan Lincoln Blvd (North)

11. Riosa Road/Sheridan Lincoln Blvd (South)

FEHR AND PEERS will collect two days of two-hour AM and PM peak period turning movement traffic counts at the study intersections. The traffic counts will include trucks, bicycles, and pedestrians. The counts will be collected on midweek days (Tuesday, Wednesday, or Thursday) with good weather while schools are in session and when no major events are planned at the Hard Rock Casino and Toyota Amphitheatre. The counts will also not occur within two weeks of Halloween given the level of attendance this holiday generates at Bishop's Pumpkin Farm in Wheatland. FEHR AND PEERS will coordinate with Yuba County, the School District, Beale Air Force Base and the City of Wheatland when scheduling the traffic counts. FEHR AND PEERS will observe daily train crossings (including blocking delay) at Main Street for the same two days.

FEHR AND PEERS will conduct field observations at the study locations to confirm lane configurations, pedestrian, and bicycle facilities, posted speeds, etc. and to observe AM and PM peak hour conditions. FEHR AND PEERS will conduct peak hour travel time measurements on SR 65 between Riosa Road in Sheridan and McDevitt Drive in Wheatland to determine back of queue during congested conditions. We will obtain collision data for SR 65 in the study area from the California Crash Reporting System and the local police for the most recent five-year period.

13.1.2 Existing Conditions Analysis

Traffic operations at the study intersections will be analyzed consistent with the methodology published in the Highway Capacity Manual (Transportation Research Board, 2022). The Synchro/SimTraffic traffic analysis software will be applied to determine intersection operations using microsimulation of vehicles at the study intersections. Traffic simulation analysis provides detailed results for intersection queuing and can show the effect of train crossings on intersection operations.

At study intersections, the AM and PM peak hour delay, level of service, and queue length will be reported for each movement. For SR 65 between Riosa Road in Sheridan and McDevitt Street in Wheatland, the AM and PM peak hour travel time will be reported.

FEHR AND PEERS will prepare a draft technical memorandum that describes the data collection, analysis methodology, existing conditions analysis and effects the existing conditions are having on response times for Wheatland Police and Fire personnel. We will respond to one set of comments and prepare a final memorandum.

13.1.3 Travel Demand Forecasts

FEHR AND PEERS will use the Yuba County travel demand model to develop traffic volume forecasts for the study intersections. We will work with SYTIA staff to determine the appropriate version to use. We will review the model to confirm the existing roadway network and land uses in the project area. This includes extending the model to cover the study area in Placer County along Riosa Road in Sheridan.

For the cumulative conditions model, we will ensure that the planned roadway projects are included. For the land development projects, we will compare the land use absorption totals for Wheatland in the Yuba County travel demand model with the allocated future

development in the SACSIM travel demand model to develop estimated land uses for the No Build and Build Alternatives. The land use estimates will be reviewed and approved by the project team prior to preparing the traffic forecasts. We will prepare opening year and design year forecasts for the no build and up to two build alternative scenarios. Daily, AM peak hour, and PM peak hour forecasts will be prepared for the study intersections.

From the travel demand model, we will prepare vehicle miles of travel (VMT) estimates for the project alternatives. We will prepare induced travel estimates and recommend measures to mitigate VMT changes.

FEHR AND PEERS will prepare a draft technical memorandum that describes the forecast methodology, forecast volumes, and VMT and other performance measures. We will respond to one set of comments and prepare a final memorandum.

13.1.4 Future Conditions Analysis

Using the traffic forecasts, FEHR AND PEERS will analyze intersection and highway operations for the AM and PM peak hours under opening and design year conditions. The no build alternative and up to two build alternatives will be analyzed.

For the build alternatives, the proposed new intersections on Riosa Road or Spenceville Road at the ends of the proposed expressway will be included as study intersections. Traffic control options (stop control, roundabout, and signal) for these intersection will be evaluated). At intersections, the AM and PM peak hour delay, level of service, and queue length will be reported for each movement. For SR 65, the AM and PM peak hour corridor travel time will be reported.

In addition to the traffic operations analysis, FEHR AND PEERS will conduct a safety assessment of the build alternatives and discuss the potential impact to pedestrian, bicycle, transit, and rail networks. We will prepare the traffic index for pavement design.

13.1.5 Transportation Analysis Report

FEHR AND PEERS will prepare a draft Transportation Analysis Report (TAR) that documents the data collection, existing conditions analysis, travel demand forecasts, and future conditions analysis. The report will provide tables that summarize the analysis findings and figures to show traffic volumes.

FEHR AND PEERS will attend up to 6 project meetings to discuss the traffic analysis and preparation of the TAR,

Deliverables: Methodology Memorandum; Existing Conditions Memorandum; Traffic Analysis Report

13.2 Population and Employment Forecasts

FEHR AND PEERS will contract with Economic & Planning Systems, Inc. (EPS) to provide detailed population and employment forecasts for the City of Wheatland and southern Yuba County under the No Build and Build Alternatives. This represents an alternative approach to assessing induced travel, as it provides feedback to the land use absorption step in the traffic forecasting process. EPS will research and assemble data from several third-party data sources that include information regarding future population estimates

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

through 2050. Depending on the availability of data, EPS also may provide projections of job growth. This approach will provide a more defensible estimate of potential land use development for the No Build and Build Alternatives and how the proposed project will affect development. EPS will provide the information for FEHR AND PEERS to inform the Yuba County travel demand model when preparing the future year forecasts.

13.3 Preliminary Drainage Report

DOKKEN will conduct a preliminary drainage investigation to determine the existing drainage patterns and storm drain facilities in the project area, including existing channels/ditches, pipe/culvert locations, sizes, local rainfall intensities, and flows. This information will be obtained through a combination of field reconnaissance, City/County staff, as-built files. After reviewing the existing drainage conditions, on- and off-site hydrologic and hydraulic analyses will be conducted for the existing and post-project condition, emphasizing the primary objective of maintaining existing flow patterns and runoff amounts.

The on-site analyses will include identifying where new facilities are needed and where existing facilities can be reused, developing drainage boundaries for the areas within the project limits, developing flows for each facility based on Caltrans hydrology standards, and identifying where new/retrofitted storm drain facilities are needed. A comparison of existing versus proposed peak flows will also be performed and will become the basis of the retention design.

A Draft Preliminary Drainage Report for the project will be prepared to document the hydrologic and hydraulic analysis and will provide a detailed discussion of the following: existing conditions and facilities in the project area, the on-site hydrologic analyses, existing and post-project drainage patterns, flood conditions, results of the on-site hydraulic analyses (including basin sizing) and any issues of special concern or significance.

Deliverables: Preliminary Drainage Report

13.4 UPRR & CPUC Diagnostic Meeting

DOKKEN will schedule and facilitate an on-site diagnostic meeting with the Union Pacific Railroad and the California Public Utilities Commission. The meeting will discuss the proposed project, the UPRR requirements to allow a new crossing and any concerns CPUC has with a new crossing. SYTIA will be responsible for covering any UPRR and/or consultant time and expenses for the meeting(s) or reviews.

Deliverables: Diagnostic Meeting and Meeting Minutes

13.5 Design Support for Environmental

DOKKEN will support the environmental process by providing engineering data and graphics to the environmental team, reviewing submittals for consistency with the design, and reviewing mitigation measures to ensure that they can be implemented.

Deliverables: Engineering Data and Graphics to Support Environmental Documentation

13.6 Preliminary Geotechnical Design and Materials Report

GEOCON will review readily available geotechnical information and published geologic mapping, obtain bulk near-surface soil samples by hand-excavation at several locations along the proposed roadway alignments, perform laboratory testing on the bulk samples to evaluate preliminary project pavement support characteristics, perform preliminary engineering analyses, and develop preliminary geotechnical design recommendations for the proposed project elements. Specifics of our engineering analysis will depend on forthcoming project design details and available geotechnical information.

GEOCON will prepare a Preliminary Geotechnical Design and Materials Report (PGDMR) to include (but not be limited to) the following:

- Scope of work summary and project description.
- Site Plan showing near-surface soil sample locations.
- Results of laboratory testing.
- Site geology and anticipated subsurface conditions.
- Preliminary seismic study (in accordance with the latest Caltrans Seismic Design Criteria).
- Preliminary geologic hazard evaluation (liquefaction, lateral spreading, etc.) based on existing geotechnical data.
- Preliminary geotechnical design recommendations for Caltrans Standard retaining walls/sound walls, including recommended foundation type(s) and associated design parameters.
- Preliminary approach embankment material and earthwork recommendations.
- Preliminary pavement structural section recommendations based on Traffic Indices provided by the design engineer.
- Geotechnical investigation recommendations for design-level Geotechnical Design and Materials Report (GDMR) analysis and final project recommendations.

Deliverables: Preliminary Geotechnical Design and Materials Report

13.7 Phase I Environmental Site Assessment (ESA)

GEOCON will perform research to estimate the existing potential for impacts to the project Site (i.e., levels of hazardous materials/wastes warranting regulatory cleanup action) from the presence of hazardous materials/wastes on, or within, the vicinity of the Site. For the purposes of this Phase I ESA, the “vicinity” of the Site is defined as properties located within ¼-mile of the Site. The guidelines used for the definition of hazardous materials/wastes are presented in the California Code of Regulations, Title 22. The Phase I ESA will be performed in general accordance with American Society for Testing and Materials (ASTM) Designation E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

The scope of services for the Phase I ESA is presented as follows.

- Perform a reconnaissance of the Site to assess conditions for the presence, or make visual observations of indicators of the potential existing presence, of hazardous materials, hazardous wastes, or soil and/or groundwater impacts on the Site. These indicators include, but are not limited to, 55-gallon drums, USTs and aboveground storage tanks, chemical

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

containers, waste storage and disposal areas, industrial facilities, discolored surficial soils, electrical transformers that may contain polychlorinated biphenyls (PCBs), and areas conspicuously absent of vegetation. DOKKEN will provide GECON with a site plan clearly depicting the site boundaries. DOKKEN will obtain permission to enter the Site. If access is unavailable to any portions of the Site, our ability to complete the assessment described herein may be hindered. Provisions for a survey of wetlands delineation, asbestos, lead-based paint, lead in drinking water, radon gas, and methane gas are not provided in this scope of services.

- Perform a visual survey of the adjacent properties from the Site and from public thoroughfares to observe general types of land use surrounding the Site.
- Review the Standard Environmental Records Sources: Federal and State referenced in American Society for Testing and Materials (ASTM) Designation E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process to obtain information regarding the potential presence of hazardous materials/wastes on the Site or on properties located within the approximate minimum search distance specified for each source.
- Review reasonably ascertainable regulatory agency files the Site and/or properties in the vicinity of the Site whose environmental conditions might potentially impact the Site. The sources for these files may include the Placer and Yuba County Environmental Health Departments and the Regional Water Quality Control Board.
- Review pertinent and reasonably ascertainable information sources to evaluate physiographic, geologic, and hydrogeologic conditions in the vicinity of the Site.
- Review and interpret reasonably ascertainable historical aerial photographs to obtain information concerning the historical use of the Site and adjacent properties.
- Review United States Geological Survey (USGS) topographic maps to obtain information relative to the topography of the Site, as well as previous development and uses of the Site and properties located in the vicinity of the Site.
- Review documents provided by Client at Client's discretion. Potentially useful documents may include geotechnical, geologic, and environmental reports, Site plans, plot plans, and correspondence with regulatory agencies.
- Conduct interviews by telephone or in writing with present and past tenants/owners of the Site to evaluate activities conducted at the Site with regard to the use, generation, storage, or disposal of hazardous materials/wastes onsite.
- Prepare a report summarizing the findings of the Phase I ESA which will qualitatively describe the potential for environmental impairment of the Site. If necessary, the report will also provide recommendations for additional environmental services.

Deliverables: Phase I Environmental Site Assessment

13.8 Utility Coordination

DOKKEN will update the preliminary utility investigation performed during the PSR to clarify any conflicts or proposed relocations associated with the alternative being

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

considered in PA&ED. The elevation of the overhead lines and existing clearance measurements will be added to the utility base map. If the information obtained with the Utility A Letter requests does not adequately cover the preferred alternative facilities, a supplemental request will be submitted to the utility companies to obtain necessary detail. The utility base map will be updated as well as the utility portion of the Right of Way Data Sheets.

Deliverables: Updated Utility Information and Updated A Letters as appropriate

TASK 14 COMMUNITY AND STAKEHOLDER OUTREACH

PA&ED level public outreach was performed during the PSR-PDS. The Community Outreach tasks during PA&ED will consist primarily of supporting the NOP Scoping Meeting and the Public Hearing required for the environmental document.

14.1 Notice of Preparation and Public Hearing Support

DOKKEN will provide engineering support to the environmental team in preparing for and hosting the notice of preparation and public hearing. Responsibilities will include providing engineering drawings for environmental figures, preparing exhibits for the public meetings, and attending public meetings.

AIM will continue to support the project with monitoring the website, project branding and other outreach support as needed.

Deliverables: Handouts and Presentation Materials

14.2 Cooperative Agreement and Coordination with Placer County

DOKKEN will continue to coordinate with PCTPA, Supervisor Landon, Sheridan MAC and the Placer County Department of Public Works in an effort to promote support for the project with Placer County stakeholders. DOKKEN will prepare a draft Cooperative Agreement between SYTIA and Placer County to establish a framework for the approval of the CEQA EIR. DOKKEN will circulate the draft for comments and make revisions in an effort to help negotiate an agreement acceptable to both parties.

DOKKEN will continue outreach to PCTPA, Supervisor Landon, Sheridan MAC and the Placer County Department of Public Works to keep them informed of the project progress through the following communications:

Stakeholder	Outreach Method(s)
PCTPA	Invitation to PDT's and focus meetings with them
Supervisor Landon	Communications to the Supervisor's office
Sheridan MAC	Communications and periodic MAC updates in person
Placer County Dept of Public Works	Invitation to PDT's and focus meetings with them

Deliverables: Draft & Final Cooperative Agreement, Outreach Communications

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

TASK 15 FUNDING STRATEGY and GRANT SUPPORT (no cost provided)

Scope and budget for funding, grant research, and grant preparation has not been included in this scope of work.

TASK 16 PROJECT REPORT

16.1 Geometric Concept Drawing

DOKKEN will utilize the geometrics for the preferred alternative, and as-built information and records to identify all non-standard features of the existing facility and proposed project improvements for the interim project. DOKKEN will prepare a Draft GCD at 1" = 100' scale for up the preferred alternative utilizing existing available right of way information and topographic mapping. The GCD will include layouts, profiles, super-elevations, typical sections and traffic volume turning diagrams.

Deliverables: Geometric Concept Drawing

16.2 Design Standard Decision Documents

DOKKEN will evaluate the project for any non-standard features that are identified in the Caltrans Design Information Bulletin (DIB) 78. The DIB 78 will be used in conjunction with the Caltrans Highway Design Manual and compared to boldface and underlined standards. DOKKEN will prepare Design Standard Decision Documents (DSDD) for any non-standard feature.

The DSDD will be prepared in accordance with Chapter 21 of the Project Development Procedures Manual, "Design Standard Decisions."

Deliverables: Design Standard Decision Documents

16.3 Location Map, Layouts, Profiles and Typical Sections (30% Plans)

DOKKEN will prepare the necessary attachments for the Project Report, including a Location Map, Layouts, Profiles, and Typical sections. DOKKEN will utilize the GCD developed to prepare 11" x 17" plan sheets of project layout, profiles, and typical sections. DOKKEN will submit the Design A submittal to UPRR as part of the 30% plans.

Deliverables: Location Map, Layouts, Profiles, Typical Sections, UPRR Design A Submittal

16.4 Storm Water Data Report

Compliance with Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit will be documented in the Storm Water Data Report (SWDR). The SWDR will be prepared to ensure that the programmed project includes sufficient right-of-way and budget for the required storm water controls.

DOKKEN will develop a long-form PA&ED-level SWDR in accordance with the latest Caltrans Project Planning and Design Guide. The document will include:

- A description of the project and the major engineering features.

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

- A preliminary estimate of the Total Disturbed Soil Area (DSA), New Impervious Surface (NIS) Area, and Post Construction Treatment (PCT) Area.
- A determination of Risk Level and requirement for Treatment BMPs.
- A discussion of the stormwater quality issues specific to this project.
- A description of the probable design pollution prevention BMPs.
- A description of the probable permanent treatment BMPs, if required.
- A description of the probable maintenance and construction site BMPs.
- SWDR Summary Spreadsheets
- Maps and exhibits

Deliverables: Storm Water Data Report (PA&ED Level)

16.5 Cost Estimates

DOKKEN will prepare the Caltrans standard '11-page' format cost estimate for improvements of the project. DOKKEN will include information on pavement structural section, drainage, retaining walls, erosion control and water pollution control BMPs, traffic signals, signage, traffic management plan, structures, and right of way costs in the estimate.

Deliverables: Caltrans 11 Page Estimate

16.6 Right of Way Data Sheet/Utility Information Sheet

DOKKEN will prepare the Right of Way Data Sheets for the project. DOKKEN will prepare the Right of Way Utility Estimate Worksheet and Utility Information Sheets to support the Right of Way Data Sheets.

Deliverables: Right of Way Data Sheet; Utility Information Sheet

16.7 Bridge Advanced Planning Studies Updates

DOKKEN will revise and update Advanced Planning Studies for the recommended bridge type for the two bridges included in the preferred alternative at the UPRR and the Bear River. The Bridge General Plans will show the plan, profile and typical section views. Denoted on these views will be column sizes, foundation types, barrier types, lighting, aesthetic treatments, slope protections, lane/shoulder widths and utility locations on the bridge.

Deliverables: Updated Bridge Advanced Planning Studies(2)

16.8 Draft Project Report

DOKKEN will prepare the Draft Project Report (DPR) for the project in accordance with Caltrans "Preparation Guidelines for Project Report." The document will discuss the proposed project, purpose and need, and provide an overview of impacts including environmental impacts and potential right of way impacts.

This task includes the preparation of a draft and final report for the DPR with a recommendation for circulation of the Environmental Document. The draft will be submitted to the City of Wheatland, Yuba and Placer Counties for review and comment. DOKKEN will address the comments and produce the final DPR for approval and circulation with the Draft Environmental Document.

SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY

Deliverables: *Draft Project Report*

16.9 Project Report

After circulation of the DPR, DOKKEN will prepare a draft and final Project Report (PR) with the recommendation of approval of the project. The draft will be submitted to City of Wheatland, Yuba and Placer Counties for review and comment. DOKKEN will address the comments and produce the final Project Report.

Deliverables: *Project Report*

End of PA&ED Scope of Services



TASK DESCRIPTION	DOKKEN ENGINEERING																		FEHR & PEERS						GEOCON CONSULTANTS, INC.											
	Matthew Griggs, PE Project Manager	Lindsay Katt, PE Roadway Project Engineer	Alex Gullstrand, PE Structure Project Engineer	Senior Engineer 2	Senior Engineer 1	Associate Engineer 2	Associate Engineer 1	Assistant Engineer 2	Assistant Engineer 1	Senior CAD	CAD Detailer / Engineering Technician	Sarah Holm Environmental Manager	Zach Lipiak Environmental Lead	Senior Environmental Planner	Associate Environmental Planner	Environmental Planner	Right of Way Manager	Senior Right of Way Agent	Right of Way Agent / Appraiser	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Principal	Senior Associate	Engineer	Admin Support	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Principal Engineer/Geologist/Scientist	Senior Engineer/Geologist/Scientist	Project Engineer/Geologist/Scientist	Senior Staff Engineer/Geologist/Scientist	Staff Engineer/Geologist/Scientist	Technical Illustrator / Senior Draftsman	Word Processor / Technical Editor / Draftsman
	\$305	\$255	\$245	\$295	\$245	\$205	\$185	\$165	\$135	\$255	\$165	\$300	\$205	\$205	\$155	\$120	\$245	\$205	\$125				\$410	\$300	\$160	\$165				\$245	\$180	\$150	\$140	\$110	\$105	\$90
TASK 9 - PROJECT MANAGEMENT	192	228		40								120	228							608		\$211,240														
9.1 Project Meetings	80	88										100	140							408		\$105,540														
9.2 Project Management and Schedule	72	100										10	40							222		\$58,660														
9.3 Quality Control	40	40		40								10	48							178		\$47,040														
TASK 10 - SURVEYS AND RIGHT OF WAY MAPPING		24																		24		\$6,120														
10.1 Topographic Surveying		12																		12		\$3,060														
10.2 Preliminary Boundary and Right of Way Surveys		12																		12		\$3,060														
TASK 11 - ENVIRONMENTAL TECHNICAL STUDIES	18											52	102	380	545	788				1,885	\$3,000	\$301,035														
11.1 Natural Environmental Study	4											10	16	40	80	210				360		\$53,100														
11.1.1 Aquatic Resources Delineation Report												6	16	36	60	100				218		\$33,760														
11.2 Biological Assessment for USFWS	2											6	8	16	45	120				197		\$28,605														
11.3 Biological Assessment for NMFS	2											6	10	24	60	110				212		\$31,780														
11.4 Cultural Resources Inventory Report	4											8	16	160	140	40				368		\$66,000														
11.4.1 Native American Consultation												4	12	40	40					96	\$3,000	\$21,060														
11.5 Historic Resources Report / Finding of Effect (FOE)												4	8	24		8				44		\$8,720														
11.6 Noise Study Report	6											8	16	40	120	200				390		\$58,010														
TASK 12 - CEQA ENVIRONMENTAL DOCUMENT	24	42						16	24			128	338	176	397	912				2,057	\$10,000	\$348,655														
12.1 Notice of Preparation	2	4										20	50	8	8	48				140		\$26,520														
12.2 Draft Environmental Impact Report	4	8							12			24	60	48	105	240				501		\$79,295														
12.2.1 CEQA-Level Resource Investigation	8	18						8				40	90	70	150	270				646	\$10,000	\$116,760														
12.3 Public Circulation												4	30	4	18	60				116		\$18,160														
12.3.1 Public Hearing	8	12						8	12			12	20		24	40				136		\$24,660														
12.4 Response to Public Comments	2	6										12	40	24	40	120				244		\$39,468														
12.5 Final Environmental Impact Report		2										8	24	16	40	110				200		\$30,510														
12.6 CEQA Finding of Fact & Statement of Overriding Consideration												8	24	6	12	24				74		\$13,290														
TASK 13 - ENGINEERING STUDIES	48	134	6	16	12	8	82	156	110		24	4	8			4				612	\$5,000	\$127,620	32	72	220	58	382	\$26,016	\$105,506	6	24	42	12	17	12	6
13.1 Transportation Analysis Report (TAR)	8	16						8												32	\$5,000	\$12,840	32	70	220	52	374	\$8,516	\$86,416							
13.2 Population and Employment Forecasts	4	4																		8		\$2,240		2		6	8	\$17,500	\$19,090							
13.3 Preliminary Drainage Report	4	8		16			70	100	60		24									282		\$49,490														
13.4 UPRR & CPUC Diagnostic Meeting	12	20	6																	38		\$10,230														
13.5 Design Support for Environmental	12	60			12		12	48	10											146		\$32,070														
13.6 Preliminary Geotechnical Design and Materials Report	4	6				8														18		\$4,390								4	16	2	12	1	4	2
13.7 Phase I Environmental Site Assessment (ESA)	2	8										4	8			4				26		\$5,970							2	8	40		16	8	4	
13.8 Utility Coordination	2	12					8	40												62		\$10,390														
TASK 14 - COMMUNITY AND STAKEHOLDER OUTREACH	40	50					8	4				20	6			4				132	\$10,000	\$44,320														
14.1 Notice of Preparation and Public Hearing Support	10	20					8	4				4	6			4				56	\$10,000	\$22,920														
14.2 Cooperative Agreement and Coordination with Placer County	30	30										16								76		\$21,600														
TASK 15 - FUNDING STRATEGY AND GRANT SUPPORT (No Hours Allocated)																																				
TASK 16 - PROJECT REPORT	78	472	40	36	36		140	540	120	24	10	12	28	4		32	8	48	24	1,652		\$341,160														
16.1 Geometric Concept Drawing	8	60											120	20						208		\$40,240														
16.2 Design Standard Decision Documents	6	40			16								40	20						122		\$25,250														
16.3 Loc. Map, Layouts, Profiles & Type Sections (30% Plans)	8	48			20		40	100	60											276		\$51,580														
16.4 Storm Water Data Report	4	24		20			40	120			10									218		\$42,090														
16.5 Cost Estimates	4	24		16			20	40												104		\$22,360														
16.6 Right of Way Data Sheet/Utility Information Sheet	4	12					40	20									8	48	24	156		\$28,388														
16.7 Structure Advance Planning Study Updates	8	4	40				40			24										116		\$26,780														
16.8 Draft Project Report	24	160					60					6	18	4		24				296		\$67,210														
16.9 Project Report	12	100						20				6	10			8				156		\$37,270														
TOTAL BASE HOURS	382	968	46	92	48	8	222	720	258	24	34	336	710	560	942	1,740	8	48	24	7,170			32	72	220	58	382			6	24	42	12	17	12	6
TOTAL BASE COST	\$116,510	\$246,840	\$11,270	\$27,140	\$11,760	\$1,640	\$41,070	\$118,800	\$34,820	\$6,120	\$5,610	\$100,800	\$145,550	\$114,800	\$146,010	\$208,800	\$1,960	\$9,840	\$3,000	\$28,000	\$1,380,350	\$13,120	\$21,600	\$35,200	\$9,570		\$26,016	\$105,506	\$1,470	\$4,320	\$6,300	\$1,680	\$2,210	\$1,260	\$540	



PA&ED COST PROPOSAL - HOURS BREAKDOWN BY TASK
SOUTH YUBA TRANSPORTATION IMPROVEMENT AUTHORITY
BEALE EXPRESSWAY

Revised September 30, 2025

TASK DESCRIPTION	AIM CONSULTING							REY ENGINEERING							ESA							GRAND TOTAL HOURS	OTHER DIRECT COSTS	GRAND TOTAL COSTS					
	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Outreach Oversight	Graphic Designer	Outreach Manager	Outreach Coordinator	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Principal Surveyor II	Senior Surveyor II	Lider Technician III	2-Man Crew	Blank	TOTAL HOURS	OTHER DIRECT COST	TOTAL COST	Senior Architectural Historian 2	Senior Architectural Historian 1	Senior GIS Analyst				TOTAL HOURS	OTHER DIRECT COST	TOTAL COST		
TASK 9 - PROJECT MANAGEMENT				\$250	\$181	\$123	\$97				\$325	\$235	\$210	\$360	\$100					\$225	\$205	\$170					808	\$211,240	
9.1 Project Meetings																											408	\$105,540	
9.2 Project Management and Schedule																											272	\$58,660	
9.3 Quality Control																											178	\$47,040	
TASK 10 - SURVEYS AND RIGHT OF WAY MAPPING											26	48	16	66		156	\$11,243	\$58,093									180	\$11,243	\$64,213
10.1 Topographic Surveying											2	4	16	50		72	\$11,243	\$34,193									84	\$11,243	\$37,253
10.2 Preliminary Boundary and Right of Way Surveys											24	44		16		84		\$23,900									96		\$26,960
TASK 11 - ENVIRONMENTAL TECHNICAL STUDIES																			48	44	6	98	\$50	\$20,890	1,983	\$3,050	\$321,925		
11.1 Natural Environmental Study																											360		\$53,100
11.1.1 Aquatic Resources Delineation Report																											218		\$33,760
11.2 Biological Assessment for USFWS																											197		\$28,605
11.3 Biological Assessment for NMFS																											212		\$31,780
11.4 Cultural Resources Inventory Report																											368		\$66,000
11.4.1 Native American Consultation																											96	\$3,000	\$21,060
11.5 Historic Resources Report /Finding of Effect (FOE)																			48	44	6	98	\$50	\$20,890	142	\$50	\$29,610		
11.6 Noise Study Report																											390		\$58,010
TASK 12 - CEQA ENVIRONMENTAL DOCUMENT																											2057	\$10,000	\$348,655
12.1 Notice of Preparation																											140		\$26,520
12.2 Draft Environmental Impact Report																											501		\$79,295
12.2.1 CEQA-Level Resource Investigation																											646	\$10,000	\$116,760
12.3 Public Circulation																											116		\$18,168
12.3.1 Public Hearing																											136		\$24,660
12.4 Response to Public Comments																											244		\$39,460
12.5 Final Environmental Impact Report																											200		\$30,510
12.6 CEQA Finding of Fact & Statement of Overriding Consideration																											74		\$13,290
TASK 13 - ENGINEERING STUDIES	119	\$1,950	\$19,730																								\$1,113	\$32,966	\$252,856
13.1 Transportation Analysis Report (TAR)																											406	\$13,516	\$99,256
13.2 Population and Employment Forecasts																											16	\$17,500	\$21,330
13.3 Preliminary Drainage Report																											282		\$49,490
13.4 UPRR & CPUC Diagnostic Meeting																											30		\$10,230
13.5 Design Support for Environmental																											146		\$32,070
13.6 Preliminary Geotechnical Design and Materials Report	41	\$963	\$7,533																								59	\$963	\$11,923
13.7 Phase I Environmental Site Assessment (ESA)	78	\$988	\$12,198																								104	\$988	\$18,168
13.8 Utility Coordination				8	8	16	40	72	\$706	\$10,000																	62		\$10,390
TASK 14 - COMMUNITY AND STAKEHOLDER OUTREACH				8	8	16	40	72	\$706	\$10,000																	204	\$10,706	\$54,520
14.1 Notice of Preparation and Public Hearing Support				8	8	16	40	72	\$706	\$10,000																	128	\$10,706	\$32,928
14.2 Cooperative Agreement and Coordination with Placer County																											76		\$21,600
TASK 15 - FUNDING STRATEGY AND GRANT SUPPORT (No Hours Allocated)																													
TASK 16 - PROJECT REPORT																											1652		\$341,160
16.1 Geometric Concept Drawing																											208		\$40,240
16.2 Design Standard Decision Documents																											122		\$25,250
16.3 Loc. Map, Layouts, Profiles & Type Sections (20% Plans)																											276		\$51,580
16.4 Storm Water Data Report																											218		\$42,090
16.5 Cost Estimates																											104		\$22,360
16.6 Right of Way Data Sheet/Utility Information Sheet																											156		\$28,380
16.7 Structure Advance Planning Study Updates																											116		\$26,780
16.8 Draft Project Report																											296		\$67,210
16.9 Project Report																											156		\$37,270
TOTAL BASE HOURS	119			8	8	16	40	72			26	48	16	66		156			48	44	6	98				7,997			
TOTAL BASE COST		\$1,950	\$19,730	\$2,000	\$1,448	\$1,968	\$3,878		\$706	\$10,000	\$8,450	\$11,280	\$3,360	\$23,760			\$11,243	\$58,093	\$10,800	\$9,020	\$1,020		\$50	\$20,890		\$67,965	\$1,594,569		

The County of Yuba

Community Development & Services Agency

Michael Lee, Director

Phone – (530) 749-5430 • Fax – (530) 749-5434
915 8th Street, Suite 123
Marysville, California 95901

www.co.yuba.ca.us



BUILDING
749-5440 • Fax 749-5616

CODE ENFORCEMENT
749-5455 • Fax 749-5464

ENVIRONMENTAL HEALTH • CUPA
749-5450 • Fax 749-5454

PLANNING
749-5470 • Fax 749-5434

PUBLIC WORKS • SURVEYOR
749-5420 • Fax 749-5424

FINANCE AND ADMINISTRATION
749-5430 • Fax 749-5434

To: South Yuba Transportation Improvement Authority (SYTIA)

From: Samuel Bunton, Yuba County Director of Public Works

Subject: Approve South Beale Road Railroad Grade Separation Project Study Report (PSR-PDS), authorize Chair to sign the Project Study Report, and authorize Dokken Engineering for the Project Approval and Environmental Document phase of the project

Date: October 7th, 2025

RECOMMENDATION:

Approve South Beale Road Railroad Grade Separation Project Study Report (PSR-PDS), authorize Chair to sign the Project Study Report, and authorize Dokken Engineering for the Project Approval and Environmental Document phase of the project.

BACKGROUND:

On August 2, 2022, the SYTIA Board approved a professional services agreement with Dokken Engineering to prepare a Project Study Report (PSR-PDS) for the South Beale Road Interchange project. The agreement included authorization of the PSR tasks and allowed for a future authorization of the PA&ED phases of the project.

Between August 2022 and October 2025, staff and the project team completed the following activities as part of the Project Study Report Development:

- Development of the project need and purpose
- Development of alternative alignment concepts
- Traffic evaluation of the alternative concepts
- Outreach with numerous private, public and property owner stakeholders
- Preliminary right of way impact evaluation
- Cost Estimates
- Preliminary Environmental Assessment Report (Environmental Scoping)
- Alternative Screening and Evaluation
- Funding program research
- Preparation of the Project Study Report Draft and Final Documents

DISCUSSION:

The PSR (attached) includes extensive discussions of the purpose, need, alternatives, analysis, outreach, schedule and project cost.

Three build alternatives (Alternatives 1A, 1B, and 2) were considered during the PSR development. In addition, a no-build alternative was included in the traffic analysis to estimate the impacts of not doing the project. All Build Alternatives were evaluated. Alternatives 1A and 1B (also known as the North Alternatives) reroute South Beale Road northerly in order to construct the railroad separation with adequate space to construct an interchange at State Route 65. Alternative 2 (also known as the Central Alternative) keeps South Beale Road's current alignment, but constructs a bridge over the railroad tracks and realigns State Route 65 to the west in order to create enough space to construct an interchange and the railroad separation structure.

All three alternatives are recommended for moving forward into the Project Approval and Environmental Document (PA&ED) phase. The three alternatives will be further investigated and an alternative will likely be selected at the completion of a project report and after additional data can be obtained.

The South Beale Road Railroad Grade Separation Project must progress through the environmental process before it will be competitive for significant funding from grant sources. The next step is the completion of environmental documents, environmental technical studies, surveying, right of way mapping, and project report. The consultant contract for the PSR-PDS included tasks to advance the project into the environmental phase, but these tasks have not been authorized to date. Staff is requesting the Board authorize initiation of the PA&ED process at this time.

Lastly, the original project name of South Beale Road Interchange has been changed to South Beale Road Railroad Grade Separation Project. Although the original project name would typically be adequate, it does not clearly describe the project's intent of removing the at-grade railroad crossing. Since the project is anticipated to be statutorily exempt from CEQA, the new project name reduces potential questions and concerns when filing the CEQA exemption.

FISCAL IMPACT:

There is no direct fiscal impact with your Board's approval of the PSR.

The cost of advancing the South Beale Road Railroad Grade Separation Project through Project Approval & Environmental Documents (PA&ED) is estimated at \$1,988,500.

ATTACHMENTS:

Project Study Report – Project Development Support for South Beale Road Railroad Grade Separation Project

Project Study Report-Project Development Support (PSR-PDS)

For

Conceptual Approval for a Project-Funded-By-Others

For The

South Beale Road Railroad Grade Separation

On Route State Route 65

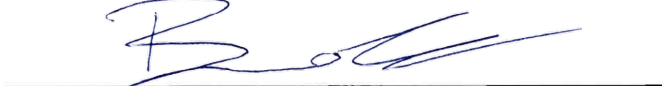
Between Forty Mile Road

And Dairy Road

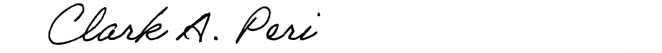
APPROVAL RECOMMENDED:


for KEVIN MALLEN, SYTIA Executive Director,
Accepts risks identified in this PSR-PDS and
attached risk register

APPROVAL RECOMMENDED:


FOR SUKHVINDER TAKHAR,
Deputy District Director Planning,
Local Assistance and Sustainability

APPROVAL RECOMMENDED:


For CHRISTOPHER SUGAR, Project Manager

APPROVED:

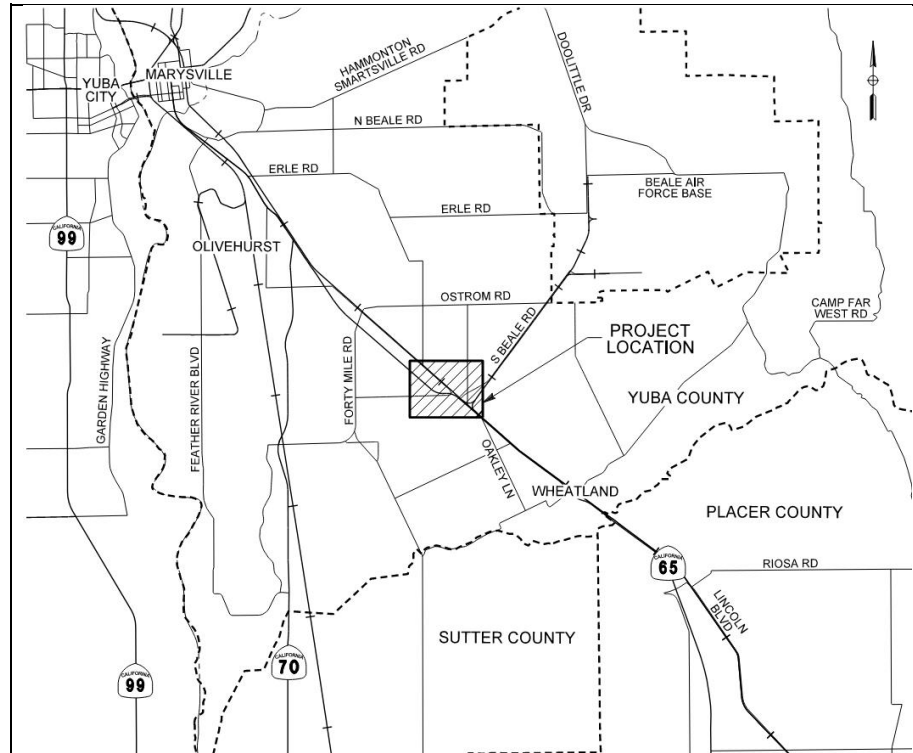
SERGIO ACEVES, District 3 Director

Date

GARY BRADFORD, SYTIA Chair

Date

Vicinity Map



On Route State Route 65

Between Forty Mile Road

And Dairy Road

This project study report-project development support has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.



JACQUELINE LOCKHART, Dokken Engineering (Representing SYTIA)
REGISTERED CIVIL ENGINEER

09/19/2025

DATE



Table of Contents

1.	INTRODUCTION	1
2.	BACKGROUND.....	1
3.	PURPOSE AND NEED.....	2
4.	TRAFFIC ENGINEERING PERFORMANCE ASSESSMENT	2
5.	DEFICIENCIES	6
6.	CORRIDOR AND SYSTEM COORDINATION	6
7.	ALTERNATIVES.....	7
8.	RIGHT-OF-WAY.....	10
9.	STAKEHOLDER INVOLVEMENT.....	11
10.	ENVIRONMENTAL COMPLIANCE	11
11.	FUNDING	13
12.	DELIVERY SCHEDULE.....	15
13.	RISKS.....	15
14.	EXTERNAL AGENCY COORDINATION.....	15
15.	PROJECT REVIEWS	16
16.	PROJECT PERSONNEL.....	16
17.	ATTACHMENTS (134 PAGES)	16

1. INTRODUCTION

The South Yuba Transportation Improvement Authority (SYTIA), in cooperation with California Department of Transportation (Caltrans), proposes to construct a new grade separation structure over the Union Pacific Railroad (UPRR) tracks adjacent to State Route (SR) 65 at South Beale Road in unincorporated Southern Yuba County. The proposed project aims to improve safety by removing an at-grade railroad crossing, improve access to Beale Air Force Base, and remove two unsignalized intersections on SR 65. **Attachment A** provides a map of the project vicinity.

Three viable alternatives have been selected for consideration and are described in more detail in the “Alternatives” section of this report.

Project Limits	03-Yuba-65; PM 2.9/R5.8
Number of Alternatives	3 Build Alternatives plus No Build
Current Capital Outlay Support Estimate for PA&ED	\$3.8 million
Current Capital Outlay Construction Cost Range	\$46 million to \$79 million
Current Capital Outlay Right-of-Way Cost Range	\$2.2 million to \$5.5 million
Funding Source	Potential Local, State and Federal
Type of Facility	Freeway
Number of Structures	2
Anticipated Environmental Determination or Document	CEQA – Statutory Exemption NEPA – Categorical Exclusion
Legal Description	In unincorporated Yuba County on State Route 65 from 2.0 miles South of Forty Mile Rd to 1.5 miles North of Dairy Rd
Project Development Category	3

The purpose of this Project Study Report – Project Development Support (PSR – PDS) is to program only the support costs for the Project Approval and Environmental Document (PA&ED) phase of the project. The remaining capital outlay support, right-of-way, and construction components of the project are preliminary estimates and are not suitable for programming purposes. A Project Report will serve as the programming document for the remaining components of the project and will serve as approval of the “selected” alternative.

2. BACKGROUND

South Beale Road is a rural two-lane road that connects SR 65 to Beale Air Force Base (AFB). It serves as the primary access to and from the south of the base. The AFB occupies over 23,000 acres of land in the County. The SR 65 and South Beale intersection is stop-controlled on the South Beale Road approach with an at-grade railroad crossing of the UPRR tracks that run parallel to SR 65.

State Route 65 is a north-south regional highway/freeway composed of two segments. The southern segment begins at the junction with State Route 99, near Bakersfield, and

terminates at the junction with SR 198 near Exeter. The northern segment begins at the junction with Interstate 80 in Roseville and terminates at the junction with SR 70 at Olivehurst and serves the communities of Rocklin, Lincoln, and Wheatland. SR 65 is part of the National Highway System as well as the California Highway and Expressway system. Within Yuba County, large areas along SR 65 have been developed or approved for development and is one of the main areas of traffic congestion that bridges across the Yuba and Feather Rivers. Within the project area, SR 65 is a Surface Transportation Assistance Act (STAA) Terminal Route.

At the South Beale Road intersection, SR 65 is a four-lane divided highway with a posted speed of 65 miles per hour (mph). South of South Beale Road, the highway narrows to two lanes with a 55-mph posted speed limit. About one-quarter mile to the north, SR 65 intersects with Morrison Road/Rancho Road which is a four-leg intersection that is stop-controlled on Morrison Road and Rancho Road. North of this intersection, SR 65 continues as a four-lane freeway with the nearest interchange at Forty Mile Road.

As a preliminary planning document, SYTIA sponsored a Comprehensive Implementation Strategy Report (CIS) (2021) to begin advancing the projects included in their adopted Traffic Impact Fee program. The new grade separation at South Beale and SR 65 was identified in this report.

3. PURPOSE AND NEED

Purpose:

The purpose of this project is to improve safety and operations on SR 65 and South Beale Road, and to provide Beale Air Force Base personnel with improved response times in the event of an emergency.

Need:

The project is needed as the current unsignalized intersection at SR 65 and South Beale Road has a collision rate that is higher than the statewide average for similar roadway facilities. In addition, immediately north of the intersection on South Beale Road there is an at-grade crossing of the Union Pacific Railroad tracks that run parallel to SR 65. The proximity of the at-grade crossing to the intersection creates long delays along SR 65 and South Beale Road when trains cross the road, as the existing turn pockets do not have sufficient capacity to safely hold the long queues. Furthermore, the existing intersection operates below acceptable level of service due to high left turn volumes. This limits access to Beale Air Force Base and reduces response times in the event of an emergency.

4. TRAFFIC ENGINEERING PERFORMANCE ASSESSMENT

In this project phase, a Traffic Engineering Performance Assessment (TEPA) study was performed. This involved evaluating current traffic data and performing a macro-

level analysis. The primary objective was to assess potential benefits and deficiencies associated with the proposed project, while also outlining the necessary scope for traffic analysis in the subsequent phase (PA&ED). Detailed traffic studies and analyses will be carried out during the PA&ED phase to demonstrate how each project alternative aligns with its designated objectives and requirements.

Summary of Preliminary Findings and Recommendations

Traffic analysis for the TEPA is limited to an assessment of readily available information and data, as well as a macro-level analysis and evaluation. For this TEPA, intersection turning movement data was taken from the traffic analysis conducted for the Recology Ostrom Road Project Environmental Impact Report (EIR). This project collected AM and PM peak hour traffic counts at five of the six study intersections in January 2016. For the SR 65 intersection at Rancho Road/Morrison Road, turning volumes were estimated for the analysis proposed in this study.

The project horizon year 2050 traffic model roadway network included the following planned projects:

- A two-lane Beale Expressway (formerly East Wheatland Expressway) that would extend from SR 65 near South Beale Road, bypass Wheatland to the east, and reconnect with SR 65 at Riosa Road
- The extension of Morrison Road from SR 65 to Forty Mile Road
- Phase 2 of the SR 70/Plumas Lake Boulevard interchange that would extend Plumas Lake Boulevard to the east, over the railroad tracks, and connect with Plumas Arboga Road

For opening year 2030, the Beale Expressway and Morrison Road extension are not expected to be completed yet and were therefore not assumed in place.

Based on the preliminary analysis, Alternatives 1A/1B and 2 provide acceptable level of service (LOS) D or better conditions at the new ramp termini and adjacent intersections constructed as part of the project under the Horizon Year 2050 conditions. Under the No Build conditions, operations at the intersection of Rancho Road/South Beale Road would operate below LOS D conditions.

Table 1: Intersection Operations – Horizon Year 2050 Conditions

Intersection	No Build			Alternative 1A/1B			Alternative 2		
	Control	AM	PM	Control	AM	PM	Control	AM	PM
1. Forty Mile Rd/SR 65 NB Ramps	Side Street Stop	<u>D / 27</u> <u>(NBLT)</u>	<u>F / >300</u> <u>(NBLT)</u>	Side Street Stop	<u>D / 27</u> <u>(NBLT)</u>	<u>F / >300</u> <u>(NBLT)</u>	Side Street Stop	<u>D / 27</u> <u>(NBLT)</u>	<u>F / >300</u> <u>(NBLT)</u>
2. Forty Mile Rd/SR 65 SB Ramps	Side Street Stop	C / 22 (SBR)	<u>D / 31</u> <u>(SBR)</u>	Side Street Stop	C / 22 (SBR)	<u>D / 31</u> <u>(SBR)</u>	Side Street Stop	C / 22 (SBR)	<u>D / 31</u> <u>(SBR)</u>
3. SR 65/Morrison Rd ¹	Signal	<u>D / 45</u>	<u>E / 57</u>	Signal	C / 30	C / 23	Signal	C / 30	C / 23
4. Rancho Rd/ S Beale Rd ²	Signal	B / 15	B / 13	Signal	B / 15	B / 13	Signal	D / 36	D / 45
5. S Beale Rd/ Bradshaw Rd	Side Street Stop	A / 10 (SB)	B / 13 (SB)	Side Street Stop	B / 15 (NB)	C / 21 (NB)	Side Street Stop	B / 10 (SB)	B / 13 (SB)
6. SR 65/Oakley Ln	Side Street Stop	<u>F / >300</u> <u>(EB)</u>	<u>F / 74</u> <u>(EB)</u>	Side Street Stop	<u>F / >300</u> <u>(EB)</u>	<u>F / 74</u> <u>(EB)</u>	Side Street Stop	<u>F / >300</u> <u>(EB)</u>	<u>F / 74</u> <u>(EB)</u>
7. Rancho Rd/ Morrison Rd ³	Signal	B / 14	B / 16	Signal	D / 53	C / 34	Signal	D / 53	C / 34
8. S Beale Rd/ Rancho Rd	n/a	n/a	n/a	Signal	C / 30	D / 49	n/a	n/a	n/a

Notes: Level of service and delay are shown with delay reported in seconds per vehicle. Bold and underline font indicate deficient conditions. For side street stop control, the level of service and delay are reported for the worst movement or approach with the worst movement noted in parentheses.

1. For Alternatives 1A/1B & 2, this intersection is SR 65 Southbound Ramps/Morrison Rd.

2. For Alternative 1A/1B, this intersection is SR 65 Northbound Ramps/S Beale Rd. For Alternative 2, this intersection is SR 65 Northbound Ramps/S Beale Rd/Beale Rancho Rd.

3. For Alternatives 1A/1B & 2, this intersection is Rancho Rd/Beale Rancho Rd.

Collision Analysis

Table 2 shows the collision history at the SR 65 and South Beale Road intersection (PM 4.099) for the three-year period from October 2019 to September 2022. Five of the total 7 collisions were injury-related collisions. The injury collision rate at the intersection is higher than the statewide average for similar roadway facilities.

Table 3 shows the collision history for the full project area segment of SR 65 (PM 2.9 to R5.8) for the five-year period from October 2019 to September 2024. Four of the 57 collisions that occurred in the five-year period were fatality-related collisions. The fatality collision rate in the study area is higher than the statewide average for similar roadway facilities; however, based on review of the locations of the fatal collisions, 3 of the 4 were at the SR 65 and Oakley Lane intersection. A separate Caltrans project (03-1N650, PM 2.5/2.7 and PM 3.35/3.5) includes signing and striping improvements at the Oakley Lane intersection to address the safety issues.

Table 2: Collision History – SR 65 and South Beale Road PM 4.099 (10/01/2019-09/30/2022)

Collisions					Actual Collision Rate ¹			Statewide Average Collision Rate for Similar Facilities		
Fatal	Serious Injury	Other Injury	Property Damage	Total	Fatal	Fatal & Injury	Total	Fatal	Fatal & Injury	Total
0	0	5	2	7	0.000	<u>0.21</u>	0.29	0.005	0.12	0.29

Source: Caltrans TASAS Table B, July 25, 2023

Notes: 1. Collision rate is collisions per million vehicle miles.

Bold and underline font indicates an actual collision rate that is great than the average collision rate for a similar facility.

Table 3: Collision History – SR 65 PM 2.9-R5.8 (10/01/2019-09/30/2024)

Collisions					Actual Collision Rate ¹			Statewide Average Collision Rate for Similar Facilities		
Fatal	Serious Injury	Other Injury	Property Damage	Total	Fatal	Fatal & Injury	Total	Fatal	Fatal & Injury	Total
4	2	18	29	53	<u>0.032</u>	0.19	0.43	0.015	0.25	0.66

Source: Caltrans TASAS Table B, July 15, 2025

Notes: 1. Collision rate is collisions per million vehicle miles.

Bold and underline font indicates an actual collision rate that is great than the average collision rate for a similar facility.

The data provided is protected by 23 U.S.C. § 407, and shall not be subject to discovery, nor admitted as evidence in any applicable legal proceeding against the State of California. By the release of this information, pursuant to subpoena or public records request, the State of California, Department of Transportation does not waive any rights it has under 23 U.S.C. § 407.

For the South Beale Road intersection collision data, the primary collision factor was failure to yield (6 collisions) and an improper turn (1 collisions). The collision types are broadside (6 collisions) and hit object (1 collision).

Future PA&ED Traffic Scope

Part of the TEPA process is to develop an initial traffic scope of work for the more detailed traffic analysis to be completed during the PA&ED phase. As identified in the TEPA, traffic counts should be collected at each of the project study intersections during the AM and PM peak periods. The counts need to include heavy vehicles, bicycles, and pedestrians as well as include field observed queue measurements. Average train volumes at the South Beale Road railroad crossing should be collected. The analysis should include a detailed assessment of existing transportation conditions, development of traffic forecast volumes for the opening and horizon years, an intersection safety and operation assessment, evaluation of freeway and intersection operations, and a qualitative assessment of pedestrian, bicycle and transit facilities. The traffic analysis for any future year conditions will include any other capital improvements anticipated to occur. A Transportation Analysis Report will be prepared to summarize the results and findings from the analysis.

5. DEFICIENCIES

The TEPA identifies that under the No Build Alternative, the at-grade railroad crossing east of the SR 65/South Beale Road intersection would remain unchanged. As traffic volumes increase, delays are expected to escalate due to continued train crossings and the limited gaps available in SR 65 traffic flow. This will further impact safety of the intersection and access to and from Beale Air Force Base in the event of an emergency.

6. CORRIDOR AND SYSTEM COORDINATION

Caltrans Planning

System planning for SR 65 is described in the following State planning documents: District System Management and Development Plan (DSMDP) (2013), Caltrans District 3, Corridor System Management Plan (CSMP) (2009) and Transportation Concept Report (TCR) (2017). Each of these documents identify SR 65 as one of the six major transportation systems that serves both local and regional traffic and develops a strategic plan for implementing key policies, programs and projects that are needed to maintain, manage and enhance transportation operations within District 3. A project is identified in the TCR for the construction of a new interchange at the existing South Beale Road intersection. The CSMP lists the existing segment of SR 65 from South Beale Road to SR 70 as a four-lane freeway and a six-lane freeway as the ultimate facility. The future construction of a new two-lane expressway from the north end of SR 65 Lincoln realignment to the existing SR 65, near South Beale Road, is also identified in the planning documents.

Current active projects within the project post miles are:

- 03-0J660 (PM 4.0/R9.38) – Capital Preventive Maintenance Program (CAPM). This project will restore the pavement condition throughout the project limits, upgrade existing signs, Midwest Guardrail System (MGS), add sidewalk at McGowan Parkway, lighting curbs ramps, and Traffic Management Systems (TMS) elements. The project will upgrade and replace existing drainage systems. This project will also improve safety and operation by construction deceleration and acceleration lanes. Construction is scheduled for 2026.
- 03-1N650 (PM 2.5/2.7 and PM 3.35/3.5) – Proactive Safety. This project includes intersection improvements at SR 65 at Dairy Road. The alternatives being considered are either a traffic signal or roundabout. Additionally, the project includes signing and striping improvements at the SR 65/Oakley Lane intersection.

Regional Planning

A new SR 65/South Beale Road interchange is identified as a recommended improvement for state facility in the Yuba County General Plan (2030). South Beale Road is designated as a rural arterial west of SR 65, and urban arterial east of SR 65.

SR 65 is identified as a two-lane conventional highway up to South Beale intersection, then becomes a freeway facility.

Local Planning

SYTIA developed the Comprehensive Implementation Strategy (CIS) (2021) to advance the projects included in their adopted Traffic Impact Fee program. The CIS identifies the grade separation project at SR 65/ South Beale Road as part of the included projects.

Transportation Planning Scoping Information Sheet

A Transportation Planning Scoping Information Sheet (TPSIS) was completed in August 2024 for a new interchange at South Beale Road along SR 65. The TPSIS identifies project planning needs, including consultation with Tribal Governments, public engagement, ensuring that the proposed project is consistent with local and regional planning documents, and identifying smart mobility and active transportation needs within the project area. A copy of the TPSIS is included as **Attachment B**.

7. ALTERNATIVES

Build Alternatives

Alternative 1A – North Layout

- 2 lane South Beale Road;
- UPRR grade separation;
- SR 65 overhead structure;
- New spread diamond interchange Type L-2 which includes four ramps on the existing SR 65;
- Interchange ties into the realigned South Beale Rd north and south of SR 65;
- New Morrison Rd/South Beale Rd connection;
- New Rancho Rd/South Beale Rd connection;
- Existing Morrison Rd/SR 65 and Rancho Rd/SR 65 intersections will be eliminated;
- South Beale Rd/SR 65 intersection and at grade railroad crossing will be eliminated;
- Cul-de-sac at closed-off South Beale Rd to be constructed.

Alternative 1B – North Layout

- 2 lane South Beale Road;

- UPRR grade separation;
- SR 65 overhead structure;
- New two quadrant cloverleaf interchange with a Type L-7 in the southbound direction and Type L-8 in the northbound direction which includes four ramps on the existing SR 65;
- Interchange ties into the realigned South Beale Rd north and south of SR 65;
- New Morrison Rd/South Beale Rd connection;
- New Rancho Rd/South Beale Rd connection;
- Existing Morrison Rd/SR 65 and Rancho Rd/SR 65 intersections will be eliminated;
- South Beale Rd/SR 65 intersection and at grade railroad crossing will be eliminated;
- Cul-de-sac at closed-off South Beale Rd to be constructed;
- Project can accommodate a potential future SR 65 Realignment.

Alternative 2 – Central Layout

- 2 lane South Beale Road;
- UPRR grade separation;
- SR 65 overhead structure;
- Realignment of SR 65;
- New spread diamond interchange Type L-2 in the southbound direction and a Type L-7 two-quadrant cloverleaf in the northbound direction, which combined includes four ramps on the realigned SR-65;
- Interchange ties into the South Beale Rd extension north and south of SR 65;
- New Morrison Rd/South Beale Rd connection;
- Extension of Rancho Rd along existing SR-65 to connect to South Beale Rd;
- Existing Morrison Rd/SR 65 intersection will be eliminated;
- South Beale Rd/SR 65 intersection and at grade railroad crossing will be eliminated;
- New at grade crossing at Rancho Rd extension;
- Project can accommodate a potential future SR 65 Realignment.

Cost Estimates

The estimated total project cost, including right of way and construction, is approximately \$48.2 million to \$55.6 million for Alternative 1A/1B and \$72.7 million to \$84.5 million for Alternative 2 (in escalated dollars). The estimated PA&ED support cost is approximately \$3,850,000. A Life Cycle Cost Analysis (LCCA) will be prepared as part of the PA&ED phase to determine the most cost effective pavement sections. A cost breakdown for the Build Alternatives is included in **Attachment E**.

Non-Standard Design Features

No non-standard design features have been identified for any of the Build Alternatives at this time.

Stormwater

All Build Alternatives have the potential to increase the volume of runoff and pollutant load of the runoff due to the increase in impervious areas. In addition, the project may temporarily increase the sediment load in the runoff due to the grading activities associated with the construction of the project. To mitigate these impacts, temporary and permanent treatment Best Management Practices (BMPs) will be incorporated into the project.

Both permanent and temporary project specific BMP measures will be specified and quantified during the PA&ED phase of the project.

Dewatering and temporary creek diversion systems are anticipated for construction of Alternative 2.

Complete Streets

The project is in a rural area where there are no existing or planned complete streets facilities including pedestrian or bicycle improvements. Incorporation of complete streets features will be evaluated as part of the subsequent phases of the project.

Constructability

Construction of the Build Alternatives and roadways can be accomplished with minimal disruption to SR 65. Erection of the falsework for the new structures over SR 65 will require a short-term detour of traffic on SR 65. A short-term median crossover or widening of the inside shoulder along SR 65 is one option for detouring mainline traffic since there are no adjacent interchanges to divert traffic. Short term detours of the local road traffic will also be necessary. No long-term closures or detours are anticipated.

No Build Alternative

Under the No Build Alternative, the grade separation at South Beale Road and SR 65 would not be constructed. Operations of SR 65 would not be improved, safety would not be improved within the area, and access to the Air Force Base would not be improved. The No Build Alternative does not meet the project Purpose and Need and is not recommended.

8. RIGHT-OF-WAY

Alternative 1A/1B will require acquisition of private property to accommodate the grade separation, realignment of South Beale Road, Rancho Road and interchange configuration for each ramp.

Alternative 2 will require acquisition of private property to accommodate the grade separation, realignment of SR 65, interchange configuration for each ramp, Rancho Road and Morrison Road extension to South Beale Road.

A Right of Way Conceptual Cost Estimate for the Build Alternatives is included in **Attachment F**.

Utilities

The following utility companies have been determined to have facilities within the project vicinity:

- City of Wheatland
- AT&T
- PG&E
- Western Area Power Administration
- Kinder Morgan
- Level 3/Lumen
- MCI

Further investigations will be performed during the PA&ED phase to determine the types, location, and sizes all utilities.

The Build Alternatives will require potholing to determine if underground utilities will require relocation. For preliminary planning and estimating purposes, the presence of all the above utility companies facilities are assumed to be impacted. Relocation of utilities, if necessary, will be coordinated with the utility owners during the design process.

The agency responsible for the costs of any utility relocation will be determined based on research into ownership, prior rights, and Master Agreements. Once this determination is made, a “determination of liability” will be completed to appropriately allocate funds for the design and relocation of the affected utilities.

The No Build Alternative will not have any impact on utilities.

Railroad

The proposed grade separation structure over the UPRR tracks requires a permanent easement. Coordination efforts will include obtaining necessary agreements with UPRR to facilitate construction activities, ensuring minimal disruption to railroad operations, and adhering to regulatory protocols for the protection of railroad infrastructure and operations.

9. STAKEHOLDER INVOLVEMENT

Representatives of SYTIA and Caltrans attended Project Development Team (PDT) meetings during the Project Initiation Document (PID) phase to develop the purpose and need and identify the alternatives studied for the SR 65/South Beale Road Interchange Project. These meetings will continue during the PA&ED phase. Also, during PA&ED phase, public meetings/open houses, mailers, and other electronic notifications will be done as part of the environmental review process.

10. ENVIRONMENTAL COMPLIANCE

A Preliminary Environmental Analysis Report (PEAR) was completed and is included as **Attachment G**.

The project is anticipated to qualify for a Categorical Exclusion (CE) under NEPA 23 CFR 771.117(C)(28) for the construction of a grade separation to replace existing at-grade railroad crossings; however, should unusual circumstances be discovered during the environmental document phase, an Environmental Assessment (EA) would be prepared. The Project is also considered exempt under Section 21080.13 of the California Environmental Quality Act (CEQA) for railroad grade separation projects that eliminate an existing at-grade crossing and therefore may utilize a Statutory Exemption (SE).

The anticipated environmental approval for the Build Alternatives involve the preparation of a Community Impact Assessment (CIA) to evaluate potential impacts to land use, nearby communities, farmland, and growth. An AD 1006 form will be prepared to determine potential impacts to farmland and will be documented in a Farmlands Technical memorandum. A Hazardous Waste Initial Site Assessment (ISA) will identify any potential impacts associated with hazardous waste and materials. Following the Hazardous Waste ISA, a Preliminary Site Investigation (PSI) will be prepared to confirm the presence or absence of hazardous materials in the Project area. A Water Quality Assessment Report (WQAR) would be prepared to analyze potential impacts to water quality. A Paleontological Investigation Report and Paleontological Evaluation Report would be prepared to analyze potential impacts to paleontological resources. A Construction Noise Memorandum would be prepared to analyze noise impacts to sensitive receptors. An Air Quality Report will be prepared to determine the project impacts on air quality. A Location Hydraulic Study and Summary Floodplain Encroachment Report would be prepared to analyze impacts to the floodplain. Lastly, a Visual Impact Assessment (VIA) will be prepared for the Project identifying potential

impacts to visual resources and determining any necessary minimization and mitigation measures to reduce impacts.

Cultural and historic impacts would be assessed through the preparation of a Historic Property Survey Report (HPSR) and an Archaeological Survey Report (ASR). The UPRR tracks that run parallel with SR 65 will be evaluated for listing under the National Register of Historic Places. It is assumed that the tracks are historic; therefore, a Finding of Effect (FOE) will be prepared to determine historic resources impacts. Coordination with Native American tribes under Section 106 of the National Historic Preservation Act (NHPA) will identify any potential impacts to Native American cultural or historic resources; minimization or mitigation measures will be developed to reduce impacts.

Alternatives 1A/1B do not cross but are within proximity to a tributary of Best Slough, a water of the US and State. Since work within waters of the US is not anticipated, section 404 and 401 permits are not required. A 1602 Streambed Alteration Agreement (SAA) may be necessary if the construction footprint encroaches onto the riparian areas adjacent to these waters, which are considered waters of the State as well. A Natural Environment Study (NES) will be prepared to discuss potential impacts to biological resources and to develop any necessary minimization and mitigation measures to reduce impacts. There are no federally listed species occurrences or habitat present within the alignment of Alternatives 1A/1B. Therefore, Section 7 is not anticipated, streamlining the PA&ED phase of the Project.

Alternative 2 crosses Best Slough and its tributaries, which are considered waters of the US and State. Alternative 2 also has the potential to impact wetlands associated with Best Slough. Regulatory permits are required, including Section 404, 401, and 1602 permits. Since permanent impacts are anticipated to be under 0.5 acres, this alternative qualifies under Nation Wide Permit (NWP) 14. An ARDR would be prepared to delineate jurisdiction features and an NES is required to discuss potential impacts to biological resources and to develop any necessary minimization and mitigation measures to reduce impacts. Valley Elderberry Longhorn Beetle (VELB), Central Valley steelhead, and Chinook Salmon Central Valley Distinct Population Segment (DPS), all federally listed species, have the potential to occur within this alignment. Therefore, preparation of a Biological Assessment (BA) to initiate Section 7 consultation with US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) is required. Depending on level of impacts for each federally listed species, Section 7 consultation would be either informal or formal. Informal consultation can take 60-90 days to complete and formal consultation can take up to 135 days to complete.

Environmental commitments will be determined during the preparation of technical studies listed above and the NEPA document during the PA&ED phase. Possible commitments may include limitations on time and use of diesel-powered equipment, preconstruction surveys for nesting birds, protocol level surveys for Swainson's hawk, BMP's and erosion control measures, and hazardous waste/materials commitments. Potential constraints and special considerations for the Project include delays in Project schedule if there is difficulty or delay in obtaining any necessary permits or agreements and gaining permission to enter private properties along the project footprint.

11. FUNDING

It has been determined that this project is eligible for Federal-aid funding.

Local funds are currently being collected through the SYTIA impact fee program and the project is currently being added to the Countywide impact fee program. Funds are committed through PA&ED and available for PS&E. Through these two impact fee programs local funds are anticipated to cover additional project costs, such as PS&E and construction costs, but state and federal dollars are being pursued to expedite the project through construction. An example of this includes the County's recent Rural and Tribal Assistance grant application for \$2.5million to support the PS&E phase. If awarded, this would allow PS&E to expedite and additional dollars to be committed to construction.

Potential State and Federal dollars, along with additional information on the programs, include:

State Transportation Improvement Program (STIP)

STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources.

Local Partnership Program (LPP)

LPP funds are distributed through a 40% statewide competitive and 60% formulaic component for jurisdictions with voter approved taxes, tolls, or fees which are dedicated solely to transportation improvements. Funding is provided to local and regional agencies to improve aging infrastructure, active transportation, transit and rail, and health and safety benefits.

Trade Corridor Enhancement Program (TCEP)

The purpose of the TCEP is to provide funding for infrastructure improvements on federally designated Trade Corridors of National and Regional Significance, on California's portion of the National Highway Freight Network, as identified in California's Freight Mobility Plan, and along other corridors that have a high volume of freight movement. The TCEP will also support the goals of the National Highway Freight Program, the California Freight Mobility Plan, and the guiding principles in the California Sustainable Freight Action Plan.

Better Utilizing Investments to Leverage Development (BUILD)

BUILD provides grants for projects with significant local or regional impact and supports critical roadway, transit, rail, maritime, and aviation infrastructure improvements that improve safety, reduce congestion, and spur economic growth.

Rural and Tribal Assistance Pilot Program (RTA)

RTA provides up to \$54.2 million in no-match funds on a first-come, first-serve basis until funds are expended for rural local governments, political subdivisions, states, federally recognized tribes, and the Department of Hawaiian Home Lands. Projects submitted under RTA must be reasonably expected to be eligible for one or more of the department's lending or grant programs such as the Transportation Infrastructure Finance and Innovation Act (TIFIA), Railroad Rehabilitation and Improvement Funding (RRIF), Infrastructure for Rebuilding America (INFRA) Grant Program, the Mega Program, and BUILD. The County of Yuba submitted an application for \$2.5 million to help expedite the future PS&E phase.

Federal Congressional Earmarks – Community Project Funding (CPF)

CPF allows Members of Congress to request direct federal funding for specific projects benefiting the communities that the Member of Congress represent. The funds are provided through the annual appropriations bills drafted by the House Committee on Appropriations.

Railroad Crossing Elimination Program (RCE)

RCE is intended to fund highway-rail or pathway-rail grade crossing improvement projects that focus on improving the safety and mobility of people and goods. Eligible projects include grade separations or closures using a bridge, track relocations, and improvement or installation of protective devices to improve safety if related to a grade separation or relocation.

Capital Outlay Project Estimate

	Range of Estimate		Other Funds	
	Construction	Right-of-Way	Construction	Right-of-Way
Alternative 1A/1B	\$46 M to \$53 M	\$2.2 M to \$2.6 M	\$46 M to \$53 M	\$2.2 M to \$2.6 M
Alternative 2	\$68 M to \$79 M	\$4.7 M to \$5.5 M	\$68 M to \$79 M	\$4.7 M to \$5.5 M

Estimate amounts have been escalated to mid-point of construction. The level of detail available to develop these capital outlay project estimates is only accurate to within the above ranges and is useful for long-range planning purposes only. The capital outlay project estimates should not be used to program or commit State-programmed capital outlay funds.

Capital Outlay Support Estimate

Capital outlay support estimate for programming PA&ED in the 2028 MTIP for this project: \$3,850,000.

12. DELIVERY SCHEDULE

Project Milestones		Scheduled Delivery Date (Month/Day/Year)	Target (T)/ Actual (A)
BEGIN ENVIRONMENTAL	M020	11/1/2025	T
CIRCULATE DPR & DED EXTERNALLY	M120	2/1/2027	T
PA & ED	M200	6/1/2027	T

The anticipated funding fiscal year for construction is 2030.

13. RISKS

As part of this phase, a Risk Register has been completed. The Risk Register is an assessment of potential risks and impacts to the overall project that may occur in subsequent phases. The PDT identified 6 risks (threats) associated with the project; 3 threats identified as having “Low” risk rating, 1 threat identified as having a “Moderate” risk rating, and 2 threats identified as “High” risk rating. The project Risk Register is included in **Attachment H**.

14. EXTERNAL AGENCY COORDINATION

The project requires the following coordination:

US Army Corps of Engineers

Department of the Army Permit for:

Clean Water Act Section 404

Rivers and Harbors Act of 1899 Section 9

Rivers and Harbors Act of 1899 Section 10

State Water Resources Control Board

National Pollutant Discharge Elimination System (NPDES) Permit

California Department of Fish and Wildlife

California Fish and Game Code Section 1602

Lake or Streambed Alteration Agreement

US Fish and Wildlife Service

Section 7 Endangered Species Act

National Marine Fisheries Service

Section 7 Endangered Species Act

Federal Railroad Administration

Section 106 National Historic Preservation Act

Regional Water Quality Control Board
 Clean Water Act Section 401
 Water Quality Certification

Local Agency
 Cooperative Agreements with Yuba County

Railroads
 Railroad Agreement for at-grade or separated-grade crossings

Other
 Tribal consultation with Native American Tribes under Section 106

15. PROJECT REVIEWS

District Traffic Safety Engineer	<u>Masha Bokova</u>	Date	<u>9/3/2024</u>
Project Manager	<u>Christopher Sugar</u>	Date	<u>9/3/2024</u>
Landscape Architecture	<u>Jeff Juarez</u>	Date	<u>9/3/2024</u>
Yuba County	<u>Sam Bunton</u>	Date	<u>6/5/2025</u>
City of Wheatland	<u>Dane Schilling</u>	Date	<u>6/5/2025</u>

16. PROJECT PERSONNEL

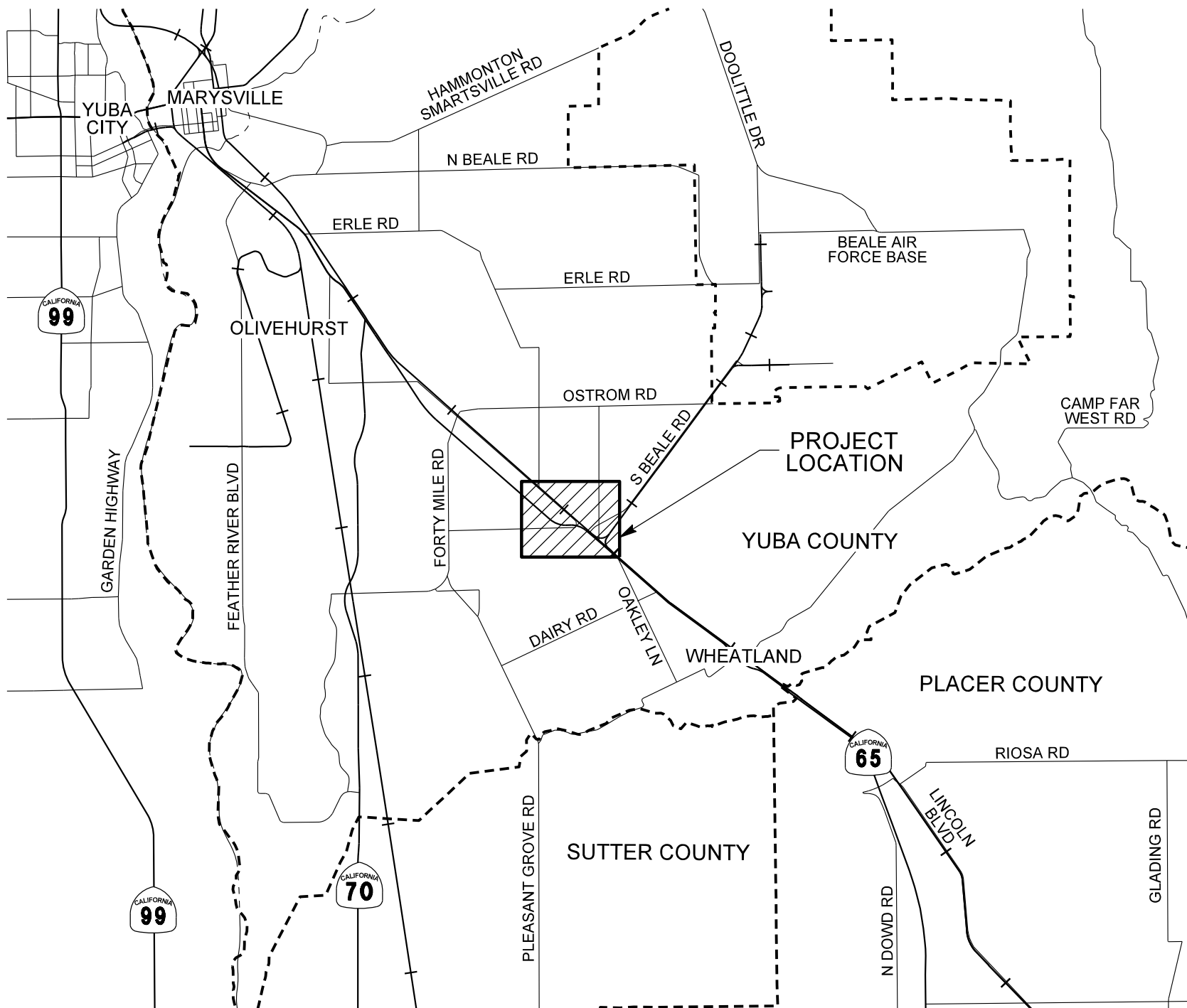
Christopher Sugar, Caltrans Project Manager	(530) 812-4314
Gustavo Reynoso, Caltrans Design Oversight	(530) 821-8360
Sam Bunton, Yuba County Director of Public Works	(530) 749-5649
Juann Ramos, Dokken Engineering Project Manager	(916) 858-0642
Jacqueline Lockhart, Dokken Engineering Project Engineer	(916) 858-0642

17. ATTACHMENTS (134 PAGES)

- A. Vicinity Map (1)
- B. Transportation Planning Scoping Information Sheet (TPSIS) (26)
- C. Plan View Exhibits for Alternatives 1A/1B, 2 and No build Alternative. (4)
- D. Typical Sections for Alternatives 1A/1B, 2 and No build Alternative. (1)
- E. Cost estimates for Alternatives 1A/1B and Alternative 2 (7)
- F. Conceptual Cost Estimate – Right of Way Component (4)
- G. Preliminary Environmental Analysis Report (46)
- H. Risk Register (2)
- I. Storm Water Data Report (SWDR) Cover Page (1)
- J. Landscape Architecture Assessment Study (3)
- K. Transportation Engineering Performance Assessment (TEPA) (39)

ATTACHMENT A

Vicinity Map



DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD
SUITE 200
FOLSOM, CA 95630
(916) 858-0642

PROJECT
**SOUTH BEALE ROAD RAILROAD GRADE
SEPARATION PROJECT**
EXHIBIT
VICINITY MAP

ATTACHMENT B

Transportation Planning Scoping Information Sheet

Transportation Planning Scoping Information Sheet

Proposed Project Summary

EA #	3J990	AM Tool ID #	N/A	EFIS Project ID #	0323000045
County-Route-PM	YUB-65 PM 2.6/R5.2				
Anchor Asset	400.000 Locally Funded State Highway Projects				
Proposed Project Scope	In Yuba County on Route 65 from Dairy Road to approx. 1 mile north of Morrison Road, construct interchange on SR 65 at South Beale Road with extension to Forty Mile Road				
Proposed Fund Type	0042 Reimbursement (Non-SHOPP)				

Section 1: TPSIS Summary Statements & Recommended Actions

1-1 Project Summary Refer to TPSIS Section: ☒ 2 ☒ 3 ☒ 5 ☒ 6 ☒ 7 ☐ 8 ☒ 9 ☐ 10 ☐ 11 ☐ Other	Provide a justification if needs/opportunities are not recommended to be included in project scope.
Project Needs/Opportunities: - Public Outreach and Engagement – opportunity to inform, collaborate, consult. (2-3-3) - Shur-curb to prohibit left turns from Oakley Lane to SR-65, as well as Do Not Pass and No Passing signs. There has been a high number of collisions near Oakley Lane during the latest 5-year period, including 3 fatal collisions. (3-1-1) - Drainage upgrades along the project limits to accommodate future increase precipitation flows. (3-1-4)	
Project Risks/Challenges: - Yuba County Language Demographics (Speaks English “less than Very Well”). (2-3-4) - The project area is forecast to experience increases in precipitation and temperature according to Caltrans District 3 Climate Change Vulnerability Assessment Data. The project limits are not subject to wildfire exposure according to CCVRA data, however surrounding segments of SR65 are. (3-1-4) - Multiple known cultural resources in the project vicinity. (3-1-5) - Project locations are in a soil depositional area that varies from Older Pleistocene to Holocene. The project location is in an area with low sensitivity for buried resources. (3-1-5) - Low potential risk at bridge 16 0003. Priority 2 and 3 roadways comprising the project limits. (5-1-3) - Potential Climate Stressors – Precipitation and Temperature (5-1-1) - The project provides unique or primary access into or out of any of the trip generators or between communities (6-2-3) - Project is within close proximity to VELB habitat and Swainson's hawk habitat. Additionally, there is a creek south of the project vicinity. (7-1-2) - One Local Development appears to potentially interact with the project, and this is Commercial Project at 4551 Dairy Road, Wheatland. (9-1-1)	

Transportation Planning Scoping Information Sheet

1-2 List recommendations based on identified needs/opportunities to be included in project scope. (Provide section references below)	
- Extensive Public Engagement recommended. Public Engagement Plan - Inform, Collaborate, Consult (2-3-3) - Translation and interpretation services recommended - Yuba County Language Demographics (Speaks English "less than Very Well") (2-3-4) - Recommend installing a shur-curb to prohibit left turns from Oakley Lane to SR-65, install additional Do Not Pass signs (R4-1) and No Passing Zone signs (W14-3). (3-1-1) - Consider utilization of inert materials where possible for project components (wildfire hardening) (3-1-4) - Drainage upgrades along the project limits to accommodate future increase precipitation flows. (3-1-4) - Consider Cultural/Historic Preservation (3-1-5) - Increasing connectivity between the Wheatland and Olivehurst communities for all modes of transportation. (6-2-4) - Installation of ladder crosswalks at the interchange on- and off-ramps to allow for safe crossings. Include sidewalks and ADA compliant curb ramps throughout the interchange. (6-4-1) - Section 7 consultation for VELB may be required as well as an ITP for swainson's hawk. 401/404 and 1600 permits may be required for work if working within the stream. Migratory birds may be nesting within project vicinity. Pre construction nessting bird surveys may be required and work buffers may be required for work within close proximity to active nests. (7-1-2) - Collaborate with broadband providers to explore broadband connectivity opportunities. (3-1-3)	
1-3 Road Safety Considerations	If not provide a justification, why.
Has "District Safe System Lead" been contacted through the TPSIS preparation process? ☒ Yes ☐ No	

Required Sections Checklist (Check boxes below once completed):

☒ Section 1 ☒ Section 2 ☒ Section 3 ☒ Section 4 ☒ Section 5 ☒ Section 6-1

Prepared for use in Project Nomination by:

Manpreet K. Aré 7/15/2024

District Planning Representative (Date)

Received for use in Project Nomination by:

Shahna Thomas Powell 8/8/24

District Asset Manager (Date)

Section 2: Tribal Government Consultation, Local Partners, and Public Engagement Coordination

2-1 TRIBAL GOVERNMENT CONSULTATION – Caltrans Tribal Relations Team ; NALB Resource Intranet Page		
2-1-1 Tribal Lands – Is the proposed project: within or near an Indian Reservation Rancheria, or Tribal Trust Land? NALB Tribal lands Viewer; DEA GIS Library ☒ Yes ☐ No	If so, indicate if: ☒ The project involves trust land(s) (including tribal and individual allotted lands) outside of a reservation or Rancheria ☐ Tribe(s) have been informed of the project and will be coordinated with during project development ☐ All applicable tribal laws and regulations have been reviewed for required coordination	Provide names of TRIBES, TRIBAL GOVERNMENTS, reservations, Rancherias, tribal trust lands. Estom Yumeka Maidu Tribe of the Enterprise Rancheria The Hardrock Casino & Hotel located at 3317 Forty Mile Rd, Wheatland, CA 95692
2-1-2 Does the Tribe have a Tribal Employment Rights Office/Ordinance (TERO) on file? ☐ Yes ☒ No	If so, indicate if: ☐ The TERO has been reviewed for required coordination ☐ Is this project on a route identified in the National Tribal Transportation Facility Inventory (NTTFI)? ☐ There is a related Memorandum of Understanding (MOU) between the District and the Tribe ☐ Caltrans has other MOUs with the Tribe	
2-1-3 Have any tribes expressed environmental concerns related to the project? ☐ Yes ☒ No	Provide Tribal name(s) and details: Consultation for this project has occurred via email on March 8th, March 15th & March 25th, 2024. Virtual consultation occurred on March 15th, 2024. Tribal comments and concerns have not been provided, so far. Consultation will continue as the PID reaches 30% and 60%. The Tribe will be notified when the PID has reached 90% and 100% complete so they're aware that consultation will continue through the DNAC during 0-phase.	
2-1-4 Have any tribes expressed any other concerns related to the project? ☐ Yes ☒ No	Provide Tribal name(s) and details:	
2-1-5 Who are the appropriate points of contact within the Tribe(s) for future coordination and consultation?	Name, title, phone number, e-mail: Estom Yumeka Maidu Tribe of the Enterprise Rancheria Nelson Smith, THPO, nelsons@enterpriserancheria.org Jamie Jagears, Exec. Admin., Jamiej@enterpriserancheria.org Glenda Nelson, Chairwomen, glendan@enterpriserancheria.org	

Transportation Planning Scoping Information Sheet

2-2 EQUITY CONSIDERATIONS			
2-2-1 Is the project located in or have the potential to affect equity priority communities (also known as disadvantaged or underserved communities)? <i>You can use these links to identify if project is located in DAC area (additional data sources available in guidance):</i> • California Healthy Places Index Map • CalEnviroScreen 4.0 OEHHA	☐ Yes ☐ No ☒ Unknown (Defer to PID)	Describe the communities and any potential impacts. No disadvantaged communities within the immediate area, however, Enterprise Rancheria is a disadvantaged community on Forty Mile Road, just outside of the project limits. Yuba City, Marysville, and parts of Olivehurst are to the North and are disadvantaged communities as well. Marysville, Olivehurst and Linda: Have Overall HPI scores in the bottom 25th percentile	
2-2-2 If 2-2-1 is Yes, what are their known mobility needs (consider access to opportunities/destinations)?	☐ Yes ☐ No ☒ Unknown (Defer to PID)	Describe needs.	
2-2-3 Do opportunities exist to incorporate project components that reconnect divided communities, improve equitable access and mobility, or contribute to better public health?	☐ Yes ☐ No ☒ Unknown (Defer to PID)	Describe opportunities.	
2-3 PRELIMINARY PUBLIC ENGAGEMENT		Source/Date Contacted	Additional Information
2-3-1 Which local partner agencies have been identified?			City of Wheatland Yuba County Yuba City Marysville
2-3-2 Which other stakeholders, community-based organizations, advocates, or interest groups have been identified? https://www.yubawater.org/ https://www.inallianceinc.com/			Yuba Water Agency InAlliance
2-3-3 What is the recommended Public Engagement Strategy for this project?	☒ Inform ☒ Consult	☒ Collaborate ☐ Involve	☐ No Recommendation

Transportation Planning Scoping Information Sheet

2-3-4 Is the project likely to require translation and interpretation services?	☒ Yes ☐ No ☐ Unknown (Defer to PID)	Yuba County Language demographics: • 74.9% speak English only • 17.6% speak Spanish • 1.7% speak Indo-European languages • 5.5% speak Asian languages/Pacific Islander • 0.3% speak other languages To calculate the percentage of the population in each language group that doesn't speak English very well, we multiply the percentage of speakers of each language by the corresponding percentage of those who speak English less than very well, the results were the following: Yuba County Language Demographics (Speak English less than Very Well) • Spanish: 6% • Indo-European: 0.56% • Asian/Pacific Islander: 2.1% • Other: 0.1% Total 9.8% of Yuba County's Population speaks English less than very well.
--	--	--

Section 3: Plan and Document Review

3-1 PLANNING DOCUMENTS AND SCOPING TOOLS	SUMMARY OF RECOMMENDATIONS & CONSIDERATIONS
3-1-1 District Traffic Safety Plans	There has been a high number of collisions near Oakley Lane during the latest 5-year period, including 3 fatal collisions. Recommend installing a shur-curb to prohibit left turns from Oakley Lane to SR-65, install additional Do Not Pass signs (R4-1) and No Passing Zone signs (W14-3).
3-1-2 Active Transportation Plans: ☒ California Active Transportation Plan (CAT Plan) ☐ District Bike and Ped Plan ☐ Regional/Local Plan	The D3 CAT plan and SMF mapping tool show that the project route from PM T4.247 to PM R5.2 is prohibited to pedestrians and cyclists, while the project route PM T4.247 to PM 2.6 is open to pedestrians and cyclists. The project route from PM T4247 to PM 2.6 has a LTS of 3, indicating most cyclists will not be comfortable through this stretch. These tools also note a need for safe crossing at the Forty Mile Rd intersection with SR-65.

Transportation Planning Scoping Information Sheet

3-1-3 Broadband: ☐ Is there Caltrans-owned broadband infrastructure within this project location?	No
3-1-4 Climate Change Planning: ☒ Caltrans District Vulnerability Assessment ☒ Caltrans Climate Change Adaptation Priority Plans ☒ Local Climate Action Plan/GHG reduction plan (Yuba County General Plan 2030) ☐ Greenhouse gas section of EIR for RTP/SCS ☐ Locally Adopted Transportation Adaptation Plan	The project area is forecast to experience increases in precipitation and temperature according to Caltrans District 3 Climate Change Vulnerability Assessment Data. The project limits are not subject to wildfire exposure according to CCVRA data, however surrounding segments of SR65 are. To mitigate climate change stressors forecast for the project limits: - Consider utilization of inert materials where possible for project components (wildfire hardening) - Drainage upgrades along the project limits to accommodate future increase precipitation flows. <u>Caltrans District 3 Climate Change Vulnerability Assessment Data:</u> Change in Average Minimum Temperature 2025: 2.7 2055: 5.3 2085: 7.9 Average 7-Day Maximum Temperature 2025: 3.6 2055: 7.12 2085: 10.2 Percent Change in 100-Year Precipitation Depth 2025: 2.3% 2055: 3.2% 2085: 7.6% <u>Adaptation Priority Report Data:</u> - Bridge 16 0002 – Priority 5 (lowest) – PM 2.21 - Roadway north of PM 3.775 – Priority 3 (temperature) - Roadway south of PM 3.775 – Priority 2 (temperature) *Refer to segment map section for more detail

Transportation Planning Scoping Information Sheet

3-1-5 Cultural/Historic Preservation Scoping Tools: ☒ Caltrans Cultural Resources Database ☒ Caltrans Historic Bridge Inventory ☒ Archaeological Site Sensitivity Model ☒ AB52 Letter	Caltrans Cultural Resources Database: Multiple known cultural resources in the project vicinity. Historic Bridge Inventory: None Archaeological Site Sensitivity Model: Project locations are in a soil depositional area that varies from Older Pleistocene to Holocene. The project location is in an area with low sensitivity for buried resources. AB52 Letter: Colfax-Todds Valley Consolidated Tribe, Estom Yumeka Maidu Tribe of the Enterprise Rancheria, Mooretown Rancheria of Maidu Indians, Pakan'yan Maidu of Strawberry Valley Rancheria, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of Nevada and California, and Wilton Rancheria
3-1-6 Freight Planning: ☐ California Freight Mobility Plan ☐ California Sustainable Freight Action Plan ☐ Caltrans Safety Roadside Rest Areas (SRRA) ☐ Truck Parking Study ☐ Regional/Local Plan	No recommendation by Freight Coordinator
3-1-7 Project Planning: ☒ District 10 Year Project Book ☐ MONSTER List ☐ Preliminary Investigation/Feasibility Study	
3-1-8 Rail and Mass Transportation Planning: ☐ California State Rail Plan ☐ Statewide Transit Strategic Plan	No recommendations
3-1-9 Regional & Local Planning: ☐ Regional Transportation Plan ☐ Sustainable Community Strategy ☐ General and Local Plans ☐ Regional Concept of Transportation Operations ☐ Local Coastal Program Plan	No recommendations
3-1-10 System Planning: ☐ Interregional Transportation Strategic Plan (ITSP) ☐ Corridor Plans (TCR, CSMP, CMCP)	No recommendations
3-1-11 Tribal Planning: ☐ Tribal Transportation Plan	
3-1-12 Other (Identify): ☐ _____	

Section 4: Caltrans Stakeholder Information

4-1 TITLE	Name	Phone Number	Email Address
4-1-1 District Safe System Lead	Fernando Rivera	(530) 682-6609	fernando.rivera@dot.ca.gov
4-1-2 Complete Street/Bicycle and Pedestrian Coordinator	Chris Houlemard	(530) 565-3994	chris.houlemard@dot.ca.gov
4-1-3 Climate Change Coordinator/Liaison	David Dosanjh	(530) 565-3905	david.dosanjh@dot.ca.gov
4-1-4 District Native American Coordinator and/or District Cultural Resources PQS Staff	Katherine Jorgensen	(530) 720-4555	katherine.jorgensen@dot.ca.gov
4-1-5 District Native American Liaison (Transportation Planning)	Angelina Healy	(530) 790-8138	angelina.healy@dot.ca.gov
4-1-6 Environmental Planner	Erin Damm	(530) 812-4371	erin.damm@dot.ca.gov
4-1-7 Freight Planner	Ishmael Sweeney	(530) 649-4868	ishmael.sweeney@dot.ca.gov
4-1-8 Local Development Review (LDR) Planner	Satwinder Dhatt	(530) 821-8261	satwinder.dhatt@dot.ca.gov
4-1-9 Park and Ride Coordinator	Dianira Soto	(530) 812-4414	dianira.soto@dot.ca.gov
4-1-10 Regional Planner	Manpreet Ark	(530) 565-3885	manpreet.ark@dot.ca.gov
4-1-11 Sustainable Planning Grant Coordinator	Manpreet Ark	(530) 565-3885	manpreet.ark@dot.ca.gov
4-1-12 System Planner	Dianira Soto	(530) 812-4414	dianira.soto@dot.ca.gov
4-1-13 Rail & Transit Planner	David J. Smith	(530) 682-3791	david.j.smith@dot.ca.gov
4-1-14 Equity, Engagement and Health Planner	Joan Davis	(530) 821-8456	joan.davis@dot.ca.gov
4-1-15 Other Coordinators			

Section 5: Climate Change

5-1 CLIMATE CHANGE CONSIDERATIONS	Comment/Action
5-1-1 Using the Caltrans climate change considerations tool kit, identify potential GHG emission and climate change-related mitigation options at the proposed project location. Attach toolkit as an appendix and check GHG reduction measures and climate change-related adaptation measures that could apply to the proposed project for consideration.	Completed Caltrans climate change considerations toolkit has been attached? ☒ Yes ☐ No
5-1-2 Using the District Vulnerability Assessment appropriate for the proposed project area, identify the potential climate stressors that could affect transportation assets within the project limits. Using the vulnerability assessment interactive Webmap; print and attach map of potential project site vulnerability	☒ Temperature ☒ Precipitation ☐ Wildfire ☐ Other: ☐ Sea-Level Rise ☐ Storm Surge ☐ Cliff Retreat
5-1-3 Are there potential climate risks to major assets within the project area? (e.g. Bridge potentially at risk of SLR inundation, stretch of highway at risk for high temp, and wildfire- consider appropriate materials)	☒ Yes ☐ No Low potential risk at bridge 16-0003. Priority 2 and 3 roadways comprising the project limits. See segment maps below.

Transportation Planning Scoping Information Sheet

5-1-4 Is the project located in the Coastal Zone Boundary, Local Coastal Program Area (https://www.coastal.ca.gov/maps/), or within the San Francisco Bay Conservation and Development Commission (BCDC)? https://bcdcc.ca.gov/bcdc-cities-jurisdiction.html	☐ Yes ☒ No	
--	--	--

Section 6: Smart Mobility, Active Transportation and Transit

6-1 APPLICABILITY OF CHECKLIST (REQUIRED)	
6-1-1 Is the project located entirely on a facility where bicyclists and pedestrians are legally prohibited and the project does not involve a shared use path, pedestrian/bicycle structure or work impacting a local road crossing or interchange? <i>(i.e. project including freeway mainline and ramp work where the project freeway segment legally prohibits bicyclists and pedestrians per the MUTCD.)</i> If no, continue, if yes, you may stop here.	☐ Yes ☒ No
6-1-2 Is the primary project purpose to address assets that are outside of the roadbed where pedestrian and bicycle travel is not affected, and construction will not affect future pedestrian and bicycle facilities? <i>(i.e. culvert outfalls, storm water treatment facilities, bridge substructure or scour mitigation, planting or vegetation removal, retaining walls, etc.)</i> If no, continue, if yes, you may stop here.	☐ Yes ☒ No
6-2 PLACE TYPES (OPTIONAL from here on)	Comment/Action
6-2-1 Identify the Smart Mobility Framework Place Type(s) surrounding the project limits.	☐ Central Cities ☐ Urban Communities ☐ Suburban Communities ☒ Rural Areas ☐ Protected Lands and Special Use Areas
6-2-2 Are there any -existing or proposed- Pedestrian/ Bicyclist/ Passenger Rail/Transit Trip Generators in or adjacent to the project area?	☐ Schools ☒ Town Centers ☐ Shopping Centers ☐ Bus Stops ☐ Large Employment Businesses ☐ Shared-use trail access/parking. ☐ Public Transit /Passenger Rail Facilities ☐ Health/Medical Facilities ☐ Other
6-2-3 Check all that apply: ☐ the highway segment functions as a “Main Street” or a “Safe Route to School” ☒ the project provides unique or primary access into or out of any of the trip generators or between communities ☐ the project provides unique or primary access across a river, highway corridor or other natural and/or man-made barrier	
6-2-4 Summary of place type related considerations (see Smart Mobility Framework Guide) Increasing connectivity between the Wheatland and Olivehurst communities for all modes of transportation.	

Transportation Planning Scoping Information Sheet

6-3 BICYCLE, PEDESTRIAN, RAIL AND TRANSIT CONDITIONS	Comment/Action	
6-3-1 Identify existing bicycle and pedestrian facilities within project limits.	☐ Bicycle/Pedestrian Accessibility ☐ Bicycle Lane Choose an item. ☐ Backpacking/Hiking/Equestrian Trail ☒ Shoulder ☐ Sidewalks ☐ Other:	☐ Curb Ramps ☐ California Coastal Trail ☐ Signage ☐ Green Striping ☐ Bike Boxes ☐ Two-Stage Turn Boxes
6-3-2 Identify physical and/or perceived impediments for bicyclists and pedestrians.	☒ Narrow Shoulders ☐ Narrow Sidewalks ☐ Connectivity Gaps ☐ Curbs and Gutters	☐ Utility Boxes ☒ High Vehicle Speeds ☐ AADT ☐ Other:
6-3-3 Are there any complete streets assets including Bikeways (Class I – IV), Sidewalk, and Crosswalk, in Fair or Poor condition, in the project area?	☐ Yes ☒ No	Describe.
6-3-4 Design Year ADT	☐ <2,500 ☐ 2,500-5,000 ☐ 5,000-10,000 ☐ >10,000	
6-3-5 Posted Speed	☐ 15-20 ☐ 25-30 ☐ 35-40 ☒ >45	
6-3-6 Level of Traffic Stress (LTS)	Bicycle LTS: 3 Pedestrian LTS: 3	
6-3-7 Identify existing Rail and transit facilities within the project vicinity/ corridor.	☐ Rail and Transit Stops ☒ Active Rail/Transit Line ☐ Park and Ride Lot ☐ Connections to other services ☐ Signal Priority ☐ Seamless Transfer Opportunities ☐ Other:	
6-4 BICYCLE, PEDESTRIAN & TRANSIT NEEDS/OPPORTUNITIES	Comment/Action	
6-4-1 Are there opportunities to improve safety for bicyclists and pedestrians with Complete Street features?	☒ Yes ☐ No	Installation of ladder crosswalks at the interchange on- and off-ramps to allow for safe crossings. Include sidewalks and ADA compliant curb ramps throughout the interchange.
6-4-2 Identify any pedestrian, bicycle or transit needs in/linking to the project area as identified in an existing Bicycle/Pedestrian Plan or comprehensive planning study for the corridor.	The D3 CAT plan and SMF mapping tool show that the project route from PM T4.247 to PM R5.2 is prohibited to pedestrians and cyclists, while the project route PM T4.247 to PM 2.6 is open to pedestrians and cyclists. The project route from PM T4247 to PM 2.6 has a LTS of 3, indicating most cyclists will not be comfortable through this stretch. These tools also note a need for safe crossing at the Forty Mile Rd intersection with SR-65.	
6-4-3 Is there a public/partner identified need for bicycle/pedestrian/ transit or “way finding” signs that could be incorporated into the project?	☐ Yes ☒ No	

Transportation Planning Scoping Information Sheet

6-4-4 Provide recommendations to address physical and/or perceived impediments for bicyclists and pedestrians (identified in 6-3-2) within project limits”.	☒ Yes ☐ No	The installation of ladder crosswalks at the interchange on- and off-ramps to allow for safe crossings, sidewalks with ADA compliant curb ramps throughout the interchange. No bikeway facilities recommended due to lack of appropriate tie-ins in the region.
6-4-5 Is there any opportunity to improve transit on state owned roads or improve access to transit?	☐ Yes ☒ No	
6-4-6 Preferred Bikeway Facilities	☐ Class I ☐ Class II ☐ Class III ☐ Class IV ☐ Standard Shoulder or Shared Lane	

Section 7: Environmental Linkage Considerations (OPTIONAL)

7-1 AIR QUALITY, WILDLIFE, AND NATURAL HABITAT CONSIDERATIONS		
7-1-1 Check all that apply: ☐ Air Quality – proposed project is located in a Federal non-attainment or attainment maintenance area ☐ Project is within identified Wildlife Corridors in a Habitat Conservation Plan, South Coast Wildlife Linkage or California Essential Habitat Connectivity Plan. ☐ Proposed project is located within or near any lands protected under a National Scenic Rivers Act, US Fish and Wildlife Services such as Critical Habitat, National Wildlife Refuge System, etc., or within the boundaries of other resource agencies such as HCPs, USFS or BLM designated critical habitat areas or Habitat Conservation Plans		
7-1-2 Are any of the following Officially Designated Habitat Types located within or near the proposed Project Location? ☒ Wetlands ☒ Riparian or Stream Habitats ☒ Jurisdictional Waters ☐ Important Bird Areas ☐ Important Rare Plants Areas ☐ Natural Communities of Conservation Concern ☐ Environmentally Sensitive Habitat Areas	If so, describe here: Project is within close proximity to VELB habitat and Swainson's hawk habitat. Additionally, there is a creek south of the project vicinity. Section 7 consultation for VELB may be required as well as an ITP for swainson's hawk. 401/404 and 1600 permits may be required for work if working within the stream. Migratory birds may be nesting within project vicinity. Pre construction nesting bird surveys may be required and work buffers may be required for work within close proximity to active nests.	
7-1-3 Is there an identified fish passage barrier(s)? www.cafishpac.org	☐ Yes ☒ No	Describe.

Transportation Planning Scoping Information Sheet

7-2 ADVANCE BIOLOGICAL MITIGATION OPPORTUNITIES	Comment/Action
7-2-1 Identify Potential Environmental Mitigation Opportunities for the project: ☐ Mitigation bank within the project limits with available credits to purchase ☐ Mitigation Fees from existing Habitat Conservation Plan ☐ Projects timeline allows participation in the Advance Mitigation Program ☐ Any opportunities available within the project limits to offset project impacts	

Section 8: System Planning (OPTIONAL)

8-1 ROUTE DESIGNATIONS			
8-1-1 Freeway and Expressway	Choose an item.	8-1-8 Scenic Highway	Choose an item.
8-1-2 National Highway System	Choose an item.	8-1-9 National Highway Freight Network	
8-1-3 Federal Functional Classification		8-1-10 Critical Urban Freight Corridor	
8-1-4 Strategic Highway Network	Choose an item.	8-1-11 Critical Rural Freight Corridor	
8-1-5 Strategic Interregional Corridor		8-1-12 NHS and STAA Route Classification	
8-1-6 Interregional Road System	Choose an item.	8-1-13 Truck Network Designation	
8-1-7 Priority Interregional Facility		8-1-14 Other	
8-2 FACILITY TYPE			
8-2-1 Current			
8-2-2 Concept			
8-2-3 Ultimate			

Section 9: Local Development Review (OPTIONAL)

9-1 LOCAL DEVELOPMENTS IMPACTING PROJECT		
Project Title: 4551 Dairy Road Commercial Project Project Location: 4551 Dairy Road, Wheatland, Postmile 2.681 and APN 015-100-076-000 GTS link: https://ld-igr-gts.dot.ca.gov/district/3/project/32285		Encroachment Permit Required ☒
9-1-1 Project Description: Gas station with convenience store with drive-thru, two proposed quick serve restaurants, and a express car wash with vacuum stations. The northern 2 acres will remain undeveloped and will be used for a new septic / leach filed.		
9-1-2 Distance to Caltrans Project: Dairy Road west and SR 65		
9-1-3 Summary of Mitigation Measures:		
9-1-4 Mitigation Funding Source(s)	9-1-5 Amount of Available Funding	9-1-6 Summary of Caltrans Concerns: One appears to potentially interact with the project, and this is Commercial Project at 4551 Dairy Road, Wheatland.

Section 10: Broadband Considerations (OPTIONAL)

10-1 BROADBAND OPPORTUNITIES (CPUC Map, BMMN Map, Caltrans-owned Broadband Map)	
10-1-1 Is there existing broadband infrastructure (fiber optic cable) available for Caltrans use within the project location?	☐ Yes ☐ No ☐ Unknown (Defer to PID)
10-1-2 If 'Yes', who owns the broadband infrastructure?	☐ Caltrans ☐ BMMN ☐ ISP ☐ Other
10-1-3 If 'No', is there an opportunity for Caltrans to install broadband infrastructure as part of this project?	☐ Yes ☐ No ☐ Unknown (Defer to PID)

Section 11: Freight Considerations (OPTIONAL)

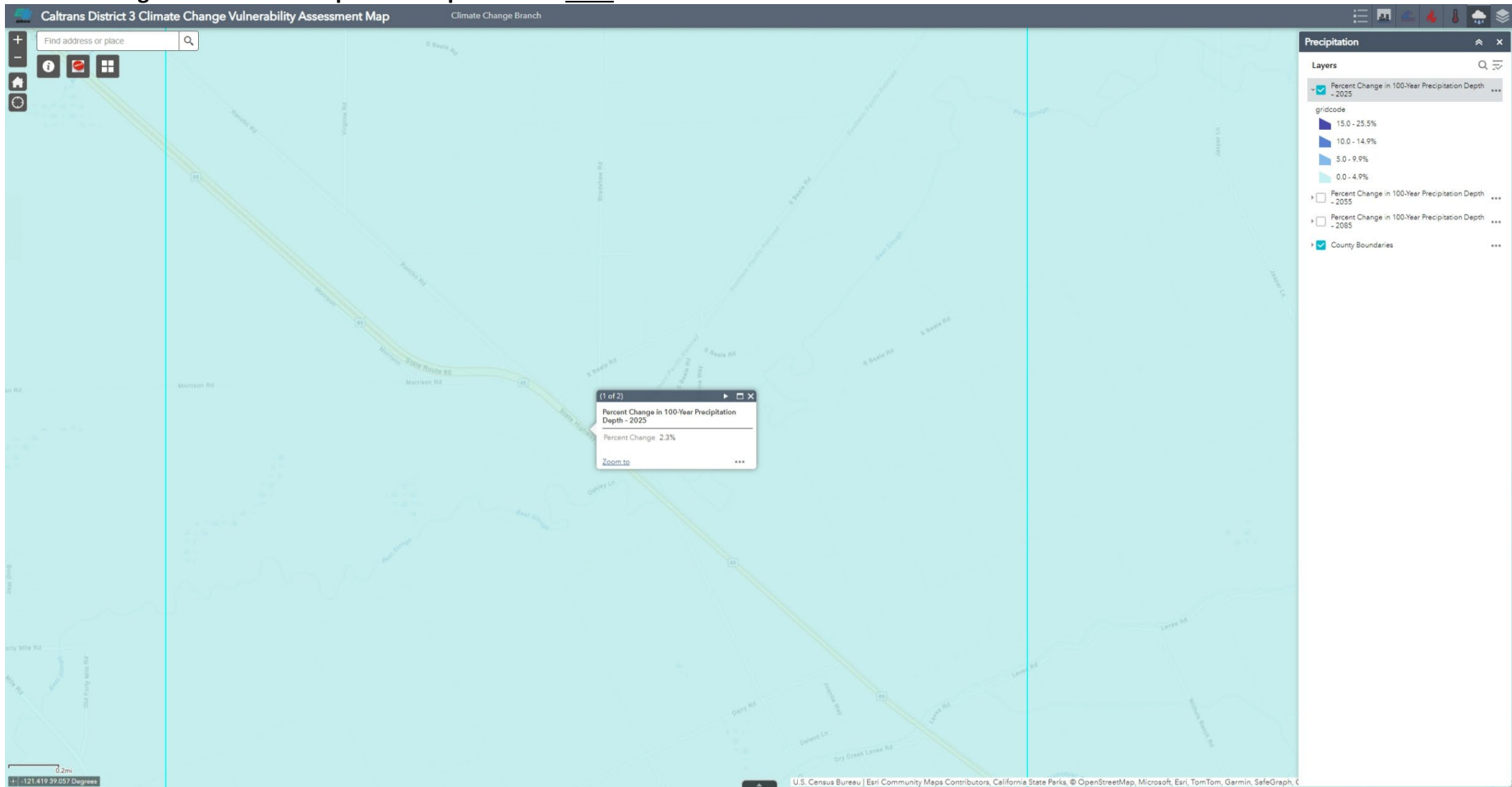
11-1 FREIGHT OPPORTUNITIES AND CONSIDERATIONS	
11-1-1 Are there any known unauthorized truck parking issues or deficiencies along the route?	☐ Yes ☒ No Describe.
11-1-2 Are there any existing or planned restrictions/limitations pertaining to truck weight or height?	☐ Yes ☒ No Describe.
11-1-3 Identify truck usage impacts within the project area: ☐ Truck Bottleneck/Congestion ☐ Distressed Pavement ☐ Truck Geometric Constraints (Truck/Weight/Height restrictions) ☐ Shoulder Width ☐ Shoulder Dust Issues ☐ Bridge Conditions	Add text if needed.
11-1-4 Check if apply: ☐ The project area contains Intermodal connections to other freight facilities (sea ports, rail, airport) ☐ Freight key services along route (e.g. agriculture (crops, processing, packing))	Add text if needed.
11-1-5 Are there any opportunities for Truck Parking, based on SRRA Master Plan or any relevant truck parking studies?	☐ Yes ☐ No Describe.
11-1-6 Identify opportunities for zero emission fueling (electric charging, hydrogen) for vehicles including trucks.	☐ Yes ☐ No Describe.

Transportation Planning Scoping Information Sheet

SEGMENT MAP/PICTURES (OPTIONAL)

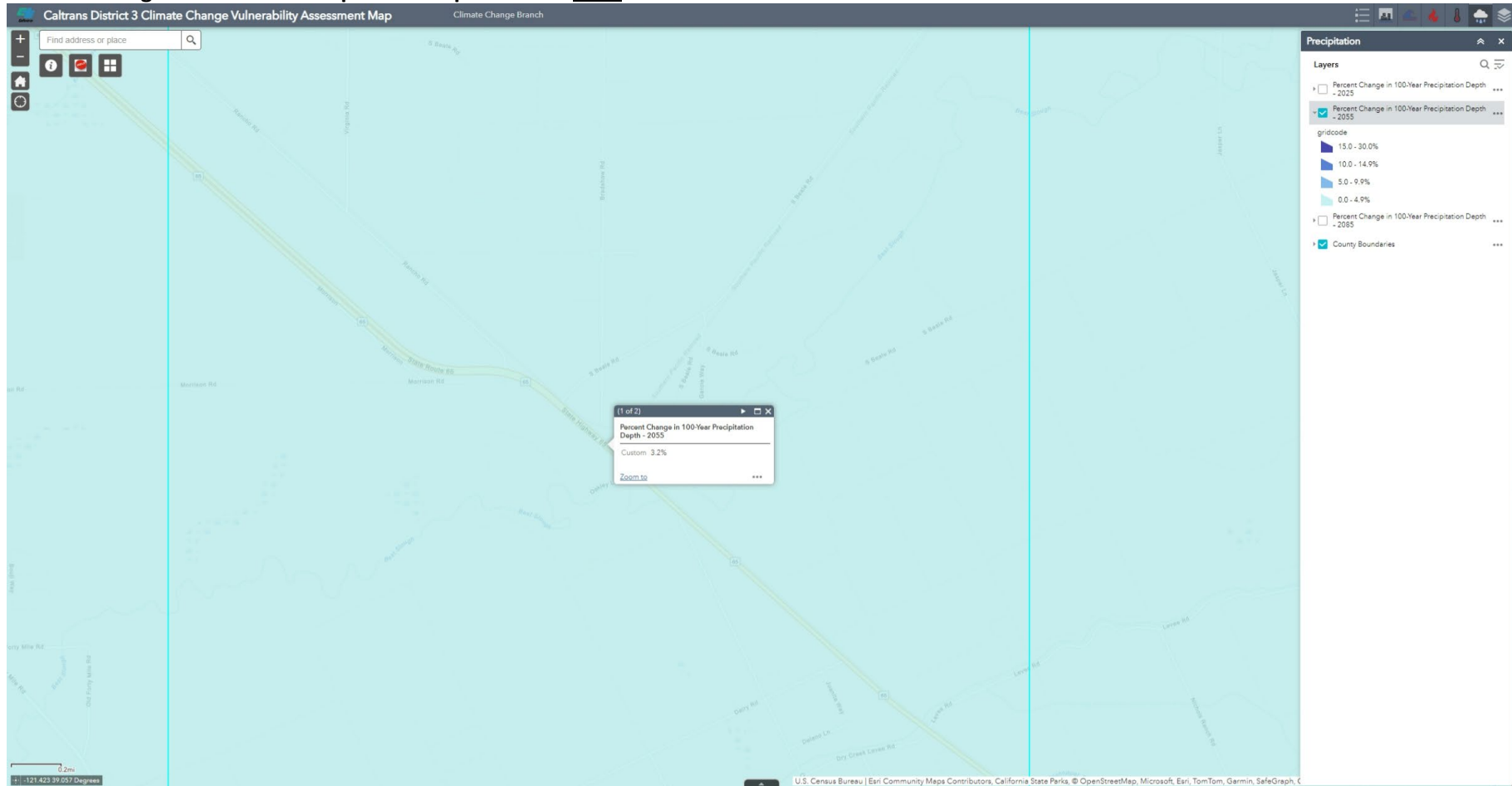
Climate Change Supplement (Maps)

Percent Change in 100-Year Precipitation Depth – 2025: 2.3%



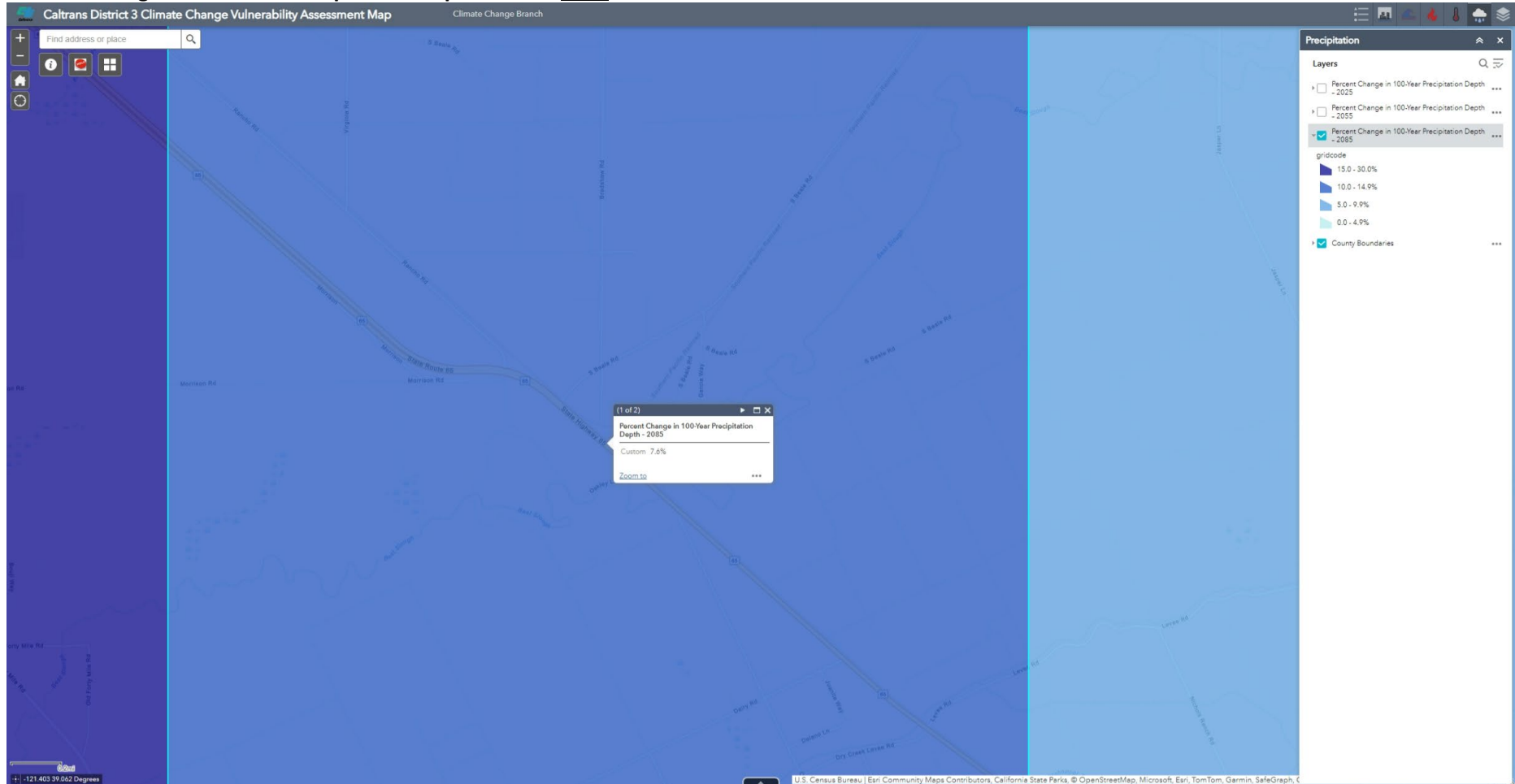
Transportation Planning Scoping Information Sheet

Percent Change in 100-Year Precipitation Depth – 2055: **3.2%**



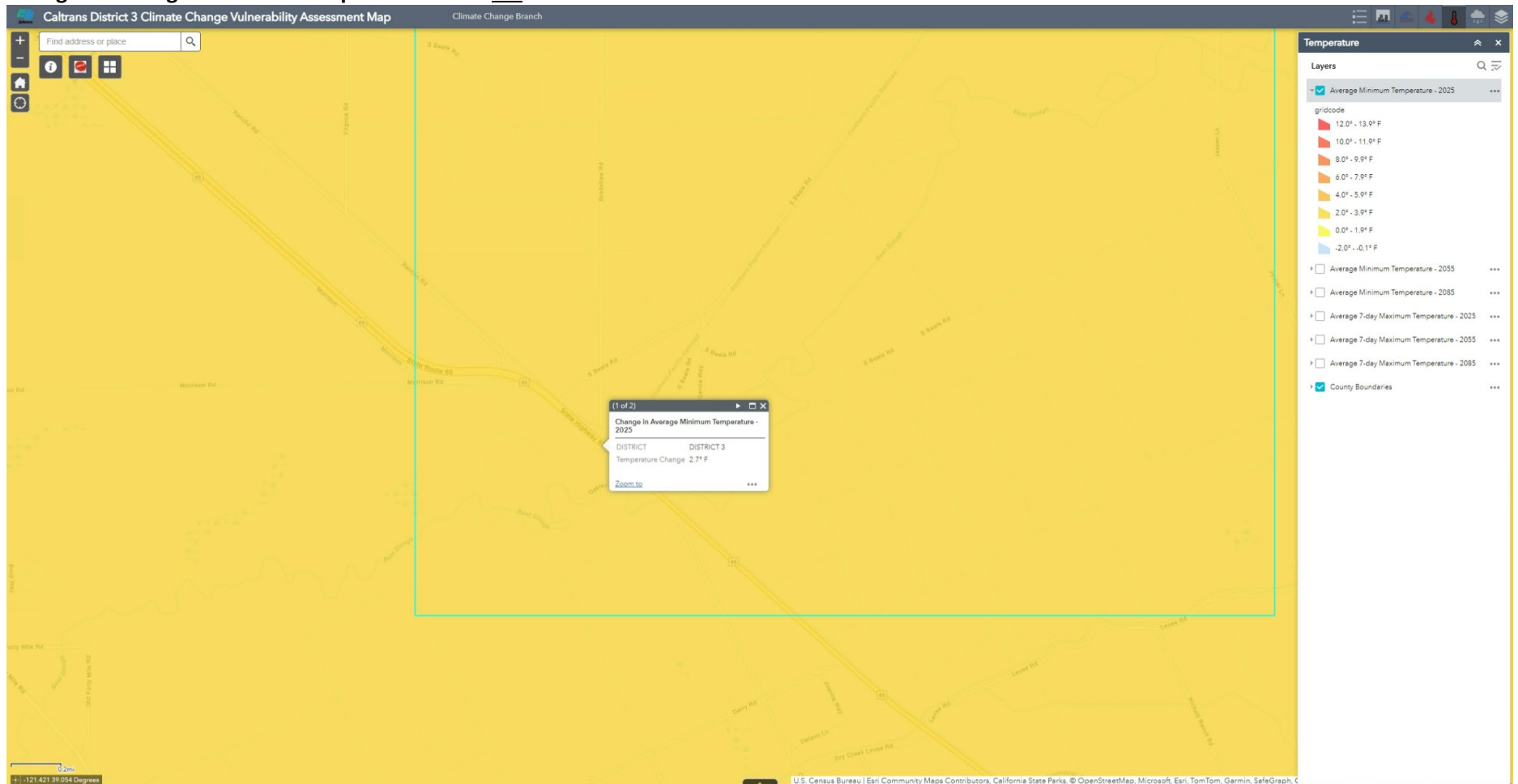
Transportation Planning Scoping Information Sheet

Percent Change in 100-Year Precipitation Depth – 2085: **7.6%**



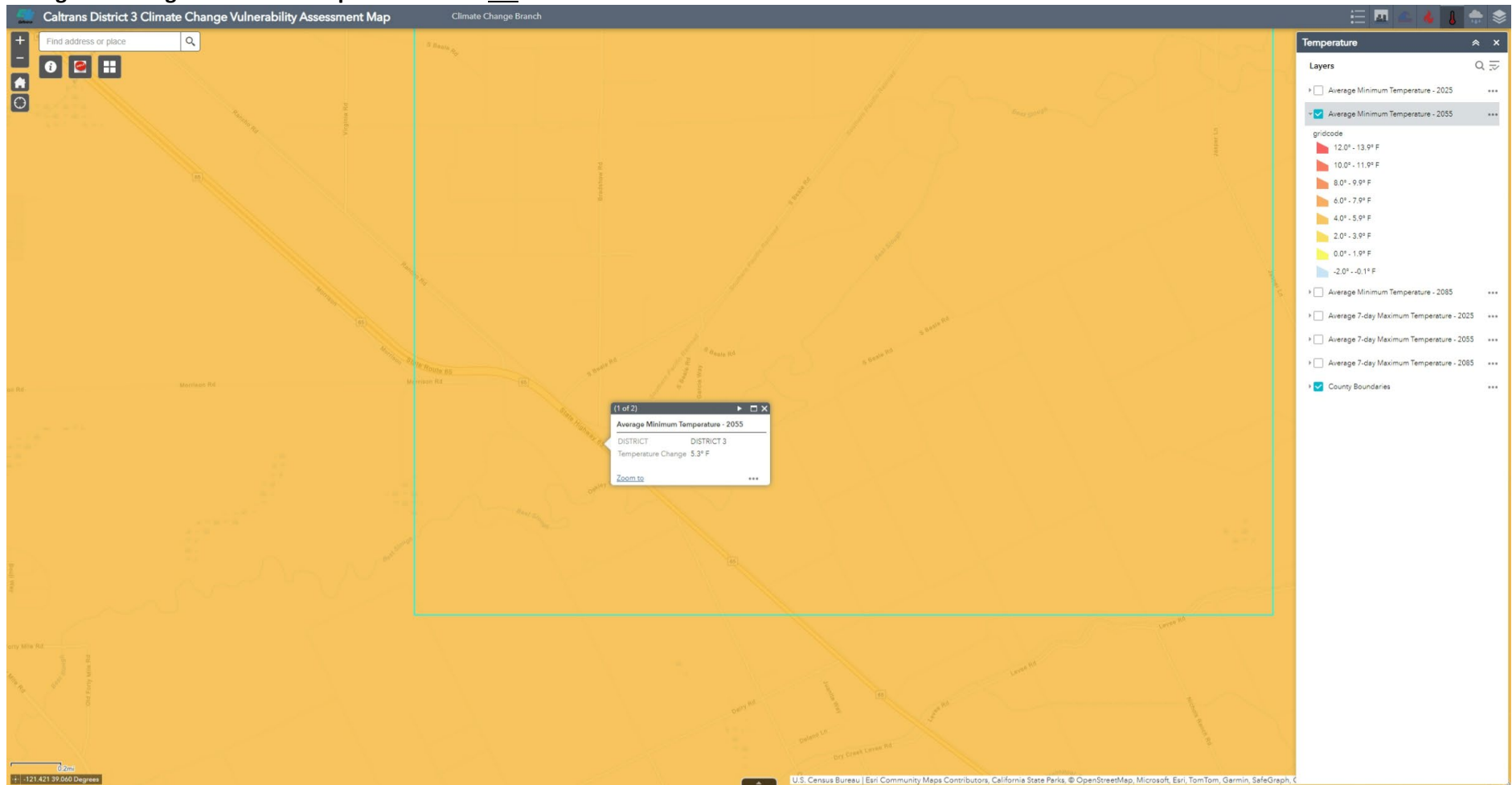
Transportation Planning Scoping Information Sheet

Change in Average Minimum Temperature 2025: 2.7



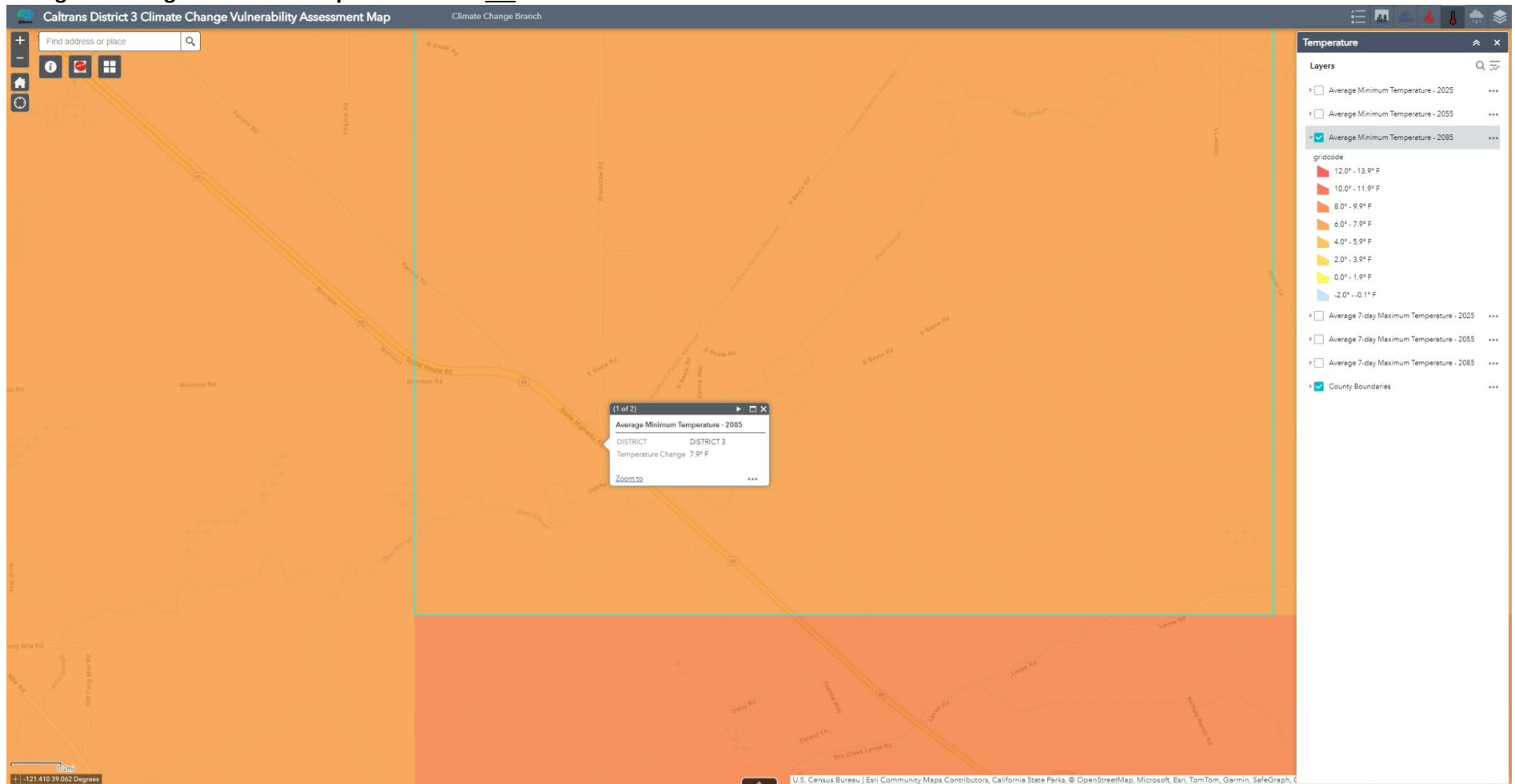
Transportation Planning Scoping Information Sheet

Change in Average Minimum Temperature 2055: 5.3



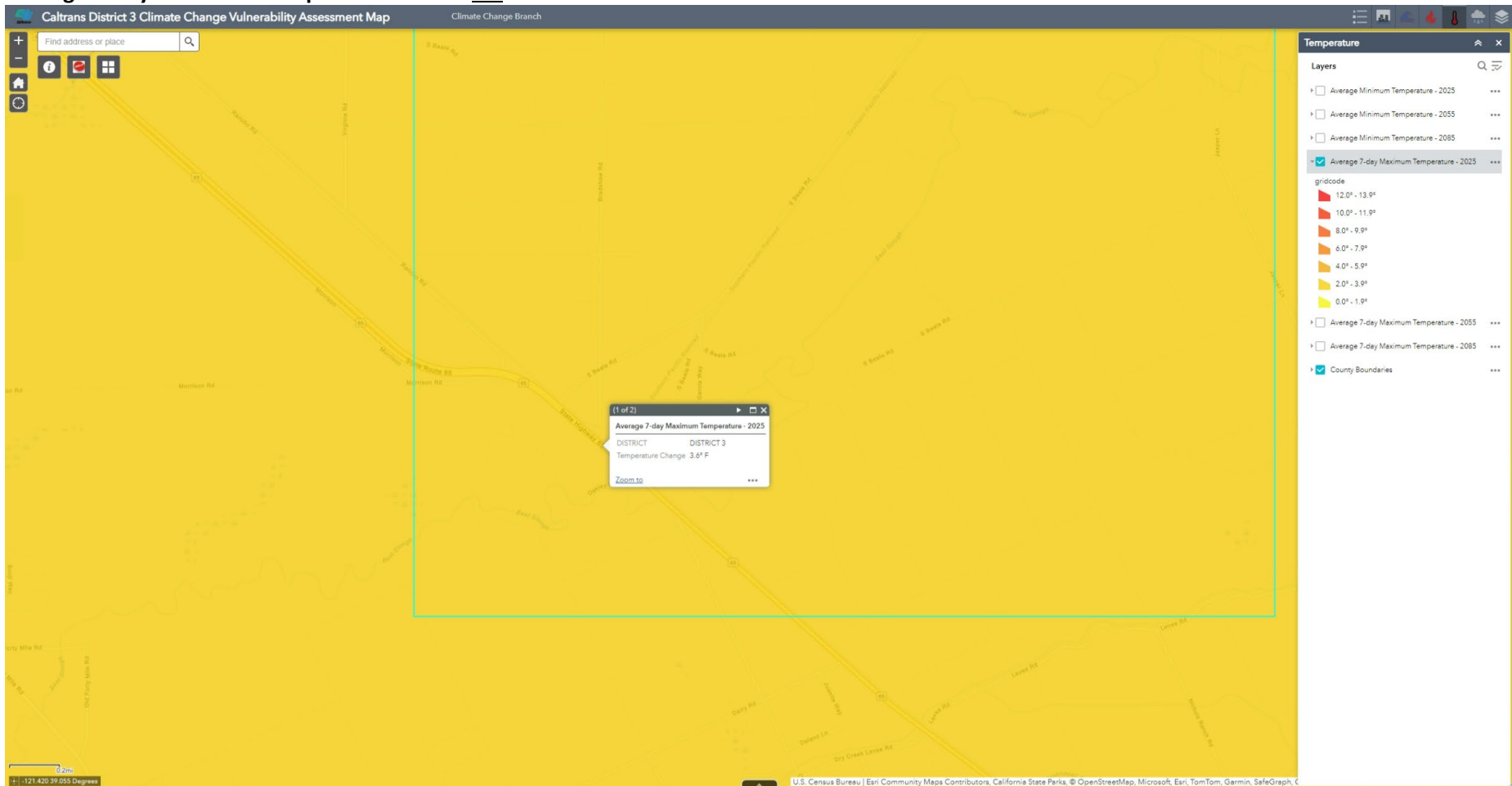
Transportation Planning Scoping Information Sheet

Change in Average Minimum Temperature 2085: 7.9



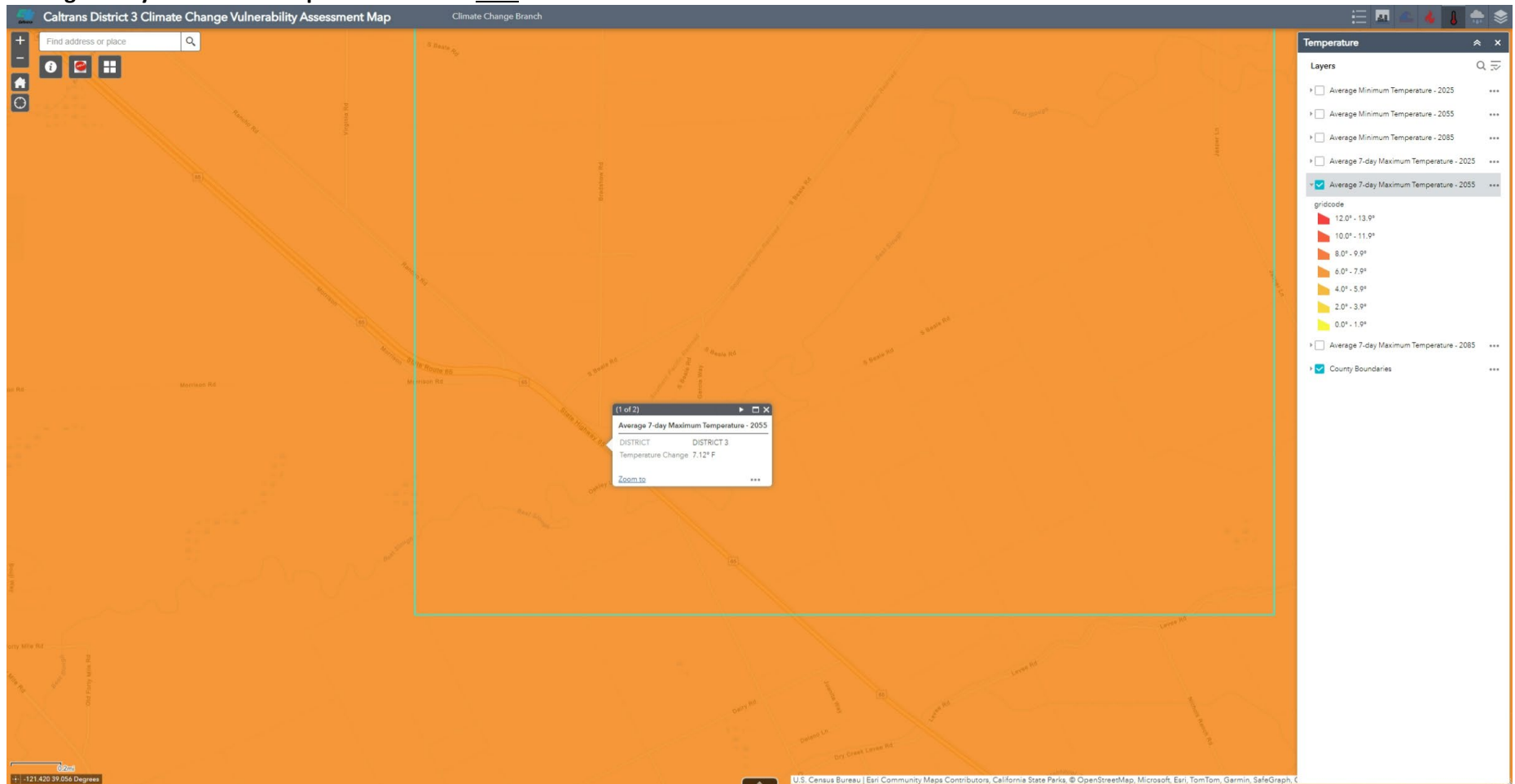
Transportation Planning Scoping Information Sheet

Average 7-Day Maximum Temperature - 2025: **3.6**



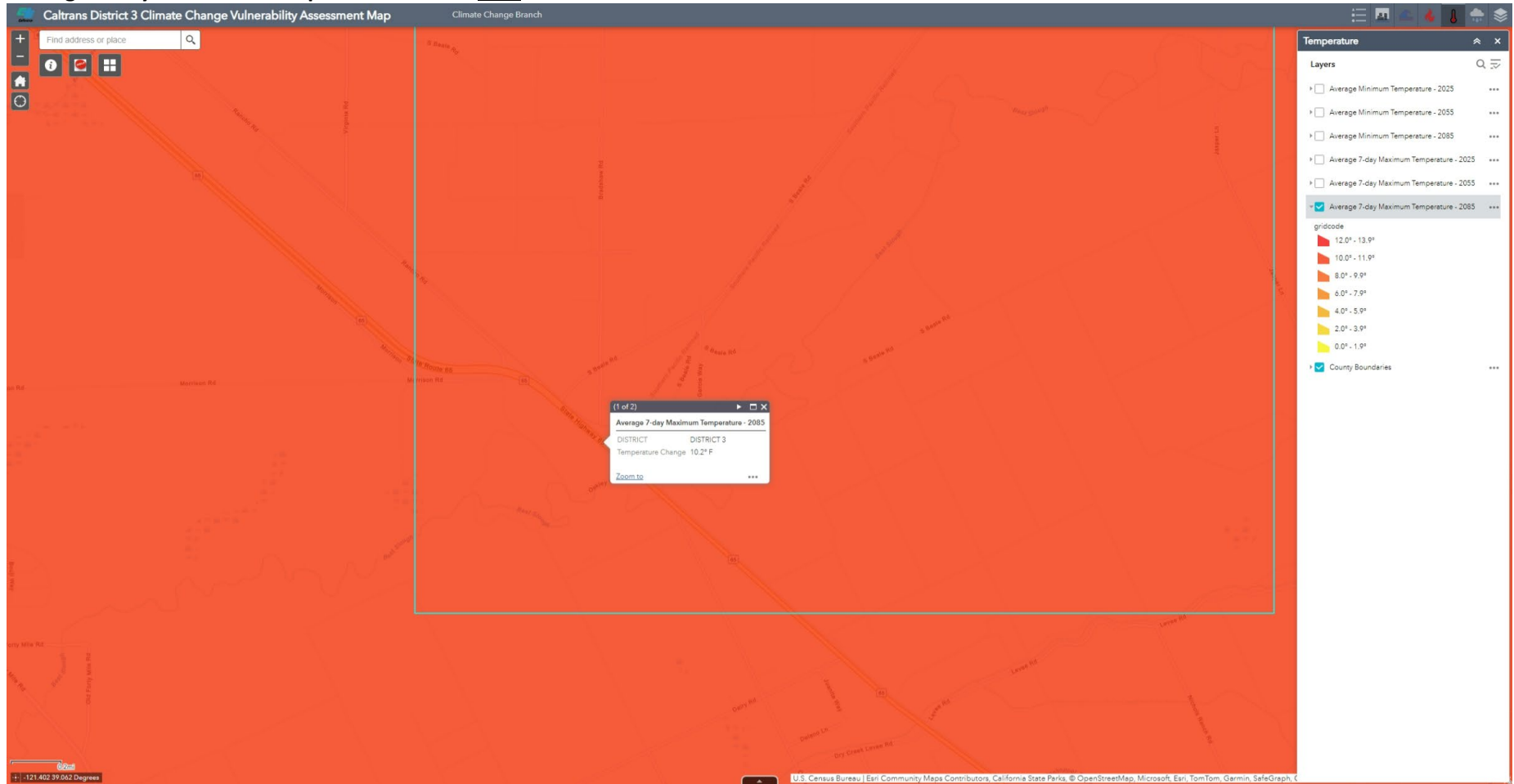
Transportation Planning Scoping Information Sheet

Average 7-Day Maximum Temperature – 2055: 7.12



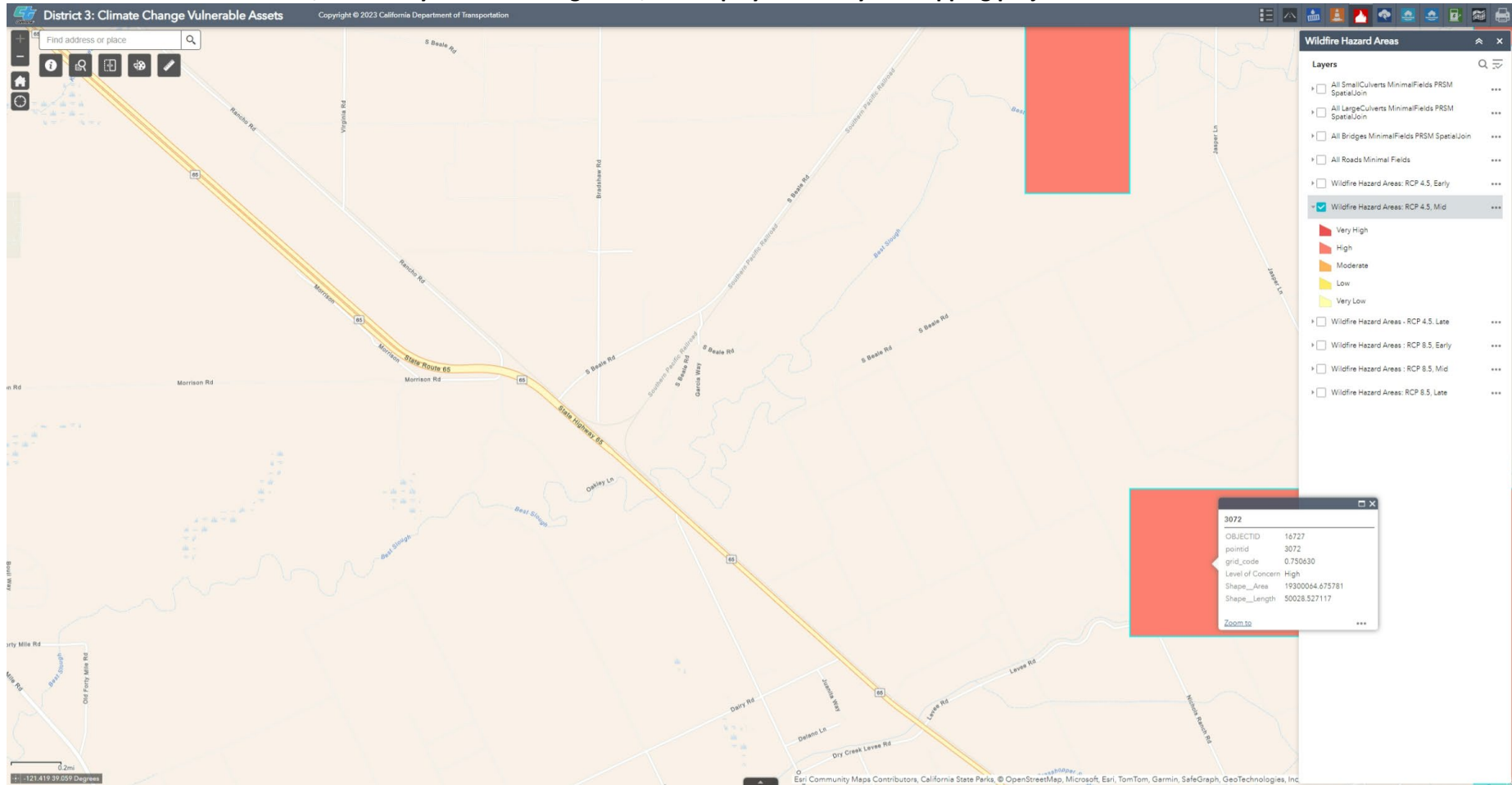
Transportation Planning Scoping Information Sheet

Average 7-Day Maximum Temperature – 2085: 10.2



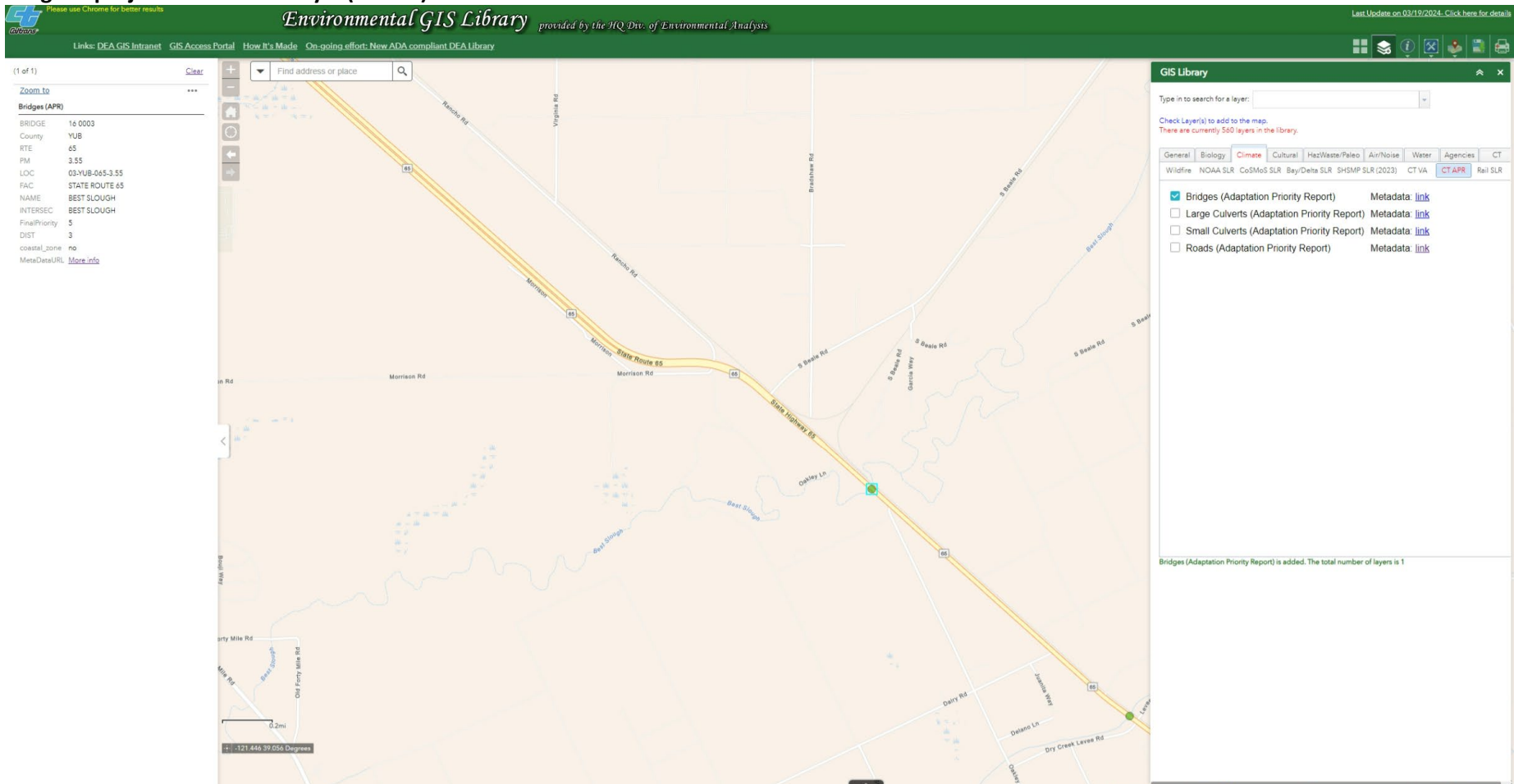
Transportation Planning Scoping Information Sheet

Wildfire Hazard Area – RCP 4.5, Mid – only in surrounding areas, not displayed directly overlapping project limits in models available.



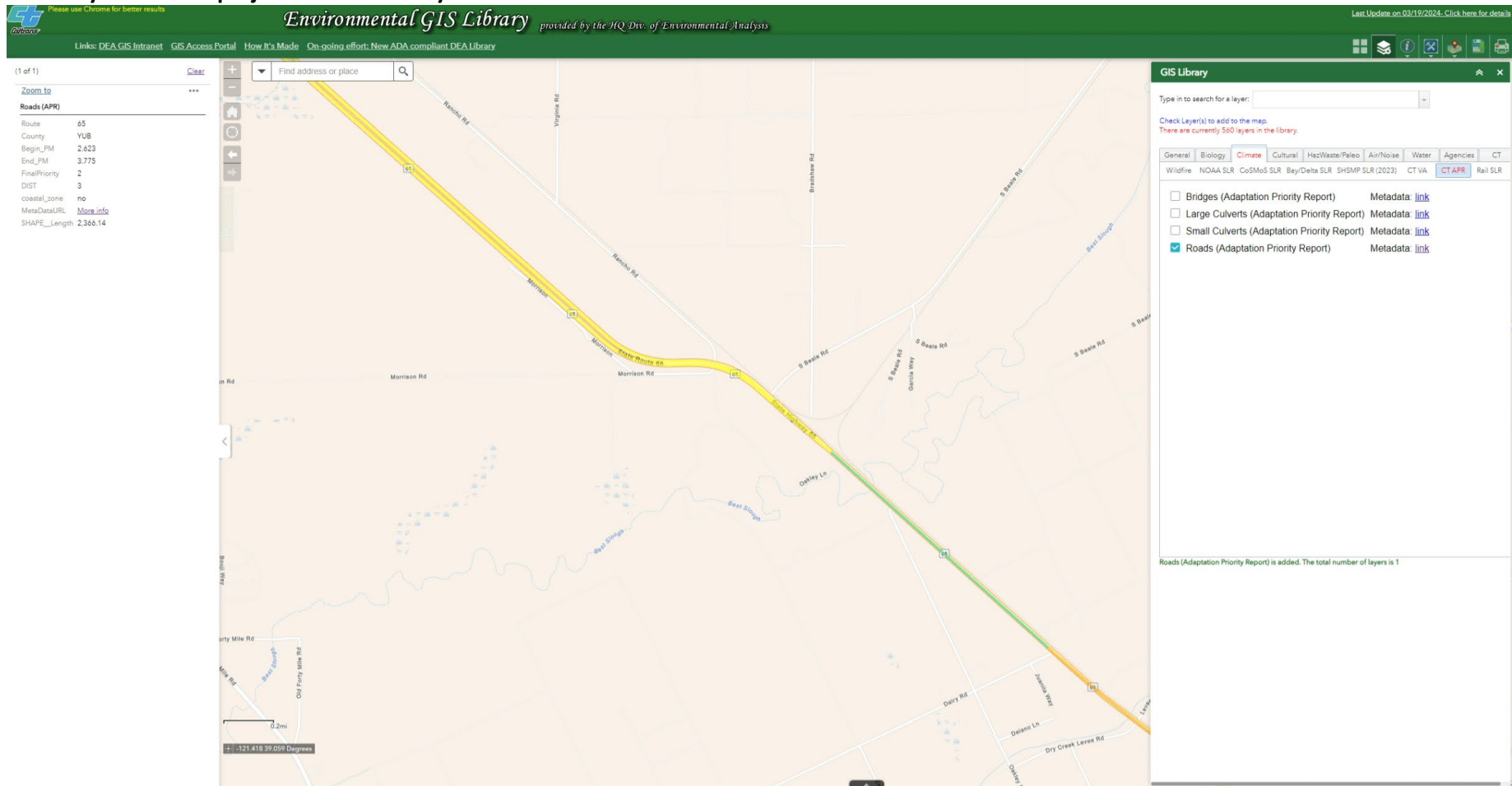
Transportation Planning Scoping Information Sheet

Bridge in project limits – Priority 5 (lowest)



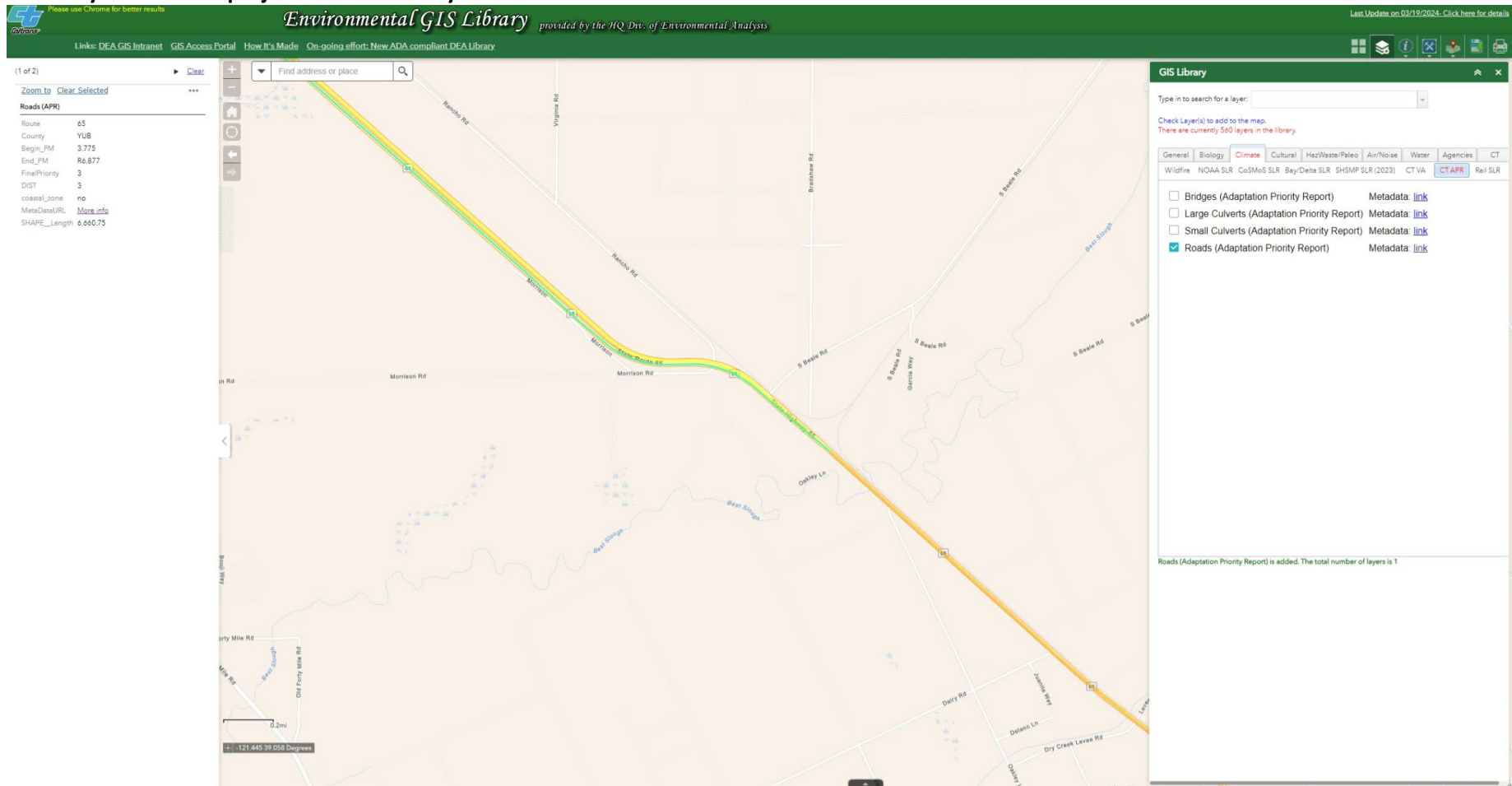
Transportation Planning Scoping Information Sheet

Roadway on Eastern project limits – Priority 2



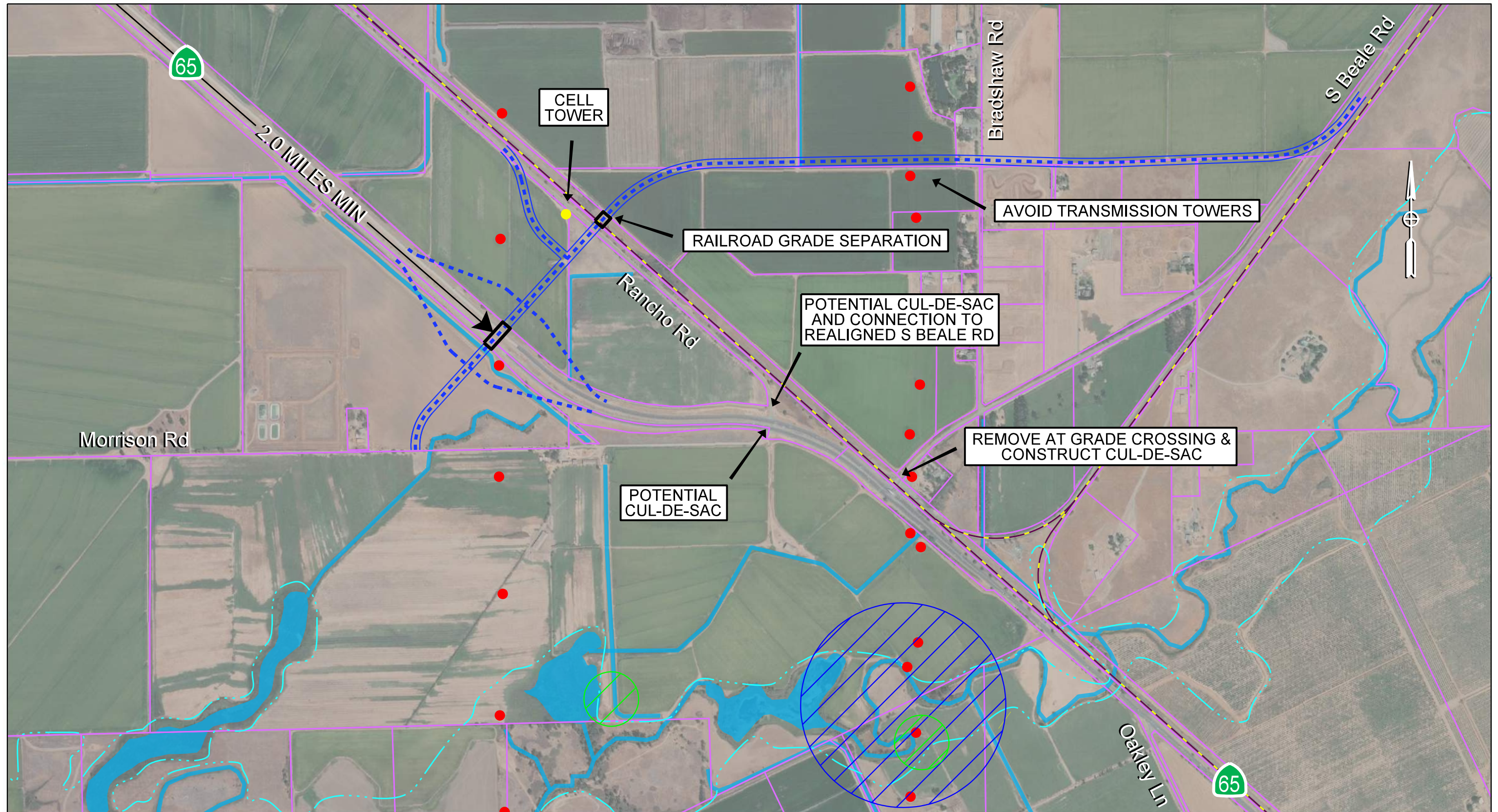
Transportation Planning Scoping Information Sheet

Roadway on Western project limits – Priority 3



ATTACHMENT C

Plan View Exhibits For Alternatives 1A/1B and 2



LEGEND:

- PROPOSED PROJECT - ULTIMATE STRUCTURES
- RIGHT OF WAY/PARCEL LINES
- TRANSMISSION TOWER
- EXISTING RAILROAD

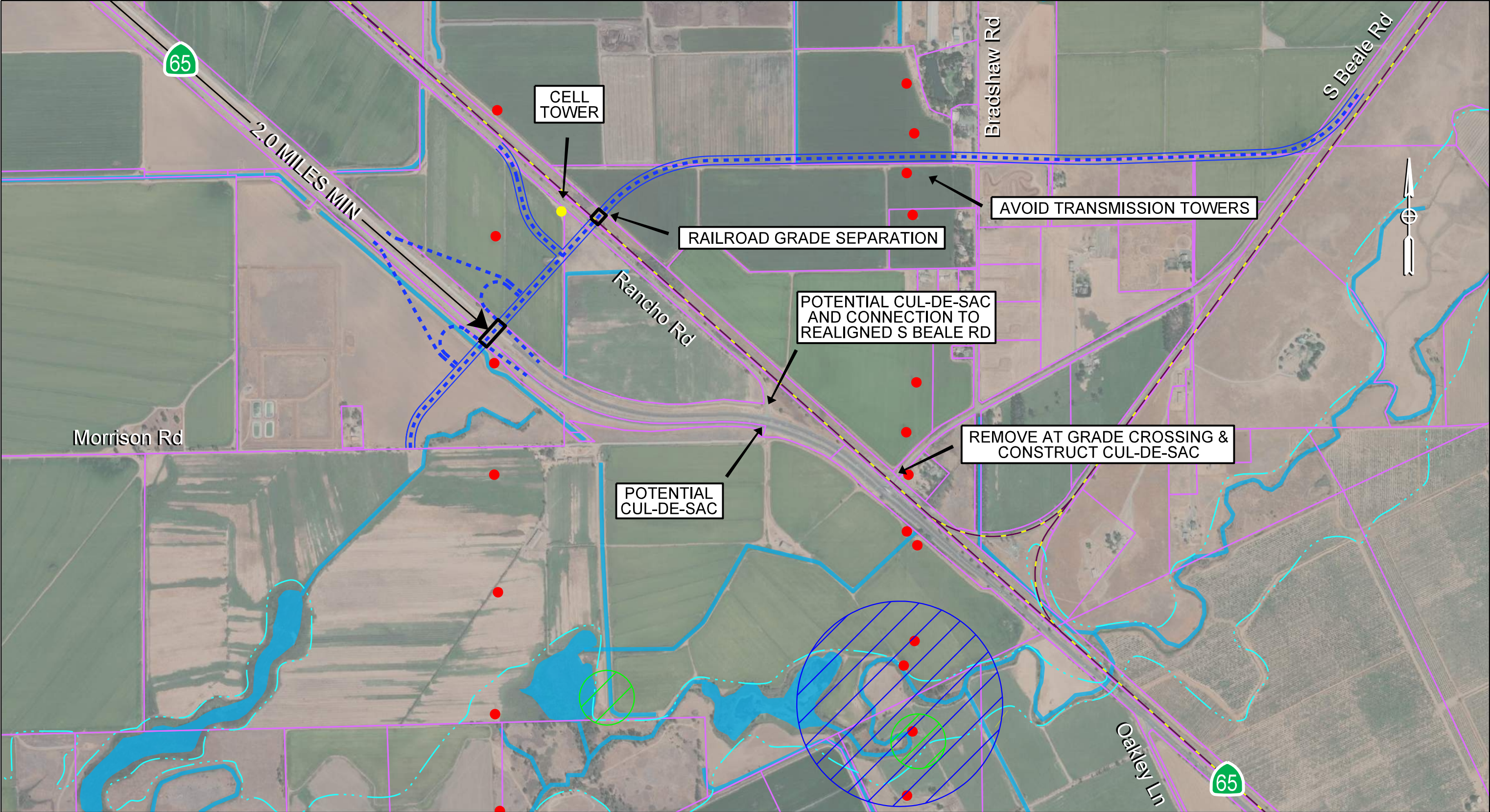
- JURISDICTIONAL WATERS
- FEMA FLOOD BOUNDARY
- STATE LISTED SPECIES
- FEDERALLY LISTED SPECIES

DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD
SUITE 200
FOLSOM, CA 95630
(916) 858-0642

JULY 2025

PROJECT
SOUTH BEALE ROAD RAILROAD GRADE SEPARATION PROJECT

EXHIBIT
ALTERNATIVE 1A - NORTH LAYOUT



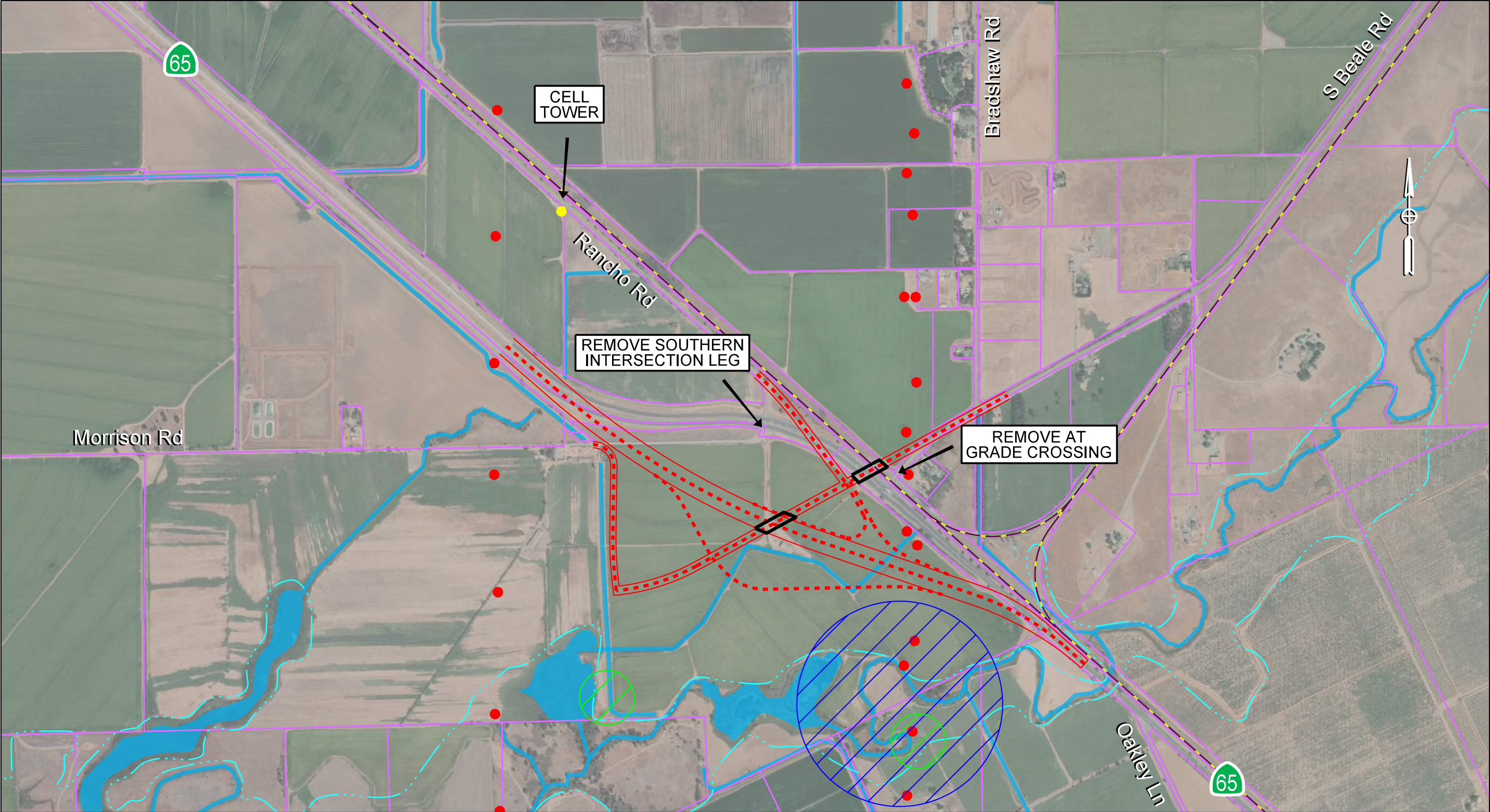
LEGEND:

- PROPOSED PROJECT - ULTIMATE STRUCTURES
- RIGHT OF WAY/PARCEL LINES
- TRANSMISSION TOWER
- EXISTING RAILROAD

- JURISDICTIONAL WATERS
- FEMA FLOOD BOUNDARY
- STATE LISTED SPECIES
- FEDERALLY LISTED SPECIES

DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD
SUITE 200
FOLSOM, CA 95630
(916) 858-0642

PROJECT
SOUTH BEALE ROAD RAILROAD GRADE SEPARATION PROJECT
EXHIBIT
ALTERNATIVE 1B - NORTH LAYOUT



LEGEND:

- PROPOSED PROJECT - ULTIMATE
- STRUCTURES
- RIGHT OF WAY/PARCEL LINES
- TRANSMISSION TOWER
- EXISTING RAILROAD

- JURISDICTIONAL WATERS
- FEMA FLOOD BOUNDARY
- STATE LISTED SPECIES
- FEDERALLY LISTED SPECIES

DE

DOKKEN

ENGINEERING

110 BLUE RAVINE ROAD

SUITE 200

FOLSOM, CA 95630

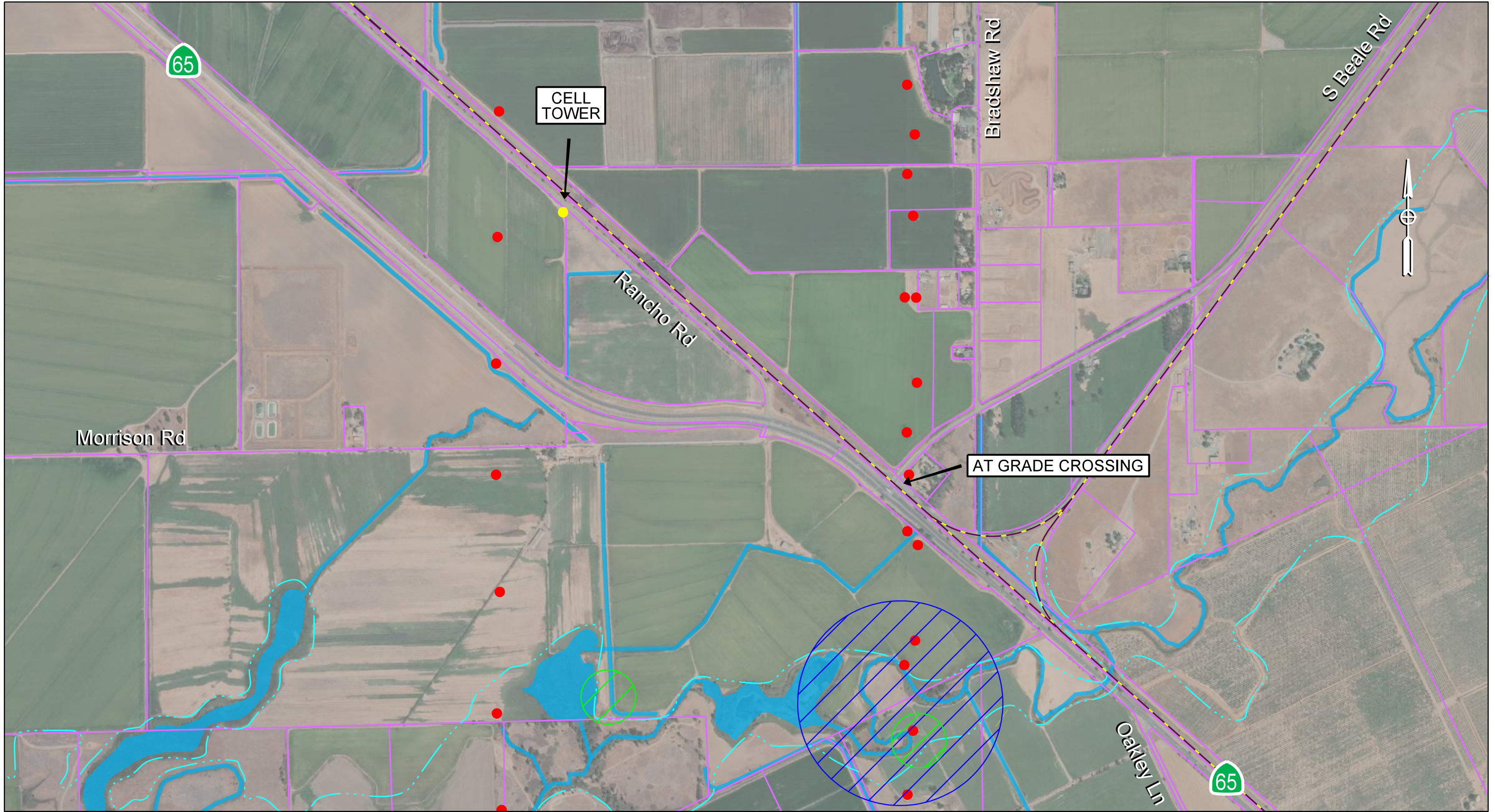
(916) 858-0642

PROJECT

SOUTH BEALE ROAD RAILROAD GRADE SEPARATION PROJECT

EXHIBIT

ALTERNATIVE 2 - CENTRAL LAYOUT



LEGEND:

- RIGHT OF WAY/PARCEL LINES
- TRANSMISSION TOWER
- EXISTING RAILROAD
- JURISDICTIONAL WATERS

- FEMA FLOOD BOUNDARY
- STATE LISTED SPECIES
- FEDERALLY LISTED SPECIES

DOKKEN

ENGINEERING

110 BLUE RAVINE ROAD

SUITE 200

FOLSOM, CA 95630

(916) 858-0642

PROJECT

SOUTH BEALE ROAD RAILROAD GRADE SEPARATION PROJECT

EXHIBIT

NO BUILD ALTERNATIVE

ATTACHMENT D

Typical Cross Sections For Alternatives 1A/1B and 2

FOR DESIGN STUDY ONLY

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Yub	65	2.9/R5.8		
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.					

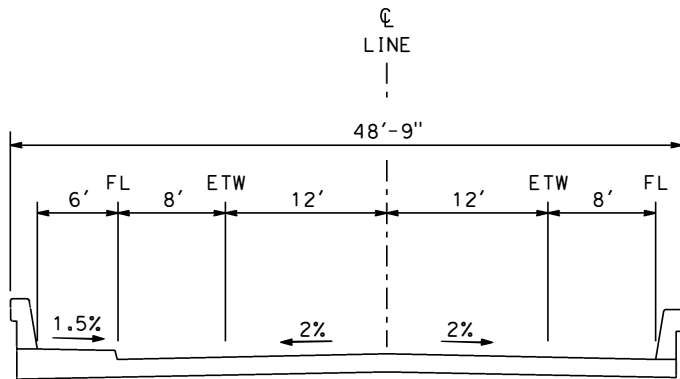
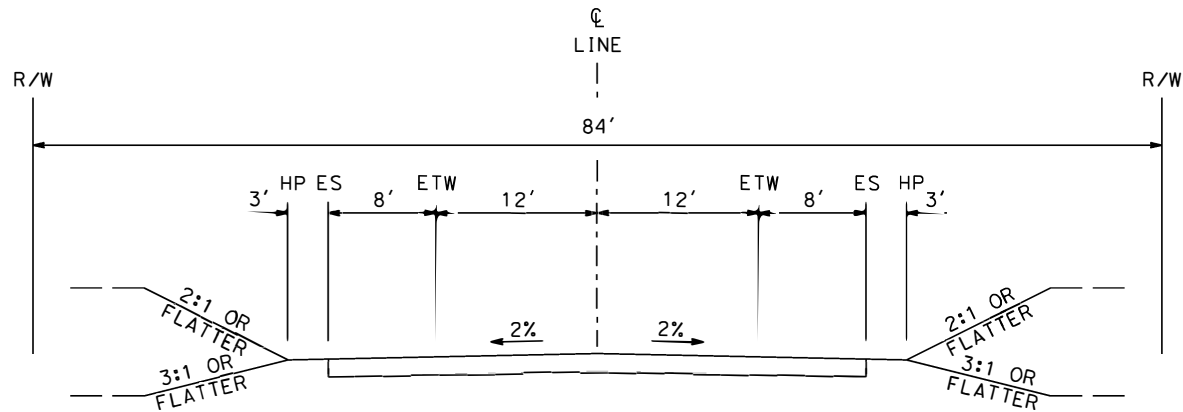
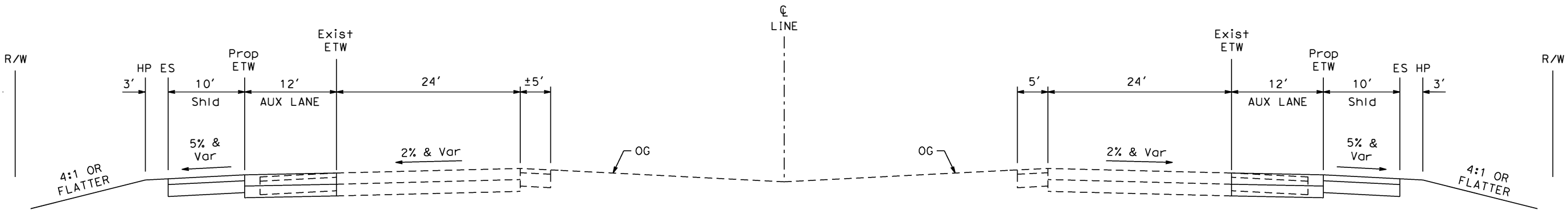
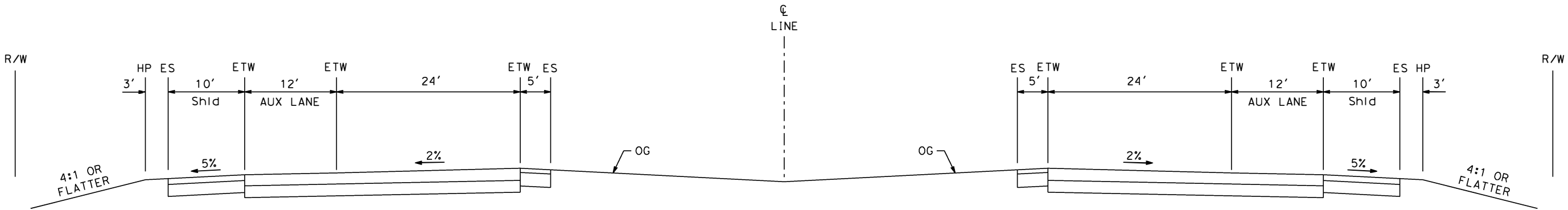
REGISTERED PROFESSIONAL ENGINEER

No. _____

Exp. _____

CIVIL

STATE OF CALIFORNIA



TYPICAL CROSS SECTIONS
NO SCALE

ATTACHMENT E

Cost Estimates For Alternatives 1A/1B and 2

Project Study Report – Project Development Support Capital Outlay Project Estimate

Dist - Co - Rte 03-YUB-65

PM 2.9 / R 5.8

Program Code

Project Number EA 03-3J990

Month/Year July 2025

PROJECT DESCRIPTION:

Limits: Between Forty Mile Road and Dairy Road, near South Beale Road

Proposed Improvement (Scope): Construct a grade separation over UPRR tracks in the
the vicinity of State Route 65 and South Beale Road intersection

Alternate: Alternative 1A/1B

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ <u>30,300,000</u>
TOTAL STRUCTURE ITEMS	\$ <u>20,600,000</u>
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$ <u>-</u>
SUBTOTAL CONSTRUCTION COSTS	\$ <u>50,900,000</u>
TOTAL RIGHT-OF-WAY ITEMS	\$ <u>2,400,000</u>
 TOTAL PROJECT CAPITAL OUTLAY COSTS	 \$ <u>53,300,000</u>

I. ROADWAY ITEMS

	<u>Average Cost per Lane Mile</u>		<u>Number of Lane Miles</u>		<u>Total Cost</u>
Total Cost	<u>\$5,050,000</u>	X	<u>6.0 miles</u>	=	<u>\$30,300,000</u>

Explanation:

Included in the average cost per lane mile are all costs associated with the realignment of South Beale Road, Rancho Road and interchange configuration for each ramp, including the pavement structural section, earthwork, signing, striping, construction staging and all drainage facilities. Not included in the price above are costs associated with the overcrossing structure, utility relocations and right of way acquisitions.

Contact:

Dokken Engineering, (916) 858-0642

TOTAL ROADWAY ITEMS \$30,300,000

II. STRUCTURES ITEMS

	<u>Structure (1) S Beale Rd</u>	<u>Structure (2) Grade Separation</u>
Bridge Name		
Total Cost for Structure	<u>\$12,800,000</u>	<u>\$7,800,000</u>

Explanation:

Included in the cost for Structures 1 & 2 is the cost for all items associated with the construction. Not included in the structures price are costs for retaining walls or concrete drainage structures.

TOTAL STRUCTURE ITEMS \$20,600,000

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Environmental Mitigation	-		X	=

Explanation:

No Environmental Mitigation Costs are anticipated for Alternative 1A/1B.

TOTAL ENVIRONMENTAL MITIGATION ITEMS \$ 0

IV. RIGHT-OF-WAY ITEMS

	<u>Escalated Value</u>
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	<u>\$1,500,000</u>
B. Utility Relocation (State share)	<u>\$900,000</u>

Anticipated Date of Right-of-Way Certification 2030
(Date to which values are escalated)

Explanation:

It is estimated that the project will impact 13 parcels with an estimated area of approximately 70 Acres.

TOTAL RIGHT-OF-WAY ITEMS \$ 2,400,000

Project Study Report – Project Development Support Capital Outlay Project Estimate

Dist - Co - Rte 03-YUB-65

PM 2.9 / R 5.8

Program Code _____

Project Number EA 03-3J990

Month/Year July 2025

PROJECT DESCRIPTION:

Limits: Between Forty Mile Road and Dairy Road, near South Beale Road

Proposed Improvement (Scope): Construct a grade separation over UPRR tracks in the
the vicinity of State Route 65 and South Beale Road intersection

Alternate: Alternative 2

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	\$ <u>47,400,000</u>
TOTAL STRUCTURE ITEMS	\$ <u>27,600,000</u>
TOTAL ENVIRONMENTAL MITIGATION ITEMS	\$ <u>500,000</u>
SUBTOTAL CONSTRUCTION COSTS	\$ <u>75,500,000</u>
TOTAL RIGHT-OF-WAY ITEMS	\$ <u>5,200,000</u>
 TOTAL PROJECT CAPITAL OUTLAY COSTS	 \$ <u>80,700,000</u>

I. ROADWAY ITEMS

	<u>Average Cost per Lane Mile</u>		<u>Number of Lane Miles</u>		<u>Total Cost</u>
Total Cost	<u>\$5,386,364</u>	X	<u>8.8 miles</u>	=	<u>\$47,400,000</u>

Explanation:

Included in the average cost per lane mile are all costs associated with the realignment of South Beale Road, Rancho Road and interchange configuration for each ramp, including the pavement structural section, earthwork, signing, striping, construction staging and all drainage facilities. Not included in the price above are costs associated with the overcrossing structure, utility relocations and right of way acquisitions.

Contact:

Dokken Engineering, (916) 858-0642

TOTAL ROADWAY ITEMS \$47,400,000

II. STRUCTURES ITEMS

	<u>Structure (1)</u>	<u>Structure (2)</u>
Bridge Name	<u>S Beale Rd</u>	<u>Grade Separation</u>
Total Cost for Structure	<u>\$12,800,000</u>	<u>\$14,800,000</u>

Explanation:

Included in the cost for Structures 1 & 2 is the cost for all items associated with the construction. Not included in the structures price are costs for retaining walls or concrete drainage structures.

TOTAL STRUCTURE ITEMS \$27,600,000

III. ENVIRONMENTAL MITIGATION

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>
Environmental Mitigation	<u>1</u>	<u>LS</u>	X <u>\$500,000</u>	= <u>\$500,000</u>

Explanation:

Mitigation for permanent impacts to Waters of the U.S. and State will be required from U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). USACE and RWQCB historically require mitigation at a 3:1 ratio. It is assumed that mitigation to satisfy USACE and RWQCB requirements would be completed in the form of an in-lieu fee payment to the U.S. Fish and Wildlife Foundation Sacramento District California In-Lieu Fee Program. Rates, as of 2024, are currently \$375,000 per acre. Assuming there will be 0.18 acre of permanent impacts for Alternative 2, mitigation cost will be approximately \$200,000. CDFW will have separate mitigation requirements for impacts to Waters of the State and riparian habitat. On-site planting and restoration at a 3:1 ratio is typically preferred. Assuming 5 year monitoring will also be required, this mitigation cost can range from \$100k - \$200k. Please contact Amy Bakker, Senior Environmental Planner, at abakker@dokkenengineering.com should further explanation be required.

TOTAL ENVIRONMENTAL MITIGATION ITEMS \$500,000

IV. RIGHT-OF-WAY ITEMS

	<u>Escalated Value</u>
A. Acquisition, including excess lands, damages to remainder(s) and Goodwill	<u>\$3,500,000</u>
B. Utility Relocation (State share)	<u>\$1,700,000</u>

Anticipated Date of Right-of-Way Certification 2030
(Date to which values are escalated)

Explanation:

It is estimated that the project will impact 9 parcels with an estimated area of approximately 106 Acres.

TOTAL RIGHT-OF-WAY ITEMS

\$ 5,200,000

ATTACHMENT F

Conceptual Cost Estimate – Right Of Way Component For Alternatives 1A/1B and 2

CONCEPTUAL COST ESTIMATE – RIGHT OF WAY COMPONENT

3 – YUB – 65
PM 2.9/ R5.8
EA 03-3J990
South Beale Road
Railroad Grade
Separation Project
(Alt 1A/1B)

A Field Review was conducted ☒ Yes ☐ No

Scope of the Right of Way

Provide a general description of the right of way including the location attributes.

Right of Way Required ☒ Yes ☐ No
Number of Parcels ☒ 1-10 ☐ 11-25 ☐ 26-50 ☐ 51-100 ☐ >100
☐ Urban ☒ Rural
Land Area: Fee 3,052,154 ft² Easement 0 .
Displaced Persons/Businesses ☐ Yes ☒ No
Demolition/Clearance ☐ Yes ☒ No
Railroad Involvement ☒ Yes ☐ No
Utility Involvements ☒ Yes ☐ No 7 Number of Utilities in area

Cost Estimates

Support Costs	☐ \$0-\$25,000	☐ \$500,001-\$1,000,000
	☒ \$25,001-\$100,000	☐ \$1,000,001-\$5,000,000
	☐ \$100,001-\$250,000	☐ \$5,000,001-\$10,000,000
	☐ \$250,001-\$500,000	☐ >\$10,000,000
Capital Costs	☐ \$0-\$100,000	☐ \$5,000,001-\$15,000,000
	☐ \$100,001-\$500,000	☐ \$15,000,001-\$50,000,000
	☐ \$500,001-\$1,000,000	☐ \$50,000,001-\$100,000,000
	☒ \$1,000,001-\$5,000,000	☐ >\$100,000,000

Schedule

Right of Way will require 18 months to deliver a Right of Way Certification #1 from Final R/W Maps. This estimate is based on a Right of Way Certification date of 2030.

Areas of Concern

The areas of concern identify areas in close proximity to the project that could result in major increases to the cost, scope, or schedule of delivering the Right of Way component if impacted.

No complex right of way issues are anticipated.

Assumptions and Limiting Conditions

Provide the assumptions and limiting conditions used in the preparation of this estimate.

Only permanent right of way takes have been considered. Temporary Construction Easements or Utility Easements will be considered as the project progresses.

CONCEPTUAL COST ESTIMATE – RIGHT OF WAY COMPONENT

3 – YUB – 65
PM 2.9/R5.8
EA 03-3J990
South Beale Road
Railroad Grade
Separation Project
(Alt 2)

A Field Review was conducted ☒ Yes ☐ No

Scope of the Right of Way

Provide a general description of the right of way including the location attributes.

Right of Way Required ☒ Yes ☐ No
Number of Parcels ☒ 1-10 ☐ 11-25 ☐ 26-50 ☐ 51-100 ☐ >100
☐ Urban ☒ Rural
Land Area: Fee 4,628,242 ft² Easement 0 .
Displaced Persons/Businesses ☐ Yes ☒ No
Demolition/Clearance ☐ Yes ☒ No
Railroad Involvement ☒ Yes ☐ No
Utility Involvements ☒ Yes ☐ No 7 Number of Utilities in area

Cost Estimates

Support Costs	☐ \$0-\$25,000	☐ \$500,001-\$1,000,000
	☒ \$25,001-\$100,000	☐ \$1,000,001-\$5,000,000
	☐ \$100,001-\$250,000	☐ \$5,000,001-\$10,000,000
	☐ \$250,001-\$500,000	☐ >\$10,000,000
Capital Costs	☐ \$0-\$100,000	☐ \$5,000,001-\$15,000,000
	☐ \$100,001-\$500,000	☐ \$15,000,001-\$50,000,000
	☐ \$500,001-\$1,000,000	☐ \$50,000,001-\$100,000,000
	☒ \$1,000,001-\$5,000,000	☐ >\$100,000,000

Schedule

Right of Way will require 18 months to deliver a Right of Way Certification #1 from Final R/W Maps. This estimate is based on a Right of Way Certification date of 2030.

Areas of Concern

The areas of concern identify areas in close proximity to the project that could result in major increases to the cost, scope, or schedule of delivering the Right of Way component if impacted.

No complex right of way issues are anticipated.

Assumptions and Limiting Conditions

Provide the assumptions and limiting conditions used in the preparation of this estimate.

Only permanent right of way takes have been considered. Temporary Construction Easements or Utility Easements will be considered as the project progresses.

ATTACHMENT G

Preliminary Environmental Analysis Report (PEAR)



NORTH REGION ENVIRONMENTAL PRELIMINARY ENVIRONMENTAL ASSESSMENT REPORT (PEAR)

DATE: <u>5/20/2025</u>	CO-RTE-PM: <u>YUB-65- 2.9/R5.8</u>																																				
TO: <u>Gustavo Reynoso</u> Project Engineer <u>(530) 821-8360</u> Phone Number	EFIS Number: <u>0323000045</u>																																				
FROM: <u>Amy Bakker</u> Environmental Planner <u>(916) 858-0642</u> Phone Number	EA: <u>03-3J990</u>																																				
	Project Nickname: <u>South Beale Road Railroad Grade Separation</u>																																				
	FUNDING SOURCE(S): (check all that apply) ☒ State ☒ Federal ☒ Local ☒ Measure Funded ☐ Safety Project (010 Programming Code) ☐ Other: Click here to enter text.																																				
ANTICIPATED ENVIRONMENTAL APPROVAL																																					
CEQA: Categorical Exemption NEPA: Categorical Exclusion (23 USC 327) HQ DEA Environmental Concurrence with NEPA Class of Action date: Click here to enter a date. ☒ N/A	SCHEDULE <table border="1"><thead><tr><th><u>Task</u></th><th><u>Time Needed</u> This is the time needed from the date the ESR has been received and has been determined complete.¹</th></tr></thead><tbody><tr><td>Begin Env to DED²:</td><td></td></tr><tr><td>DED to PA&ED:</td><td></td></tr><tr><td>Begin Env to PA&ED (CE/CE only)²:</td><td>9/1/2025 – 4/1/2027</td></tr><tr><td>PA&ED to RTL³:</td><td>6/1/2027 – 4/1/2030</td></tr></tbody></table> ¹ Suggest adding 3 months to schedule prior to DED (or PA&ED if no DED) to provide Design enough time to prepare an ESR that is considered “complete” per the ESR Submittal Guidance Checklist. ² Certain surveys are season-specific. The ESR should be received by February in order to conduct surveys. Late-season surveys are also often required. ³ Time for permits + 3 months between Draft PS&E (M300) and RTL (M460).	<u>Task</u>	<u>Time Needed</u> This is the time needed from the date the ESR has been received and has been determined complete. ¹	Begin Env to DED²:		DED to PA&ED:		Begin Env to PA&ED (CE/CE only)²:	9/1/2025 – 4/1/2027	PA&ED to RTL³:	6/1/2027 – 4/1/2030																										
<u>Task</u>	<u>Time Needed</u> This is the time needed from the date the ESR has been received and has been determined complete. ¹																																				
Begin Env to DED²:																																					
DED to PA&ED:																																					
Begin Env to PA&ED (CE/CE only)²:	9/1/2025 – 4/1/2027																																				
PA&ED to RTL³:	6/1/2027 – 4/1/2030																																				
PRELIMINARY DESIGN INFORMATION																																					
Does the project involve any of the following? <table border="0"><tr><td>☒ New alignment</td><td>☐ Construct access roads</td><td>☐ Ramp closure</td><td>☒ Retaining/Sound walls</td></tr><tr><td>☒ Road realignment</td><td>☐ Disposal/borrow site(s)</td><td>☒ R/W acquisition</td><td>☐ Pile driving</td></tr><tr><td>☐ Road widening</td><td>☒ Equipment staging area</td><td>☒ Temporary easements</td><td>☒ Seasonal constr. window</td></tr><tr><td>☐ Bridge work</td><td>☒ Drainage/culverts</td><td>☒ Utility relocation</td><td>☒ Night work</td></tr><tr><td>☒ Road cut/fill</td><td>☒ 100-year floodplain</td><td>☒ Ground disturbance:</td><td>☐ Blasting</td></tr><tr><td>☐ Detours</td><td>☐ Establish CRZ</td><td>Est. max. depth:</td><td>☒ Stream bed, bank, and channel work</td></tr><tr><td>☒ Grinding</td><td>☒ Railroad</td><td><u>Unknown</u></td><td>☐ Other: Click here to enter text.</td></tr><tr><td></td><td>☐ NPS, USFS, BLM, DPR, or other State/Federal lands</td><td>☒ Vegetation removal</td><td></td></tr><tr><td></td><td></td><td>☒ Tree removal</td><td></td></tr></table>		☒ New alignment	☐ Construct access roads	☐ Ramp closure	☒ Retaining/Sound walls	☒ Road realignment	☐ Disposal/borrow site(s)	☒ R/W acquisition	☐ Pile driving	☐ Road widening	☒ Equipment staging area	☒ Temporary easements	☒ Seasonal constr. window	☐ Bridge work	☒ Drainage/culverts	☒ Utility relocation	☒ Night work	☒ Road cut/fill	☒ 100-year floodplain	☒ Ground disturbance:	☐ Blasting	☐ Detours	☐ Establish CRZ	Est. max. depth:	☒ Stream bed, bank, and channel work	☒ Grinding	☒ Railroad	<u>Unknown</u>	☐ Other: Click here to enter text.		☐ NPS, USFS, BLM, DPR, or other State/Federal lands	☒ Vegetation removal				☒ Tree removal	
☒ New alignment	☐ Construct access roads	☐ Ramp closure	☒ Retaining/Sound walls																																		
☒ Road realignment	☐ Disposal/borrow site(s)	☒ R/W acquisition	☐ Pile driving																																		
☐ Road widening	☒ Equipment staging area	☒ Temporary easements	☒ Seasonal constr. window																																		
☐ Bridge work	☒ Drainage/culverts	☒ Utility relocation	☒ Night work																																		
☒ Road cut/fill	☒ 100-year floodplain	☒ Ground disturbance:	☐ Blasting																																		
☐ Detours	☐ Establish CRZ	Est. max. depth:	☒ Stream bed, bank, and channel work																																		
☒ Grinding	☒ Railroad	<u>Unknown</u>	☐ Other: Click here to enter text.																																		
	☐ NPS, USFS, BLM, DPR, or other State/Federal lands	☒ Vegetation removal																																			
		☒ Tree removal																																			
SUMMARY STATEMENT																																					
The County has prepared this PEAR to identify environmental issues, constraints, costs, and resource needs associated with the project. Staff did not conduct field reviews or complete technical studies; therefore, these efforts will be required in the PA&ED Phase. Based on the project description and mapping provided, the following studies will be required: • Air Quality Report • Traffic Memorandum																																					

- Noise Memorandum
- Hazardous Waste Initial Site Assessment
- Preliminary Site Investigation
- Water Quality Assessment Report
- Natural Environment Study
- Aquatic Resources Delineation Report
- Biological Assessment
- Visual Impact Assessment/Scenic Resource Evaluation
- Historic Properties Survey Report
- Archaeological Survey Report
- Finding of Effects Report
- Area of Potential Effects Map
- Community Impact Assessment
- Farmland Impact Assessment Form AD 1006
- Paleontological Investigation Report
- Paleontological Evaluation Report
- Location Hydraulic Study
- Summary Floodplain Encroachment Report

Based on a preliminary analysis, the project will require the following permits:

- Section 1602 Streambed Alteration Agreement
- Section 401 Water Quality Certification
- Section 404 Nationwide Permit
- United States Fish and Wildlife Service/National Marine Fisheries Service Letter of Concurrence or Biological Opinion

Environmental Assumptions and Risks are presented at the end of this document.

ANTICIPATED ENVIRONMENTAL EFFICIENCIES IN THE ENVIRONMENTAL STUDY PHASE

☒ None ☐ Field review not required ☐ Use Water Quality Assessment Checklist ☐ PEAR Mitigation Checklist

PURPOSE AND NEED STATEMENT (Purpose: project goal; Need: identified transportation deficiency)

Purpose: The purpose of this project is to improve safety and operations on State Route (SR) 65 and South Beale Road, and to provide Beale Air Force Base personnel with improved response times in the event of an emergency.

Need: The project is needed as the current unsignalized intersection at SR 65 and South Beale Road has a collision rate that is higher than the statewide average for similar roadway facilities. In addition, immediately north of the intersection on South Beale Road there is an at-grade crossing of the Union Pacific Railroad tracks that run parallel to SR 65. The proximity of the at-grade crossing to the intersection creates long delays along SR 65 and South Beale Road when trains cross the road as the existing turn pockets do not have sufficient capacity to safely hold the long queues. Furthermore, the existing intersection operates below acceptable level of service due to high left turn volumes. This limits access to Beale Air Force Base and reduces response times in the event of an emergency.

PROJECT DESCRIPTION

The South Yuba Transportation Improvement Authority (SYTIA), in cooperation with the California Department of Transportation (Caltrans), proposes to construct a new grade separation over the Union Pacific Railroad (UPRR) tracks adjacent to State Route 65 (SR 65) at South Beale Road in unincorporated Southern Yuba County, California. The proposed project aims to improve safety by removing an at-grade railroad crossing, improve access to Beale Air Force Base, and remove two unsignalized intersections on SR 65. The SYTIA is the lead agency under the California Environmental Quality Act (CEQA).

The Project limits includes the area covered by all proposed build alternatives. The Project limits are along SR 65 between post mile (PM) R5.8 and 2.9 and extends into Morrison Rd to the west and South Beale Rd to the east. The three build alternatives are as follows:

- Alternative 1A: North layout
- Alternative 1B: North layout
- Alternative 2: Central layout

Permanent right-of-way acquisitions, drainage improvements, temporary construction easements, and utility relocations will be required to accommodate the proposed Project. All alternatives would require right of way acquisition from privately owned lands. The crossing of UPRR will require an easement from the railroad. The California Public Utilities Commission (CPUC) will need to approve the crossing and Yuba County will need to enter into a maintenance agreement with UPRR.

The Project will utilize local, state, and federal funds, as such it requires compliance with CEQA and the National Environmental Policy Act (NEPA). The lead agency for CEQA compliance is the SYTIA and the lead agency for NEPA compliance is Caltrans. The project is anticipated to qualify for a Categorical Exclusion (CE) under NEPA 23 CFR 771.117(C)(28) for the construction of a grade separation to replace existing at-grade railroad crossings; however, should unusual circumstances be discovered during the environmental document phase, an Environmental Assessment (EA) would be prepared. The Project is also considered statutorily exempt under Section 21080.13 of the CEQA guidelines for railroad grade separation projects that eliminate an existing at-grade crossing and therefore may utilize a Statutory Exemption (SE).

Alternatives

Alternative 1A – North Layout

- 2 lane South Beale Road
- UPRR grade separation
- SR-65 overhead structure
- New spread diamond interchange Type L-2 which includes four ramps on the existing SR-65
- Interchange ties into the realigned South Beale Rd north and south of SR-65
- New Morrison Rd/South Beale Rd connection
- New Rancho Rd/South Beale Rd connection
- Existing Morrison Rd/SR-65 and Rancho Rd/SR-65 intersections will be eliminated.
- South Beale Rd/SR-65 intersection and at grade railroad crossing will be eliminated.
- Cul-de-sac at closed-off South Beale Rd to be constructed.

Alternative 1B – North Layout

- 2 lane South Beale Road
- UPRR grade separation
- SR-65 overhead structure
- New two quadrant cloverleaf interchange with a Type L-7 in the southbound direction and Type L-8 in the northbound direction which includes four ramps on the existing SR-65
- Interchange ties into the realigned South Beale Rd north and south of SR-65
- New Morrison Rd/South Beale Rd connection
- New Rancho Rd/South Beale Rd connection
- Existing Morrison Rd/SR-65 and Rancho Rd/SR-65 intersections will be eliminated.
- South Beale Rd/SR-65 intersection and at grade railroad crossing will be eliminated.
- Cul-de-sac at closed-off South Beale Rd to be constructed.

Alternative 2 – Central Layout

- 2 lane South Beale Road
- UPRR grade separation
- SR-65 overhead structure
- Realignment of SR-65
- New spread diamond interchange Type L-2 in the southbound direction and a Type L-7 two-quadrant cloverleaf in the northbound direction, which combined includes four ramps on the realigned SR-65
- SR-65 structure over waterways.
- Interchange ties into the South Beale Rd extension north and south of SR-65.
- New Morrison Rd/South Beale Rd connection.

- Extension of Rancho Rd along existing SR-65 to connect to South Beale Rd.
- Existing Morrison Rd/SR-65 intersection will be eliminated.
- South Beale Rd/SR-65 intersection and at grade railroad crossing will be eliminated.
- New at grade crossing at Rancho Rd extension.

No Build Alternative

Under the no build alternative, the grade separation at South Beale Road and SR-65 would not be constructed. Operations of SR-65 would not be improved, safety would not be improved within the area, and access to the Air Force Base would not be improved.

ENVIRONMENTAL CONSIDERATIONS

General

1.	Does the project have independent utility and logical termini?	Yes
2.	Is the project anticipated to generate public controversy?	No
3.	Is Public Outreach during the K-Phase recommended?	No

Noise

4.	Is the project a Type 1 project as defined in 23 CFR 772.5(h) (construction on new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes)?	Yes
5.	Does the project have the potential for adverse construction-related noise impacts (such as related to pile driving)?	No

Explain "Yes" and "TBD" responses:

- The project is independent of any other projects and has a logical beginning and end.
- This project is considered a Type I project. Alternative 2 involves realignment of the existing SR 65, along with construction of four new interchange ramps on the realigned highway. Alternative 1A and 1B do not involve realignment of the existing SR 65, however new interchanges along the highway are proposed for both alternatives. Preparation of a Construction Noise Memorandum would be completed.

Required Technical Studies and Analyses: Technical Memorandum

Air Quality

6.	Is the project in a NAAQS non-attainment or maintenance area for ozone, nitrogen dioxide, carbon monoxide, PM2.5, or PM10 per U.S. EPA's Green Book listing of nonattainment areas? [If "No," stop here. Transportation conformity does not apply to the project.]	No
7.	Is the project exempt from project-level conformity? [If "Yes," stop here. The project is exempt from project-level conformity requirements.] ☒ 40 CFR 93.126 Table 2 category: Safety Project – Railroad/Highway Crossing ☐ 40 CFR 93.128 Traffic signal synchronization	Yes
8.	Is the project exempt from regional conformity? If "Yes," state which conformity exemption in 40 CFR 93.127 Table 3 applies: Changes in horizontal alignment/interchange configurations	Yes
9.	Is the project:	
	• In a metropolitan non-attainment/maintenance area?	N/A
	• In an isolated rural non-attainment area?	N/A
	• In a CO, PM10, and/or PM2.5 non-attainment/maintenance area?	N/A

Explain "Yes" and "TBD" responses:

7 and 8. This project is exempt from project-level conformity for Safety Projects – Railroad/Highway Crossing and regional conformity per 40 CFR 93.127 as it involves changes in horizontal alignment and interchange configurations.

Required Technical Studies and Analyses: Air Quality Report

Hazardous Materials/Hazardous Waste

10.	Is there potential for hazardous materials (including underground or above-ground tanks, etc.) or hazardous waste (including oil/water separators, waste oil, asbestos-containing materials, lead-based paint, ADL, etc.) within or immediately adjacent to the construction area?	Yes
-----	--	-----

Explain "Yes" and "TBD" responses:

10. A Caltrans Initial Site Assessment (ISA) checklist has been prepared and incorporates results of a GeoTracker and Envirostor database search, as well as a visual survey of the Project site (see Attachment B). All alternatives will impact existing roadways, UPRR railroad tracks, and active farmland. Therefore, contaminants of concern include lead in yellow paint on the existing roadways, aerially deposited lead in soils adjacent to SR 65, potential polychlorinated biphenyls in a pole or pad-mounted electrical transformer, treated wood waste, contaminants potentially present on the railroad tracks including, petroleum hydrocarbons, grease, oils and heavy metals, as well as pesticides and herbicides from farmlands. Both the GeoTracker and EnviroStor databases show that there are no documented hazardous waste sites within either build alternative.
- According to the Caltrans ISA checklist determination, a Hazardous Waste ISA will be prepared for the Project to determine the presence of possible hazardous waste/materials in the Project area and the associated potential risk, during the PA&ED phase. A Preliminary Site Investigation (PSI) will be prepared after the preparation of the Hazardous Waste ISA to confirm the presence or absence of hazardous materials in the Project area. The ISA and PSI will recommend measures to reduce and avoid impacts, which may include hazardous waste/material handling education and training for construction workers.

Required Technical Studies and Analyses: ISA and PSI**Water Quality/Resources and Stormwater**

- | | |
|--|-----|
| 11. Does the project have the potential to impact water resources (rivers, streams, bays, inlets, lakes, drainage sloughs) within or immediately adjacent to the project area? | Yes |
| 12. Does the project trigger the need for stormwater compliance (>1 acre additional impervious surface)? | Yes |
| 13. If yes to #12, can Caltrans achieve compliance on-site, or would off-site alternative compliance credits be required? | Yes |

Explain "Yes" and "TBD" responses:

11. The proposed Project is within the jurisdiction of the Central Valley Regional Water Quality Control Board (RWQCB). Additionally, Alternative 2 would impact multiple jurisdictional waters and would require a Clean Water Act Section 401 certification and Section 404 NWP. During the PA&ED phase, a Water Quality Assessment Report will be prepared for all alternatives and will discuss potential impacts to water quality and identify BMP's to minimize and avoid water quality impacts.
12. The proposed Project would increase the amount of impervious surfaces in the area by greater than 1 acre and may affect stormwater runoff and other discharges. It must conform to Caltrans' existing Statewide NPDES Permit and the existing SWRCB General NPDES Permit for Construction and Land Disturbance Activities.
13. The project can achieve compliance on-site.

Required Technical Studies and Analyses: Water Quality Assessment Report**Coastal Zone**

- | | |
|--|----|
| 14. Is the project within the Coastal Zone? | No |
| 15. Is this project anticipated to need coastal mitigation? (if yes, please complete and submit the PEAR Mitigation Checklist) | No |

Explain "Yes" and "TBD" responses:

Click or tap here to enter text.

Required Technical Studies and Analyses/Permit: N/A**Floodplain**

- | | |
|--|-----|
| 16. Is the construction area within a regulatory floodway or within the base floodplain (100-year) elevation of a watercourse or lake? | Yes |
|--|-----|

Explain response:

16. Only a small portion of Alternative 2 is located within Zone A, an area that has at least a 1% annual chance of flooding. The remaining area of all build alternatives are located within Zone X, an area of moderate to low flooding risk. The NEPA document will identify any potential impacts to hydrology and will develop any necessary minimization and mitigation measures to reduce impacts.

Required Technical Studies and Analyses: SFER and LHS**Wild and Scenic Rivers**

- | | |
|--|----|
| 17. Is the project within or immediately adjacent to a Wild and Scenic River System? | No |
|--|----|

Explain "Yes" and "TBD" responses:

Scenic rivers will be discussed within the Visual Impact Assessment report.

Required Technical Studies and Analyses: Discuss in ED only**Biological Resources**

(If "Yes" to any question (18-23) complete and submit the PEAR Mitigation Checklist to Stewardship (Unit 0288).

- | | |
|---|-----|
| 18. Is there a potential for state or federally listed threatened or endangered species, or their critical habitat or essential fish habitat, to occur within or adjacent to the construction area? | Yes |
| 19. Does the project have the potential to directly or indirectly affect migratory birds, or their nests or eggs (such as vegetation removal, box culvert replacement/repair, bridge work, etc.)? | Yes |

20.	Is there a potential for aquatic resources (wetlands and/or waters) to occur within or adjacent to the construction area?	Yes
21.	Does the project have the potential to interfere with the movement of fish or wildlife, or with established migratory corridors?	No
22.	Is there opportunity or known "Areas of Interest" for improving wildlife connectivity or fish passage?	No
23.	Is there a potential for the introduction or spread of invasive plant species?	Yes

Explain "Yes" and "TBD" responses:

18. Habitat communities within and adjacent to the Project vicinity include urban landscape (roadways, residential areas, and other urban facilities) and agricultural land, which covers a majority of the area. As such, there is no potential for special status plant species within the Project area.

Alternatives 1A and 1B

A preliminary desktop review of the USFWS Information for Planning and Conservation (IPaC) database, the NMFS species list, the CDFW California Natural Diversity Database (CNDDB) species occurrences, and California Native Plant Society (CNPS) database queries were conducted to identify species protected under the Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) (see attachment C). Based on this review, Swainson's hawk, a state threatened species, has the potential to occur within the Alternative 1A/1B alignment. Appropriately timed special-status animal surveys will be required. There are no federally listed species occurrences or habitat present within the alignment of Alternatives 1A or 1B. Therefore, Section 7 is not anticipated, streamlining the PA&ED phase of the Project. A NES will be prepared during the PA&ED phase to determine impacts to sensitive biological resources.

Alternative 2

A preliminary desktop review of the USFWS IPaC database, the NMFS species list, the CDFW CNDDB species occurrences, and CNPS database queries were conducted to identify species protected under FESA and CESA (see attachment C). Based on this review, Swainson's hawk, Tricolored blackbird, Western Pond Turtle, VELB, Central Valley steelhead, and Chinook Salmon Central Valley DPS have the potential to occur within Alternative 2. Appropriately timed special-status animal surveys will be required. A NES will be prepared during the PA&ED phase to determine impacts to sensitive biological resources. Additionally, since VELB, Central Valley steelhead, and Chinook Salmon Central Valley DPS have the potential to occur, a BA will be required to initiate Section 7 consultation with USFWS and NMFS during the PA&ED phase. Depending on level of impacts to each federally listed species, Section 7 Consultation would be either informal or formal. Informal consultation would not have a timeframe to complete and formal consultation can take up to 135 days to complete. Both the NES and BA would develop minimization and mitigation measures to reduce impacts to biological resources.

19. Vegetation removal will be required under all build alternatives. Shrubs and trees within the Project vicinity may be utilized by nesting birds during the nesting bird season, generally from February 1 through August 31. Nesting birds are protected under the Migratory Bird Treaty Act and under the California Fish and Game Code, measures to protect nesting birds will be outlined in the NES. While construction work is still allowed during nesting bird season, preconstruction surveys would be required prior to vegetation removal, and a no work buffer zone would be implemented if an active nest is found. Additionally, under Alternative 2, pile driving activities within Best Slough would be limited to the period of June 1 through October 1 during the summer low-flow period to avoid impacts to Central Valley steelhead and Chinook Salmon Central Valley DPS.

20. Based on the information below, Alternative 2 is anticipated to have greater impacts to waters of the US and State, sensitive species, and sensitive habitats. Alternative 2 would result in greater mitigation costs and would require Section 7 Consultation with USFWS and NMFS, extending the environmental approval timeline.

Alternatives 1A and 1B

A tributary to Best Slough, a water of the US and State, is within proximity to the southwest portion of Alternatives 1A and 1B (Figure 4. Environmental Constraints). Additionally, these alternatives avoid wetlands associated with Best Slough. Since work within waters of the US is not anticipated, section 404 and 401 permits are not required. A 1602 SAA may be necessary if the construction footprint encroaches onto the riparian areas adjacent to these waters, which are considered waters of the State. This would be determined during the PA&ED phase. If needed, the 1602 SAA would be obtained during the Plans, Specifications, and Estimates (PS&E) phase of the Project.

Alternative 2

Best Slough and its tributaries, both considered waters of the US and State, are located within Alternative 2 (Figure 4. Environmental Constraints). Construction of Alternative 2 would result in approximately 0.22 acres of permanent impacts to these water features. Alternative 2 is also near jurisdictional wetlands adjacent to Best Slough and impacts are possible. During PA&ED a delineation of jurisdictional features will be performed. Results from the jurisdictional delineation and impacts would be documented in the NES and an Aquatic Resources Delineation Report (ARDR). Due to anticipated impacts to jurisdictional features, a Section 401, 404, and 1602 permit are required. Since permanent impacts are likely to remain under 0.5 acres, Alternative 2 would qualify under Section 404 NWP 14. All permits would be obtained during PS&E.

Permanent impacts to jurisdictional waters would require compensatory mitigation per requirements set by USACE, RWQCB, and CDFW. USACE and RWQCB would most likely require compensatory mitigation in the form of in lieu fee payments to the USACE Sacramento District National Fish and Wildlife Foundation. CDFW would most likely require purchasing credits from a CDFW mitigation bank. Mitigation would be determined during the preparation of the NES and BA.

23. Yes. There may be potential for the introduction or spread of invasive plant species during construction; however the project will implement standard BMPs to avoid the spread of invasive species, and the project will not include invasive plants in either potential landscaping or revegetation efforts of disturbed soils. Potential impacts associated with the spread of invasive species will be addressed within the NES.

Required Technical Studies and Analyses:	
Biology: ☐ Memo ☐ NES(MI) ☒ NES ☒ BA (☒ NMFS ☒ USFWS)	
CESA (CDFW): ☒ Consistency Determination ☐ Incidental Take Permit	
FESA: ☐ Informal Consultation: ☐ USFWS ☐ NMFS ☒ Formal Consultation: ☒ USFWS ☒ NMFS ☐ PLOC ☐ PBO ☐ LOC	
EFH: ☒ Consultation: (NMFS)	
Wetlands: ☒ Delineation and Assessment Agencies Involved: ☒ USACE ☐ NRCS ☒ CDFW ☐ Tribal ☐ Coastal ☒ CVRWQCB	
Wildlife Connectivity / Fish Passage: ☒ Discuss in NES and ED	
Invasive Species: ☒ Discuss in NES and ED	
Sections 4(f) and 6(f)	
24. Section 4(f): Are there any historic sites or public owned parks, recreation areas, wildlife or waterfowl refuges within or immediately adjacent to the construction area?	TBD
25. Section 6(f): Does the project have the potential to affect properties acquired or improved with Land and Water Conservation Fund Act funds?	No
Explain "Yes" and "TBD" responses:	
24. If it is determined that the UPRR tracks are eligible for listing under the NRHP, Section 4(f) analysis would be required. The type of Section 4(f) analysis needed is dependent on the "use" of the Section 4(f) resource and since impacts to the UPRR tracks will be avoided as much as possible, a de minimis determination is anticipated. The Section 4(f) analysis will be prepared concurrently with the FOE.	
Required Technical Studies and Analyses:	Agencies Involved:
Section 4(f): TBD	☒ SHPO ☐ DOI ☐ HUD ☐ USDA ☐ State Parks ☐ Other:
Section 6(f): N/A	☐ NPS ☐ Other:
Visual Resources	
26. Does the project have the potential to affect any visual or scenic resources?	Yes
Explain "Yes" responses:	
26. The visual environment of the Project area consists of agricultural lands, which are recognized as important scenic resources within Yuba County. Agricultural lands will be impacted by all alternatives; therefore, a Visual Impact Assessment (VIA) Moderate level report will be prepared using Caltrans and FHWA guidelines. During the PA&ED phase, the VIA and NEPA document will be prepared and will determine minimization and mitigation measures to reduce impacts. See Attachment D for the Visual Resources Questionnaire. As part of the Moderate VIA, a Scenic Resources Evaluation would be included as a part of the document.	
Required Technical Studies and Analyses: Moderate VIA	
Right of Way and Relocation Impacts	
27. Will the project require any right of way, including partial or full acquisitions, construction easements, or utility relocations?	Yes
Number of parcels affected: Acquisitions: TBD TCEs: TBD	
28. Will the project require residential or business relocations?	No
Explain "Yes" responses:	
27. To construct the Project, the County would be required to obtain right-of-way from various private landowners. The acreage of land acquisitions will vary among the three build alternatives. The County right-of-way acquisition process is based on the NEPA document certification and can take between 6 and 18 months. Private landowner right-of-way acquisitions can take varying amounts of time based on communication and other factors. Additionally, all build alternatives would require an easement from UPRR, which requires approval from the CPUC.	
Required Technical Studies and Analyses: Discuss in ED only	
Land Use, Community, and Farmland Impacts	
29. Is the project inconsistent with plans and goals adopted by the community?	No
30. Does the project have the potential to divide or disrupt neighborhoods/communities?	No
31. Does the project have the potential to disproportionately affect low-income and minority populations?	No
32. Will the project require the relocation of public utilities?	Yes
33. Will the project affect access to properties or roadways?	No
34. Will the project involve changes in access control to the State Highway System (SHS)?	Yes
35. Will the project involve the use of a temporary road, detour, or ramp closure?	No
36. Will the project reduce available parking?	No
37. Will project construction encroach on state or federal lands?	No
38. Will the project require conversion of any farmland to a different use or impact any farmlands?	Yes

Explain "Yes" responses:

30. There are rural residents located east and west of SR-65 that may be impacted by all build alternatives. Potential costs associated with right-of-way acquisition, farmland conversions, or other impacts cannot be estimated at this time. Each alternative entails a different amount of right-of-way in privately owned lands; therefore, costs will vary by alternative. During the PA&ED phase, a CIA will be conducted and will address community impact concerns, as well as identify minimization and mitigation measures to reduce impacts.

32. The project may require relocation of public utilities. Coordination will occur with existing utility owners to determine the number and location of all underground and overhead utilities in order to determine which existing utilities need to be adjusted or relocated for the proposed project.

38. Prime farmlands are present within Alternatives 1A and 1B and unique farmlands are present within all build alternatives (Figure 4. Environmental Constraints). Portions of these farmlands would be converted to nonagricultural use as a result of the Project. Completion of form AD 1006 will determine the significance of potential impacts from conversion of Prime and Unique farmlands. A Farmlands Technical Memorandum and CIA will be prepared during the PA&ED phase to determine any potential impacts to farmlands and recommend minimization and mitigation measures to reduce any potential impacts. There are no timberlands within the Project area.

Required Technical Studies and Analyses:

Community Impact Assessment

☒ Form AD 1006 (USDA) or NRCS CPA-106**Agencies Involved:**☒ NRCS ☐ Coastal ☐ Other:☒ NRCS**Cultural Resources**

39. Are there National Register listed or potentially eligible historic properties (buildings, sites, objects, landscapes, etc.) within or immediately adjacent to the construction area?

Yes

40. Is the project adjacent to or would it encroach on Tribal Land?

No

41. Is the project located within Tribal Ancestral Territory?

No

Explain "Yes" and "TBD" responses:

39. A preliminary cultural record search was conducted by the North Central Information Center (NCIC) within the proposed Project area, which includes the area covered by all build alternatives, and a ½ mile radius. The record search disclosed three recorded resources within the Project area and one within the ½ mile radius. Of the three recorded resources within the Project area, all alternatives directly impact one, the UPRR tracks, which are discussed below.

All build alternatives have the potential to affect the UPRR tracks that run parallel to SR-65. It is assumed the tracks are considered a potential historic resource under NRHP. A HPSR, ASR, and a Finding of Effect (FOE) will be prepared during the PA&ED phase to identify archaeological resources and evaluate built environmental resources. It is assumed that the FOE will conclude that the UPRR tracks are eligible for listing in the NRHP with no adverse effect.

Additionally, a preliminary SLF search was completed by the NAHC. The results of the SLF search were positive, indicating the presence of Native American cultural resources within the USGS quadrangle that covers the Project area. The NEPA document will analyze impacts to Native American resources and identify any necessary minimization and mitigation measures to reduce impacts to such resources. Native American tribes will be contacted to identify any Native American cultural and historic resources with the potential to be impacted by the Project and whether further consultation is needed.

Required Technical Studies and Analyses:☐ Screened Undertaking Memorandum☒ Historic Property Survey Report☒ Archaeological Survey Report☐ Historical Resources Evaluation Report☐ Extended Phase I Report☐ Environmentally Sensitive Area Action Plan☐ Geoarchaeological Study☐ Phase II Evaluation Report☐ Ethnographic Study☐ Phase III Data Recovery☐ ARPA, Special Use, and/or Scientific Research Permit☐ Other:☒ Finding of Effects Report**Agencies involved:** ☒ Cultural Studies Office☐ SHPO☐ Memorandum of Agreement/Programmatic Agreement**Agencies Involved:** ☐ SHPO☐ Advisory Council on Historic Preservation☐ Cultural Studies Office**ANTICIPATED PERMITS**☒ Section 401 or Tribal Water Quality Certification☐ Section 9 Structures in Navigable Waters (no fee)☒ Section 404 Nationwide Permit☐ Section 10 Work in Navigable Waters (no fee)☐ NEPA/404 Integration MOU☐ State Coastal Development Permit (no fee)☒ Section 1602 Streambed Alteration Agreement☐ Local Coastal Development Permit☒ Incidental Take Permit or Consistency Determination (CDFW)☐ State Lands Agreement (no fee)☐ Section 408 Levee Alteration (no fee)☐ Bridge Permit (no fee)☐ Report of Waste Discharge**Anticipated time to acquire permits:** 2028

ENVIRONMENTAL RISKS					
Title	Risk Statement	Current Status / Assumptions	Probability	Strategy	Response Options
Potential Historic Resource Impacts	All build alternatives contain UPRR tracks that will be evaluated for listing under the NRHP.	If determined eligible under the NRHP, impacts to this resource, depending on the severity, may be difficult to mitigate and may cause delays in permitting and NEPA certification	Low (11-30%)	Avoid	The UPRR tracks will not be directly impacted or relocated; therefore, adverse effects to a historic resource are not anticipated.
Permission to Enter	The applicant must obtain/renew/maintain permission to enter certain portions of private property in order for technical specialists to conduct field surveys to complete the technical studies for use of the gathered information in the NEPA document.	Failure to obtain permission to enter these private properties could delay preparation of the technical studies and the NEPA document.	Low (11-30%)	Mitigate	Based on preliminary review, no special status species or cultural resources are anticipated to be discovered on private property that would be directly impacted by the road realignment. Should access be denied a desktop review of the parcel would be sufficient for NEPA purposes.
NEPA Document Type	Based on the results of the technical studies, the Project may not qualify to utilize a Categorical Exclusion under NEPA.	A higher level NEPA document may be required which could delay NEPA approval and increase the cost to prepare an Environmental Assessment (EA).	Low (11-30%)	Avoid	Choosing Alternative 1A or 1B would avoid impacts to federally listed species and their habitat thereby reducing the risk of unusual circumstances.
Permanent Impacts to Waters of the US and State	Permanent impacts to waters of the US and State would require compensatory mitigation per requirements set by USACE, RWQCB, and CDFW.	USACE and RWQCB would most likely require compensatory mitigation in the form of in lieu fee payments to the USACE Sacramento District National Fish and Wildlife Foundation. CDFW would most likely require credits to be purchased from a CDFW mitigation bank. Mitigation would be determined during the preparation of the NES. Alternative 2 would require greater mitigation costs since this alternative would result in permanent impacts to waters of the US and State.	High (51-70%)	Avoid	Choosing Alternative 1A or 1B would require less mitigation costs.
Presence of Federally Listed Species	VELB, Central Valley steelhead, and Chinook Salmon Central Valley DPS, all federally listed species, have the potential to occur within Alternative 2.	Preparation of a BA is required to initiate Section 7 consultation with USFWS and NMFS. Mitigation for impacts to these species would be required which can be costly.	High (51-70%)	Avoid	Choosing Alternative 1A or 1B would avoid impacts to federally listed species and their habitat.

DISCLAIMER

This report is not an environmental document or determination. The above information and recommendations are based on the project description provided in this report. The discussion and conclusions provided by this PEAR are approximate and based on a *cursory review* of existing records, databases, and mapping tools to estimate the potential for probable project effects on the environment. The purpose of this report is to provide a preliminary level of environmental analysis to support the Project Initiation Document. Changes in project scope, alternatives, existing environmental conditions, and/or environmental laws or regulations will require a reevaluation of this report.

Signatures:

Dotrick Wilson

08/06/2025



08/06/2025

ENVIRONMENTAL BRANCH CHIEF

DATE

PROJECT MANAGER

DATE



ATTACHMENTS

Attachment A: Maps and Exhibits

Figure 1: Project Vicinity

Figure 2: Project Location

Figure 3: Project Features

Figure 4: Environmental Constraints

Attachment B: ISA Checklist

Attachment C: CNDDDB, CNPS, NMFS, and USFWS Species Lists

Attachment D: Visual Impact Assessment Questionnaire

Attachment A: Maps and Exhibits

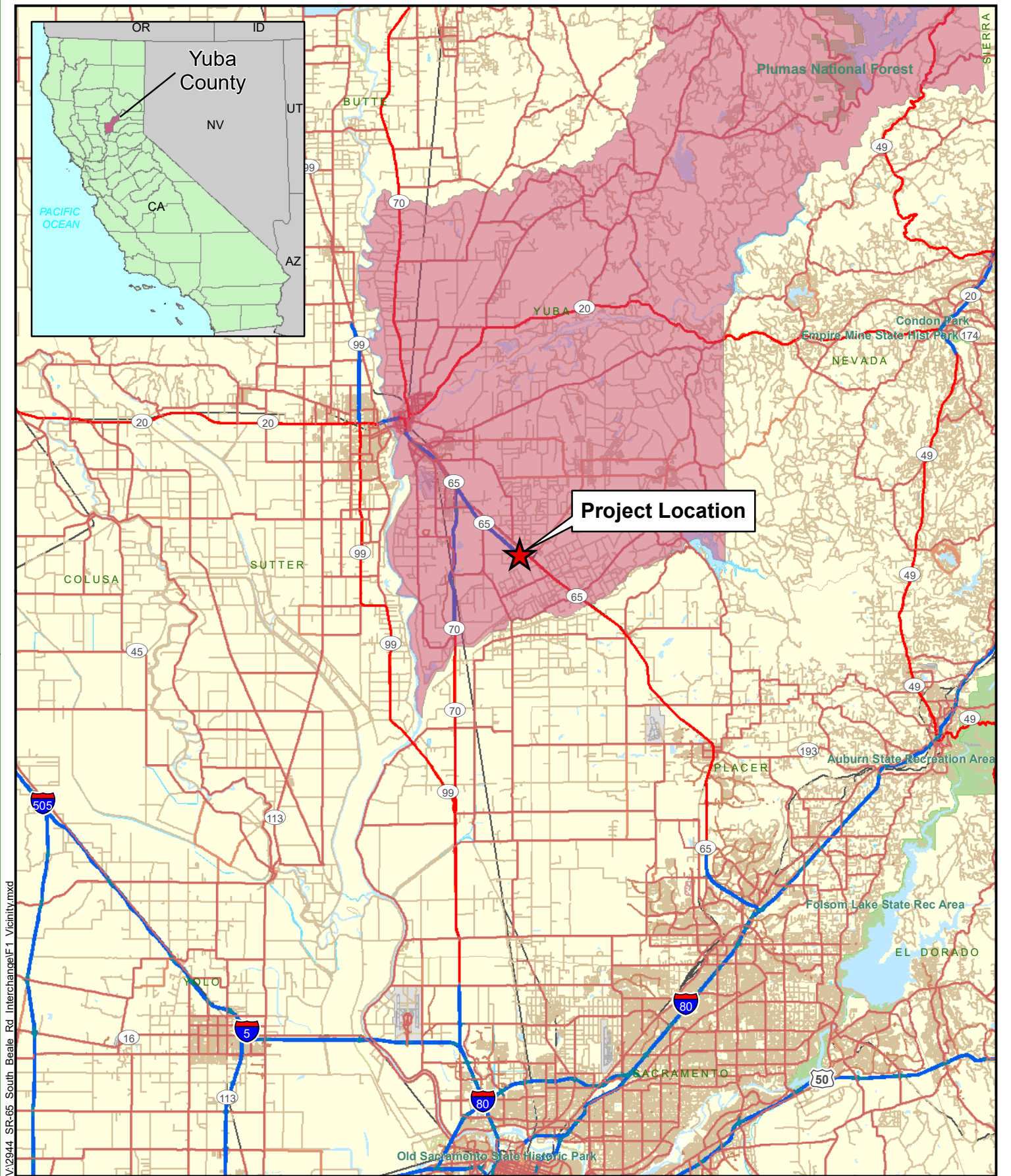
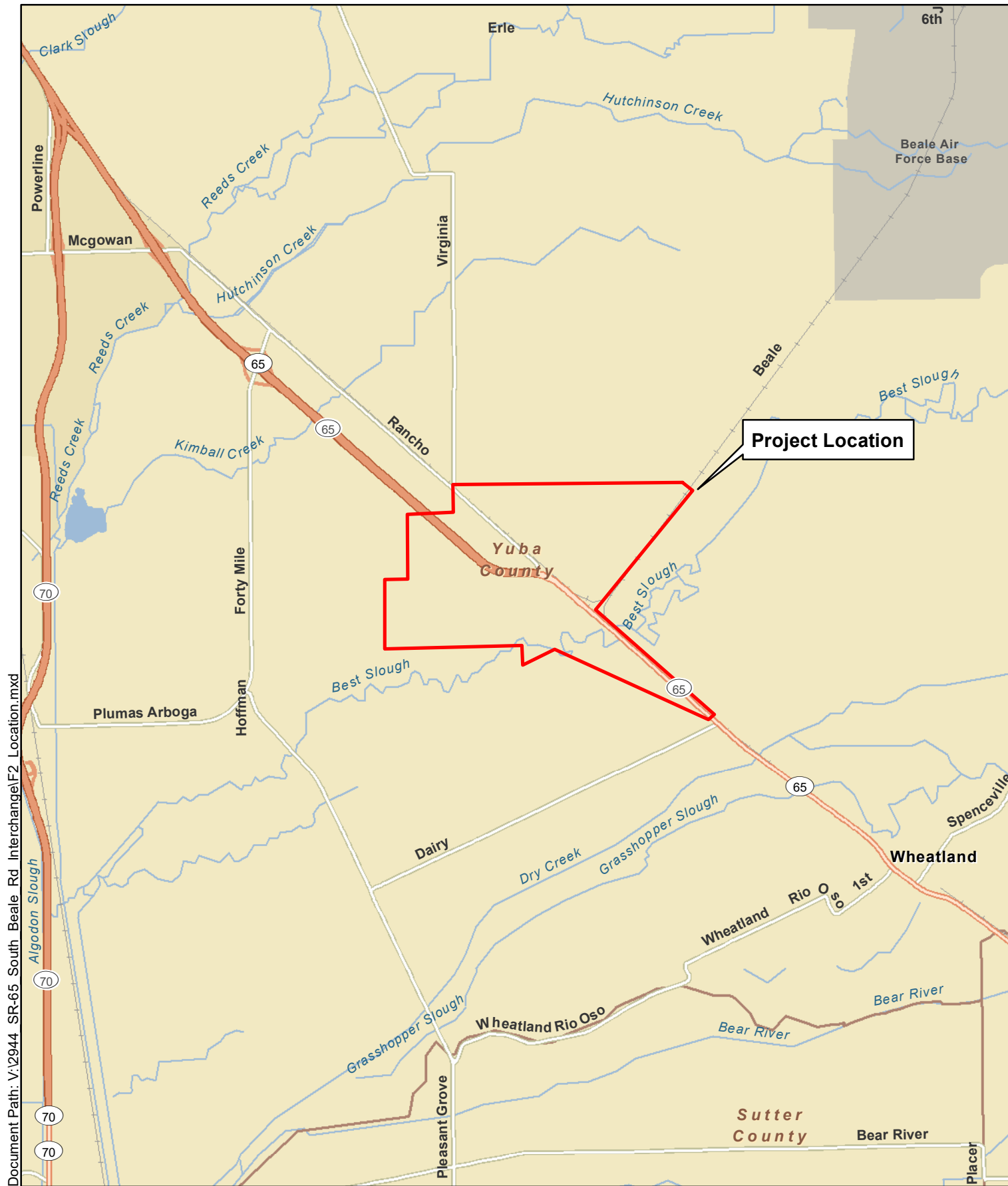


FIGURE 1
Project Vicinity

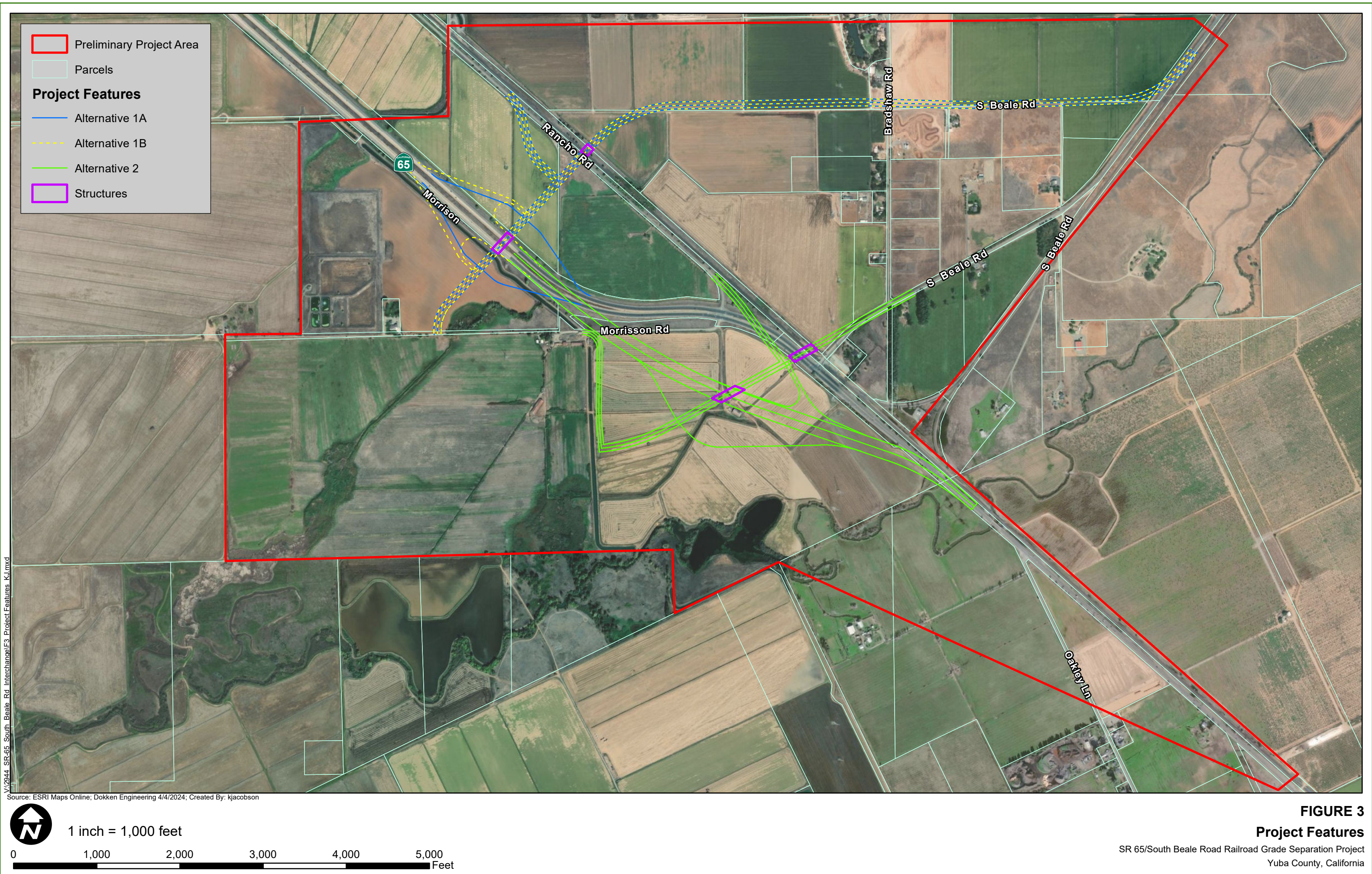
SR 65/South Beale Road Railroad Grade Separation Project
Yuba County, California



0 0.6 1.2 1.8 2.4
Miles

FIGURE 2
Project Location

SR 65/South Beale Road Railroad Grade Separation Project
Yuba County, California



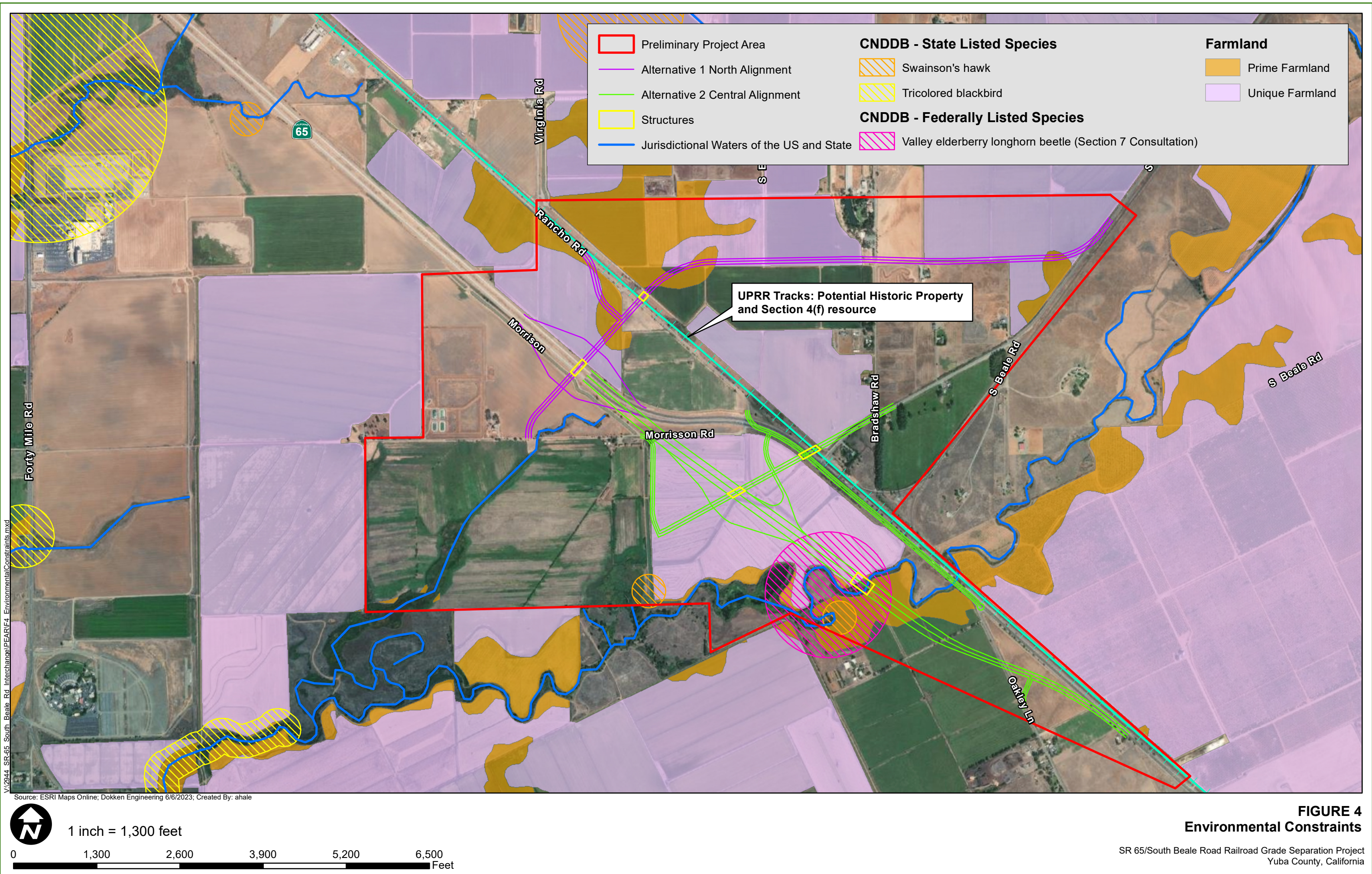


FIGURE 4
Environmental Constraints

SR 65/South Beale Road Railroad Grade Separation Project
Yuba County, California

Attachment B: ISA Checklist

Initial Site Assessment (ISA) Checklist

Project Information

County: Yuba Route: 65 Post Mile: 2.9/R5.8 EA: 03-3J990

Description: The California Department of Transportation (Caltrans), in cooperation with Yuba County (County), proposes to construct a grade separation at South Beale Road and State Route (SR) 65 in unincorporated Southern Yuba County, California.

Is the project on the HW Study Minimal-Risk Projects List? No

Project Manager: Juann Ramos phone # 916-858-0642

Project Engineer: Jacqueline Lockhart phone # 916-858-0642

Project Screening

Attach the project location map to this checklist to show location of all know and/or potential HW sites identified.

1. Project Features: New R/W? Yes Excavation? Yes Railroad Involvement? Yes

Structure demolition/modification? Yes Subsurface utility relocation? Yes

2. Project Setting: Agricultural

Rural or Urban: Rural

Current land uses: Employment and Employment Village & Natural Resources

Adjacent land uses: Natural Resources

3. Check federal, State, and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project. GeoTracker and EnviroStor database results are attached to this checklist.

4. Conduct Field Inspection. Date: 04/27/2022 Use the attached map to locate potential or known HW sites.

STORAGE STRUCTURES / PIPELINES:

Underground tanks: None Surface tanks: None

Sumps: None Ponds: None

Drums: None Basins: Yes

Transformers: S Beale Road/SR 65 intersection

Landfill: None

Other: None

Initial Site Assessment (ISA) Checklist

(continued)

CONTAMINATION: (spills, leaks, illegal dumping, etcetera)

Surface staining: None _____ Oil sheen: None _____

Odors: None _____ Vegetation damage: None _____

Other: None

HAZARDOUS MATERIALS: (asbestos, lead, etcetera)

Buildings: None _____ Spray-on fireproofing: None _____

Pipe wrap: None _____ Friable tile: None _____

Acoustical plaster: None _____ Serpentine: None _____

Paint: Pavement striping on existing roadways Other: Aerially deposited lead adjacent to SR 65

5. Additional record search, as necessary, of subsequent land uses that could have resulted in a hazardous waste site. Use the attached map to show the location of potential hazardous waste sites.
6. Other comments and/or observations: Based on preliminary review, contaminants of concern include yellow paint on the existing roadways, aerially deposited lead in soils adjacent to SR 65, potential polychlorinated biphenyls in a pole or pad-mounted electrical transformer, contaminants potentially present on the railroad tracks including, petroleum hydrocarbons, grease, oils and heavy metals, as well as pesticides and herbicides from farmlands.

ISA Determination

Does the project have potential hazardous waste involvement? Yes If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Investigation? No If "YES," explain; then give an estimate of additional time required:

An ISA Report should be prepared to transmit the conclusions to the Project Manager and Project Engineer.

ISA Conducted by

Jacqueline Lockhart, PE



Date 7/24/2025



LEGEND - CHOOSE MORE SITES

LUST Cleanup Sites - REMOVE

Cleanup Program Sites - REMOVE

Military Cleanup Sites - REMOVE

Military Privatized Sites - REMOVE

Military UST Sites - REMOVE

☒ Signifies a Closed Site

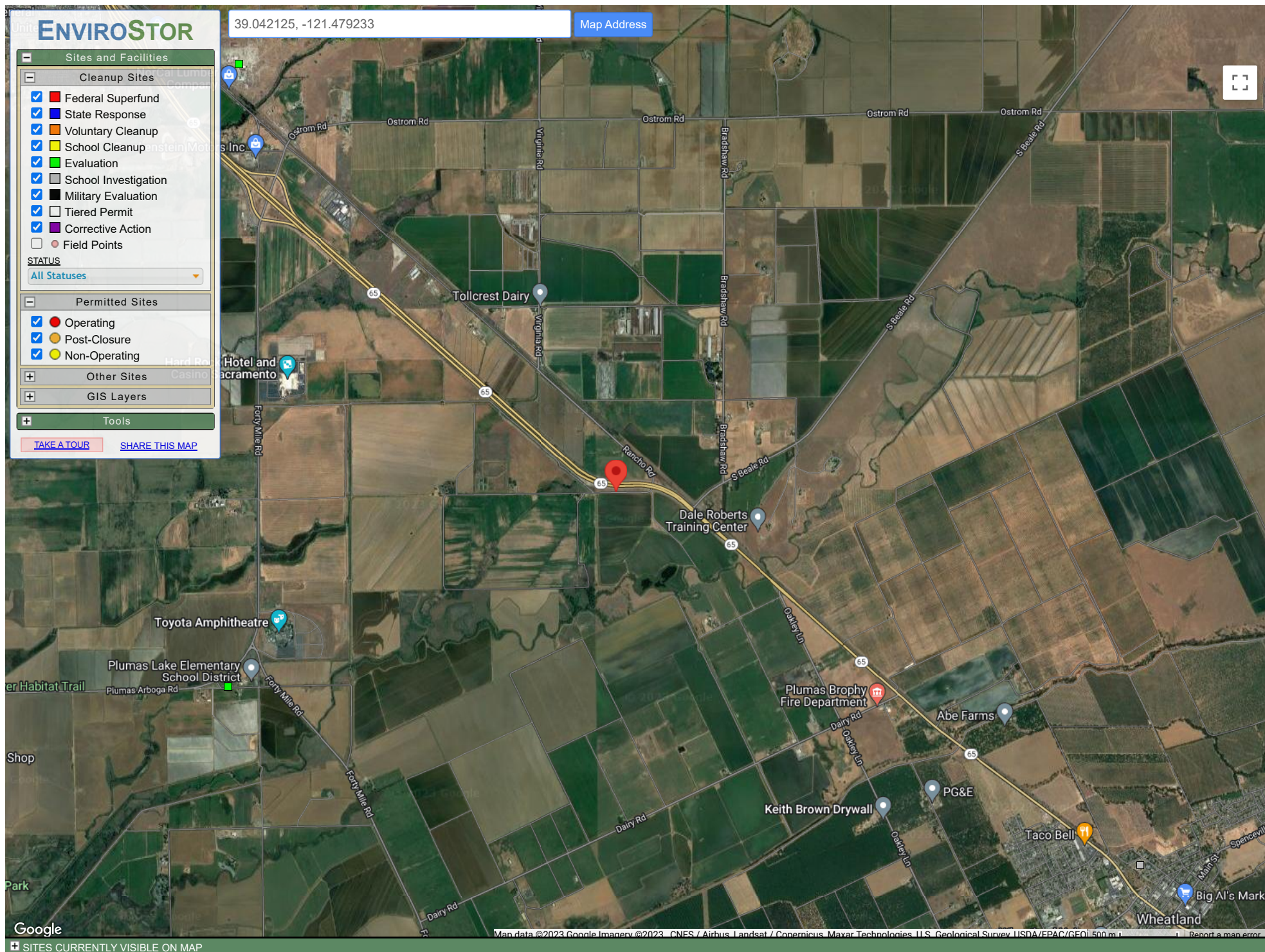
ACTIVE MAP COVERAGES:

Military Bases - - REMOVE

LIST SITES VISIBLE ON MAP

Map data ©2023 Imagery ©2023 , CNES / Airbus, Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GE0 200 m Report a map error

Sites Shown on Map: 0 Total Sites 0 Open Sites 0 Closed Sites 0 Sites w/Water Quality Data



Attachment C: CNDDB, CNPS, NMFS, and USFWS Species Lists



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad< IS (Wheatland (3912114) OR Camp Far West (3912113) OR Lincoln (3812183) OR Sheridan (3812184) OR Nicolaus (3812185) OR Olivehurst (3912115) OR Smartville (3912123) OR Browns Valley (3912124) OR Yuba City (3912125))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Ahart's dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	PMJUN011L1	None	None	G2T1	S1	1B.2
Antioch Dunes anthicid beetle <i>Anthicus antiochensis</i>	IICOL49020	None	None	G3	S3	
bank swallow <i>Riparia riparia</i>	ABPAU08010	None	Threatened	G5	S2	
big-scale balsamroot <i>Balsamorhiza macrolepis</i>	PDAST11061	None	None	G2	S2	1B.2
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	PDSCR0R060	None	Endangered	G2	S2	1B.2
Brandegee's clarkia <i>Clarkia biloba</i> ssp. <i>brandegeae</i>	PDONA05053	None	None	G4G5T4	S4	4.2
Brazilian watermeal <i>Wolffia brasiliensis</i>	PMLEM03020	None	None	G5	S2	2B.3
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
California black rail <i>Laterallus jamaicensis coturniculus</i>	ABNME03041	None	Threatened	G3T1	S1	FP
California linderiella <i>Linderiella occidentalis</i>	ICBRA06010	None	None	G2G3	S2S3	
chinook salmon - Central Valley spring-run ESU <i>Oncorhynchus tshawytscha</i> pop. 11	AFCHA0205L	Threatened	Threatened	G5T2Q	S2	
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	ICBRA03010	Endangered	None	G2	S2	
dwarf downingia <i>Downingia pusilla</i>	PDCAM060C0	None	None	GU	S2	2B.2
Ferris' milk-vetch <i>Astragalus tener</i> var. <i>ferrisiae</i>	PDFAB0F8R3	None	None	G2T1	S1	1B.1
foothill yellow-legged frog - north Sierra DPS <i>Rana boylei</i> pop. 3	AAABH01053	None	Threatened	G3T2	S2	
giant gartersnake <i>Thamnophis gigas</i>	ARADB36150	Threatened	Threatened	G2	S2	
grasshopper sparrow <i>Ammodramus savannarum</i>	ABPBXA0020	None	None	G5	S3	SSC
great blue heron <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
Great Valley Cottonwood Riparian Forest <i>Great Valley Cottonwood Riparian Forest</i>	CTT61410CA	None	None	G2	S2.1	



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
Great Valley Mixed Riparian Forest <i>Great Valley Mixed Riparian Forest</i>	CTT61420CA	None	None	G2	S2.2	
green sturgeon - southern DPS <i>Acipenser medirostris pop. 1</i>	AFCAA01031	Threatened	None	G2T1	S1	
Hartweg's golden sunburst <i>Pseudobahia bahiifolia</i>	PDAST7P010	Endangered	Endangered	G1	S1	1B.1
hoary bat <i>Lasiurus cinereus</i>	AMACC05032	None	None	G3G4	S4	
least Bell's vireo <i>Vireo bellii pusillus</i>	ABPBW01114	Endangered	Endangered	G5T2	S2	
legenere <i>Legenere limosa</i>	PDCAM0C010	None	None	G2	S2	1B.1
long-eared owl <i>Asio otus</i>	ABNSB13010	None	None	G5	S3?	SSC
North American porcupine <i>Erethizon dorsatum</i>	AMAFJ01010	None	None	G5	S3	
Northern Hardpan Vernal Pool <i>Northern Hardpan Vernal Pool</i>	CTT44110CA	None	None	G3	S3.1	
northern harrier <i>Circus hudsonius</i>	ABNKC11011	None	None	G5	S3	SSC
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G4	S3	SSC
pincushion navarretia <i>Navarretia myersii ssp. myersii</i>	PDPLM0C0X1	None	None	G2T2	S2	1B.1
recurved larkspur <i>Delphinium recurvatum</i>	PDRAN0B1J0	None	None	G2?	S2?	1B.2
Sacramento anthicid beetle <i>Anthicus sacramento</i>	IICOL49010	None	None	G4	S4	
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	AFCJB34020	None	None	G3	S3	SSC
Sacramento Valley tiger beetle <i>Cicindela hirticollis abrupta</i>	IICOL02106	None	None	G5TH	SH	
Sanford's arrowhead <i>Sagittaria sanfordii</i>	PMALI040Q0	None	None	G3	S3	1B.2
song sparrow ("Modesto" population) <i>Melospiza melodia pop. 1</i>	ABPBXA3013	None	None	G5T3?Q	S3?	SSC
steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus pop. 11</i>	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	G1G2	S1S2	SSC



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
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T2T3	S3	
veiny monardella <i>Monardella venosa</i>	PDLAM18082	None	None	G1	S1	1B.1
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened	None	G3	S3	
vernal pool tadpole shrimp <i>Lepidurus packardii</i>	ICBRA10010	Endangered	None	G4	S3	
western pond turtle <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
western red bat <i>Lasiurus frantzii</i>	AMACC05080	None	None	G4	S3	SSC
western spadefoot <i>Spea hammondi</i>	AAABF02020	None	None	G2G3	S3S4	SSC
western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white-tailed kite <i>Elanus leucurus</i>	ABNKC06010	None	None	G5	S3S4	FP
yellow warbler <i>Setophaga petechia</i>	ABPBX03010	None	None	G5	S3S4	SSC
yellow-breasted chat <i>Icteria virens</i>	ABPBX24010	None	None	G5	S3	SSC
Yuma myotis <i>Myotis yumanensis</i>	AMACC01020	None	None	G5	S4	

Record Count: 52

CNPS Rare Plant Inventory



Search Results

15 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3812183:3812184:3812185:3912115:3912114:3912113]

▲ COMMON NAME	SCIENTIFIC NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Ahart's dwarf rush	<u>Juncus leiospermus var. ahartii</u>	Juncaceae	annual herb	Mar-May	None	None	G2T1	S1	1B.2	Yes	1984-01-01	 © 2004 Carol W. Witham
big-scale balsamroot	<u>Balsamorhiza macrolepis</u>	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	Yes	1974-01-01	 ©1998 Dean Wm. Taylor
Boggs Lake hedge-hyssop	<u>Gratiola heterosepala</u>	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2	S2	1B.2		1974-01-01	 ©2004 Carol W. Witham
Brandegee's clarkia	<u>Clarkia biloba ssp. brandegeae</u>	Onagraceae	annual herb	(Mar)May-Jul	None	None	G4G5T4	S4	4.2	Yes	2001-01-01	No Photo Available
Brazilian watermeal	<u>Wolffia brasiliensis</u>	Araceae	perennial herb (aquatic)	Apr-Dec	None	None	G5	S2	2B.3		2001-01-01	 © 2021 Scot Loring
dwarf downingia	<u>Downingia pusilla</u>	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2		1980-01-01	No Photo Available
Ferris' milk-vetch	<u>Astragalus tener var. ferrisiae</u>	Fabaceae	annual herb	Apr-May	None	None	G2T1	S1	1B.1	Yes	1994-01-01	No Photo Available
Hartweg's golden sunburst	<u>Pseudobahia bahiifolia</u>	Asteraceae	annual herb	Mar-Apr	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Mexican mosquito fern	<u>Azolla microphylla</u>	Azollaceae	annual/perennial herb	Aug	None	None	G5	S4	4.2		1994-01-01	No Photo Available

pincushion navarretia	<u>Navarretia myersii ssp. myersii</u>	Polemoniaceae	annual herb	Apr-May	None	None	G2T2	S2	1B.1	Yes	1994- 01-01	 © 2020 Leigh Johnson
recurved larkspur	<u>Delphinium recurvatum</u>	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2	Yes	1988- 01-01	No Photo Available
Sanford's arrowhead	<u>Sagittaria sanfordii</u>	Alismataceae	perennial rhizomatous herb (emergent)	May- Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984- 01-01	 ©2013 Debra L. Cook
stinkbells	<u>Fritillaria agrestis</u>	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980- 01-01	 © 2016 Aaron Schusteff
valley brodiaea	<u>Brodiaea rosea ssp. vallicola</u>	Themidaceae	perennial bulbiferous herb	Apr- May(Jun)	None	None	G5T3	S3	4.2	Yes	2019- 01-07	 © 2011 Steven Perry
veiny monardella	<u>Monardella venosa</u>	Lamiaceae	annual herb	May-Jul	None	None	G1	S1	1B.1	Yes	1984- 01-01	 © 2007 George W. Hartwell

Showing 1 to 15 of 15 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website <https://www.rareplants.cnps.org> [accessed 16 March 2023].

From: [Vincent Chevreuil](#)
To: nmfswcrca.specieslist@noaa.gov
Subject: South Beale Road Interchange
Date: Thursday, March 16, 2023 12:13:00 PM
Attachments: [image001.png](#)

Quad Name **Wheatland**

Quad Number **39121-A4**

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) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

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 -

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 -



Vincent Chevreuil

Biologist/Environmental Planner |

Dokken Engineering

Phone: 916.858.0642

Email: vchevreuil@dokkenengineering.com

110 Blue Ravine Road, Suite 200 | Folsom, CA 95630

www.dokkenengineering.com



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:

March 16, 2023

Project Code: 2023-0056756

Project Name: SR65/S Beale Interchange Project

Subject: List of threatened and endangered species that may occur in your proposed project location 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, 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 U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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 Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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

Project Code: 2023-0056756

Project Name: SR65/S Beale Interchange Project

Project Type: Road/Hwy - Maintenance/Modification

Project Description: Interchange

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.0437445,-121.48872840437073,14z>



Counties: Yuba County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 8 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 final critical habitat for this species. Your location does not overlap 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

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7850	Threatened

CRUSTACEANS

NAME	STATUS
Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> There is final critical habitat for this species. Your location does not overlap 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 does not overlap 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 does not overlap 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.

IPAC USER CONTACT INFORMATION

Agency: Dokken Engineering

Name: Katie Jacobson

Address: 110 Blue Ravine Rd #200

City: Folsom

State: CA

Zip: 95630

Email: kjacobson@dokkenengineering.com

Phone: 9168449581

Attachment D: Visual Impact Assessment Questionnaire



[Home](#) | [Programs](#) | [Design](#) | [Visual Impact Assessment](#)

VIA Questionnaire

Questionnaire to Determine Visual Impact Assessment (VIA) Level

Use the following questions and subsequent score as a guide to help determine the appropriate level of VIA documentation. This questionnaire assists the VIA preparer (i.e. Landscape Architect) in estimating the probable visual impacts of a proposed project on the environment and in understanding the degree and breadth of the possible visual issues. The goal is to develop a suitable document strategy that is thorough, concise and defensible.

Enter the project name and consider each of the twelve questions below. Select the response that most closely applies to the proposed project and corresponding number on the right side of the table. Points are automatically computed at the bottom of the table and the total score should be matched to one of the four groups of scores at the end of the questionnaire that include recommended levels of VIA study and associated annotated outlines (i.e., memo, standard, advanced).

This scoring system should be used as a preliminary guide and should not be used as a substitute for objective analysis on the part of the preparer. Although the total score may recommend a certain level of VIA document, circumstances associated with any one of the ten question-areas may indicate the need to elevate the VIA to a greater level of detail. For projects done by others on the State Highway System, the District Landscape Architect should be consulted when scoping the VIA level and provide concurrence on the level of analysis used.

[The Standard Environmental Reference, Environmental Handbook, Volume I: Chapter 27-Visual & Aesthetics Review](#)

lists preparer qualifications for conducting the visual impact assessment process. Landscape Architects receive formal training in the area of visual resource management and can appropriately determine which VIA level is appropriate.

Preparer Qualifications:

"Scenic Resource Evaluations and VIA's are performed under the direction of licensed Landscape Architects. Landscape Architects receive formal training in the area of visual resource management with a curriculum that emphasizes environmental design, human factors, and context sensitive solutions. When recommending specific visual mitigation measures, Landscape Architects can appropriately weigh the benefits of these different measures and consider construction feasibility and maintainability."

Calculate VIA Level Score

Project Information

Project Name

South Beale Road Railroad Grade Separation Project

Project Identification #

EA 03-3J990

Project Location (Dist-Co-Rte-PM)

YUB-65-R5.8/2.88

Preparer Name and CA LA License Number

Amy Bakker, Senior Environmental Planner, Dokken Engineering

Caltrans District Landscape Architect (DLA)

For projects on State Highway System Only, Name of Caltrans District Landscape Architect (DLA) providing VIA Questionnaire Score Concurrence - if different than above.

Jeff Juarez, Caltrans Landscape Architecture Unit

Visual Features of Project and its Alternative(s)

Grade Separation and New Interchange

Additional Visual Context Remarks

Existing highway and adjacent agricultural setting.

Regulatory Framework

Potential Agencies that may have to be Involved

☒ Federal ☒ State ☒ Local ☐ Tribal ☐ Other

Visual Change and Sensitivity

Landscape Observations

☐ Water ☐ Visually dominant landforms ☒ Natural vegetation
☐ Visually Appealing Structures ☐ Other features of interest

Impact of Project on Natural, Cultural, and Existing Project Environments

- ☒ **Highly compatible** ☐ **Moderately compatible** ☐ **Not compatible**
- ☐ **Other**

Landscape Context and Development Patterns

- ☒ **Natural/Undeveloped** ☒ **Rural** ☐ **Suburban** ☒ **Urban**

Scenic, Visual and Historic Resource(s) within the Area of Visual Effect

- ☐ **Officially designated State Scenic Highway**
- ☐ **Eligible Scenic Highway** ☒ **Visual resources**
- ☐ **Federally (or otherwise) designated historic, scenic resource**

Expected Agency Involvement

Caltrans, Yuba County

Expected Public Feedback

- ☐ **Scenic resources identified as important** ☒ **Not important**
- ☐ **No public feedback**

Change to Visual Environment

Does the project’s aesthetic approach appear to be consistent with applicable laws, ordinances, regulations, policies, or standards?

1.

Although the State is not required to comply with regional and local planning ordinances and other regulations, these documents are critical in understanding the importance that communities place on visual resources. The Caltrans Environmental Planning branch may have copies of the planning documents that pertain to the project. If not, this information can be obtained by contacting the local planning department.

High Consistency (2 point) ▼

Will permits be required by outside regulatory agencies (i.e., federal, state, or local)?

2.

Permit requirements can have an unintended consequence on the visual environment. Anticipated permits, as well as specific permit requirements may be determined by talking with the project Environmental Planner and Project Engineer. Note: coordinate with the Caltrans representative responsible for obtaining the permit prior to communicating directly with any permitting agency.

Yes, both federal and state, or multiple permits required (4 points)

Will the project character be compatible with the visual character of the existing landscape?

3.

Consider the types of adverse changes to the scenic integrity of the landscape caused by the project. Evaluate the scale and extent of the project features compared to the surrounding scale of the community. Is the project likely to give an urban appearance to an existing rural or suburban community?

High Compatibility (1 points) ▼

Will the project contrast adversely with the memorability (vividness), natural harmony and/or cultural order (unity) of the existing landscape?

Evaluate the scale and extent of the project features compared to the scale of the visual elements within the surroundings. Is the project likely to change the appearance in a way that is contrasting with the line, color, form, and texture of the existing landscape visual character?

Moderate Adverse Contrast (3 points) ▼

Will the project, when viewed together with other past or foreseeable projects, result in a cumulative adverse change in the visual quality or character of the existing landscape?

Identify any projects in the area (both Caltrans’ and others’) that have been recently constructed and/or are reasonably foreseeable and/or currently planned for future construction. The window of time and the extent of area applicable to possible cumulative impacts should be based on a reasonable anticipation of the viewing public’s awareness of cumulative change.

Project is unlikely to result in noticeable adverse cumulative visual impact

Will the project produce a new source of substantial light or glare, which will adversely affect daytime or nighttime views within the area?

Identify new sources of lighting and glare and how day- and nighttime visual conditions may change.

No potential for adverse effects (1 point) ▼

What is the potential that the project proposal will be controversial within the community?

Assess the level of public concern by talking with local agency management and staff familiar with the affected community’s sentiments as evidenced by past projects and/or current information.

Low Potential that project will be controversial (2 points) ▼

How sensitive are potential viewer groups likely to be regarding visible changes proposed by the project?

Consider among other factors who the viewer groups represent, the number of viewers within the group, probable viewer expectations, activities, viewing duration, and orientation. The expected viewer sensitivity level may be scoped by applying professional judgment, and by soliciting information from other Caltrans staff, local agencies and community stakeholders familiar with the affected community’s sentiments and demonstrated concerns..

Moderate Sensitivity (3 points) ▼

What level of local concern is there for the types of specific project features (e.g., bridge structures, large excavations, sound barriers, or median planting removal) and construction impacts that are proposed?

Certain project improvements can be of special interest to local citizens, causing a heightened level of public concern, and requiring a more focused visual analysis.

Moderate Level of Concern (3 points) ▼

Are there federally, state, locally designated scenic or historic resources, or other visual resources within the project area of visual effect (i.e., viewshed)?

For example: protected viewsheds, visually sensitive public use areas, national historic/scenic trails, historic sites or structures, scenic designated viewpoints, wild and scenic rivers, state scenic highways or federal scenic byways, or potential visual resources such as stands of trees, rock outcroppings, etc.

Multiple potential visual resources or a single designated scenic resource

Will the project sponsor or public benefit from a more detailed visual analysis in order to help reach consensus on a course of action to address potential visual impacts?

Consider the proposed project features, possible visual impacts, and probable environmental commitments.

Moderate Benefit (3 points) ▼

Will the project likely require design changes to reduce the extent of visual resource impacts?

Consider design changes and enhancements such as realignment, additional alignment alternatives, vertical profile adjustments, extensive landscaping, architectural treatment, color and texture treatments and/or lighting of aboveground structures.

Minimal design changes (2 points) ▼

Assumptions/Issues

Assumptions/Issues

Calculate Total

[It is recommended that you print a copy of these calculations for the project file.](#)

Project Score: 29

Select An Outline Based Upon Project Score

The total score will indicate the recommended VIA level for the project. In addition to considering circumstances relating to any one of the 12 questions that would justify elevating the VIA level, also consider any other project factors that would influence level selection.

Score 12-18 VIA Questionnaire

No visual resource related regulatory requirements. No or negligible visual changes to the environment are proposed. None or minimal public concern has been identified. This Questionnaire with rationale for selected responses to questions in the available spaces after each question along with a statement of no visual resource impact is appropriate and provides a sufficient rationale why a technical study is not required.

Score 19-28 VIA Memorandum

Very limited visual resource related regulatory requirements. Minor visual changes to the environment are proposed. Minor public concern from the public may be expected. A VIA Memorandum is appropriate in this case. The VIA Memorandum should briefly describe project features, impacts and any environmental commitment measures. Visual simulations are not necessary. Go to the Directions for using and accessing VIA Memorandum Annotated Outline (website link).

Score 29-38 Standard VIA Report

Several visual resource related regulatory requirements. Moderately noticeable visual changes to the environment are proposed. Moderate public concern may be expected. A fully developed Standard VIA Report is appropriate. The report should describe in detail the project’s visual attributes, its visual impact and potential environmental commitment measures. Visual simulations are recommended. This report will likely receive public review. Go to the Directions for using and accessing the Standard VIA Annotated Outline (website link).

Score 39-48 Advanced VIA Report

Extensive visual resource related regulatory requirements and clearly noticeable changes to the environment are proposed. Moderate to high public concern may be expected. A fully developed Advanced VIA Report is appropriate. The report should describe in detail and numerically score the project’s visual change and sensitivity, its visual impact and any environmental commitments proposed. Visual simulations are required. It is appropriate to alert the Project Development Team to the potential for highly adverse impacts and to consider project alternatives to avoid those impacts. This technical study will receive close public review. Go to the Directions for using and accessing the Advanced VIA Annotated Outline (website link coming soon).

Statewide Campaigns

- ▶ [ADA Access](#)
 - ▶ [Adopt-A-Highway](#)
 - ▶ [Amber Alert](#)
 - ▶ [Be Work Zone Alert](#)
 - ▶ [CAL FIRE](#)
- ▶ [Cal OES: Power Outage and Fire Recovery Resources](#)
 - ▶ [California Climate Investments](#)
 - ▶ [California Connected](#)
 - ▶ [California Transportation Plan 2050](#)
- ▶ [Clean California](#)
 - ▶ [Energy Upgrade](#)
 - ▶ [Go Safely California](#)
 - ▶ [HeatReadyCA.com](#)
- ▶ [REAL ID](#)
 - ▶ [Save Our Water](#)
 - ▶ [Stormwater Education Campaign](#)
 - ▶ [Tenant and Landlord Resources](#)

► [Move Over Law](#)

► [Unclaimed Property](#)

[Back to Top](#)

[Accessibility](#)

[Privacy Policy](#)

[Conditions of Use](#)

[Register to Vote](#)

[!\[\]\(aa53ad6fea213b8b2226d3077e30533a_img.jpg\) Facebook](#) [!\[\]\(a1c2189b125458bd8fa8822d0c2da6bc_img.jpg\) Twitter](#)

Copyright © 2024 State of California

ATTACHMENT H

Risk Register

Project Information			
Checkpoint:		Project Manager: Christopher Sugar	
Date:	6/17/2024	Program:	
EA:	03-3J990	Capital Costs: \$0	
EFIS ID:	03-2300-0045	Support Costs: \$0	
Project Nickname:	SR 65/S Beale Rd Grade Separation	Total Costs: \$0	
County/Route/PM:	YUB-65-2.9/R5.8	RTL Target:	

Calculated Risk Reserve				Last Run Date:	
Project Phase	Confidence Level	Resource Hours	Reserve \$'s	Confidence Level	Schedule Reserve
0 (PA&ED)	50%	-	\$0	50%	days
1 (PS&E)	40%	-	\$0	50%	days
2 (RW Sup)	50%	-	\$0	50%	days
3 (Con Sup)	50%	-	\$0	50%	days
4 (Con Cap)	50%	-	\$0		-
9 (RW Cap)	50%	-	\$0		-
Project Total		-	\$ -		days

Risk Register													version 2.02 03/01/2023
Risk Identification			Phase	Initial Risk Assessment		Risk Response		Residual Risk		Risk Status			
RISK ID #	Risk Statement "As a result of <root cause>, <uncertain event> may occur, which would lead to <effect on objective(s)>."	Proactive Response (prior to risk occurring)		Initial Risk Probability		Response Strategy		Residual Risk Probability		Risk Assumptions and Status	Date Risk Identified		
Status		Response if Risk Occurs		Cost Impact (\$k)	Schedule Impact	Cost Impact (\$k)	Schedule Impact	Cost Impact (\$k) (Y indicates Residual Risk will be included in Reserve Calculations)	Schedule Impact (Y indicates Residual Risk will be included in Reserve Calculations)		Anticipated Resolution Date		
Type												Date Last Updated	
RiBS Sub Category	Risk Trigger	Risk Owner											
1	As a result of the new grade separation, UPRR coordination may be lengthy, which would lead to schedule delays.	Will start meetings with UPRR during the PA&ED phase of the project.		3 - Moderate (31-50%)		Avoid					6/17/2024		
Active			0-PA&ED										
Threat		Maintain close coordination with UPRR.	2-RW Sup	Insignificant									
ROW: Rail Road	Early outreach and coordination with UPRR.		3-Con Sup								7/22/2024		
			4-Con Cap										
			9-RW Cap										
2	If determined eligible under NRHP, impacts to the UPRR tracks, depending on severity, may be difficult to mitigate.	The UPRR tracks will not be directly impacted or relocated; therefore, adverse effects to the potentially historic resource are not anticipated.		2 - Low (11-30%)		Avoid				All build alternatives contain UPRR tracks that will be evaluated for listing under the NRHP.	7/22/2024		
Active			0-PA&ED	Insignificant									
Threat			2-RW Sup										
ENV: Archaeological & Cultural	Determine if the tracks are eligible under NRHP		3-Con Sup									7/22/2024	
			4-Con Cap										
			9-RW Cap										
3	As a result of needing permission to enter to private properties for technical specialists to conduct field surveys to complete technical studies, there could be a delay to the preparation of the technical studies and the CEQA/NEPA document.	Based on preliminary review, no special status species or cultural resources are anticipated to be discovered on private property that would be directly impacted by the project.		2 - Low (11-30%)		Mitigate		2 - Low (11-30%)			7/22/2024		
Active			0-PA&ED	Insignificant									
Threat		Should access be denied, a desktop review of the parcel would be sufficient for CEQA/NEPA purposes.	2-RW Sup										
ENV: Biological	Obtain permission to enters.		3-Con Sup									7/22/2024	
			4-Con Cap										
			9-RW Cap										
	Environmental												

Risk Identification			Phase	Initial Risk Assessment		Risk Response		Residual Risk		Risk Status	
RISK ID #	Risk Statement a result of <root cause>, <uncertain event> may occur, which would lead to <effect on objective(s)>."As	Proactive Response (prior to risk occurring)		Initial Risk Probability		Response Strategy		Residual Risk Probability		Risk Assumptions and Status	Date Risk Identified
Status		Response if Risk Occurs		Cost Impact (\$k)	Schedule Impact	Cost Impact (\$k)	Schedule Impact	Cost Impact (\$k) (Y indicates Residual Risk will be included in Reserve Calculations)	Schedule Impact (Y indicates Residual Risk will be included in Reserve Calculations)		Anticipated Resolution Date
Type											Date Last Updated
RiBS Sub Category	Risk Trigger	Response if Risk Occurs									
	Risk Owner										
4	As a result of permanent impacts to waters of the US and State, USACE and RWQCB would most likely require compensatory mitigation in the form of in lieu fee payments to the USACE Sacramento District National Fish and Wildlife Foundation. CDFW would most likely require credits to be purchased from a CDFW mitigation bank.	Selecting Alternative 1A or 1B would require less mitigation costs. Alternative 2 would require greater mitigation costs since this alternative results in more permanent impacts to waters of the US and State.		4 - High (51-70%)		Avoid					7/22/2024
Active			0-PA&ED								
Threat		Compensatory mitigation will be required.	1-PS&E	Insignificant							
ENV: Permits	Selected alternative will determine impacts.		2-RW Sup							7/22/2024	
			3-Con Sup								
		4-Con Cap									
	Environmental	9-RW Cap									
5	If federally listed species are identified and impacted, preparation of a BA will be required to initiate Section 7 consultation with USFWS and NMFS, which may lead to costly mitigation for impacts.	Selecting Alternative 1A or 1B would likely avoid impacts to federally listed species and their habitats.		4 - High (51-70%)		Avoid					7/22/2024
Active			0-PA&ED	Insignificant							
Threat		Preparation of a BA and Section 7 consultation.	1-PS&E								
ENV: Biological	Alternative selection and determination of impacts.		2-RW Sup							6/5/2025	
			3-Con Sup								
		4-Con Cap									
	Environmental	9-RW Cap									
6	As a result of the environmental technical studies, the project may not qualify to utilize a Categorical Exclusion under NEPA.	Selection of Alternative 1A or 1B would avoid impact to federally listed species and their habitat thereby reducing the risk of unusual circumstances.		2 - Low (11-30%)		Avoid					6/5/2025
Active			0-PA&ED	Insignificant							
Threat		Preparation of and Environmental Assessment.	1-PS&E								
	Alternative selection and determination of impacts		2-RW Sup							6/5/2025	
			3-Con Sup								
		4-Con Cap									
	Environmental	9-RW Cap									

ATTACHMENT I

Storm Water Data Report Cover Page

Long Form – Stormwater Data Report Template



Dist-County-Route: 03-YUB-65

Post Mile Limits: 2.9/R5.8

Type of Work: Grade Separation and New Interchange

Project ID (EA): 03-3J990

Phase: ☒ PID ☐ PA/ED ☐ PS&E

Applicable Caltrans Post Construction Treatment Requirement: 2012 ☐ 2022 ☒

Regional Water Quality Control Board(s): Central Valley (Region 5S)

Total Disturbed Soil Area: 40.65 ac PCTA: 40.91 ac

Alternative Compliance (acres): ATA 2 (50% Rule)? Yes ☐ No ☒

Estimated Const. Start Date: 05/01/2030 Estimated Const. Completion Date: 10/31/2032

Risk Level: RL 1 ☐ RL 2 ☒ RL 3 ☐ WPCP ☐ Other: _____

Is (M)WEL0 applicable? Yes ☒ No ☐

Is the Project within a TMDL watershed? Yes ☐ No ☒

Does the project require trash treatment? Yes ☐ No ☒

Notification of ADL reuse (if yes, provide date): Yes ☐ Date: _____ No ☒

This Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the date upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E only.

Ashley Orsaba-Finders 8/13/25
Ashley Orsaba-Finders, Registered Project Engineer Date

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

Christopher Sugar 8/13/2025
Christopher Sugar, Project Manager Date

Anthony Thurman 08/19/2025
Anthony Thurman, District Maintenance Representative Date

Nicki Johnson 08/19/2025
Nicki Johnson, Designated Landscape Architect Representative Date

[Stamp Required at PS&E only] Fabian Martinez 08/13/2025
Fabian Martinez, District 3 NPDES Coordinator Date

ATTACHMENT J

Landscape Architecture Assessment Study



**NORTH REGION
LANDSCAPE ARCHITECTURE ASSESSMENT STUDY**
03-LAND-0002 (Rev. 2023-October)

To: Jeff Juarez From: Jacqueline Lockhart Unit/Senior: Project Manager: Christopher Sugar	DISTRICT: 3 DATE: 05/23/25 EA: 3J990 ID: 0323000045	CO: YUB	RTE: 65	PM: 2.9/R5.8																								
CONTRACT SEPARATION: ☒ Roadside work as part of roadway work EA ☐ Roadside work for roadway project to follow under separate EA	PROJECT: SR 65/S. Beale Road Grade Separation FUNDING SOURCE: PA&ED (Local), Construction (TBD – Potential Local, State, Federal) PROJECT MILESTONE: ☒ PID ☐ PA&ED PROJECT COST (In thousands): DISTRICT (x1000) \$46,000 - \$81,000 STRUCTURES (x1000) \$																											
PROJECT DESCRIPTION The South Yuba Transportation Improvement Authority (SYTIA), in cooperation with California Department of Transportation (Caltrans), proposes to construct a new grade separation over the Union Pacific Railroad (UPRR) tracks adjacent to State Route 65 (SR 65). The proposed project aims to improve safety by removing an at-grade railroad crossing, improve access to Beale Air Force Base, and remove two unsignalized intersections on SR 65.																												
SCENIC HIGHWAY STATUS ☐ Officially Designated ☐ Eligible ☒ Not Designated																												
HIGHWAY PLANTING/IRRIGATION BACKGROUND INFORMATION <table style="width: 100%;"><tr><td style="width: 45%;">CLASSIFIED LANDSCAPE FREEWAY STATUS</td><td style="width: 10%;">☐ Yes</td><td style="width: 10%;">☒ No</td><td style="width: 35%;"></td></tr><tr><td>WARRANTED HIGHWAY PLANTING</td><td>☐ Yes</td><td>☒ No</td><td></td></tr><tr><td>EXISTING H2O & POWER AVAILABLE</td><td>☐ Yes</td><td>☒ No</td><td>Where: _____</td></tr><tr><td>EXISTING IRRIGATION IMPACTED</td><td>☐ Yes</td><td>☒ No</td><td>Where: _____</td></tr><tr><td>COOP. MAINT. AGREEMENTS</td><td>☐ Yes</td><td>☒ No</td><td></td></tr><tr><td>ADJACENT TO OUTDOOR ADVERTISING</td><td>☐ Yes</td><td>☒ No</td><td></td></tr></table>					CLASSIFIED LANDSCAPE FREEWAY STATUS	☐ Yes	☒ No		WARRANTED HIGHWAY PLANTING	☐ Yes	☒ No		EXISTING H2O & POWER AVAILABLE	☐ Yes	☒ No	Where: _____	EXISTING IRRIGATION IMPACTED	☐ Yes	☒ No	Where: _____	COOP. MAINT. AGREEMENTS	☐ Yes	☒ No		ADJACENT TO OUTDOOR ADVERTISING	☐ Yes	☒ No	
CLASSIFIED LANDSCAPE FREEWAY STATUS	☐ Yes	☒ No																										
WARRANTED HIGHWAY PLANTING	☐ Yes	☒ No																										
EXISTING H2O & POWER AVAILABLE	☐ Yes	☒ No	Where: _____																									
EXISTING IRRIGATION IMPACTED	☐ Yes	☒ No	Where: _____																									
COOP. MAINT. AGREEMENTS	☐ Yes	☒ No																										
ADJACENT TO OUTDOOR ADVERTISING	☐ Yes	☒ No																										
AREA (Ft²/ACRE) FOR HIGHWAY PLANTING:																												
EROSION CONTROL BACKGROUND INFORMATION <table style="width: 100%;"><tr><td style="width: 45%;">SOIL DISTURBANCE</td><td style="width: 10%;">☒ Yes</td><td style="width: 10%;">☐ No</td><td style="width: 35%;"></td></tr><tr><td>CONCENTRATED FLOW AREAS</td><td>☒ Yes</td><td>☐ No</td><td></td></tr><tr><td>SLOPE LOCATIONS</td><td>☒ Yes</td><td>☐ No</td><td></td></tr><tr><td>SLOPES > 2:1</td><td>☐ Yes</td><td>☒ No</td><td></td></tr></table>					SOIL DISTURBANCE	☒ Yes	☐ No		CONCENTRATED FLOW AREAS	☒ Yes	☐ No		SLOPE LOCATIONS	☒ Yes	☐ No		SLOPES > 2:1	☐ Yes	☒ No									
SOIL DISTURBANCE	☒ Yes	☐ No																										
CONCENTRATED FLOW AREAS	☒ Yes	☐ No																										
SLOPE LOCATIONS	☒ Yes	☐ No																										
SLOPES > 2:1	☐ Yes	☒ No																										
AREA (Ft²/ACRE) FOR EROSION CONTROL: Areas included in the Erosion Control Cost herein are 1,220,000 Ft ² for Alternatives 1A/1B and 1,780,000 Ft ² for Alternative 2.																												
MITIGATION BACKGROUND INFORMATION <table style="width: 100%;"><tr><td style="width: 60%;">PROJECT BIOLOGIST</td><td style="width: 10%;"></td><td style="width: 10%;"></td><td style="width: 20%;">Contact Date: _____</td></tr><tr><td>BIOLOGICAL REVEG. REQUIRED</td><td>☐ Yes</td><td>☒ No</td><td>Applicable Permits: _____</td></tr><tr><td>VISUAL IMPACT MIT. REQUIRED</td><td>☐ Yes</td><td>☒ No</td><td></td></tr><tr><td>UNIT TASKED w/ BIO. REVEG.</td><td colspan="3">☐ Landscape Architecture ☐ Stewardship</td></tr></table>					PROJECT BIOLOGIST			Contact Date: _____	BIOLOGICAL REVEG. REQUIRED	☐ Yes	☒ No	Applicable Permits: _____	VISUAL IMPACT MIT. REQUIRED	☐ Yes	☒ No		UNIT TASKED w/ BIO. REVEG.	☐ Landscape Architecture ☐ Stewardship										
PROJECT BIOLOGIST			Contact Date: _____																									
BIOLOGICAL REVEG. REQUIRED	☐ Yes	☒ No	Applicable Permits: _____																									
VISUAL IMPACT MIT. REQUIRED	☐ Yes	☒ No																										
UNIT TASKED w/ BIO. REVEG.	☐ Landscape Architecture ☐ Stewardship																											
AREA (Ft²/ACRE) FOR MITIGATION PLANTING:																												



ROADSIDE MAINTENANCE SAFETY NEEDS

- ☒ Paving of Extended Gore Areas
- ☐ Paving of Narrow Areas
- ☒ Maintenance Vehicle Pullouts (MVPs)
- ☐ Other _____

ROADSIDE VEGETATION MANAGEMENT TREATMENT NEEDS

- ☒ Guardrails and Signs - vegetation control TBD
- ☒ Side Slopes/Embankment Slopes - included in erosion control

ROADSIDE VEGETATION CONTROL NEEDS

☒ Roadside Clearing should be considered on all projects over 150 Working Days. Check with the Project Engineer/Manager on the anticipated number of working days. Roadside Clearing gives construction the option to direct the contractor to mow weeds. An NSSP is needed if erosion control areas require mowing.

CONTEXT SENSITIVITY

- ☐ It is determined that the project may involve consideration of community and local involvement.
- ☒ No foreseen issues with community and local involvement

CONSIDER ADDITIONAL AESTHETIC TREATMENT FOR:

- ☐ Sound Wall
- ☐ Retaining Wall
- ☒ Bridge Structure
- ☐ Other _____



**NORTH REGION
LANDSCAPE ARCHITECTURE ASSESSMENT STUDY**
03-LAND-0002 (Rev. 2023-October)

HIGHWAY PLANTING COST INFORMATION:

- ☐ Highway Planting
☐ Irrigation
☒ Roadside Clearing
☐ _____-year Plant Establishment
☐ Inert Materials

Alt 1A/1B

Alt 2

\$
\$
\$ 20,000
\$
\$
\$
\$ 0

\$
\$
\$ 20,000
\$
\$
\$

HIGHWAY PLANTING SUBTOTAL

EROSION CONTROL COST INFORMATION:

- ☒ Soil Stabilization (BFM, Hydroseed, Compost, etc.)
☒ Sediment Control (RECP, Fiber Rolls, etc.)
☐ Soil Building (Incorporate Materials, Duff, etc.)
☐ Steep Slope (Wire Blanket, Cellular Confinement, etc.)

Alt 1A/1B

Alt 2

\$ 150,000
\$ 300,000
\$
\$
\$ 450,000

\$ 210,000
\$ 450,000
\$
\$
\$ 660,000

EROSION CONTROL SUBTOTAL

MITIGATION PLANTING COST INFORMATION:

- ☐ Landscape Architecture Tasked Biological Reveg.
☐ Visual Impact Mitigation Planting

\$
\$

MITIGATION SUBTOTAL

\$ 0

TOTAL

\$ 470,000 \$ 680,000

PREPARED BY:



Jacqueline Lockhart – Dokken
Engineering

DATE:

08/07/2025

CONCURRED BY:

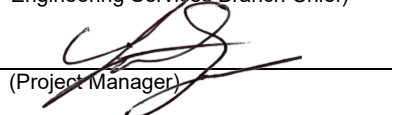


(Landscape Architecture or
Engineering Services Branch Chief)

DATE:

8/07/2025

APPROVED BY:



(Project Manager)

DATE:

08/07/2025

ATTACHMENT L

Transportation Engineering Performance Assessment (TEPA)

State Route 65/South Beale Road Interchange

Traffic Engineering Performance Assessment



Prepared for:
South Yuba Transportation
Improvement Authority

July 2024

FEHR  PEERS

RS22-4237

Table of Contents

1. Introduction.....	1
1.1 Project Purpose.....	1
1.2 Study Area	1
1.3 Study Locations.....	3
1.4 Data Sources and Reference Documents	4
2. Analysis Methodology	5
2.1 Data Collection.....	5
2.1.1 Traffic Volume.....	5
2.1.2 Traffic Volume Comparison.....	6
2.1.3 Collisions.....	8
2.2 Travel Demand Forecasting Methodology.....	8
2.3 Operations Analysis Methodology.....	9
3. Existing Conditions.....	13
3.1 Intersection Operations	13
3.2 Freeway Operations	14
3.3 Multimodal Facilities.....	14
4. Project Alternatives	16
4.1 No Build Alternative	16
4.2 Build Alternative 1	16
4.3 Build Alternative 2	17
5. Opening Year (2030) Conditions.....	21
5.1 Intersection Operations	21
5.2 Freeway Operations	25
6. Horizon Year (2050) Conditions	27
6.1 Intersection Operations	27
6.2 Freeway Operations	31
6.3 Multimodal Facilities.....	33
7. Transportation Analysis for PA-ED.....	34
7.1 Traffic Study Area.....	34
7.2 Data Collection.....	34
7.3 Existing Conditions Analysis	35
7.4 Traffic Forecasts	35
7.5 Future Year Operations Analysis	36
7.6 Transportation Analysis Report.....	36

List of Figures

Figure 1: Study Area	2
Figure 2: Intersection Peak Hour Volumes and Lane Configurations – Existing Conditions	7
Figure 3: Alternative 1	19
Figure 4: Alternative 2	20
Figure 5: Intersection Peak Hour Volumes and Lane Configurations – Opening Year 2030 Conditions No Build Alternative	22
Figure 6: Intersection Peak Hour Volumes and Lane Configurations – Opening Year 2030 Conditions Build Alternative 1	23
Figure 7: Intersection Peak Hour Volumes and Lane Configurations – Opening Year 2030 Conditions Build Alternative 2	24
Figure 8: Intersection Peak Hour Volumes and Lane Configurations – Horizon Year 2050 Conditions No Build Alternative	28
Figure 9: Intersection Peak Hour Volumes and Lane Configurations – Horizon Year 2050 Conditions Build Alternative 1	29
Figure 10: Intersection Peak Hour Volumes and Lane Configurations – Horizon Year 2050 Conditions Build Alternative 2	30

List of Tables

Table 1: Intersection Peak Hour Characteristics	5
Table 2: Collision History – SR 65 from Oakley Ln to Forty Mile Rd	8
Table 3: Intersection LOS Thresholds.....	10
Table 4: Freeway LOS Thresholds.....	11
Table 5: Intersection Operations – Existing Conditions.....	13
Table 6: Freeway Operations – Existing Conditions.....	14
Table 7: Intersection Operations – Opening Year 2030 Conditions.....	21
Table 8: Freeway Operations – Opening Year 2030 Conditions.....	26
Table 9: Intersection Operations – Horizon Year 2050 Conditions.....	27
Table 10: Freeway Operations – Horizon Year 2050 Conditions.....	32

1. Introduction

This report presents the traffic engineering performance assessment (TEPA) in support of the State Route (SR) 65/South Beale Road Interchange Project Study Report/Project Development Support (PSR/PDS). The analysis has been prepared in accordance with Article 5 in Chapter 5 of Appendix S: Preparation Guidelines for Project Study Report/Project Development Support Project Initiation Documents of the Caltrans *Project Development Procedures Manual*. As specified in the guidelines, the intent of this TEPA report is to use readily available information and apply macro-level analysis and evaluation techniques to provide a technical foundation for developing a preliminary purpose and need statement for the proposed project, and to outline the scope and magnitude of the more detailed analyses to be conducted as part of subsequent project development efforts.

1.1 Project Purpose

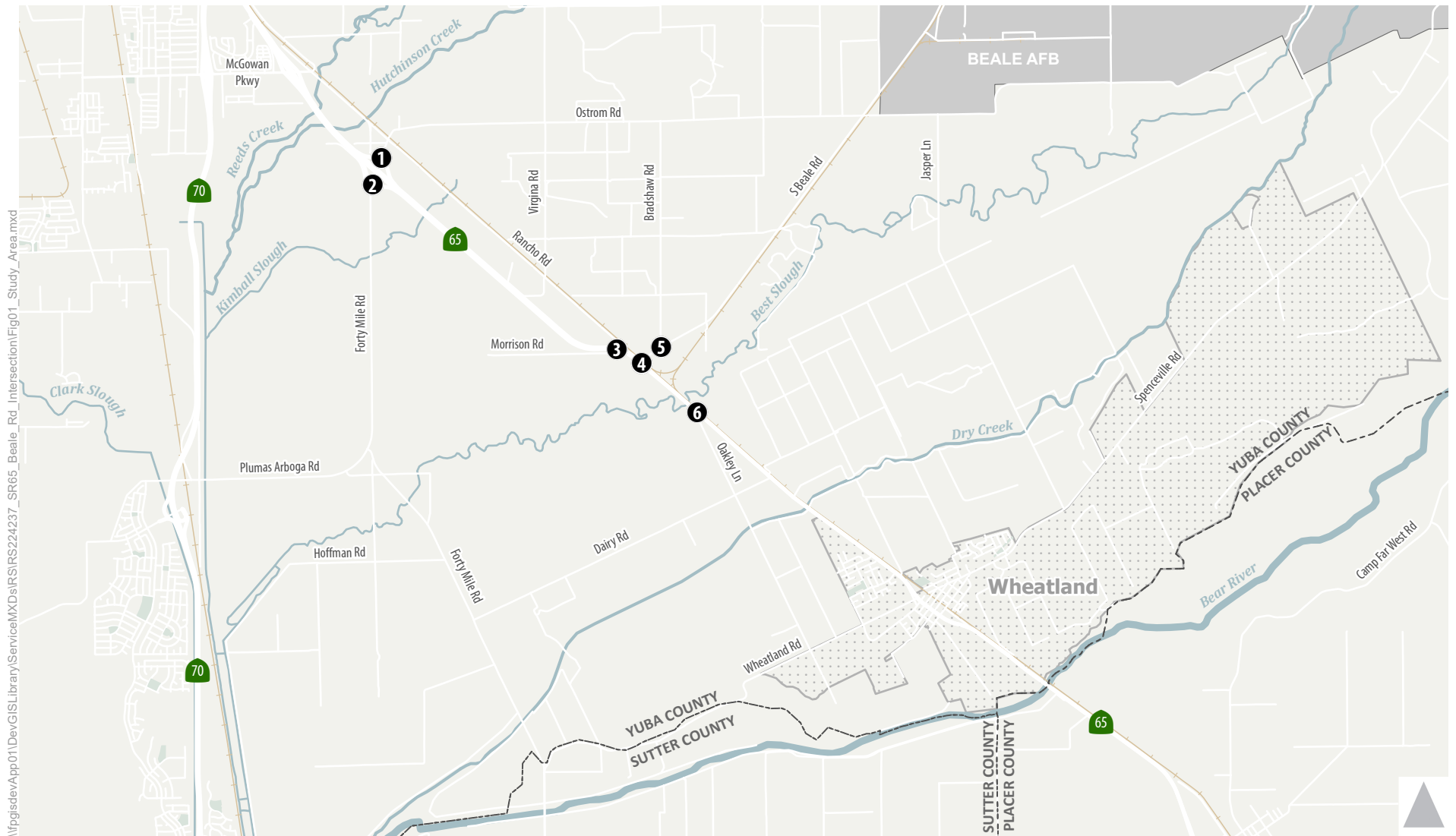
The purpose of the project is to improve safety and operations at the SR 65/South Beale Road intersection in Yuba County.

1.2 Study Area

The SR 65/South Beale Road intersection is located in southern Yuba County between the city of Wheatland and the Olivehurst community. **Figure 1** shows the study area. The study roadways are described below.

SR 65 is a regional highway/freeway that connects the Marysville/Yuba City area to the north with the Roseville/Rocklin area in Placer County to the south. This section of SR 65 connects SR 70 in Olivehurst with I-80 in Roseville. The highway varies from a six-lane freeway to a two-lane conventional highway. At the South Beale Road intersection, SR 65 is a four-lane divided highway with a posted speed of 65 miles per hour (mph). South of South Beale Road, the highway narrows to two lanes with a 55-mph speed limit. About one-quarter mile to the north, SR 65 intersects with Morrison Road/Rancho Road. North of this intersection, SR 65 becomes a four-lane freeway with an interchange at Forty Mile Road.

South Beale Road is a rural, two-lane road that connects SR 65 to Beale Air Force Base. It serves as the primary access to and from the south for the air force base. The SR 65/South Beale Road intersection features stop control on the South Beale Road approach. The roadway has an at-grade crossing of the Union Pacific Railroad about 50 feet east of SR 65. The speed limit is 55 mph. The road has 12-foot lanes with unpaved shoulders.



1 Study Intersection

Figure 1





SR 65/South Beale Road Intersection and Railroad Crossing

Forty Mile Road is a rural, north-south road that connects SR 65 to the north with Sutter County to the south at Wheatland Road/Pleasant Grove Road. Forty Mile Road has four lanes between SR 65 and Plumas Arboga Road and provides access to the Hard Rock Hotel and Casino and the Toyota Amphitheatre. Forty Mile Road has a spread diamond (Type L-2) interchange at SR 65. The ramp terminal intersections have side street stop control.

Rancho Road is a rural, two-lane road that connects SR 65 in the south to McGowan Parkway to the north. The road is immediately west of the Union Pacific Railroad and provides access to agricultural and industrial parcels.

Morrison Road is an east-west rural local road that is mostly unpaved. It provides access to SR 65 for rural residential and agricultural parcels south and west of SR 65.

Bradshaw Road is a rural, north-south, two-lane road that connects South Beale Road to Ostrom Road and provides access to rural residential and agricultural parcels.

Oakley Lane is a rural, north-south, two-lane road that connects SR 65 to Wheatland Road and parcels further to the south. The road provides access to rural residential and agricultural parcels.

1.3 Study Locations

The following intersections and freeway segments were evaluated for the TEPA. These study locations are most likely to be affected by improvements to the SR 65/South Beale Road intersection.

Intersections

1. Forty Mile Road/SR 65 Northbound Ramps
2. Forty Mile Road/SR 65 Southbound Ramps
3. SR 65/Rancho Road/Morrison Road
4. SR 65/South Beale Road
5. South Beale Road/Bradshaw Road

6. SR 65/Oakley Lane

Freeway Segments

- Northbound SR 65 from Rancho Road/Morrison Road to Forty Mile Road
- Northbound SR 65 Off-ramp to Forty Mile Road
- Northbound SR 65 Off-ramp to On-ramp at Forty Mile Road
- Northbound SR 65 On-ramp from Forty Mile Road
- Northbound SR 65 from Forty Mile Road to McGowan Parkway
- Southbound SR 65 from McGowan Parkway to Forty Mile Road
- Southbound SR 65 Off-ramp to Forty Mile Road
- Southbound SR 65 Off-ramp to On-ramp at Forty Mile Road
- Southbound SR 65 On-ramp from Forty Mile Road
- Southbound SR 65 from Forty Mile Road to Rancho Road/Morrison Road

1.4 Data Sources and Reference Documents

The following data sources were used in the preparation of this document.

- *Recology Ostrom Road Projects EIR*, Yuba County, May 2018
- *South Yuba Transportation Improvement Authority Comprehensive Implementation Strategy*, Dokken Engineering, August 2021
- *State Route 65 Corridor System Management Plan*, Caltrans, 2009
- *SYTIA CIS Projects Assessment*, Fehr & Peers, June 2021
- *Yuba County 2030 General Plan*, June 2011

2. Analysis Methodology

This chapter describes the data collection and analysis methods used to analyze the transportation facilities.

2.1 Data Collection

2.1.1 Traffic Volume

According to the Project Development Procedures Manual, “preliminary traffic engineering studies should be limited to an assessment of readily available information and data, and macro-level analysis and evaluation.” As a result, intersection turning movement data was taken from the traffic analysis conducted for the *Recology Ostrom Road Projects EIR*. This project collected AM and PM peak hour traffic counts at five of the six study intersections in January 2016. For the SR 65 intersection at Rancho Road/Morrison Road, turning volumes were estimated for analysis purposes in this study.

Table 1 lists the peak hour factor (PHF) and heavy vehicle percentage for the study intersections for the AM and PM peak hours. The January 2016 traffic counts only collected heavy vehicle volumes at SR 65/South Beale Road. At SR 65 intersections adjacent to South Beale Road, the same heavy vehicle percentage was used. Elsewhere, the *Highway Capacity Manual* (HCM) recommended default value of 3 percent was used for the AM peak hour. Since the PM peak hour heavy vehicle percentage is usually lower than the AM peak hour percentage, a value of 2 percent was used. No bicycle or pedestrian count data is available, but no bicycles or pedestrians were observed during site visits. For the freeway analysis, the PHF and heavy vehicle percentage from the SR 65/South Beale Road intersection were used.

Table 1: Intersection Peak Hour Characteristics

Intersection	Peak Hour Factor		Heavy Vehicle Percentage ¹	
	AM	PM	AM	PM
1. Forty Mile Rd/SR 65 NB Ramps	0.82	0.94	3%	2%
2. Forty Mile Rd/SR 65 SB Ramps	0.84	0.93	3%	2%
3. SR 65/Rancho Rd/Morrison Rd ²	0.88	0.97	5%	2%
4. SR 65/S Beale Rd	0.88	0.97	5%	2%
5. S Beale Rd/Bradshaw Rd	0.89	0.92	3%	2%
6. SR 65/Oakley Ln	0.88	0.97	5%	2%

Notes: 1. Truck volumes were only collected at SR 65/S Beale Rd. Adjacent SR 65 intersections use the same values. Elsewhere, a default of 3% for AM and 2% for PM is assumed at other intersections.
2. Values from the adjacent SR 65/S Beale Rd intersection were used since traffic counts were not collected at this intersection.

Figure 2 shows the existing weekday AM and PM peak hour traffic volumes, traffic control, and lane configurations at the study intersections.

Traffic volumes on SR 65 in the study area range from about 750 to 1,000 vehicles per hour in each direction. During the AM peak hour, 976 vehicles travel northbound in the single travel lane on SR 65 toward South Beale Road, with 207 turning right onto South Beale Road. Much of this right-turning traffic is destined for Beale Air Force Base. Although **Figure 2** shows the northbound approach consisting of two through lanes and a right-turn lane, it should be noted that the second through lane is added 900 feet upstream of the intersection and the right-turn lane is 100 feet in length.

During the PM peak hour, 189 vehicles turn left from South Beale Road onto southbound SR 65. A 150-foot acceleration lane is present within the SR 65/South Beale Road intersection to accommodate this movement. This intersection is situated just south of a horizontal curve along SR 65. Just south of the intersection, the two southbound through lanes merge into a single lane. Vehicles having turned left from South Beale Road merge into the inside lane in this same area.

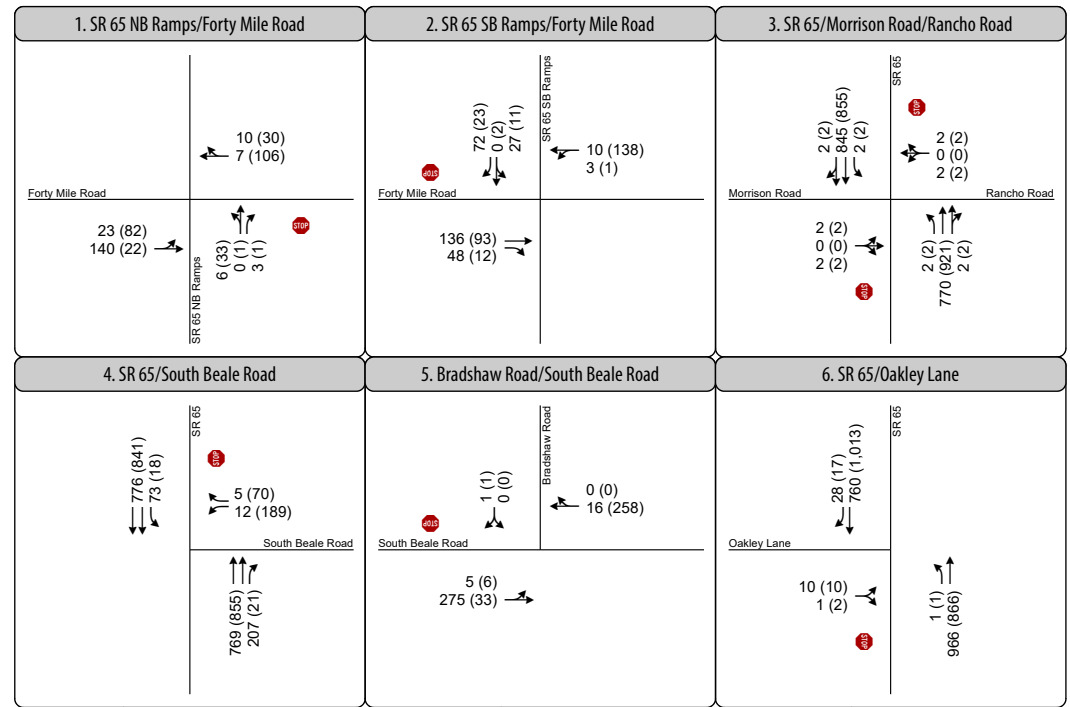
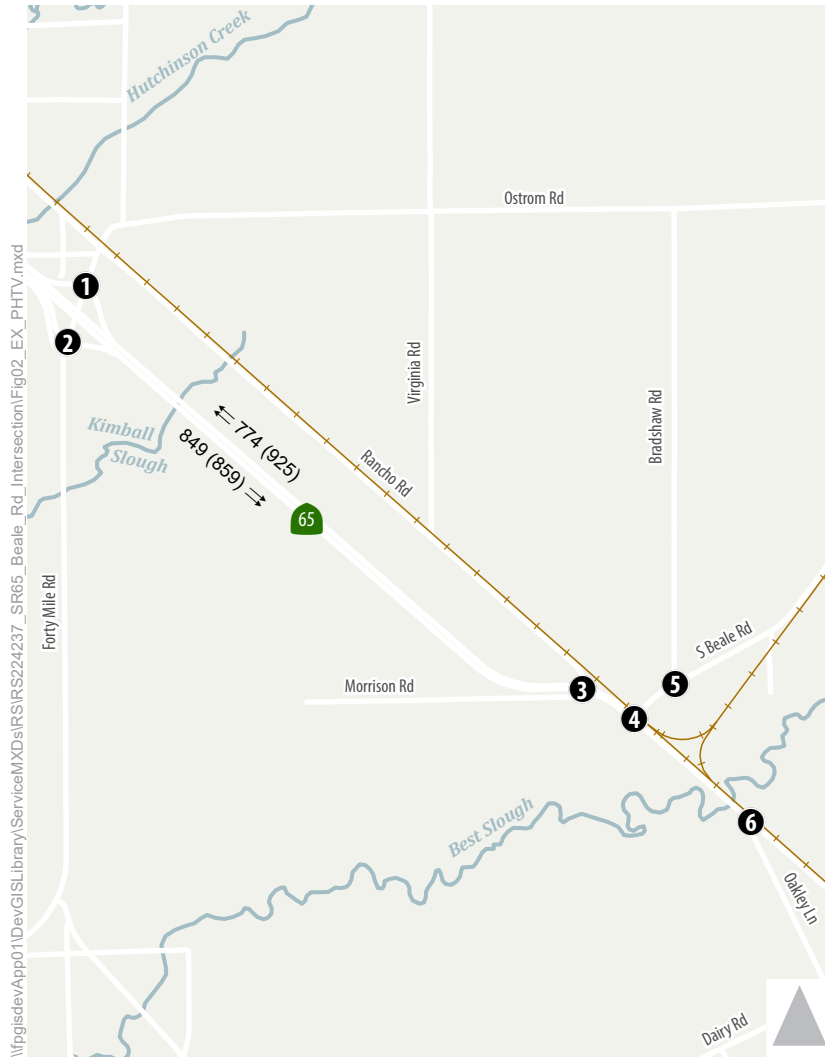
The Union Pacific Railroad operates freight trains on the railroad tracks that parallel SR 65 to the east. The at-grade crossing on South Beale Road was observed for five consecutive weekdays in January 2014 as reported in the *Recology Ostrom Road Projects EIR*. There was an average of 13.4 gate crossing activations per day with an average duration with the gates down of 1 minute and 43 seconds. The average gate crossing activations were 0.6 during the AM peak hour and 0.8 during the PM peak hour.

2.1.2 Traffic Volume Comparison

Caltrans provided more recent intersection turning movement volumes for two study intersections: SR 65/Morrison Road/Rancho Road for Thursday, April 20, 2023, and SR 65/Oakley Lane for Wednesday, November 20, 2019. The newer traffic volumes are compared in the paragraphs below against the 2016 volume data used in the analysis.

At Morrison Road/Rancho Road, the 2023 traffic counts showed peak hour minor street turning volumes that varied from 0 to 8 vehicles per hour, with most movements at 0. The estimated volumes used in the analysis had 2 vehicles per hour for these movements. For the SR 65 through movements, the 2023 peak direction volumes were 204 vehicles per hour higher (southbound) during the AM peak hour and 94 vehicles per hour higher (northbound) during the PM peak hour. The 2016 to 2023 volume growth is 24 percent higher for the southbound AM peak hour and 10 percent higher for the northbound PM peak hour. The off-peak direction volumes were 60 to 70 vehicles per hour higher, which is about 6 percent growth.

At Oakley Lane, the 2019 traffic counts showed similar minor street volumes except from the southbound right turn. The AM peak hour volume increased from 28 to 111 vehicles per hour, and the PM peak hour volume increased from 17 to 48 vehicles per hour. For the SR 65 through movements, the southbound AM peak hour volume increased by 133 vehicles per hour (18 percent), but the PM peak hour volume decreased by 120 vehicles per hour (12 percent). The northbound AM peak hour volume was nearly unchanged (a decrease of 8 vehicles per hour), but the PM peak hour volume increased by 112 vehicles per hour (13 percent).



1 Study Intersection

- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign

Figure 2

Peak Hour Traffic Volumes
and Lane Configurations -
Existing Conditions



The 2019 and 2023 count data show expected growth in SR 65 traffic volumes with one exception which could be due to a non-recurrent event for the day of the count. Because older traffic count volumes were used for the basis of the traffic analysis presented in the TEPA, the intersection delay and freeway density values reported below are likely to be lower than if more recent count data were used. However, the relative difference between alternatives would be unchanged. As shown in Chapter 7, the ramp terminal intersections would have LOS D or better conditions, so an increase in traffic volumes would not change the recommended traffic control or the number of through lanes for South Beale Road/Morrison Road. Similarly, the SR 65 freeway would have LOS C or better conditions, so additional freeway improvements such as auxiliary lanes would not change.

2.1.3 Collisions

Caltrans provided collision data for the 3.5-mile segment of SR 65 from Oakley Lane to the Forty Mile Road overcrossing (YUB PM 3.456 to R6.884). **Table 2** shows the collision history for the five-year period from October 2018 to September 2023. Three of the 57 collisions that occurred in the five-year period were fatality-related collisions. Three other collisions included serious injuries to one or more people. Thirty-five of the 57 collisions involved only property damage. The fatality collision rate in the study area is higher than the statewide average for similar roadway facilities. However, the fatality and injury rate and total rate are lower than the respective statewide averages.

Table 2: Collision History – SR 65 from Oakley Ln to Forty Mile Rd

Collisions					Actual Collision Rate ¹			Statewide Average Collision Rate for Similar Facilities		
Fatal	Serious Injury	Other Injury	Property Damage	Total	Fatal	Fatal & Injury	Total	Fatal	Fatal & Injury	Total
3	3	16	35	57	<u>0.022</u>	0.16	0.42	0.012	0.21	0.58

Source: Caltrans TASAS Table B, May 20, 2024

Notes: 1. Collision rate is collisions per million vehicle miles.

Bold and underline font indicates an actual collision rate that is great than the average collision rate for a similar facility.

For the SR 65 collision data provided by Caltrans, common primary collision factors were failure to yield and improper turn (13 collisions each) and speeding (11 collisions). The other violations category was the most common (15 collisions). The most common collision types were hit object (19 collisions), rear end (15 collisions), and broadside (13 collisions).

2.2 Travel Demand Forecasting Methodology

The travel demand forecasts were prepared using the Yuba County travel demand model. This model was updated by Fehr & Peers in 2022/2023. The model has a 2022 base year and a 2042 cumulative year. The difference method forecasting process was used to forecast intersection turning movement volumes. In this



method, the difference in the model volume between the base year and cumulative year is added to the traffic count volume. Due to the planning level nature of this study, no adjustment was applied to account for the five-year difference between the 2016 traffic counts and 2021 base year.

To prepare the horizon year forecasts, an average annual growth rate of 1 percent per year was used to increase the 2042 cumulative year volumes to the horizon year 2050. Since the model includes a significant level of growth between 2022 to 2042 (an average of 3.3 percent per year for the PM peak hour volume on SR 65 at Forty Mile Road), maintaining this growth rate beyond 2042 was considered to produce unrealistically high traffic volumes. Opening year volumes were estimated using linear interpolation between the existing traffic counts and the horizon year forecasts. Due to the uncertainty inherent in the forecasting process, turning movement volumes were rounded to the nearest 10 vehicles per hour. The minimum turning movement volume was set to 5 vehicles per hour for the opening year 2030 and 10 vehicles per hour for the horizon year 2050. The initial traffic forecasts were also adjusted to balance the demand volumes between adjacent intersections: for example, the ramp terminal intersections at the SR 65 interchanges.

The roadway network for the cumulative year travel demand model includes the following planned projects.

- A two-lane East Wheatland Expressway that would extend from SR 65 near South Beale Road, bypass Wheatland to the east, and reconnect with SR 65 at Riosa Road
- The extension of Morrison Road from SR 65 to Forty Mile Road
- Phase 2 of the SR 70/Plumas Lake Boulevard interchange that would extend Plumas Lake Boulevard to the east, over the railroad tracks, and connect with Plumas Arboga Road
- The planned SR 65/South Beale Road/Morrison Road interchange

For opening year 2030, the East Wheatland Expressway and Morrison Road extension are not expected to be completed yet and were therefore not assumed in place.

The peak hour factor and heavy vehicle percentages from existing conditions were applied to the opening year 2030 and horizon year 2050 conditions. Although no pedestrians and bicycles were observed for existing conditions, the future conditions analysis assumes at least one pedestrian per hour at signalized intersections to account for the effect of pedestrian signal phases on intersection operations.

2.3 Operations Analysis Methodology

The study intersections and freeway segments were analyzed using the procedures and methodologies from the *Highway Capacity Manual, 7th Edition* (Transportation Research Board, 2022). The planning-level HCM methodology is appropriate for the TEPA traffic analysis. Traffic operations for intersections were analyzed under AM and PM peak hours using Synchro 11 traffic analysis software, which applies the HCM procedures. However, the addition of the capacity adjustment factors for connected and automated vehicles in the 7th edition does not apply to this analysis. The freeway mainline and ramp junctions were evaluated using a spreadsheet to apply the HCM analysis procedures.

The HCM uses level of service (LOS) as a measure of effectiveness. LOS is a qualitative description of traffic operating conditions that assigns a letter rating from A (the best) to F (the worst), with E representing “at-capacity” operations. When volumes exceed capacity, stop-and-go conditions result, and operations are designated as LOS F. These ratings represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. The descriptions of letter ratings and delay thresholds for signalized and unsignalized intersections are provided in **Table 3**. For unsignalized intersections with uncontrolled movements, the intersection LOS is determined by the movement with the highest delay.

Table 3: Intersection LOS Thresholds

LOS	Description	Delay (seconds/vehicle)	
		Signalized	Unsignalized
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	< 10	< 10
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10 to 20	> 10 to 15
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20 to 35	> 15 to 25
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop, and individual cycle failures are noticeable.	> 35 to 55	> 25 to 35
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55 to 80	> 35 to 50
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	> 80 or v/c > 1 ¹	> 50 or v/c > 1 ¹

Note: 1. Volume-to-capacity ratio (v/c) is greater than 1 (exceeds capacity).

Source: *Highway Capacity Manual, 7th Edition* (Transportation Research Board, 2022)

Freeway LOS is based on vehicle density expressed as passenger cars per mile per lane. The thresholds differ for basic freeway sections compared to sections with ramp junctions (merge and diverge) or weaving. **Table 4** describes the letter ratings and thresholds for freeway analysis segments.

Table 4: Freeway LOS Thresholds

LOS	Description	Density (vehicles/mile-lane)	
		Basic	Merge, Diverge & Weave
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver.	≤ 11	≤ 10
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	>11 to 18	>10 to 20
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	>18 to 26	>20 to 28
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	>26 to 35	>28 to 35
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	>35 to 45	>35 to 43
F	Represents a breakdown in flow.	>45 or $v/c > 1^1$	>43 or $v/c > 1^1$

Note: 1. Volume-to-capacity ratio (v/c) is greater than 1 (exceeds capacity)
The HCM does not provide an LOS E maximum density for merge and diverge segments. The value of 43 vehicles per mile per lane was used to match the LOS E maximum density for weave segments.

Source: *Highway Capacity Manual, 7th Edition* (Transportation Research Board, 2022)

The peak-hour density calculations provided in this report are consistent with the definitions from the HCM, which defines four freeway section types: basic, merge, diverge, and weave. Merge and diverge sections, which refer to the freeway ramp junctions, are defined as the freeway section 1,500 feet downstream of an on-ramp and upstream of an off-ramp, respectively. If a lane that starts or ends at a freeway ramp continues for longer than 1,500 feet, then the section is analyzed as a basic section instead of as a ramp junction. The density is measured over the two adjacent freeway through-lanes plus any auxiliary lanes. A weaving section occurs between a successive on-ramp and off-ramp pair connected by an auxiliary lane. Basic sections include all other freeway sections that are not included in a merge, diverge, or weave section. The densities at weave and basic sections are measured across all mixed-flow freeway lanes (including both through lanes and auxiliary lanes).

The intersection performance target is based on the *Yuba County 2030 General Plan* (June 2011) Policy CD16.3 as shown below.

On County roads in rural areas, Level of Service "D" shall be maintained, as feasible, during the PM peak hour.

The *State Route 65 Corridor System Management Plan* (Caltrans, 2009) identifies LOS C as the 20-year concept LOS on SR 65 north of South Beale Road, for which the concept facility is the existing four-lane

freeway. South of South Beale Road, the concept facility is a two-lane expressway, and the 20-year concept LOS is E. Therefore, this study uses LOS C as the performance target for the freeway analysis.

Based on these performance targets, a study intersection is deficient when the PM peak hour LOS is E or F, and a freeway study location is deficient when the AM or PM peak hour LOS is D, E, or F. Consistent with the California Environmental Quality Act (CEQA), traffic operational performance as measured by automobile LOS cannot be considered as a project impact for the environmental analysis.

3. Existing Conditions

This chapter presents the intersection and freeway operations in the study area for existing conditions. Additional details for the operational analysis performance are provided in **Appendix A**.

3.1 Intersection Operations

Intersection operations were analyzed for the AM and PM peak hours. The existing AM and PM peak hour intersection vehicle volumes and lane configurations are provided in **Figure 2**. **Table 5** shows the AM and PM peak hour intersection operations results for existing conditions.

Table 5: Intersection Operations – Existing Conditions

Intersection	Control	LOS / Delay	
		AM Peak Hour	PM Peak Hour
1. Forty Mile Rd/SR 65 NB Ramps	Side Street Stop	B / 10 (NBLT)	B / 11 (NBL)
2. Forty Mile Rd/SR 65 SB Ramps	Side Street Stop	A / 10 (SBLT)	B / 10 (SBL)
3. SR 65/Rancho Rd/Morrison Rd	Side Street Stop	D / 28 (EB)	D / 27 (WB)
4. SR 65/S Beale Rd	Side Street Stop	C / 22 (WBL)	<u>F / 50 (WBL)</u>
5. S Beale Rd/Bradshaw Rd	Side Street Stop	A / 8 (SB)	A / 10 (SB)
6. SR 65/Oakley Ln	Side Street Stop	C / 24 (EB)	C / 23 (EB)

Notes: Level of service and delay are shown with delay reported in seconds per vehicle. Bold and underline font indicate deficient LOS E or F conditions. For side street stop control, the level of service and delay are reported for the worst movement or approach with the worst movement noted in parentheses: for example, NBLT is northbound left/through movement.

During the AM peak hour, intersection operations are LOS D or better at the study intersections. The highest delay occurs at the SR 65/Rancho Road/Morrison Road intersection although the demand volume experiencing this delay is very low (estimated to be less than 5 vehicles per hour).

During the PM peak hour, the SR 65/South Beale Road intersection operates at LOS F conditions due to the high demand for the westbound left-turn movement. This traffic primarily originates at Beale Air Force Base and travels to the city of Wheatland or to Placer County and points south. The intersection design includes a southbound acceleration lane for the eastbound left-turn movement so that drivers can look for separate gaps in the northbound and southbound traffic to enter the highway. Delay would likely be higher than reported since the gate operations at the railroad crossing just east of the intersection is not included in this analysis. The other two SR 65 intersections operate at LOS C or D conditions due to high volumes on SR 65. The remaining three intersections have LOS B or better conditions.

3.2 Freeway Operations

Using the HCM methodology, peak hour freeway operations were analyzed. The existing AM and PM peak hour freeway volumes for northbound and southbound SR 65 south of Forty Mile Road are shown in **Figure 2**. SR 65 volumes for all scenarios are shown in **Appendix D. Table 6** shows the AM and PM peak hour LOS and average density under existing conditions.

Table 6: Freeway Operations – Existing Conditions

Corridor	Segment	Facility Type	AM Peak Hour	PM Peak Hour
Northbound SR 65	Rancho Rd to Forty Mile Rd	Basic	A / 7	A / 7
	Forty Mile Rd Off-ramp	Diverge	B / 11	B / 11
	Forty Mile Rd Off to On-ramp	Basic	A / 7	A / 7
	Forty Mile Rd On-ramp	Merge	B / 12	B / 13
	Forty Mile Rd to McGowan Pkwy	Basic	A / 7	A / 8
Southbound SR 65	McGowan Pkwy to Forty Mile Rd	Basic	A / 8	A / 7
	Forty Mile Rd Off-ramp	Diverge	B / 12	B / 11
	Forty Mile Rd Off to On-ramp	Basic	A / 7	A / 6
	Forty Mile Rd On-ramp	Merge	B / 12	B / 11
	Forty Mile Rd to Morrison Rd	Basic	A / 7	A / 7

Notes: Level of service and density are shown with density reported in passenger cars per lane per mile.

During both peak hours, the study freeway segments have LOS B or better conditions. The ramp junctions (on-ramp merge and off-ramp diverge) operate at LOS B, and the basic segments operate at LOS A.

3.3 Multimodal Facilities

This section discusses other transportation modes in the study area.

The Union Pacific Railroad operates freight trains on the railroad tracks that parallel SR 65 to the east. Field observations of a week showed that gate crossing activations sometimes occur during the peak hours: an average of 0.6 activations during the AM peak hour and 0.8 during the PM peak hour. When a train crosses during the peak hour, the average intersection delay would be higher than reported in **Table 5** due to delay caused by the crossing gates.

The existing bus service in the study area is provided by Yuba-Sutter Transit. The Wheatland Route travels on SR 65 between Marysville and Wheatland. Two round trip routes from Wheatland are available, one starting at 10:00 AM and one starting at 4:25 PM. The route also provides a reservation-based, demand-response service anywhere within a quarter mile of the route.



No bicycle or pedestrian facilities are provided at the study intersections. Given the rural character of the study area, no bicycle lanes or sidewalks exist along the study area roadways.

4. Project Alternatives

This section describes the project alternatives for the SR 65/South Beale Road Interchange.

4.1 No Build Alternative

Under this alternative, the existing facilities would remain unchanged except for other planned improvements. No planned improvements are expected to be completed prior to the opening year of 2030, so the study intersections and freeway segments would have the same traffic control and lane configurations as existing conditions.

By the horizon year of 2050, two planned improvements would affect traffic operations in the study area. Morrison Road will be extended from SR 65 west to Forty Mile Road. This new connection would change travel patterns to and from destinations on Forty Mile Road such as the Hard Rock Casino and adjacent planned land uses.

The other planned improvement is the East Wheatland Expressway, which would be a two-lane limited access, local road that would start at the current end of the SR 65 freeway north of Morrison Road/Rancho Road and extend south and east with a grade-separated crossing of the current SR 65 and the Union Pacific Railroad between South Beale Road and Oakley Lane. The expressway would then turn south and reconnect with the existing SR 65 in Placer County near Sheridan. The specific alignment of the East Wheatland Expressway has not been determined. In this study, the East Wheatland Expressway is assumed to be signed as SR 65, and the current SR 65 alignment is assumed to be renamed as Rancho Road.

To maintain connections in the study area, the East Wheatland Expressway project is assumed to construct the following improvements.

- An at-grade signalized intersection on SR 65 at Morrison Road that would include a connection easterly to Rancho Road.
- New traffic signals at the Rancho Road/Morrison Road and Rancho Road/South Beale Road intersections.

Appendix D provides the roadway layout from Synchro for the SR 65, Morrison Road, and Rancho Road intersections for the No Build Alternative under horizon year 2050 conditions.

4.2 Build Alternative 1

Figure 3 shows the conceptual design layout for Build Alternative 1. South Beale Road would be realigned to the north starting about 0.8 miles east of Bradshaw Road. The new roadway would head west, intersect at-grade with Bradshaw Road, and then turn southwest to cross over (i.e., grade separation) the Union Pacific Railroad tracks, Rancho Road, and SR 65 before connecting with Morrison Road. A quadrant roadway,

or jughandle, would be constructed to connect South Beale Road to Rancho Road (for convenience, the jughandle roadway is called Beale Rancho Road in this study). At SR 65, a spread diamond interchange (Type L-2) would be built. The at-grade intersections on SR 65 at Morrison Road/Rancho Road and at the old alignment of South Beale Road would be closed. The at-grade railroad crossing on South Beale Road would also be closed. All surface street roadways described above would consist of one lane in each direction. SR 65 within the new interchange vicinity would be a four-lane freeway. Under opening year 2030 conditions, all intersections would be controlled by stop signs.

Under horizon year 2050 conditions, Build Alternative 1 would be the same as opening year 2030 conditions with the following exceptions:

- East Wheatland Expressway would be constructed as described above including reconstruction of the old SR 65 alignment to be an extension of Rancho Road.
- New traffic signals would be constructed at the two new interchange ramp intersections and the Beale Rancho Road intersections at Rancho Road and South Beale Road.

A variation of Build Alternative 1 is also being considered where the SR 65 interchange would be a partial cloverleaf (Type L-7/L-8). The loop ramps would be located north of South Beale Road to avoid modifying the current SR 65 alignment under the initial phase. The ramp terminal intersections would be located in about the same place and would have the same entering demand volumes as Build Alternative 1; therefore, it will likely have similar operational performance. The safety performance is expected to be worse than the spread diamond interchange due to the loop off-ramp. A more detailed intersection and safety analysis for this option was deferred to the PA&ED phase.

4.3 Build Alternative 2

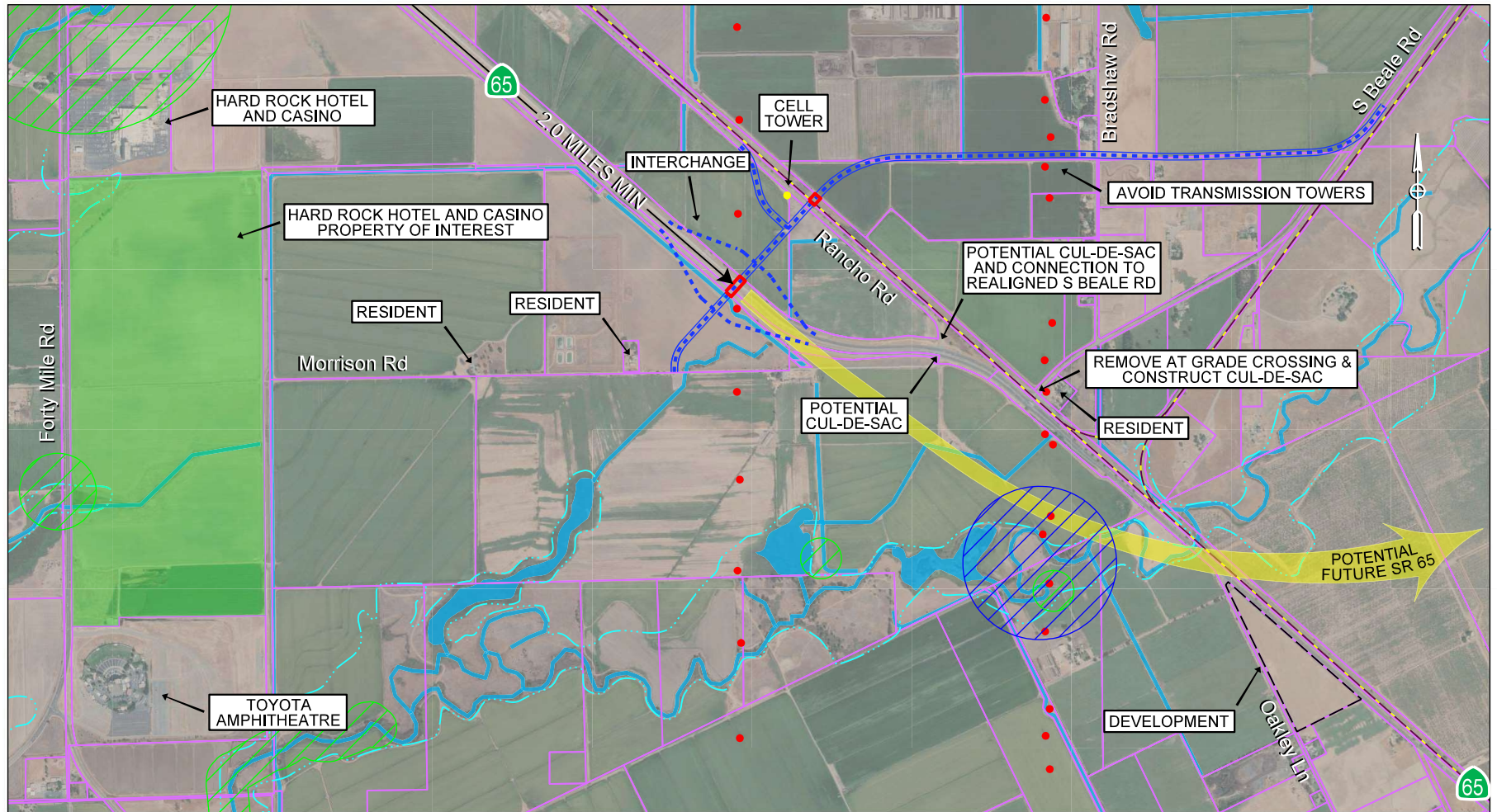
Figure 4 shows the conceptual design layout for Build Alternative 2. South Beale Road would be realigned to the north starting about 700 feet east of SR 65. The new roadway would cross over (i.e., grade separation) the Union Pacific Railroad tracks and Rancho Road and connect with a new interchange at a realigned SR 65. SR 65 would be extended south through the new interchange before curving east and south to rejoin the current SR 65 alignment near Oakley Lane. Existing SR 65 between the extension and Rancho Road would be abandoned. The end of South Beale Road would connect to Morrison Road via a roadway that would be constructed west of the SR 65 realignment.

The new SR 65 interchange would have a spread diamond (Type L-2) configuration in the southbound direction and a partial cloverleaf (Type L-7) configuration in the northbound direction. A quadrant roadway (Beale Rancho Road) would be constructed to connect South Beale Road to Rancho Road. Due to limited spacing between the SR 65 interchange and the railroad overcrossing, Beale Rancho Road would intersect South Beale Road at the northbound SR 65 ramp terminal intersection. The existing at-grade railroad crossing on South Beale Road would be closed. All surface street roadways described above would consist of one lane in each direction. SR 65 within the new interchange vicinity would be a four-lane freeway. Under opening year 2030 conditions, all intersections would be controlled by stop signs.

One major difference between Build Alternatives 1 and 2 is the alignment of SR 65. While the more southerly location of the new interchange under Build Alternative 2 necessarily requires that SR 65 be constructed in its ultimate locations (to accommodate the future East Wheatland Expressway), Build Alternative 1 maintains the existing SR 65 alignment south of the new interchange.

Under horizon year 2050 conditions, Build Alternative 2 would be the same as opening year 2030 conditions with the following exceptions:

- East Wheatland Expressway would be constructed as described above including reconstruction of the old SR 65 alignment to be an extension of Rancho Road.
- New traffic signals would be constructed at the two new interchange ramp intersections and the Beale Rancho Road intersection at Rancho Road.
- Additional widening would be constructed at the SR 65 Northbound Ramps/South Beale Road/Beale Rancho Road to accommodate horizon year 2050 traffic volumes.



LEGEND:

- PROPOSED PROJECT - ULTIMATE
- STRUCTURES
- RIGHT OF WAY/PARCEL LINES
- TRANSMISSION TOWER
- EXISTING RAILROAD

- JURISDICTIONAL WATERS
- FEMA FLOOD BOUNDARY
- TRAFFIC SIGNAL
- FEDERALLY LISTED SPECIES



STATE LISTED SPECIES

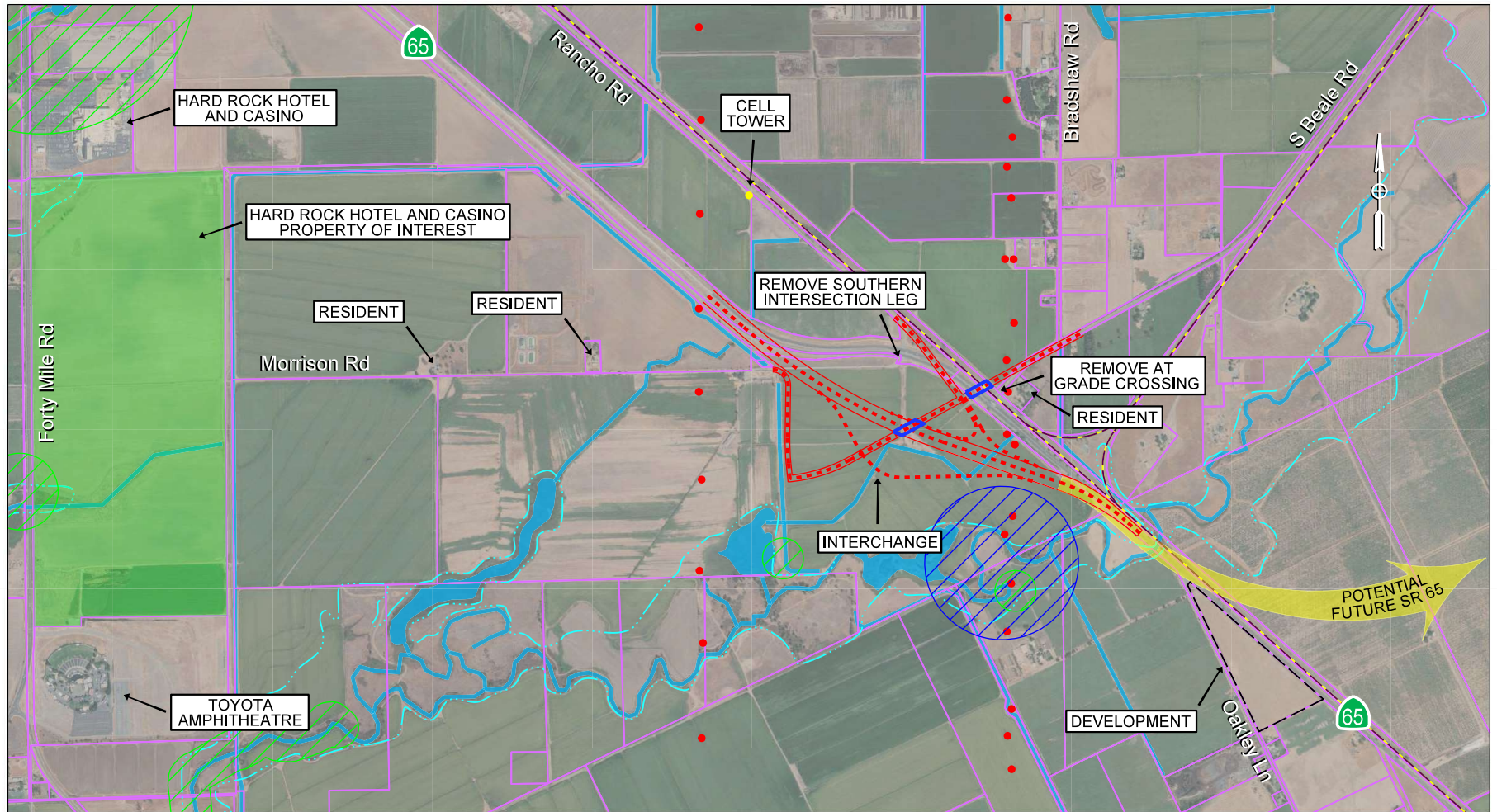
DE DOKKEN
ENGINEERING
110 BLUE RAVINE ROAD
SUITE 200
FOLSOM, CA 95630
(916) 858-0642

MARCH 2024

PROJECT
SR/65 SOUTH BEALE ROAD INTERCHANGE
EXHIBIT
NORTH ALTERNATIVE A - ULTIMATE PROJECT



Figure 3
Alternative 1 Build Scenario



LEGEND:

- PROPOSED PROJECT - ULTIMATE
- STRUCTURES
- RIGHT OF WAY/PARCEL LINES
- TRANSMISSION TOWER
- EXISTING RAILROAD

- JURISDICTIONAL WATERS
- FEMA FLOOD BOUNDARY
- TRAFFIC SIGNAL
- FEDERALLY LISTED SPECIES



STATE LISTED SPECIES



MARCH 2024

PROJECT	
SR/65 SOUTH BEALE ROAD INTERCHANGE	
EXHIBIT	
CENTRAL ALTERNATIVE - ULTIMATE PROJECT	



Figure 4
Alternative 2 Build Scenario

5. Opening Year (2030) Conditions

This chapter presents the intersection and freeway operations in the study area for opening year 2030 conditions. Additional details for the operational analysis performance are provided in **Appendix B**.

The opening year 2030 traffic volume forecasts, traffic control, and lane configurations are provided in **Figures 5, 6, and 7** for the project alternatives.

5.1 Intersection Operations

Intersection operations were analyzed for the AM and PM peak hours. **Table 7** shows the AM and PM peak hour intersection operations results for opening year 2030 conditions.

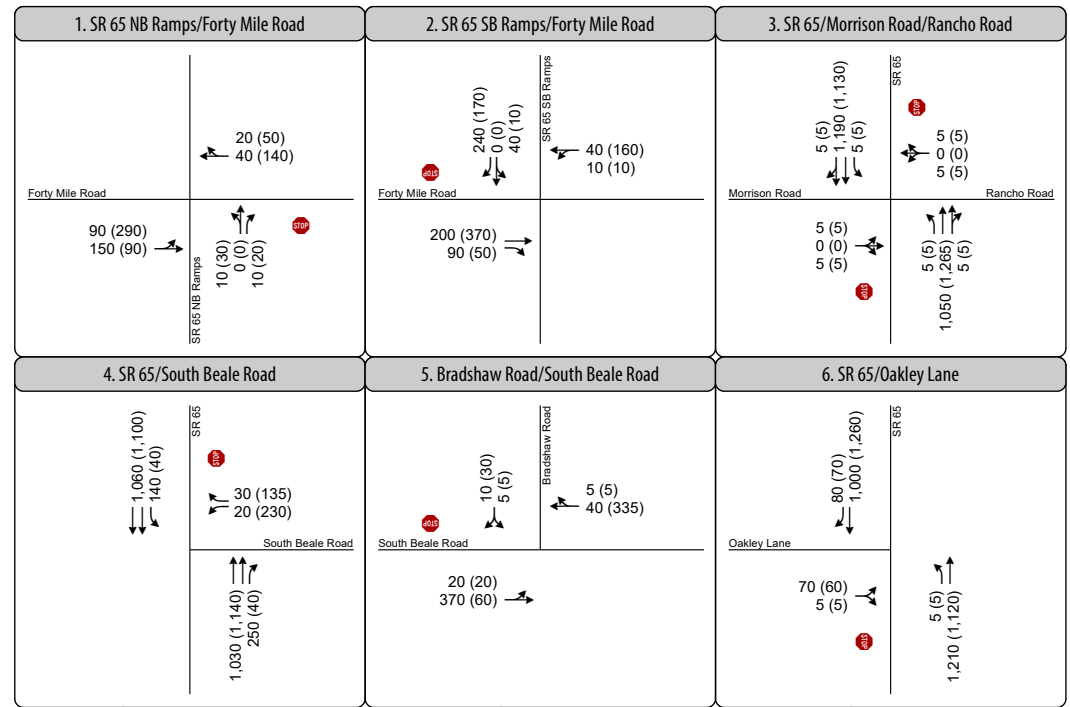
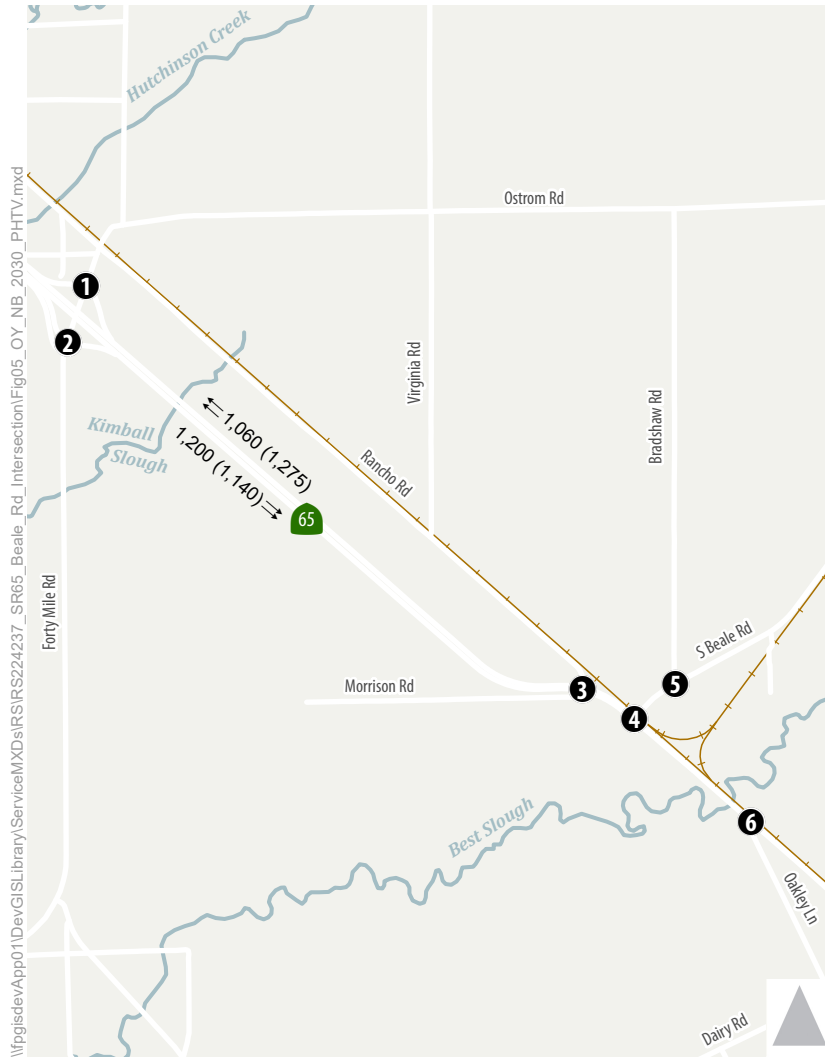
Table 7: Intersection Operations – Opening Year 2030 Conditions

Intersection	Control	No Build		Alternative 1		Alternative 2	
		AM	PM	AM	PM	AM	PM
1. Forty Mile Rd/SR 65 NB Ramps	Side Street Stop	B / 12 (NBLT)	C / 22 (NBLT)	B / 12 (NBLT)	C / 22 (NBLT)	B / 12 (NBLT)	C / 22 (NBLT)
2. Forty Mile Rd/SR 65 SB Ramps	Side Street Stop	B / 11 (SBLT)	B / 13 (SBLT)	B / 11 (SBLT)	B / 13 (SBLT)	B / 11 (SBLT)	B / 13 (SBLT)
3. SR 65/Morrison Rd/Rancho Rd ¹	Side Street Stop	<u>F / 73 (EB)</u>	<u>F / 62 (WB)</u>	A / 10 (SBLT)	B / 14 (SBLT)	A / 10 (SBLT)	B / 14 (SBLT)
4. SR 65/S Beale Rd ²	Side Street Stop	E / 39 (WBL)	<u>F / 243 (WBL)</u>	B / 11 (NBR)	B / 11 (NBL)	C / 16 (SBL)	B / 15 (NBL)
5. S Beale Rd/Bradshaw Rd	Side Street Stop	A / 10 (SB)	B / 11 (SB)	B / 12 (NB)	B / 12 (NB)	A / 9 (SB)	B / 11 (SB)
6. SR 65/Oakley Ln	Side Street Stop	<u>F / 69 (EB)</u>	<u>F / 51 (EB)</u>	<u>F / 69 (EB)</u>	<u>F / 51 (EB)</u>	<u>F / 69 (EB)</u>	<u>F / 51 (EB)</u>
7. Rancho Rd/Beale Rancho Rd	Side Street Stop	n/a	n/a	A / 9 (EBL)	A / 9 (EBL)	A / 9 (EBL)	A / 9 (EBL)
8. S Beale Rd/Beale Rancho Rd	Side Street Stop	n/a	n/a	B / 14 (SBL)	B / 12 (SBL)	n/a	n/a

Notes: Level of service and delay are shown with delay reported in seconds per vehicle. Bold and underline font indicate deficient conditions. For side street stop control, the level of service and delay are reported for the worst movement or approach with the worst movement noted in parentheses.

1. For Alternatives 1 & 2, this intersection is SR 65 Southbound Ramps/Morrison Rd.

2. For Alternative 1, this intersection is SR 65 Northbound Ramps/S Beale Rd. For Alternative 2, this intersection is SR 65 Northbound Ramps/S Beale Rd/Beale Rancho Rd.



1 Study Intersection

- Turn Lane
- AM (PM) Peak Hour Traffic Volume
- Traffic Signal
- Stop Sign

Figure 5
Peak Hour Traffic Volumes
and Lane Configurations -
Opening Year 2030 No Build Alternative



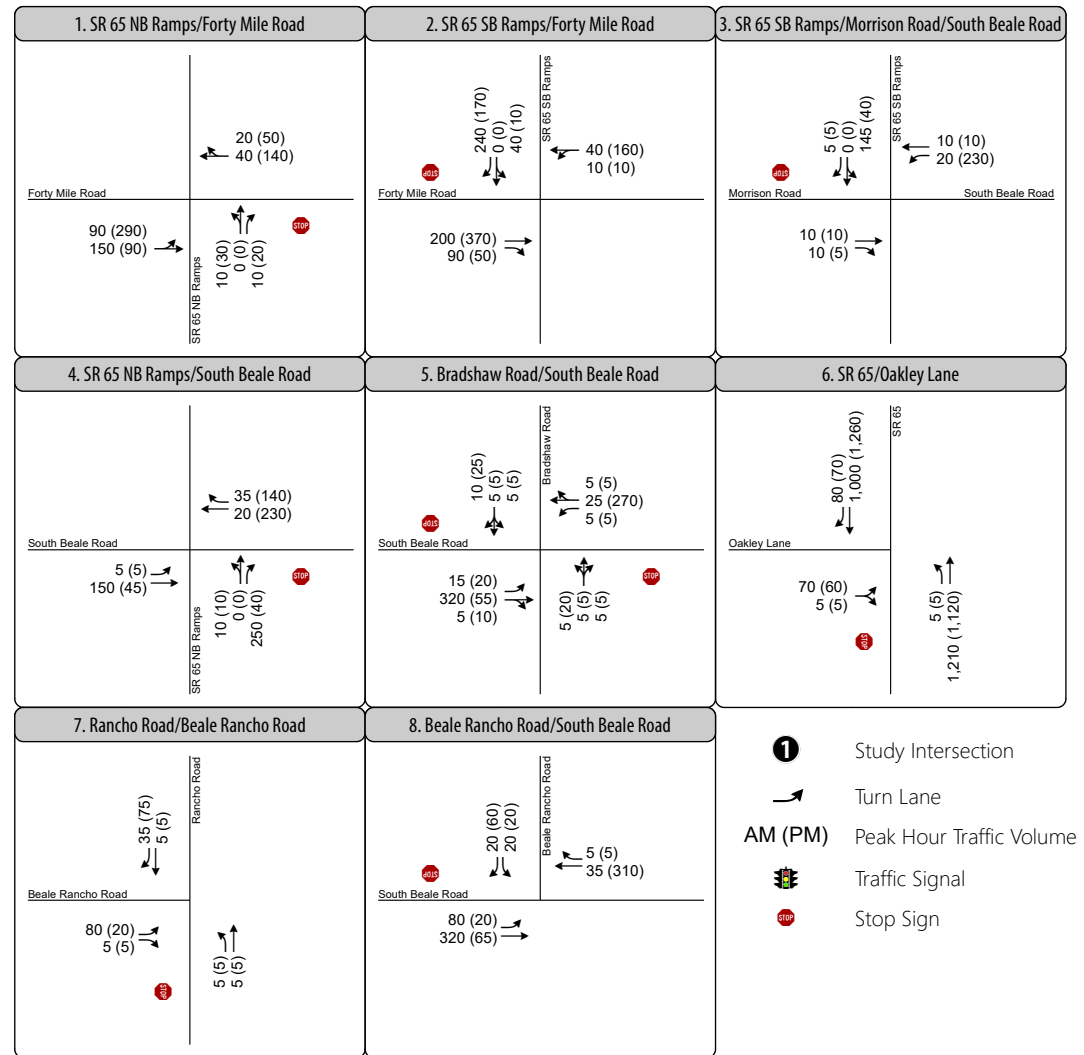
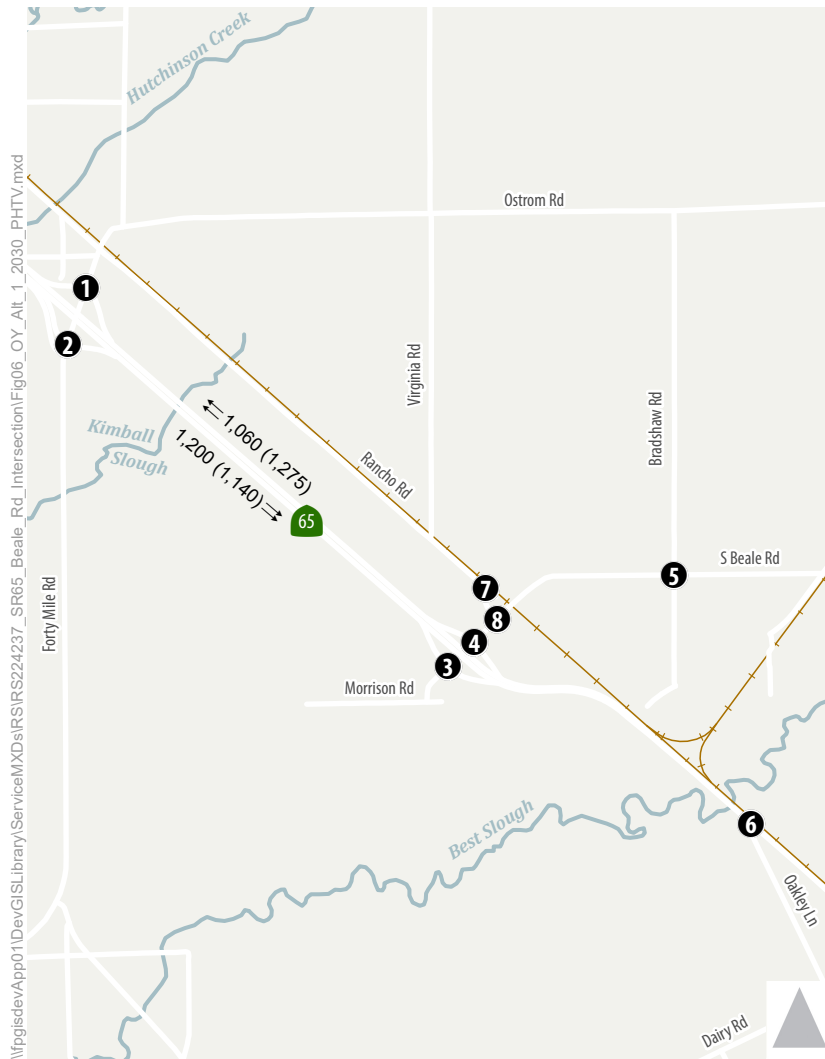


Figure 6
Peak Hour Traffic Volumes
and Lane Configurations -
Opening Year 2030 Build Alternative 1



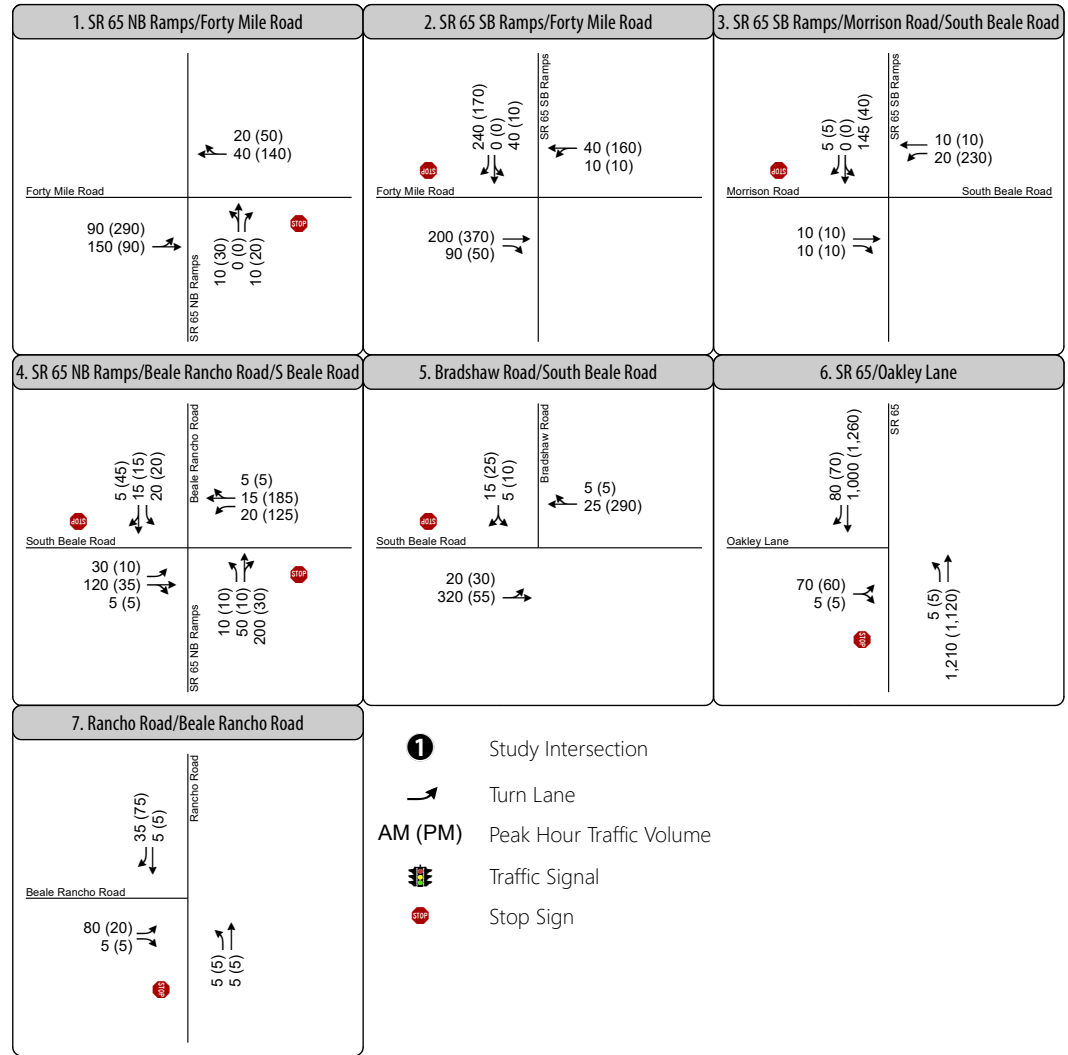
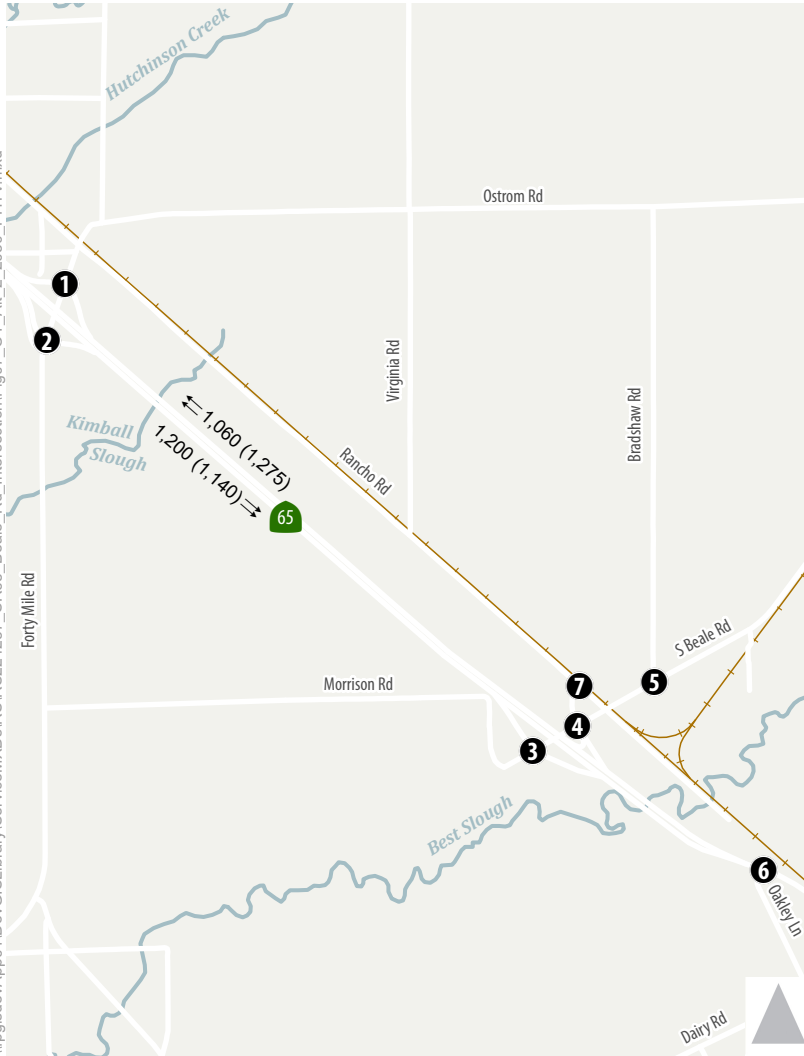


Figure 7
Peak Hour Traffic Volumes
and Lane Configurations -
Opening Year 2030 Build Alternative 2



Under opening year 2030 conditions with the No Build Alternative, increased traffic on SR 65 would degrade AM peak hour intersection operations from LOS D or better (under existing conditions) to LOS F at two intersections. During the PM peak hour, LOS F operations would be expected at the SR 65/South Beale Road and SR 65/Oakley Lane intersections. This would be an increase of two deficient intersections compared to existing conditions. The other study intersections would operate with LOS C or better conditions during the peak hours.

The build alternatives would have similar operations under opening year 2030. The proposed SR 65/South Beale Road interchange, quadrant roadway, and roadway realignments would improve intersection operations to LOS B or better for Alternative 1 and LOS C or better for Alternative 2. The four-legged SR 65 Northbound Ramps/South Beale Road/Beale Rancho Road intersection in Alternative 2 would have higher average delay compared to the three-legged SR 65 Northbound Ramps/South Beale Road intersection in Alternative 1. Since no improvements are proposed at SR 65/Oakley Lane, this intersection would continue to have LOS F conditions, which is the same as for the No Build Alternative.

5.2 Freeway Operations

Using the HCM methodology, peak hour freeway operations were analyzed. **Table 8** shows the AM and PM peak hour LOS and average density under opening year 2030 conditions. At the SR 65/Forty Mile Road interchange, the opening year 2030 freeway volumes would be the same under all alternatives. As a result, the analysis results are the same for all alternatives. Similar to existing conditions, the analysis locations would have LOS B or better conditions during both peak hours. Under the build alternatives, freeway operations at the SR 65/South Beale Road interchange would also have LOS B or better conditions.

Table 8: Freeway Operations – Opening Year 2030 Conditions

Direction	Segment	Facility Type	No Build Alternative		Alternatives 1 and 2	
			AM	PM	AM	PM
Northbound SR 65	Rancho Rd to Forty Mile Rd	Basic	A / 11	A / 9	n/a	n/a
	Oakley Ln to S Beale Rd	Basic	n/a	n/a	A / 11	A / 9
	S Beale Rd Off-ramp	Diverge	n/a	n/a	B / 16	B / 14
	S Beale Rd Off to On-ramp	Basic	n/a	n/a	A / 9	A / 9
	S Beale Rd On-ramp	Merge	n/a	n/a	B / 14	B / 14
	S Beale Rd to Forty Mile Rd	Basic	n/a	n/a	A / 9	A / 10
	Forty Mile Rd Off-ramp	Diverge	B / 14	B / 15	B / 14	B / 15
	Forty Mile Rd Off to On-ramp	Basic	A / 9	A / 9	A / 9	A / 9
	Forty Mile Rd On-ramp	Merge	B / 15	B / 17	B / 15	B / 17
	Forty Mile Rd to McGowan Pkwy	Basic	A / 10	B / 12	A / 10	B / 12
Southbound SR 65	McGowan Pkwy to Forty Mile Rd	Basic	B / 12	A / 10	B / 12	A / 10
	Forty Mile Rd Off-ramp	Diverge	B / 17	B / 14	B / 17	B / 14
	Forty Mile Rd Off to On-ramp	Basic	A / 9	A / 8	A / 9	A / 8
	Forty Mile Rd On-ramp	Merge	B / 16	B / 14	B / 16	B / 14
	Forty Mile Rd to Morrison Rd	Basic	A / 10	A / 9	A / 10	A / 9
	Morrison Rd Off-ramp	Diverge	n/a	n/a	B / 15	B / 13
	Morrison Rd Off to On-ramp	Basic	n/a	n/a	A / 6	A / 8
	Morrison Rd On-ramp	Merge	n/a	n/a	B / 14	B / 15
	Morrison Rd to Oakley Ln	Basic	n/a	n/a	A / 9	A / 10

Notes: Level of service and density are shown with density reported in passenger cars per lane per mile.

6. Horizon Year (2050) Conditions

This chapter presents the intersection and freeway operations in the study area for horizon year 2050 conditions. Additional details for the operational analysis performance are provided in **Appendix C**.

The horizon year 2050 traffic volume forecasts, traffic control, and lane configurations are provided in **Figures 8, 9, and 10** for the project alternatives.

6.1 Intersection Operations

Intersection operations were analyzed for the AM and PM peak hours. **Table 9** shows the AM and PM peak hour intersection operations results for horizon year 2050 conditions.

Table 9: Intersection Operations – Horizon Year 2050 Conditions

Intersection	No Build			Alternative 1			Alternative 2		
	Control	AM	PM	Control	AM	PM	Control	AM	PM
1. Forty Mile Rd/SR 65 NB Ramps	Side Street Stop	<u>D / 27 (NBLT)</u>	<u>F / >300 (NBLT)</u>	Side Street Stop	<u>D / 27 (NBLT)</u>	<u>F / >300 (NBLT)</u>	Side Street Stop	<u>D / 27 (NBLT)</u>	<u>F / >300 (NBLT)</u>
2. Forty Mile Rd/SR 65 SB Ramps	Side Street Stop	C / 22 (SBR)	<u>D / 31 (SBR)</u>	Side Street Stop	C / 22 (SBR)	<u>D / 31 (SBR)</u>	Side Street Stop	C / 22 (SBR)	<u>D / 31 (SBR)</u>
3. SR 65/Morrison Rd ¹	Signal	<u>D / 45</u>	<u>E / 57</u>	Signal	C / 30	C / 23	Signal	C / 30	C / 23
4. Rancho Rd/ S Beale Rd ²	Signal	B / 15	B / 13	Signal	B / 15	B / 13	Signal	D / 36	D / 45
5. S Beale Rd/ Bradshaw Rd	Side Street Stop	A / 10 (SB)	B / 13 (SB)	Side Street Stop	B / 15 (NB)	C / 21 (NB)	Side Street Stop	B / 10 (SB)	B / 13 (SB)
6. Rancho Rd/Oakley Ln	Side Street Stop	<u>F / >300 (EB)</u>	<u>F / 74 (EB)</u>	Side Street Stop	<u>F / >300 (EB)</u>	<u>F / 74 (EB)</u>	Side Street Stop	<u>F / >300 (EB)</u>	<u>F / 74 (EB)</u>
7. Rancho Rd/ Morrison Rd ³	Signal	B / 14	B / 16	Signal	D / 53	C / 34	Signal	D / 53	C / 34
8. S Beale Rd/ Beale Rancho Rd	n/a	n/a	n/a	Signal	C / 30	D / 49	n/a	n/a	n/a

Notes: Level of service and delay are shown with delay reported in seconds per vehicle. Bold and underline font indicate deficient conditions. For side street stop control, the level of service and delay are reported for the worst movement or approach with the worst movement noted in parentheses.

1. For Alternatives 1 & 2, this intersection is SR 65 Southbound Ramps/Morrison Rd.

2. For Alternative 1, this intersection is SR 65 Northbound Ramps/S Beale Rd. For Alternative 2, this intersection is SR 65 Northbound Ramps/S Beale Rd/Beale Rancho Rd.

3. For Alternatives 1 & 2, this intersection is Rancho Rd/Beale Rancho Rd.

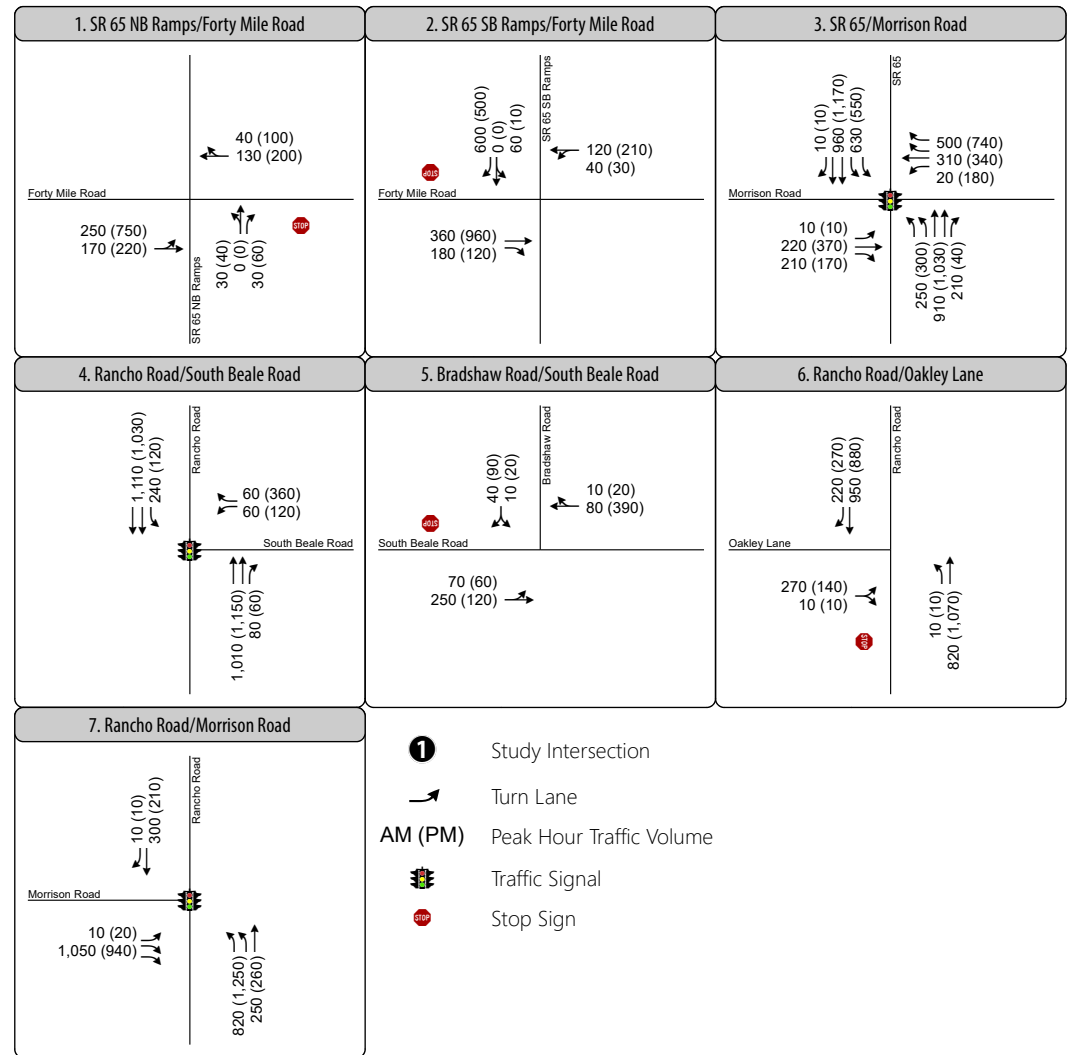
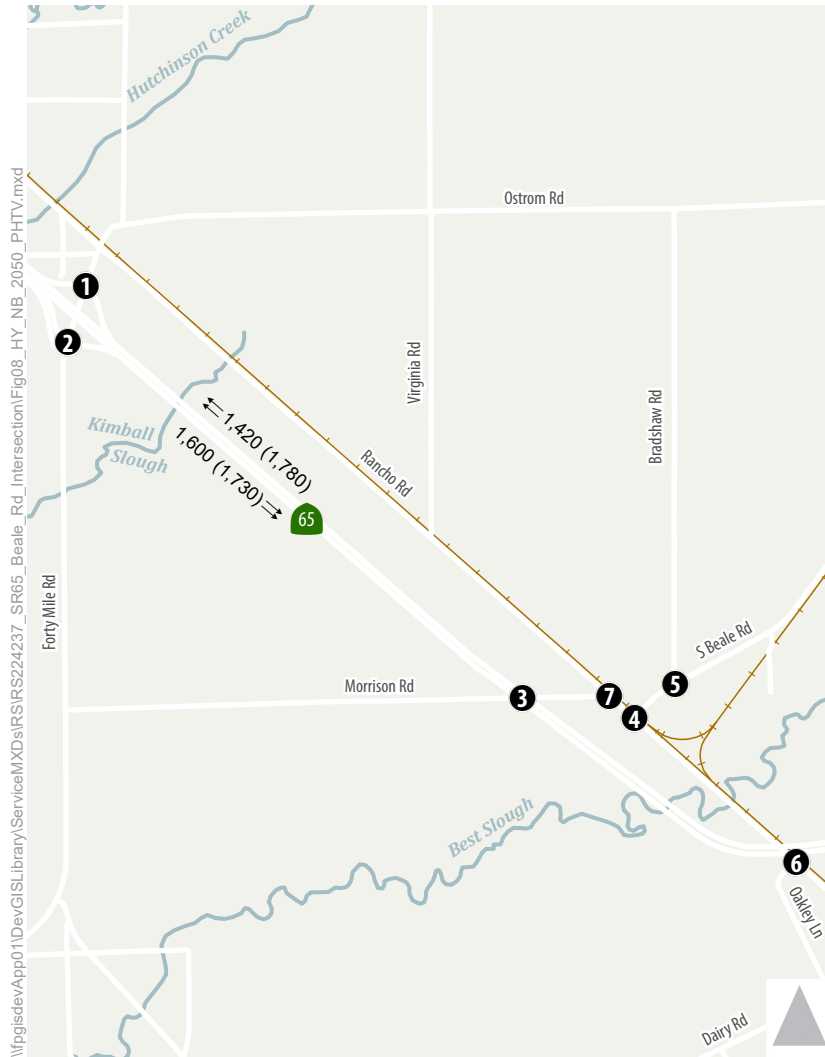


Figure 8
Peak Hour Traffic Volumes
and Lane Configurations -
Horizon Year 2050 No Build Alternative



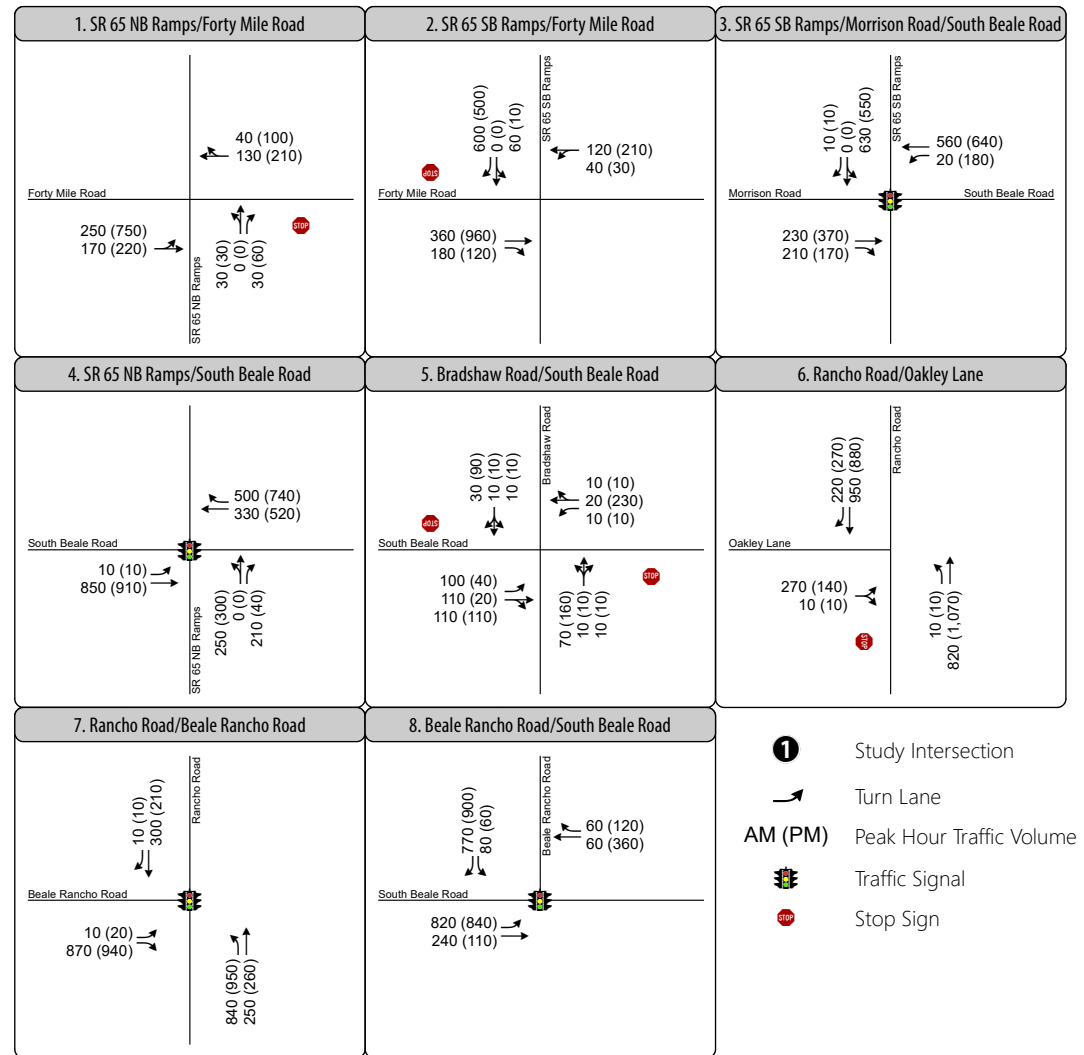
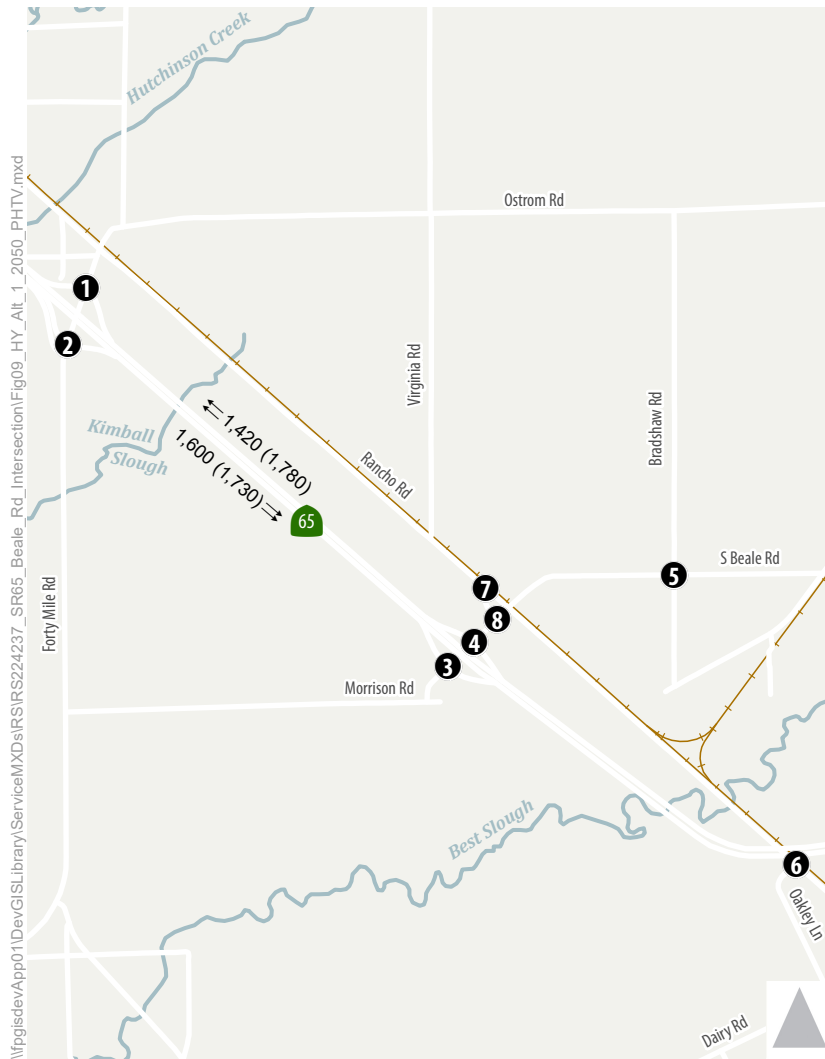


Figure 9
Peak Hour Traffic Volumes
and Lane Configurations -
Horizon Year 2050 Build Alternative 1



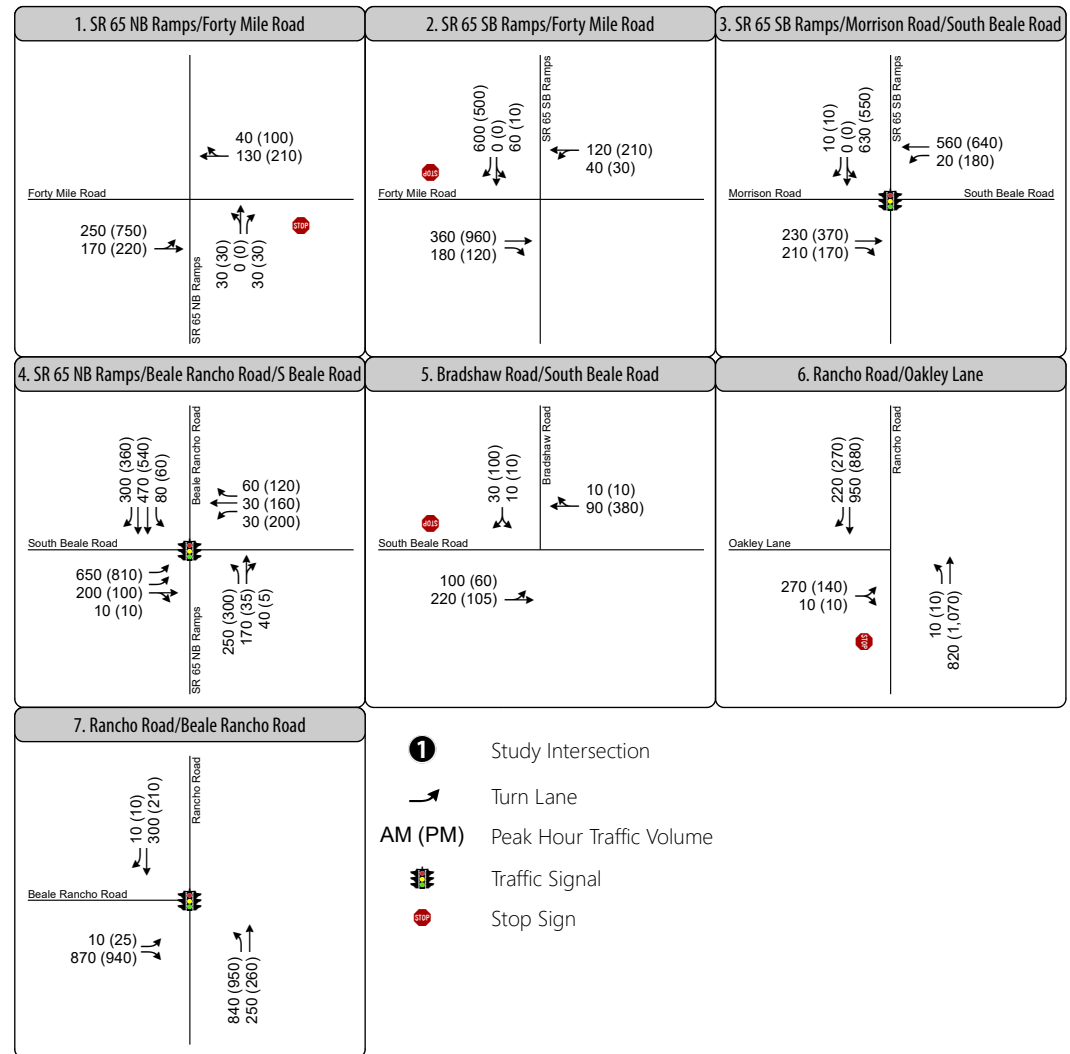
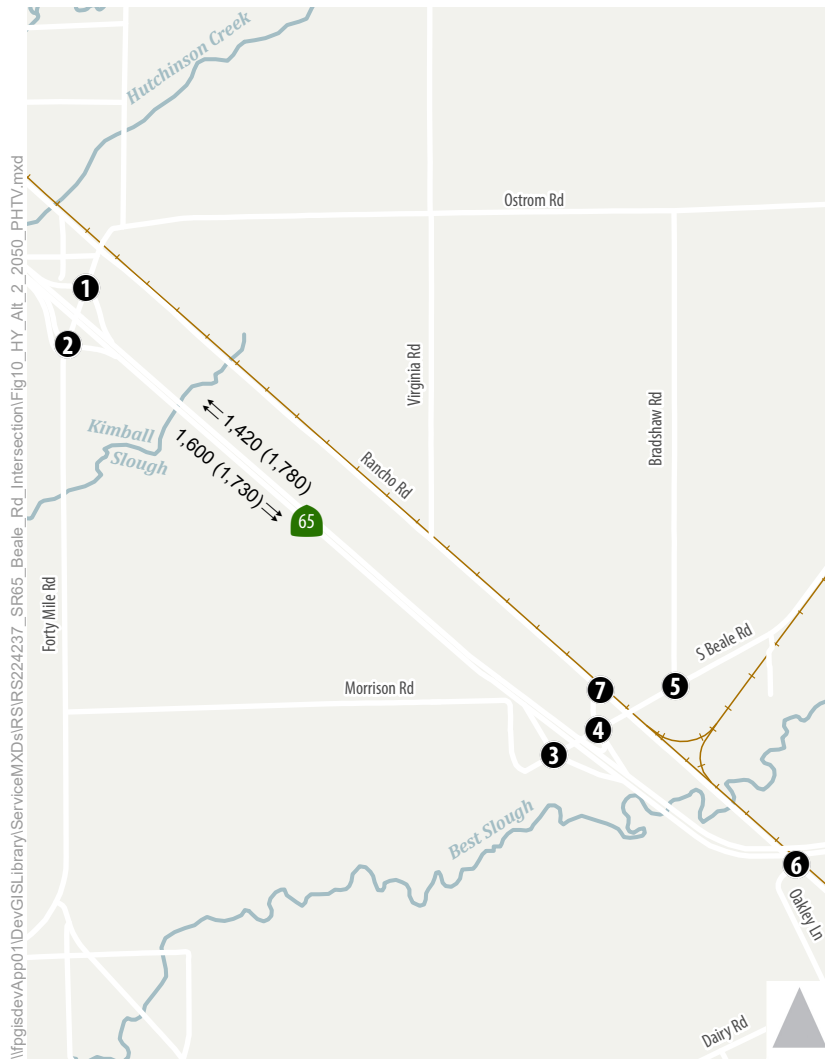


Figure 10
Peak Hour Traffic Volumes
and Lane Configurations -
Horizon Year 2050 Build Alternative 2



Compared to opening year 2030, intersection operations for the horizon year 2050 No Build Alternative would improve overall due to the separate East Wheatland Expressway project. However, the signalized at-grade intersection of SR 65/Morrison Road would operate at an unacceptable LOS D during the AM peak hour and LOS E during the PM peak hour. The Caltrans concept LOS is C for SR 65 north of South Beale Road. The signalized intersections on Rancho Road (old SR 65) would be LOS B. Like in opening year 2030 conditions, the Rancho Road (old SR 65)/Oakley Lane intersection would have LOS F during both peak hours. Additionally, increased demand on Forty Mile Road would result in LOS F during the PM peak hour at the northbound SR 65 ramps intersection.

Both Alternatives 1 and 2 could provide acceptable LOS D or better conditions at the ramp terminal and adjacent intersections constructed for this project. Under Alternative 1, the new intersections at the interchange and for the quadrant roadway (intersections 3, 4, 7 and 8) would operate acceptably (LOS D or better); however, the intersections would need to be signalized. The Beale Rancho Road intersections would operate acceptably with single left-turn pockets. The new South Beale Road/Bradshaw Road intersection would operate with acceptable LOS C or better conditions.

Under Alternative 2, the new intersections (3, 4, and 7) would also need to be signalized to operate with acceptable LOS D or better conditions. Additionally, the SR 65 Northbound Ramps/South Beale Road/Beale Rancho Road would need to be widened to provide a second southbound through lane and a second eastbound left turn lane. Even with the additional lanes, this intersection would have higher average delay (LOS D) compared to the similar intersection in Alternative 1 (LOS B).

6.2 Freeway Operations

Using the HCM methodology, peak hour freeway operations were analyzed. **Table 10** shows the AM and PM peak hour LOS and average density under horizon year 2050 conditions.

Table 10: Freeway Operations – Horizon Year 2050 Conditions

Direction	Segment	Facility Type	No Build Alternative		Alternatives 1 and 2	
			AM	PM	AM	PM
Northbound SR 65	Morrison Rd to Forty Mile Rd	Basic	B / 12	A / 10	n/a	n/a
	Jasper Ln to S Beale Rd	Basic	n/a	n/a	B / 12	A / 10
	S Beale Rd Off-ramp	Diverge	n/a	n/a	B / 17	B / 15
	S Beale Rd Off to On-ramp	Basic	n/a	n/a	A / 8	A / 8
	S Beale Rd On-ramp	Merge	n/a	n/a	B / 17	B / 18
	S Beale Rd to Forty Mile Rd	Basic	n/a	n/a	B / 12	B / 13
	Forty Mile Rd Off-ramp	Diverge	B / 18	B / 19	B / 18	B / 19
	Forty Mile Rd Off to On-ramp	Basic	B / 12	B / 13	B / 12	B / 13
	Forty Mile Rd On-ramp	Merge	B / 20	C / 25	B / 20	C / 25
	Forty Mile Rd to McGowan Pkwy	Basic	B / 14	C / 19	B / 14	C / 19
Southbound SR 65	McGowan Pkwy to Forty Mile Rd	Basic	B / 17	B / 16	B / 17	B / 16
	Forty Mile Rd Off-ramp	Diverge	C / 24	C / 22	C / 24	C / 22
	Forty Mile Rd Off to On-ramp	Basic	B / 12	B / 12	B / 12	B / 12
	Forty Mile Rd On-ramp	Merge	B / 19	B / 19	B / 19	B / 19
	Forty Mile Rd to Morrison Rd	Basic	B / 14	B / 13	B / 14	B / 13
	Morrison Rd Off-ramp	Diverge	n/a	n/a	B / 14	B / 19
	Morrison Rd Off to On-ramp	Basic	n/a	n/a	A / 4	A / 9
	Morrison Rd On-ramp	Merge	n/a	n/a	B / 11	B / 16
	Morrison Rd to Jasper Ln	Basic	n/a	n/a	A / 7	B / 11

Notes: Level of service and density are shown with density reported in passenger cars per lane per mile.

At the SR 65/Forty Mile Road interchange, the horizon year 2050 freeway volumes would be the same under all alternatives. As a result, the analysis results are the same for all alternatives. The analysis locations would have LOS C or better conditions during both peak hours. During the AM peak hour, only the southbound off-ramp to Forty Mile Road would have LOS C. During the PM peak hour, three segments would have LOS C. Under the build alternatives, freeway operations at the SR 65/South Beale Road interchange would have LOS B or better conditions.

6.3 Multimodal Facilities

The at-grade rail crossing just east of the SR 65/South Beale Road intersection would be maintained under the No Build Alternative. As traffic demand volumes increase, vehicle delays will also increase due to continued train crossings and fewer acceptable gaps in SR 65 through traffic. At some point, a traffic signal would likely be warranted at the SR 65 intersection due to increased turning movement volumes. Signalization will require an interconnect with the gates at the rail crossing due to the close spacing: there is about 50 feet of vehicle storage between the SR 65 intersection and the rail crossing.

With the build alternatives, a grade separated crossing would be constructed in an alternate location and the existing at-grade crossing would be closed. This would eliminate all potential vehicle-to-vehicle conflicts within the intersection and conflicts between vehicles and trains at this crossing.

The roadways that are constructed under the build alternatives will need to be designed to accommodate bus transit vehicles. However, given the lack of developed land in the project area and the low level of existing transit service, no transit-specific facilities are likely.

Although the project area is currently rural, bicycles and pedestrians will need to be accommodated at the project intersections. The new or reconstructed conventional highways should include bicycle lanes, and the traffic signals should include bicycle detection to satisfy Caltrans policy. Similarly, the proposed signals should include pedestrian signal heads and detection.



7. Transportation Analysis for PA-ED

This TEPA has been developed according to the Caltrans guidelines to support the PSR/PDS phase of this project. The next step will be to prepare a Transportation Analysis Report (TAR) for the PA-ED phase of the project. The proposed scope of work and the technical approach for the TAR is provided below.

7.1 Traffic Study Area

The following study intersections should be evaluated during the PA-ED phase.

1. Forty Mile Road/SR 65 Northbound Ramps
2. Forty Mile Road/SR 65 Southbound Ramps
3. SR 65/Rancho Road/Morrison Road
4. SR 65/South Beale Road
5. South Beale Road/Bradshaw Road
6. SR 65/Oakley Lane
7. SR 65/Dairy Lane

The last study intersection could be omitted if the SR 65/Oakley Lane intersection is to be retained under all project alternatives.

The traffic analysis should evaluate the freeway mainline segments and ramp junctions at the existing SR 65/Forty Mile Road interchange and the proposed SR 65/South Beale Road interchange. Additionally, a two-lane highway analysis can be conducted for SR 65 between South Beale Road and Oakley Lane and south of Oakley Lane. For future conditions, a two-lane highway analysis can be conducted for the planned East Wheatland Expressway.

7.2 Data Collection

Data collection should include new intersection turning movement counts at the study intersections during the AM and PM peak periods. The counts should be collected while schools are in session and during good weather. The counts need to include heavy vehicles, bicycles, and pedestrians. Field observations should include queue measurements. Average train volume at the South Beale Road railroad crossing should be collected.

7.3 Existing Conditions Analysis

A detailed assessment of existing transportation conditions analysis should be conducted. Due to the close spacing of the ramp terminal intersections and considerable expected traffic growth caused by new development, traffic simulation should be used to analyze intersection operations. AM and PM peak hour operations should be analyzed using the guidance from the current edition of the Transportation Research Board's *Highway Capacity Manual*. This analysis procedure will overcome the limitations of the planning-level analysis results provided here. Namely, microsimulation will account for delay caused by through vehicles blocking turn pockets, queues from turn pockets spilling back and blocking through movements, and queues from adjacent intersections spilling back into the intersection. The effects of upstream constraints can also be analyzed on downstream locations. Microsimulation can also be used to model gate operations at the at-grade rail crossing.

The microsimulation model results would be based on the average of 10 runs using different random value seeds to represent an average day. The models will be validated and calibrated to existing conditions using the criteria suggested in *Traffic Analysis Toolbox Volume III: Guidelines for Applying Traffic Micro-simulation Modeling Software* (FHWA, July 2004) or more current guidance, if available.

The HCM methods for freeway and two-lane highway capacity analysis are sufficient for the scope of the interchange analysis given that the SR 65 freeway in Yuba County is not congested or anticipated to be congested under the horizon year 2050. If ramp meters are to be included in the interchange design, the configuration will be confirmed using forecasted 15-minute on-ramp volumes and the proposed storage length.

7.4 Traffic Forecasts

The latest available Yuba County travel demand forecasting models will be used to develop opening and horizon year AM and PM peak hour traffic forecasts. This study used a version of the model that included 2042 General Plan buildout conditions and a subsequent annual growth rate to forecast horizon year conditions. This approach should be reviewed to determine what level of land use growth is appropriate for horizon year conditions. The planned roadway projects assumed to be in place by the horizon year should also be reviewed, especially regarding the configuration and alignment of the East Wheatland Expressway.

The base year model volumes should be compared to the counts collected at the study locations. If warranted, a sub-area validation should be performed using the existing demand volumes to verify the model's accuracy within the study area. The sub area-validation will comply with Caltrans standards.

The growth in link volumes projected by the model between the base year and the horizon year will be added to the existing volumes to determine horizon year volumes for the AM and PM peak hours. Opening year traffic volume forecasts for the AM and PM peak hours will be estimated through linear interpolation between the existing demand volumes and the horizon year forecasts. The development of the horizon year and opening year forecasts will be documented in a technical memorandum and submitted to the project

development team (PDT) for review and approval before proceeding with the future year traffic operations analysis.

The travel demand model will be used to prepare regional performance measures including vehicle miles of travel (VMT) for use with air quality and noise analysis, based on the guidance in the *Transportation Analysis Framework* (Caltrans, 2020) and *Transportation Analysis under CEQA* (Caltrans, 2020). The change in VMT due to the project will be determined using applicable tools, which may include the California Induced Travel Calculator (<https://travelcalculator.ncst.ucdavis.edu/>). According to Caltrans policy, VMT will be used to determine the environmental impact of the proposed project rather than LOS.

7.5 Future Year Operations Analysis

An intersection control evaluation will need to be conducted to determine the options for intersection control. The operations analysis conducted for the TEPA showed that stop control would not provide acceptable operations at the study intersections modified by the build alternatives under horizon year conditions. This finding should be confirmed with the traffic forecasts developed for the PA-ED phase. Peak hour signal warrants can be prepared. Roundabouts may be a feasible alternative to signal control at the study intersections. Alternate interchange configurations could also be considered if right-of-way constraints limit the interchange footprint.

For both the opening year and horizon year, the microsimulation model will be updated to reflect the expected future conditions, which will include the forecasted future traffic volumes and any capital improvements anticipated to occur. The models will be used to evaluate the intersection LOS, average delay, and queuing characteristics of the No Build and Build Alternatives. The simulation results will be presented to the PDT to visualize the traffic operations under each alternative and will be integral to refining the geometrics of each alternative including lane configuration and turn pocket length.

In addition, traffic forecasts will be used to evaluate freeway operations using the HCM methods. If ramp meters are included in the build alternatives, peak period forecasts will be developed from the peak hour forecasts based on the existing relationship between peak period and peak hour volumes. The peak period volumes will be used to evaluate ramp storage requirements.

A qualitative assessment of pedestrian, bicycle, and transit facilities will also be performed as part of the PA-ED phase of the project to determine if the proposed build alternatives hinder or eliminate existing or proposed bikeways, result in unsafe conditions for bicyclists or pedestrians, or cause a substantial delay in transit service. An assessment of how each build alternative would influence safety within the study area will also be performed.

7.6 Transportation Analysis Report

The Transportation Analysis Report will be prepared to summarize the results and findings from the analysis described above. The report shall be submitted to the PDT for review and approval.

The County of Yuba

Community Development & Services Agency

Michael Lee, Director

Phone – (530) 749-5430 • Fax – (530) 749-5434
915 8th Street, Suite 123
Marysville, California 95901

www.co.yuba.ca.us



BUILDING
749-5440 • Fax 749-5616

CODE ENFORCEMENT
749-5455 • Fax 749-5464

ENVIRONMENTAL HEALTH • CUPA
749-5450 • Fax 749-5454

PLANNING
749-5470 • Fax 749-5434

PUBLIC WORKS • SURVEYOR
749-5420 • Fax 749-5424

FINANCE AND ADMINISTRATION
749-5430 • Fax 749-5434

To: South Yuba Transportation Improvement Authority (SYTIA)

From: Samuel Bunton, Yuba County Director of Public Works

Subject: Adopt resolution authorizing Executive Director to execute Cooperative Agreements with Caltrans including any amendments

Date: October 7th, 2025

RECOMMENDATION:

It is recommended that the Board adopt resolution authorizing Executive Director to execute Cooperative Agreements with Caltrans including any amendments.

BACKGROUND/DISCUSSION:

Since Caltrans is the agency assigned to plan, design, construct, operate, and maintain the State Highway System (SHS), anytime that a SYTIA project connects to the SHS they must coordinate with Caltrans. Caltrans requires separate executed Cooperative Agreements prior to exchanging funds, effort, or materials between Caltrans and SYTIA for different phases of planning, design, and construction. Cooperative Agreements ensure that both partners complete all their obligations according to Caltrans' policies and procedures, applicable Federal Highway Administration (FHWA) policies and procedures, and State and federal laws.

Authorizing the Executive Director to execute Cooperative Agreements with Caltrans would facilitate compliance with Caltrans' requirements and streamline SYTIA projects.

FISCAL IMPACT:

There is no direct fiscal impact, but would ultimately save administrative time.

ATTACHMENTS:

2025_Resolution to Authorize Executive Director to execute Caltrans Co-Ops

**BEFORE THE SOUTH YUBA TRANSPORTATION
IMPROVEMENT AUTHORITY**

**AUTHORIZE EXECUTIVE DIRECTOR)
TO EXECUTE COOPERATIVE)
AGREEMENTS WITH CALTRANS)
INCLUDING ANY AMENDMENTS)**

RESOLUTION NO. _____

WHEREAS, the South Yuba Transportation Improvement Authority (SYTIA) was created as a Joint Powers Authority for the purpose of providing improvements to the transportation system located in the southern portion of the County of Yuba including within the limits of the City of Wheatland; and

WHEREAS, SYTIA is comprised of both the County of Yuba and City of Wheatland; and

WHEREAS, SYTIA has multiple projects that connect to the State Highway System; and

WHEREAS, Caltrans is the agency assigned to plan, design, construct, operate, and maintain the State Highway System; and

WHEREAS, Caltrans requires separate executed cooperative agreements prior to exchanging funds, effort, or materials between Caltrans and SYTIA for different phases of planning, design, and construction; and

WHEREAS, Cooperative agreements ensure that partners complete all their obligations according to Caltrans' policies and procedures, applicable Federal Highway Administration (FHWA) policies and procedures, and State and federal laws; and

WHEREAS, this authorization would facilitate compliance with Caltrans' requirement and streamline SYTIA projects; and

///

///

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the South Yuba Transportation Improvement Authority:

Section 1. The above recitals are true and correct findings of the South Yuba Transportation Improvement Authority.

Section 2. Appoints the Executive Director, or designee, as agent to conduct all negotiations, execute and submit all documents including, but not limited to agreements and amendments which may be necessary.

PASSED AND ADOPTED this _____ day of _____ 2025, by the South Yuba Transportation Improvement Authority, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Chair

ATTEST:

Clerk of the Board

APPROVED AS TO FORM:
SYTIA COUNSEL

By: Kelly Smith