ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT
Marysville Railroad Bridge Rehabilitation (03-0H160)

Resolution SHOPP-P-2021-05B
(will be completed by CTC)

1. FUNDING PROGRAM

- ☐ Active Transportation Program
- ☐ Local Partnership Program (Competitive)
- ☐ Solutions for Congested Corridors Program
- ☒ State Highway Operation and Protection Program
- ☐ Trade Corridor Enhancement Program

2. PARTIES AND DATE

2.1 This Project Baseline Agreement (Agreement) for the *Marysville Railroad Bridge Rehabilitation (03-0H160)*, effective on, March 25, 2021 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, *Caltrans* , and the Implementing Agency, *Caltrans* , sometimes collectively referred to as the "Parties".

3. RECITAL

3.2 Whereas at its May 13, 2020 meeting the Commission approved the State Highway Operation and Protection Program, and included in this program of projects the *Marysville Railroad Bridge Rehabilitation (03-0H160)*, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as Exhibit A and the Project Report attached hereto as Exhibit B, as the baseline for project monitoring by the Commission.

3.3 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.

4.2 To adhere, as applicable, to the provisions of the Commission:

- ☐ Resolution *Insert Number* , "Adoption of Program of Projects for the Active Transportation Program", dated
- ☐ Resolution *Insert Number* , "Adoption of Program of Projects for the Local Partnership Program", dated
- ☐ Resolution *Insert Number* , "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
- ☒ Resolution G-20-40, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated 05/13/2020
- ☐ Resolution *Insert Number* , "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

4.3 All signatories agree to adhere to the Commission's State Highway Operation and Protection Program, Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.

4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.

4.5 Caltrans agrees to secure funds for any additional costs of the project.

4.6 Caltrans agrees to report on a quarterly basis; after July 2019, reports will be on a semi-annual basis on the progress made toward the implementation of the project, including scope, cost, schedule, outcomes, and anticipated benefits.

4.7 Caltrans agrees to prepare program progress reports on a quarterly basis; after July 2019, reports will be on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.

4.8 Caltrans agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.

4.9 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits during the course of the project, and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.

4.10 The Transportation Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for four years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost
See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope
See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Other Project Specific Provisions and Conditions

Attachments:

Exhibit A: Project Programming Request Form
Exhibit B: Project Report

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

Marysville Railroad Bridge Rehabilitation (03-0H160)

Resolution SHOPP-P-2021-05B

for _____ 2/1/2021
Amarjeet S. Benipal — Date

District Director

Project Applicant

for _____ 2/1/2021
Amarjeet S. Benipal — Date

District Director

Implementing Agency

for _____ 2/1/2021
Amarjeet S. Benipal — Date

District Director

California Department of Transportation

_____ 3/4/2021
Toks Omishakin — Date

Director

California Department of Transportation

_____ _____
Mitchell Weiss — Date

Executive Director

California Transportation Commission

Baseline agreement information was extracted from Caltrans' project data systems. Project description, funding and performance measures are from CTIPS. Project delivery milestones are from PRSM. All information is current and accurate.

STATE OF CALIFORNIA ● DEPARTMENT OF TRANSPORTATION

BASELINE AGREEMENT					Date:	02/19/21 04:58:09 PM
District	**EA**	**Project ID**		**PPNO**	**Project Manager**	
03	0H160	0315000082		9820	KNUDSON, CAMERON H	
County	**Route**	**Begin Postmile**	**End Postmile**	**Implementing Agency**		
YUB	70	14.8	15.7	PA&ED	Caltrans	
				PS&E	Caltrans	
				Right of Way	Caltrans	
				Construction	Caltrans	

Project Nickname

Marysville Railroad Bridge Rehab (SHOPP)

Location/Description

In and near Marysville, from south of 14th Street to north of Cemetery Road. Roadway rehabilitation and operational improvements including turn pockets and auxiliary lanes. (G13 Contingency)

Legislative Districts					
Assembly:	03	**Senate:**	04	**Congressional:**	03

PERFORMANCE MEASURES

	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Pavement		2.4			2.4	Lane-miles
Programmed Condition	Pavement	2.4				2.4	Lane-miles

Project Milestones	**Actual**	**Planned**
Project Approval and Environmental Document Milestone	12/07/20	
Right of Way Certification Milestone		09/07/23
Ready to List for Advertisement Milestone		10/04/23
Begin Construction Milestone (Approve Contract)		02/12/24

FUNDING (Allocated amounts are shaded)

Component	Fiscal Year	SHOPP					Total
PA&ED	17/18	3,000					3,000
PS&E	18/19	3,500					3,500
RW Support	18/19	2,500					2,500
Const Support	23/24	12,000					12,000
RW Capital	23/24	15,300					15,300
Const Capital	23/24	100,650					100,650
Total		136,950					136,950

03 - YUB - 70 – PM 14.8/15.7
03-0H160 – 0315000082 - 9820
20.XX.201.120 - Roadway Rehabilitation
December 2020

Project Report

For Project Approval

On Route 70, In and Near Marysville

Between PM 14.8

And PM 15.7

I have reviewed the right-of-way information contained in this report and the right-of-way data sheet attached hereto, and find the data to be complete, current and accurate:

John Ballantyne, Chief, North Region Right of Way

APPROVAL RECOMMENDED:

Cameron Knudson

Cameron Knudson, Project Manager

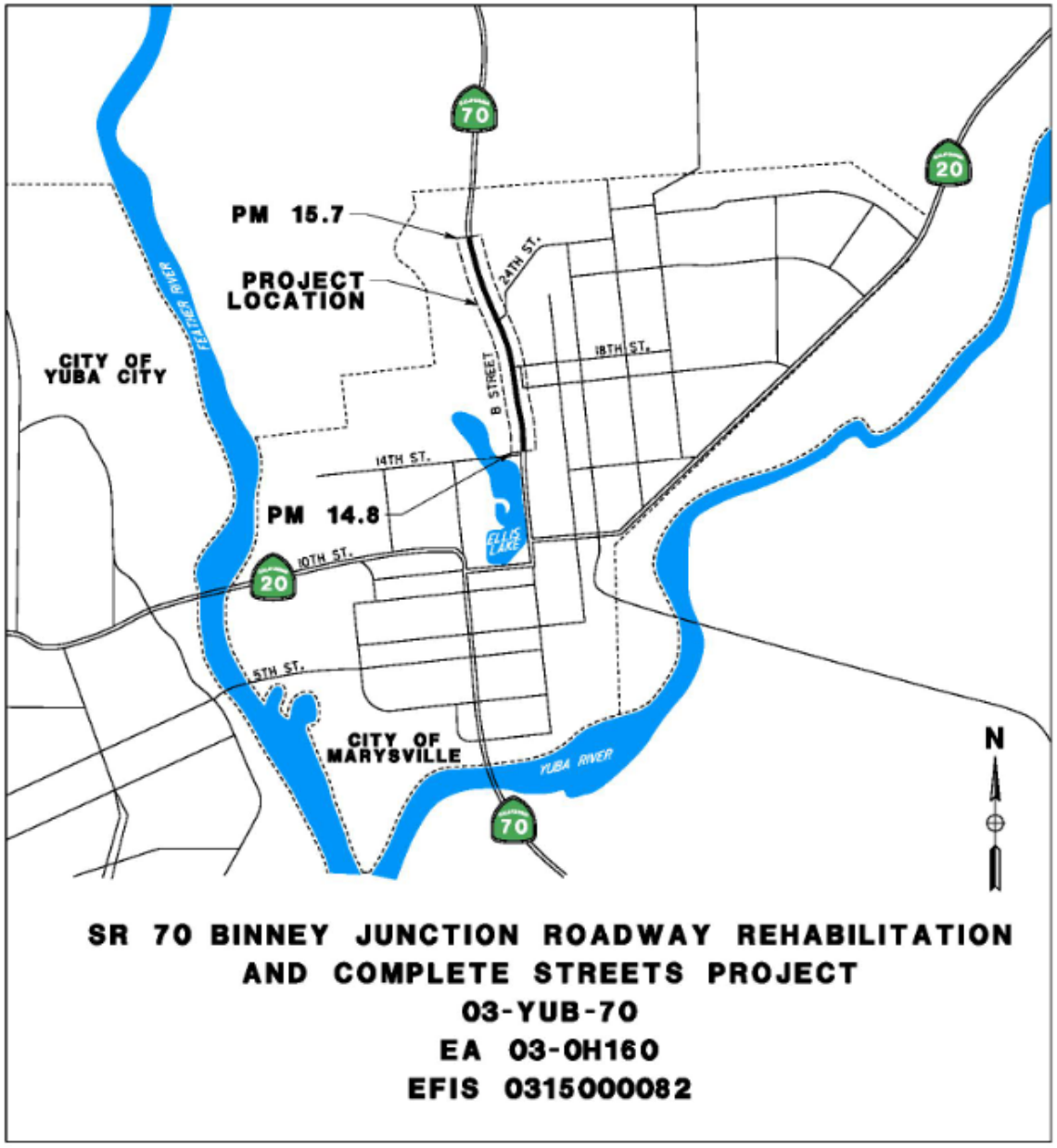
PROJECT APPROVED:

for Amarjeet S. Benipal, District 3 Director

12/7/2020

Date

Vicinity Map



This project report 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.

12/03/2020

REGISTERED CIVIL ENGINEER *DATE*

Table of Contents

1. INTRODUCTION

Project Description:

The California Department of Transportation (Caltrans), in cooperation with Yuba County, City of Marysville, and Union Pacific Railroad (UPRR), proposes to rehabilitate State Route 70 (SR 70), in the City of Marysville, from 0.1 mile south of 14th Street (PM 14.8) to just north of Cemetery Road (PM 15.7) in Yuba County. The project will provide a complete streets aspect, rehabilitation of existing pavement, reduce future traffic congestion, improve operations and safety, and comply with current Caltrans, UPRR, and local agency standards.

The project's proposed improvements are to rehabilitate the existing roadway structural sections, construct a two-way left-turn lane (TWLTL), construct two traffic storage/auxiliary lanes, standard shoulders, and standard sidewalks. These improvements will conform to the recently constructed Simmerly Slough Bridge project. Due to the frequent structure impacts at both structures (26 impacts in the last 5 years), the project will replace, lengthen and improve vertical clearance at two UPRR structures, the Marysville Underpass and the Binney Junction Underpass. Lowering the profile of existing SR 70 under the Marysville Underpass and the Binney Junction Underpass will be required to meet current vertical clearance standards and provide adequate sight distance. Lengthening the structures will allow for standard shoulders and sidewalks, which will provide complete street elements. These improvements will improve pedestrian and bicyclist safety as they travel along SR 70 through the project limits. The existing east levee north of Binney Junction to Cemetery Road will be relocated to the east to accommodate the proposed project improvements. The intersections of SR 70/E.24th Street and SR 70/16th Street will be signalized, with access from 17th Street being removed.

See **Attachment A,** *Location Map,* for more information.

Project Limits	*03-YUB-70 PM 14.8-15.7*	
Number of Alternatives	*4 (including no-build)*	
	Current Cost Estimate:	**Escalated Cost Estimate:**
Capital Outlay Support	N/A	$20,845,000
Capital Outlay Construction	$85,960,000	$100,622,000
Capital Outlay Right-of-Way	$13,980,888	$15,258,000
Funding Source	*SHOPP 20.XX.201.120*	
Funding Year	2021/2022	
Type of Facility	*12th St to 24th St: 4-lane conventional highway* *24th St to County line: 2-lane conv. highway*	
Number of Structures	3	
SHOPP Project Output	*Improve 2.7 lane-miles of pavement*	
Environmental Determination or Document	CEQA: Environmental Impact Report (EIR) NEPA: Environmental Assessment (EA)	
Legal Description	*In and near Marysville, from south of 14th Street to north of Cemetery Road*	
Project Development Category	*3*	

2. RECOMMENDATION

It is recommended that the project be approved using the preferred alternative, and that the project proceed to the next phase.

The affected local agencies have been consulted with respect to the recommended plan, their views have been considered, and the local agencies are in general accord with the plans as presented.

3. BACKGROUND

The project is located in Yuba County in the City of Marysville, on SR 70 from 14th street (PM 14.8) to Cemetery Road (PM 15.7). The initial Project Scope Summary Report was approved in November of 2014 for a roadway rehabilitation project and programmed into the 2016 SHOPP. The project was scoped for repairing or replacing the existing roadway, providing 8' shoulders, improving the vertical clearance by lowering the roadway at the underpass structures, rehabilitating the existing pump station, replacing the metal beam guard rail with steel post, improving lighting in the pedestrian tunnel, and replacing sidewalks and curb ramps in order to meet current Americans with Disabilities Act of 1990 (ADA) standards.

A Project Change Request was approved in May of 2017 to modify the scope to include roadway improvements to address freight mobility at the underpasses due to inadequate clearance heights, operational improvements, complete streets elements and safe routes to school, in addition to roadway rehabilitation. The Marysville Underpass and the Binney Junction Railroad Underpass were proposed to be replaced, and the road profile would be designed to meet vertical clearance standards. In addition, the existing pump station would be replaced with two new pump stations (one at Marysville Underpass and one at Binney Junction Underpass), and drainage systems would be improved.

Existing Facility

The existing facility is a four-lane conventional highway which transitions to two-lanes between 14th and 15th Street in Marysville. There are several short city blocks, numerous driveways, and signalized intersections within the project limits. The build facility concept maintains the facility type and capacity. Adjacent to the project location are several residential buildings, businesses, schools, parks, railroad facilities, and drainage facilities that will ultimately be impacted by the proposed project. Some building facilities include:

- East Lake
- Marysville Joint Unified School District
- Yuba-Sutter Transit
- El Torero Meat Market & Taqueria
- The Wright Closet
- B Street Dental
- Veterans Memorial Center
- Marysville High School
- Allen Scott Youth & Community Center
- Dollar Tree
- Yanez Custom Wheels and Tires
- WP Towing
- Tey Café

Within the project limits, SR 70 consists of 2-12’ lanes with asphalt concrete pavement and 8’ wide shoulders along the traveled ways for the majority of the segment. In addition, the State Route roadway consists of several left turn pockets and TWLTLs that feed directly into the building facilities previously stated. The

existing pavement along the State Route roadway is in poor condition and continued maintenance is required due to the high traffic demands that this State Route facilitates. The existing Marysville Underpass crosses SR 70 at PM 15.1 restricting the roadway width to 13'-6" (10'-6" travelled way with 1' inside shoulder and 2' outside shoulder). This underpass has a vertical clearance of 14'-1" and has a history of vehicles impacting the existing structure which causes impacts to the railroad operations, as well as temporary road closures for bridge inspection by UPRR. The Binney Junction Underpass crosses SR 70 at PM 15.4 and has a vertical clearance of 14'-8". Both the Marysville and Binney Junction Underpasses are well below the standard vertical clearance required for UPRR facilities (17'-6").

Existing Pedestrian Facility

The existing pedestrian facilities consist of 4’ to 6’ concrete sidewalks on both sides of SR 70 from 14th Street to the Marysville Underpass. The existing sidewalk at this location has a vegetated landscape feature, separating the sidewalk from the adjacent SR 70. At the Marysville Underpass, the southbound pedestrian facility terminates. Pedestrians continuing northbound are required to cross SR 70 using the uncontrolled crosswalk located at 16th Street, then continue northbound through an existing poorly lit pedestrian tunnel adjacent to SR 70. After the Marysville Underpass, there is an existing 4’ to 6’ sidewalk for northbound pedestrian traffic that leads from the underpass to the entrance of Marysville High School at 18th Street which provides access to the high school. The existing sidewalk and curb ramps in the project limits do not meet current ADA Standards.

Other Existing Features

- There is an existing finger levee underneath and to the north of the Binney Junction Underpass and an existing pump station along the West Levee, that will be affected by the proposed project.
- The intersections of SR 70/14th Street and SR 70/18th Street are signalized with protected left turn pockets.
- There are two existing railroad service lines within the project area. The Sacramento Subdivision is an east-west facility, which bisects the City of Marysville, intersects with the Valley Subdivision in the north-south direction at Binney Junction.

Existing Roadway Geometric Information and Condition

	Through Traffic Lanes			Paved Shoulder Width		Sidewalk Width
Facility Location	Number of Lanes	Lane Width (ft)	Type (Flexible, Rigid)	Left (ft)	Right (ft)	(ft)
14th Street to Marysville Underpass	2	12.0	Flexible	0.0’ to 13.0’	0.0’ to 9.0’	4.0’ to 15.0’
Marysville Underpass to 18th Street	2	12.0	Flexible	0.0’ to 8.0’	0.0’	10.0’ (right)
18 Street to Binney Junction Underpass	2	12.0	Flexible	8.0’ to 10.0’	8.0’ to 10.0’	N/A
Binney Junction Underpass to Simmerly Slough	2	12.0	Flexible	8.0’	8.0’	N/A

Existing Structure Geometric Information and Condition

Bridge Name	Bridge Number	Location	Year Built	Structure Length	Vertical Clearance	Structure Material	Design Type
Marysville Underpass	16 0018	03-YUB-070 – 15.11 MVL	1911	95 ft	14'1"	Steel	Stringer/Multi-Beam
Binney Junction Underpass	16 0026	03-YUB-070 – 15.41 MVL	1957	55 ft	14'8"	Steel	Girder/Floor beam Steel

4. PURPOSE AND NEED

Purpose:

The purpose of the project is to rehabilitate the existing roadway to reduce maintenance expenditures, improve safety, traffic operations, vertical clearances to facilitate goods movement, improve sight distance, provide safer bicycle and pedestrian facilities, and comply with ADA standards. The project will increase multimodal mobility and operations to meet complete streets and safe routes to school policies.

Need:

The project is needed to address the following deficiencies and/or issues: reduce maintenance expenditures, improve pedestrian safety by improving inadequate shoulders, and prevent structure impacts caused by non-standard vertical clearances, traffic safety, operational improvements, improve bicycle and pedestrian facilities, provide ADA compatible facilities, enhance safe routes to school facilities, and provide a complete streets facility.

A. **Problem, Deficiencies, Justification**

Vehicle delay and operating speeds are projected to be below the acceptable standards. This has become apparent over time and has only been amplified due to the recent relief efforts for the Oroville Dam Repair and Paradise Fire Relief. The existing underpasses do not meet current vertical clearance standards, which has led to a high number of closures due to truck traffic impacts to the existing structures. Due to the large volume of freight and goods movement through SR 70, the existing roadway structural section has also experienced drastic wear and tear and is in poor condition that requires high maintenance efforts.

Currently, sections of the roadway do not have sidewalks and there are no existing designated bicycle facilities, requiring bicycle users to share the State Route with vehicles, which includes high volumes of truck traffic. In addition, many of the existing ADA facilities do not meet current standards and provide inadequate accessibility due to the lack of contiguous pedestrian facilities. Rehabilitation of SR 70 will ensure that the State Route will be brought up to current design standards, which will help mitigate the vehicular impacts to the underpasses, as well as, provide safe and efficient travel for various modes of transportation, including vehicles, bicyclist, and pedestrians.

B. Regional and System Planning

State Planning

SR 70 accommodates regional, interregional, recreational, and commercial truck traffic, in addition to serving local traffic within Marysville, Oroville, and numerous unincorporated communities. SR 70 serves as a major commuter route between Marysville and Sacramento and constitutes a portion of the primary commuter route between Chico and Oroville. The route carries substantial recreational traffic through Yuba and Butte Counties. SR 70 plays an important role in goods movement, particularly for transporting local agricultural products to market and to processing plants in the region. In addition, SR 70 serves as an emergency alternative route for Interstate 80 across the Sierra Nevada Mountains.

This project consists of portions of Segments 7 and 8 of the SR 70 Transportation Concept Report (TCR) dated August 2014. The TCR is a long-range planning document to guide the logical development of transportation systems. The build facility being a 4-lane/2-lane conventional highway. However, since the Oroville Dam mandatory evacuation in February 2017 and resultant severe congestion of this section of the facility, the District has heightened an on-going effort to move closer to fulfilling an ultimate 5-lane corridor need.

Regional Planning

The project alternatives in this report are consistent with those discussed in several regional planning documents. As mentioned within the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), the strategies proactively link land use, air quality, and transportation needs. The project will then be reduced back to a 3-lane conventional highway to conform at the recently constructed Simmerly Slough Bridge Project to the north.

The project is also consistent with SACOG's Regional Bicycle, Pedestrian, and Trails Master plans dated April 2018, which proposes SR 70/B Street as a Class 2 facility (Bike Lanes) throughout the corridor. This will help promote healthy living and active communities where bicycling and walking are viable and populate travel choices in a comprehensive, safe, and convenient network. SACOG's plan is a comprehensive guide comprised of 6 counties and 22 cities, including the City of Marysville and Yuba County.

Local Planning

The City of Marysville Capital Investment Plan (CIP), dated 2017, mentions and identifies the need for several capital projects that coordinate the financing and timely improvements in a way that maximizes the return to the public. Relevant projects include

- Bicycle Lane Street Striping (Project No. 2016-4.01). This project will place bike lane striping and legends on city streets to conform to the new standards and specifications of the Master Plan.
- Sidewalk Repairs & ADA Ramps - Various Locations (Project No. 2014-4.05). This project will focus on making sidewalk repairs to eliminate

impediments to accessibility and constructing curb ramps between sidewalks.

- Union Pacific Railroad Track - Reroute and Decommission (Project No. 2016-4.03). This project would reroute the Union Pacific railroad track that bisects the city (and includes the Marysville Underpass and the south structure of the Binney Junction Underpass) to the westerly city limits. Per the CIP, the project will likely cost at least $50 million and take 8-10 years to complete.

In addition, the City of Marysville General Plan, dated August 1985, which serves as a long-term guide for orderly growth and development within the City limits, provides the following aspects which are included in the proposed project:

- To promote pedestrian access (II.C.4)
- Landscaping and tree planting required adjacent to highways (II.C.5)
- To provide a bikeway system as a beneficial transportation mode alternative (II.C.8)
- To protect residents from health hazards and annoyance associated with excessive noise levels (II.E)
- B Street Underpass (Marysville Underpass) lighting improvements and bridge structure protection measures (IV.C.2.c)

C. **Traffic**

Current and Forecasted Traffic

Location Description	Type of Roadway	Average Daily Traffic, vpd (2018)	Average Daily Traffic, vpd (2046)	Design Hourly Volume	Directional Split	% Truck	Annual Growth Rate
SR 70 (PM 14.9/15.5)	2-lane conventional highway	20,200	23,000	2,380	54%	9%	0.5%

Collision Analysis

In recent years, this segment of SR 70 has experienced 35% higher fatal+injury (F+I) type accidents than the statewide average for a similar facility. Accidents within the study area were queried from the Traffic Accident Surveillance and Analysis System (TASAS) Table B for a three-year period from January 1, 2014 to December 31, 2016. In the analyzed three-year period, there were 10 total accidents in the study segment of B Street (SR 70) from PM 14.9 to 15.5.

Location PM	Number of Accidents				Accident Rates					
	Total*	Fatal	Injury	F+I	Actual per million vehicle miles			Average per million vehicle miles		
					Fatal	F+I	Total*	Fatal	F+I	Total*
14.9/15.5	10	0	9	9	0.00	0.74	0.48	0.016	0.55	1.25

*Total accidents include fatalities and injuries, plus property only accidents.

Out of the 10 reported accidents, 5 were due to unsafe speed as the primary collision factor and 5 were rear-end type accidents. All accidents were reported within approximately 600’ north and south of the Marysville Underpass. Typically, truck

incidents with Marysville Underpass do not appear to have collision report because they were caused by legal trucks and property damage type incidents.

Due to inadequate Marysville Underpass vertical clearance height, trucks and truck trailers frequently hit or get stuck under the Marysville Underpass. The maintenance department has responded to three underpass structure truck hit incidents between 2012 and 2014. The operations department was notified of three additional underpass structure truck hit incidents between 2013 to 2016, with one incident in 2013 having extensive damage to the underpass structure. In recent years, the City of Marysville has reported several accidents along the project limits, which responded to 16 reports over the past 3 years.

See **Attachment O,** *Traffic Operational Analysis Report,* for more information.

5. ALTERNATIVES

5A. Preferred Alternative

Roadway Features

For the proposed project, the preferred alternative improvements are to rehabilitate the existing roadway from 14th Street to 16th Street, construct two-way left-turn lane (TWLTL) structural sections and construct two traffic storage/auxiliary lanes from 16th Street to Cemetery Road, provide standard shoulders to facilitate bicyclist, and standard sidewalks for adequate pedestrian utilization in accordance with current ADA standards. The proposed traveled way lane widths will be standard 12' lanes and proposed shoulders will be standard 8' shoulders. The project will conform to the recently constructed Simmerly Slough Bridge Project.

ADA compliant sidewalks will be constructed on both sides of SR 70 from 14th Street to 24th Street and will replace and upgrade existing curb ramps to current ADA standards. The sidewalk on the west side of B Street will be extended north and conform into the sidewalk constructed as part of the Simmerly Slough Bridge Project. The curb ramps will include red truncated domes to match previous City of Marysville improvements.

In addition, the intersections of SR 70/East 24th Street and SR 70/16th Street will be fully signalized. A signal warrant study was performed to determine the justification for implementing a signal at these intersections. It was determined that the intersection of SR70/16th Street did not meet any of the traffic-based warrants for a signal, but the decision was deferred to the Project Development Team due to surrounding area. With the signalization of these two intersections, it will allow for access to and from Marysville High School and surrounding business, while creating a safer pedestrian corridor for the public to use. Due to the lowering of the profile and the addition of the signal at 16th Street, the access to and from 17th Street will be removed, and a cul-de-sac will be constructed on 17th Street. Access for the residents on 17th Street will be diverted to the newly signalized intersection at 16th Street. With the proposed lengthening of the Marysville Underpass to accommodate the improvements on SR 70, the existing pedestrian tunnel for northbound pedestrians will be removed.

See **Attachment B,** *30% Preliminary Plans,* for more information.

Structure Features

There will be three newly constructed structures that will replace two existing railroad structures, the Binney Junction Underpass and Marysville Underpass. The new structures will meet current Caltrans Highway Design Manual (HDM) and UPRR vertical clearance standards. Per the request of UPRR, the tracks within the structure's prism will remain at the same grade as it is currently. Since the existing vertical elevation of the railroad will remain the same, to meet the current vertical clearance standards, SR 70's vertical profile will have to be lowered by approximate 6' at the Marysville Underpass and approximately 5.5' at the Binney Junction Underpass.

Several retaining walls are proposed for the project. These walls will be additional walls constructed for the abutments of the new structures. With the addition of the new underpass structures, the walls located at the existing structures will have to be removed.

Structure Alternative 1

This alternative will construct the new Marysville Underpass structure to the north of the existing structure, allowing for existing tracks to remain at their current location during the construction of the underpass. The new underpass will then become the permanent structure. For the Binney Junction Underpass, the new underpass structure will be constructed to the south of the existing structure, which will allow for the existing tracks to be utilized during construction.

Upon completion of the new underpasses, the tracks alignments will be shifted to the new structure and the existing structures will be removed. This alternative allows for the new structures to be constructed without affecting the continuity of UPRR schedule and will result in only one shift of railroad tracks to complete the construction of the new structures.

Structure Alternative 1A

Similar to Alternative 1, this alternative will construct structures to the north of the existing Marysville Underpass and to the south of the existing Binney Junction Underpass. The difference is that the temporary structures will be required. With this alternative, tracks will have to be shifted twice, to and from the temporary structures, during the construction of this project. This will allow the permanent structures to be constructed in the same horizontal and vertical alignment as it was previously, maintaining existing track alignment.

See **Attachment C,** *Preferred Alternative Exhibit,* for more information.

Finger Levee

Due to the proposed improvements of SR 70, the east levee, north of the Binney Junction Underpass, will have to be relocated and regraded to Cemetery Road. There is also an existing paved access road on top of the levee for maintenance that will have to be relocated accordingly in order to maintain access. In addition to relocating the levee, relief wells or slurry cutoff walls will be added along the new levee if

required and approved by the Army Corps of Engineers. The addition of either of these will help mitigate underseepage that may be present in the levee.

Drainage Features

Within the project limits, runoff is collected via streets and gutters and then directed to storm drain systems operated by Caltrans. The City maintains a storm drain system within the project limits as well. Runoff from the northern portion of the project limits is directed to the Caltrans storm drain system and then to the pump station located at the Binney Junction Underpass (P.M. 15.4). From there, runoff is pumped into Simmerly Slough, which flows on the north side of the Marysville Ring Levee in an area adjacent to the project. Runoff from the southern portion of the project is directed to the Caltrans storm drain system and then to East Lake. As the existing roadway profile will be lowered to meet current vertical clearance standards at the Marysville Underpass and the Binney Junction Underpass, majority of the existing drainage systems will need to be replaced in kind within the project limits.

There are three viable drainage alternatives for the proposed project that will be carried into the final design phase of the project. The drainage alternatives are as follows:

Drainage Alternative 1

Alternative 1 proposes to direct runoff from the entire project using curbs and gutters via a proposed storm drain pipe. This storm drain pipe would route flow to the north to the existing pump station located at the Binney Junction Underpass. From there it would be pumped via a new (replacement) pump station to the existing outlet pipes through the existing levee structure towards Simmerly Slough. Excess volume that cannot be pumped immediately would be stored in a proposed underground sump structure. This alternative assumes that the existing pump station is at the end of its service life and would not easily be configured to work with the new required storage configuration; however, the existing form mains/pipes contained within the levee are assumed to be intact and reusable. If design assessments show that these pipes must be replaced, then the outlet capacity of the proposed pump station may be modified and the sump structure re-sized within the future outlet capacity.

Drainage Alternative 2

Alternative 2 proposes to direct runoff from the northern portion of the project to the existing pump station location where it would be pumped via a new pump station through the existing outlet pipes towards Simmerly Slough. Excess volume that cannot be pumped would be stored in a proposed underground sump structure. Runoff from the southern segment of the project would be directed to a proposed detention basin and then pumped into East Lake via either the existing storm drain system or a new storm drain pipe to be sized during the design phase of the project.

Drainage Alternative 3

Alternative 3 proposes to direct runoff from the northern portion of the project as outlined above in Alternative 2. Runoff from the southern segment of the Project would be directed to a sump and then pumped into East Lake via either the existing

storm drain system or a new storm drain pipe to be sized during the design phase of the project.

See **Attachment D,** *Preliminary Drainage Report,* for more information.

Highway Planting and Erosion Control

A Landscape Architecture Assessment Study (LAAS) was performed on June 8th, 2020, from this study, the following was recommended for highway planting and erosion control:

Areas of soil disturbance will be re-established utilizing a mixture of trees, shrubs, and a seed comprised of native plant species indigenous to the area. All disturbed areas will receive soil stabilization measures that may include several Erosion Control techniques. Materials and locations will be determined during the design phase. Vegetation Control will be placed as a permanent treatment installed under the Midwest Guardrail System (MGS) where repetitive maintenance activity to control vegetation would otherwise be required. This consists of concrete applied beneath signposts, guardrails, and adjacent to median barriers. In addition, Fiber Rolls will be used with any slope work to act as an additional sediment barrier/ slope interrupter.

At the end of construction, all areas used for staging, access, or other construction activities shall be repaired by contractor pursuant to Section 5-1.36 "Property and Facility Preservation." Areas shall be sufficiently decompacted prior to final erosion control application.

See **Attachment E,** *Landscape Architecture Assessment Sheet,* for more information.

Utilities

Due to the proposed project's design features, there will be utility relocation required for each of the proposed alternatives. Existing utilities around the project area include overhead telephone/communication lines, underground fiber optics line, underground gas, water, and sewer.

Based on the mapping and information provided, the following utility facilities exist within the project location:

- AT&T (Overhead)
- California Water Service (CWS)
- City of Marysville – Sewer
- Kinder Morgan
- PG&E – Electric
- PG&E – Gas
- Qwest (Overhead)
- Sprint (Overhead)

The project cost estimate for utility relocation are installed under encroachment permit/franchises for AT&T, Kinder Morgan, PG&E Electric and Gas, and thereby are paid 100% by owner expense. CWS, City of Marysville – Sewer, and Qwest are to be relocated at the State's expense.

Nonstandard Design Features

A Design Standard Decision Document was approved on October 2nd, 2020. The proposed project requires the following nonstandard design features:

HDM Section 304.1 titled Side Slope Standards states "In light grading where normal slopes catch in distance less than 18 feet from the edge of the shoulder, a uniform catch point, at least 18 feet from the edge of the shoulder, should be used."

Uniform grading standard is meant for construction production efficiencies for larger production projects. This standard does not address safety or the Federal Highway Administration (FHWA) 10 controlling criteria and will not be classified in the same category because of the proposed nature of improvements.

5B. Rejected Alternatives

Structure Alternatives

On October 20, 2020, during the public comment period, Caltrans presented the proposed project alternatives to the City of Marysville and the public. Members of the City Council, along with the Commander of Veterans of Foreign Wars Post 948, presented concerns of Structure Alternative 2/2A due to the impacts to the Veterans Memorial Center. The center has provided a source of income for Veterans and has been a location that allows them to meet. According to the Commander, the center also provides the Veterans of the area ability to carry out programs, such as the children and youth scholarship and other Veterans' needs. In addition, impacts to the Veterans Memorial Center will hinder their ability to conduct burial honor ceremonials and more. The building has been relocated 4 times since 1925.

In addition to the Veterans Memorial Center, Structure Alternative 2/2a was highly opposed by the Members of the City Council as well, due to the impacts of 18 low-income residential acquisitions (11 multi-family plus 7 single-family residences) and to the economically disadvantaged population within the project impact area in comparison to Alternative 1/1A's one residential acquisition.

Structure Alternative 2

This alternative will construct the new Marysville Underpass structure to the south of the existing structure, allowing for existing tracks to remain at their current location during construction of the underpass. The new underpass will then become the permanent structure. The new Binney Junction Underpass will consist of two structures to the south of the existing structures, which will allow for the existing tracks to be utilized during the construction of the new Binney Junction Underpass. Tracks will then conform to the new structures which will result in only one shift of railroad tracks during the construction of the new structures.

Structure Alternative 2A

Similar to Alternative 2, this alternative will construct structures to the south of the existing Marysville Underpass and to the south of the existing Binney Junction Underpass. The difference is that the temporary structures will be required. With this alternative, tracks will have to be shifted twice, to and from the temporary structures, during the construction of this project. This will allow the permanent structures to be constructed in the same horizontal and vertical alignment as it was previously, maintaining existing track conditions.

No-Build Alternative

The No-Build Alternative proposes no project improvements.

The Project Development Team (PDT) recommends rejecting the no-build alternative because this alternative does not make any improvements to address the project's purpose and need of rehabilitation of existing pavement, providing adequate sight distance and clearance for the existing structures, and provide a complete street aspect to the State Route through the City of Marysville.

Three-lane Viaduct Alternative

This alternative proposes to construct a 2,500-foot-long three-lane viaduct over the Binney Junction Underpass and the Marysville Underpass, conforming near 14th Street and Cemetery Road. This alternative would improve local operations with traffic on SR 70 being elevated, which would optimize the design speeds of the proposed facility. After discussion with the PDT, this alternative was rejected due to the potential visual impact and increased noise generated from the vehicles being elevated on the proposed viaduct and not address the project's purpose and need for rehabilitation of the existing pavement.

Over-Under Structures Alternative

This alternative proposes to construct one bridge over Binney Junction/24th street and an underpass under the Marysville Bridge on a new alignment approximately 50-feet to the east, with a frontage road connecting 24th Street with 18th Street. In addition, the signal at 18th street would be removed in lieu of a right-in/right-out for vehicular traffic and pedestrian crossing underneath the embankment of the North Leg of the railroad. This alternative would improve operations in the project limits due to elimination of cross traffic but will reduce pedestrian and vehicular circulation at 18th Street. Given that 18th Street is adjacent to Marysville High School and serves as a main street into the neighboring communities, a reduction of pedestrian and vehicular circulation at this location would not address the project's purpose and need.

Roundabout Alternative

This alternative proposes to eliminate a signalized intersection by constructing a two-lane roundabout and frontage road at 24th Street. This alternative was ultimately rejected due to a required change in the roadway alignment and profile in order to accommodate the roundabout footprint. The larger footprint causes additional impacts to the Yuba-Sutter Transit center, Marysville High School and Binney Junction UPRR structure.

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. Hazardous Waste

Based on the proposed project scope and location, the following Hazardous Waste issues were considered:

- Naturally Occurring Asbestos (NOA) – The evaluation indicated that altered ultramafic bedrock, alluvium derived from ultramafic rock, or other rock commonly associated with NOA may be present.

- Cortese List – A closed Cortese listed site, 7-UP Bottling located at 2100 B Street will be impacted based on the current proposed project limits. This will require a preliminary site investigation (PSI) and prepare an exemption to acquire the contaminated parcel (s). Typically adding 9 to 12 months to the right-of-way acquisition process.
- Lead in Soil – A PSI for Aerially deposited lead (ADL) will need to be conducted prior to Ready-to-list (RTL).
- Thermoplastic/Paint Stripe/Pavement Marking – Thermoplastic paint may contain lead of varying concentrations depending upon color, type and year of manufacture.
- Treated Wood Waste (TWW) – TWW will be generated during this project from removal of old treated wood and from the placement of new treated wood.
- Structural Survey – Since this project will include work on existing structures, it is possible that asbestos containing material or lead containing paint may be disturbed during construction. A survey will be required prior to construction.

6B. Value Analysis

A Value Analysis (VA) was completed for this project on April 19, 2019. The District Executive Management elected to accept two of the proposed VA alternatives proposed by the VA team. The accepted alternatives provide a value improvement of 26%, when considering the combined effects of the $18.27 million cost savings, three-month reduction in construction and 7% improvement in project performance. The major savings come from VA alternative 1.3.1. based on reduced construction time and reduced time-related overhead.

The following describes the accepted alternative along with their initial cost savings, change in schedule, and performance as validated by the PDT after the VA study.

VA Alternative No. and Description	Initial Cost Savings	Change in Schedule	Performance Change
1.3.1 Construct a bridge over Binney and 24th Street and an underpass under Marysville Bridge on new alignment 50 feet to the east	$18,570,000	3-month reduction	+23%
5.1 Construct a roundabout at 24th Street to improve operations/safety and eliminate a signal	($300,000)	No Change	+21%

As mentioned in Section 5B of the project report, both of these alternatives were ultimately rejected by PDT members.

6C. Resource Conservation

This project meets the transparent methodology for SHOPP project prioritization based on the increase in safety for all users, improving the system performance and efficiency, and resorting them in kind. This project is also employing asset management strategies by minimizing the potential impacts of future congestion and maintenance.

With the removal of existing asphalt concrete along SR 70, as a resource conservation measure, the existing structural section is to be recycled.

6D. Right-of-Way Issues

Acquisitions of fee and Temporary Construction Easements (TCEs) will be required from residential and commercial properties. Acquisitions will also be required from the City of Marysville, Marysville High School, and a park owned by Yuba College District, along with four outdoor advertising signs (ODA). In addition, driveway conforms will be required for 9 parcels and new fence will be placed along the Marysville High School Parcels.

With the implementation of the Marysville and Binney Junction Underpass and the involvement of UPRR tracks, there will have to be extensive UPRR coordination during the design and construction phases of the project. UPRR involvement includes a Railroad Clearance Memo, Right of Entry, Construction and Maintenance Agreement, and Right-of-Way Agreements for preliminary engineering.

Full acquisition of at least eight buildings are required for the preferred alternative, including two single family residences, four commercial buildings, a public agency property, and a non-profit property. Anticipated total right-of-way cost of this alternative is $15,258,000.

Railroads

Union Pacific Railroad Agreement for separated-grade crossings at the Marysville Underpass and Binney Junction Underpass would be needed.

See **Attachment F,** *Right-of-Way Data Sheet,* for more information.

Relocation Impact Studies

Relocation Assistance Program (RAP) displacements will be required for the affected single-family residences, multi-family residences, and businesses/non-profits. Based on the Relocation Impact Study, dated March 18, 2020, sufficient replacement housing will be available without last resort housing.

Based on market research, there will be sufficient single-family residences and commercial properties that are equal to or better than the displacement properties available for rent or purchase for either project alternative.

See **Attachment G,** *Relocation Impact Statement,* for more information

6E. Environmental Compliance

The Environmental Approval for this project is an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) and an Environmental Assessment (EA) with a Finding of No Significant Impact (FONSI) pursuant to the National Environmental Policy Act (NEPA).

See **Attachment H,** *Final Environmental Document,* for more information.

Wetlands and Flood Plain Study

There are two distinct, independent floodplains within the project limits. The first floodplain is located within Marysville, which is in FEMA Zone X “Area with

reduced flood risk due to the levee". The proposed project will not have any impacts to the FEMA Zone X floodplain. The second floodplain, located on the other side of the existing Marysville levee, is the Simmerly Slough Floodplain. The 408 Permit Technical Memorandum will be focused on this floodplain and the levee setback portion of the project will affect the floodplain. According to the findings of the Technical Memorandum, there will be minor changes to the floodplain elevations in Simmerly Slough and the floodplain elevations will decrease with the implementation of the proposed project.

See **Attachment I,** *Section 408 Permit Hydraulics Study,* for more information.

6F. Air Quality Conformity

Each project alternative is fully compatible with the design concept and scope described in the current regional transportation plan.

Regional Conformity

The proposed project is listed in the Metropolitan Transportation Improvement Program (MTIP) and the 2016 financially constrained Metropolitan Transportation Plan/Sustainable Communities Strategy which was found to conform by SACOG on February 18, 2016. Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) made a regional conformity determination finding on December 7, 2018.

In addition, this project is also included in SACOG's financially constrained 2019-2022 MTIP. Both were determined to conform by FHWA and FTA on December 17, 2018. The design concept and scope of the proposed project is consistent with the project description in the 2019-2022 MTIP and the "open to traffic" assumptions of the SACOG regional emissions analysis.

Status of Plans Related to Regional Conformity					
MPO	Plan/TIP	Date of adoption by MPO	Date of Approval by FHWA	Last Amendment	Date of Approval by FHWA of Last Amendment
SACOG	2016 Metropolitan Transportation Plan	2/18/2016	-	-	-
SACOG	2019-22 Metropolitan Transportation Improvement Program (MTIP approval)	9/20/2018	12/17/2018	Amendment #11 Amendment #18	9/9/2019 11/20/2019
SACOG	Determination of Air Quality Conformity	-	12/7/2018	-	-

Project Level Conformity

The project is located in the maintenance area for PM2.5, thus a project-level hot-spot analysis for PM2.5 is required under 40 CFR 93.109. The project's design concept and the scope match those assumed for regional analysis purposes (in the MTP and MTIP) and a hot-spot analysis for carbon monoxide and/or particulate matter. The

project does not cause or contribute to any new localized CO, PM2.5, and/or PM10 violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones during the timeframe of the transportation plan.

Interagency Consultation

SACOG completed an Interagency Consultation Review (ICR) in order to evaluate if it is a Project of Air Quality Concern (POAQC) as defined in 40 CFR 93.116 and 93.123 and U.S.EPA's Hot-Spot Guidance. The traffic information used for the ICR was derived from the Draft Traffic Analysis Report. The project obtained concurrence from both EPA and FHWA that the Project is not a POAQC on May 14, 2019 and May 18, 2019, respectively.

Summary of Interagency Consultation Process				
Date	Format	Participants	Discussion Summary	Outcomes
5/4/2019	E-mail	District 3, Caltrans	Caltrans District 3 requested SACOG to initiate an ICR.	Request for ICR
5/13/2020	E-mail	SACOG	SACOG initiated the ICR	Initiation of a review process
5/14/2020	E-mail	EPA	EPA concurs that this is not a project of air quality concern.	Concurrence
5/18/2020	E-mail	FHWA	FHWA concurs that this is not a project of air quality concern.	Concurrence

6G. Title VI Considerations

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans commitment to upholding this policy was reaffirmed in October 2016 with an update of the Title VI Program Plan.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 USC 2000d, et seq).

Title VI of the Civil Rights Act of 1964 states:

> No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.

More information about Caltrans' adherence to Title VI, including the Nondiscrimination Policy Statement, is located at the Title VI Program website.

The public meeting will include outreach to disadvantaged communities in the vicinity of the project to ensure that project alternatives are discussed with everyone in the public.

6H. Noise Study Report

The Noise Study Report (NSR) for this project was prepared by Jason Volk on June 18, 2020 and approved by Saeid Zandian on June 18, 2020.

The purpose of this NSR is to evaluate noise impacts and abatement, if necessary, under the requirements of Title 23, Part 772, of the Code of Federal Regulations (CFR), Procedures for Abatement of Highway Traffic Noise, related to the SR 70 Binney Junction Roadway Rehabilitation and Complete Streets Project. According to 23 CFR 772.3, all highway projects developed in conformance with this regulation are deemed to be in conformance with FHWA noise standards. Compliance with 23 CFR 772 provides compliance with the noise impact assessment requirements of NEPA.

Local Impacts

Future traffic noise levels under design-year build conditions are predicted to approach or exceed the noise abatement criteria (NAC) at outdoor areas of frequent human use associated with Activity Category B and Activity Category C land uses in the project area. As such, traffic noise impacts are predicted to occur due to operation of this project, and noise abatement was considered for four areas where noise impacts were predicted to occur under future build conditions.

These four areas include:

- Ellis Lake Park
- B Street/Lakeside Court – Three Residential Area
- B Street/18th Street – Marysville High School and Youth Center
- Cemetery Road – Marysville Cemetery

At residential land uses where noise levels were predicted to approach or exceed the NAC for Activity Category B land use, noise barriers were not found to be feasible due to driveway and sidewalk access requirements along B Street. At locations associated with the cemetery, two parks, Marysville High School, and the youth center where noise levels at outdoor areas were predicted to approach or exceed the NAC for Activity Category C land use, the areas that would be affected were not considered or assumed to be areas of frequent outdoor use. Because of these factors, noise abatement was not evaluated further.

Construction Impact

No adverse noise impacts from construction are anticipated. Construction would be conducted in accordance with Caltrans provisions in Section 14-8.02, *Noise Control*, of the 2018 Standard Specifications and applicable local noise standards. Furthermore, implementing the measures specified in Chapter 8, "Construction Noise," would minimize temporary noise impacts from construction.

See **Attachment J,** *Noise Study Report,* for more information.

The Railroad Noise and Vibration Technical Report for this project was prepared by Jason Volk on June 18, 2020 and approved by Saeid Zandian on June 18, 2020.

Train/Railroad Impact

As with rail noise, the potential for vibration impacts from train operations was determined by evaluating the shift in the track location based on previously stated Alternatives in Section 5, and therefore the proximity of vibration-generating rail traffic with respect to the receptor locations.

An assessment of vibration was not required for the preferred alternative, as the sensitive receptors nearest to the proposed alignments under these alternatives were located at a distance greater than the screening distance of 120 feet for Category 3 (school) receivers. The distance to the nearest track under Structure Alternatives 1 and 1A would not change for Category 2 (residential) receivers. As such, vibration under Structure Alternatives 1 and 1A were not evaluated further.

Construction Impact

Noise related to construction of the proposed project is temporary and would cease once construction is complete. Construction at a given location for each phase of the proposed project would be intermittent and short term, relative to the nearest sensitive receptors. Noise levels from operation of heavy equipment during construction of any project feature may be intermittently perceptible above existing ambient noise levels. However, noise levels during construction are not predicted to exceed FTA daytime or nighttime construction noise thresholds at sensitive uses. No avoidance and minimization measures for construction noise are required

Construction of the proposed project would result in temporary vibration along the alignment from use of heavy equipment and machinery. Under worst-case conditions, ground borne vibration from construction activities is predicted to have a maximum value of 0.089 inch/second peak particle velocity (PPV), which is not expected to exceed the FTA vibration threshold of 0.20 inch/second PPV at structures within 25 feet of a construction area. No avoidance and minimization measures for construction vibration are required.

See **Attachment K,** *Railroad Noise and Vibration Technical Report,* for more information.

6I. Life-Cycle Cost Analysis

For the proposed project, a life-cycle cost analysis is not applicable.

7. OTHER CONSIDERATIONS AS APPROPRIATE

Public Hearing Process

The community open house presentation was originally scheduled for March 19th, 2020, but for the safety and well-being of the community members due to the development of the COVID-19 Pandemic and in accordance with Governor Gavin Newsom's Guidance on Public Gatherings, the community open house presentation was cancelled. An online presentation video of the proposed alternatives was posted on the State's website for public viewing and comments.

A public hearing for the Draft Project Report and Draft Environmental Document was held on October 20, 2020 by the City of Marysville to discuss the project's proposed alternatives. Members of the Council and the public were able to comment on the project's design features and impacts to their community. As mentioned in Section 5B, the Council Members were strongly opposed against Structure Alternative 2/2A due to the impacts to the Veteran Memorial Center and the low-income housing around the area. In addition to the public hearing, the public was also given an opportunity during the circulation period of the Draft Environmental Document to

call in and have their comments addressed for said document.

Route Matters

No new freeway agreements or revised freeway agreements will be required. Existing access control will remain and driveways to surrounding stakeholder properties will be maintained and/or adjusted to maintain access to proposed facility.

Permits

The following permits will be required for this project:

- US Army Corps of Engineering Clean Water Act Section 404 Permit
- Rivers and Harbors Act of 1899 Section 14 – 33 USC 408 Permit
- Central Valley Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification

Cooperative Agreements

Local Agency

Cooperative Agreements with City of Marysville and County of Yuba would be needed.

Transportation Management Plan

Because of the high traffic volumes within the project limits, work requiring traffic control on mainlines and shoulders will be restricted from late evening to early morning hours only. Project staging concept will be performed in accordance with the Caltrans Standard Plans. Since this project is not a stand-alone project, coordination with other projects within or nearby will be required to avoid conflicts during construction and to minimize any interference.

A full closure on SR 70 may be allowed during the late evening to early morning hours for bridge falsework only during the replacement operations of Marysville Underpass and the Binney Junction Railroad Underpass. Detour plans will be required for any full closure. One-way traffic control (reversing control) using flaggers will be allowed on the two-lane, two-way section in accordance to Caltrans Standard Plans, during nighttime hours, but may be restricted during daytime peak hours and weekends.

Coordinating with City of Marysville and the operation of the existing UPRR tracks within the project limits will be required if construction activities impact both facilities. Access to driveways and cross streets will be maintained during construction in accordance with the traffic control standard plans and traffic handling plans. Lastly, bicycle and pedestrian traffic will be maintained during construction at the locations with existing bikeways. Additional signs may be required to direct bicycle traffic when bikeways and sidewalks are closed for the contract work.

See **Attachment L,** *Transportation Management Plan Data Sheet,* for more information.

Stage Construction

The proposed project is anticipated to be constructed over 3 construction seasons and

consists of 6 different stages to construct the project.

Stage 1

The first stage will consist of temporarily lowering the roadway profile under the existing Marysville Underpass and Binney Junction Underpass to meet vertical clearance standard of 15'-0". This work will be performed under separate 55-hour closures of SR 70 between 14th Street and Cemetery Road. A detour will be provided during each of the closures to ensure through traffic is maintained on the State Route.

Temporary closures during the Marysville Underpass construction will utilize the following detour routes for through traffic: Temporary closures during the Binney Junction Underpass construction will utilize the following detour routes for through-traffic: Detour to SR20 (WB) to SR99 (NB).

Stage 2

The second stage will include construction of the new Marysville Underpass Structure and the southern Binney Junction Structure. The new Marysville structure will be relocated to the north of the existing UPRR structure, with the southern Binney Junction structure being relocated to the south of the new structure. During this stage, traffic will be shifted to the west between 16th street and Cemetery Road to allow for construction of the structures.

In addition, the non-conflicting portion of the new UPRR track alignment will be constructed to the west of the existing railroad track. (See Stage Construction – Stage 2 Exhibit). UPRR will operate on the existing track configuration during the completion of this work.

Once the Marysville Underpass, Southern Binney Junction Structure and the non-conflicting sections of the new track alignment are completed, the railroad will be temporarily closed to allow for construction of the UPRR track segments that conform to the existing tracks. Once this is completed the trains can be shifted to the new UPRR track alignment.

Stage 3

The third stage will consist of demolishing the existing Marysville Underpass Structure and the southern Binney Junction Structure. Traffic will be temporarily shifted to the west between 14th Street and Cemetery Road. Under this stage, the new segment of roadway will be constructed between 14th Street and 24th Street. Temporary shoring will be required along portions of SR 70 due to the grade difference.

Stage 4

The fourth stage will include construction of the new intersection at SR 70 and 14th Street. This work will also be performed under a 55-hour closure of the intersection of B Street and 14th Street. Traffic will then be shifted to the East, of the newly constructed section of roadway, to construct the roadway segment between the 14th Street intersection and the Yuba Sutter Transit Center.

Stage 5

The fifth stage will include construction of the new northern Binney Junction

Underpass Structure and section of roadway improvements to the east. Traffic will use the new lane configuration between 14th Street and 18th Street. North of 18th Street, traffic will remain on the west during construction of the east section of roadway between Marysville High School and Cemetery Road. Grading work within these limits will include relocating the existing eastern finger levee further east. This stage will also include the realignment for the east-west section that conforms to the new northern Binney Junction Underpass. Additional work for this stage will include the realignment of 24th Street and the improvements to the Marysville High School entrance and demolishing the existing northern Binney Junction Structure.

Stage 6

The final stage will consist of demolishing the existing northern Binney Junction Structure and shifting traffic onto the new section of roadway between 18th Street and Cemetery Road. The west section of the roadway will then be constructed.

See **Attachment M,** *Stage Construction Concept Exhibits,* for more information.

Accommodation of Oversize Loads

The proposed improvements will increase the vertical clearance of the existing profile and improve stopping sight distance at both the Marysville Underpass and Binney Junction Underpass. The proposed design is to lower the roadway profile at each underpass location to meet current Caltrans and UPRR design standards. Vertical clearance will not be adversely affected by proposed improvements during or following construction. The required temporary vertical clearance will be provided during construction.

Graffiti Control

This project is located within Yuba County and has not been identified as a graffiti-prone area.

Community Art - Mural

Within the project limits there is an existing mural at the south end of the Marysville Underpass, adjacent to the pedestrian tunnel. The mural was painted at that location in 2017 as a celebratory gesture after the community, and a local home improvement store, worked to fund and provide safety lighting to the pedestrian tunnel. Before the lighting and mural addition, the pedestrian tunnel was dark and considered unsafe by the community. Providing light and public art helped to provide a safer, and more visually pleasing, pedestrian tunnel access between north and south Maryville on SR 70. Murals are a type of community art and are an integral part of the community. There are many benefits murals can bring to a community; general mural benefits include supporting public art, improving aesthetics, creative placemaking, abetment for tag minimization, youth development, promote tourism and commerce, and many other benefits.

As a result of this project, the existing mural will be removed with the replacement of Marysville Underpass. To minimize community impacts, the mural will be replaced or rectified to maintain present conditions. The project is in an urban area, and there are many locations available to replace the mural. The existing mural has a strong

community value and is close to the high school. Replacing or rectifying the mural will enhance community cohesion and will work to reduce community impacts. Some ideas include, but are not limited to, having the same artist paint the new mural, involving local art groups, involving the local youth artists, or other ways which involve the community to create a vibrant and all-inclusive transportation system that is accessible and enjoyable to all users of the transportation system.

Complete Streets

The proposed project directly complies to Deputy Directive 64-R2, in its goal to increase and improve the facility for pedestrians and bicyclist. The project will improve the bicycle facilities by increasing the shoulder width to allow for a Class II bike lane to be utilized. In addition, curb ramps and sidewalks will be reconstructed in accordance with the current ADA standards for pedestrians to utilize.

Protect Wetlands and Surface Water

This project will implement Construction Site Best Management Practices (BMPs) to protect water bodies within or near the project limits during construction, but will not enhance adjacent wetlands, hydraulic connections and water functions, values, or existing deficiencies.

The project will adhere to the conditions of the Statewide National Pollutant Discharge Elimination System (NPDES) permit issued by the State Water Resources Control Board (Order No. 2012-0011-DWQ), NPDES Permit No CAS000003 along with the NPDES General Permit No. CAS000002 (Order No. 2009-0009-DWQ). The contractor will be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) to incorporate appropriate Construction Site BMPS for proposed construction activities. These are recommended to prevent receiving water pollution as a result of project construction activities. Anticipated temporary BMPs are: street sweeping, temporary construction entrance/exit, temporary fiber roll, temporary silt fence, temporary gravel bag berm, temporary drainage inlet protection, portable temporary concrete washout, temporary hydraulic mulch, and temporary erosion control blanket.

Stormwater

This project will comply with the Caltrans Statewide NPDES Permit and the Construction General NPDES Permit, issued by the State Water Resources Control Board. It will also adhere to the requirements issued by the Central Valley Water Quality Control Board. The post construction treatment area was determined to be greater than 1 acre, therefore the project will be required to implement permanent treatment best management practices (BMPs). There is a potential for several treatment BMPs throughout the project, including implementation of infiltration devices, detention devices, biofiltration strips, and biofiltration swales.

See **Attachment N,** *Storm Water Data Report Cover Page,* for more information.

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding

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

Programming

Fund Source	Fiscal Year Estimate								Programmed Amount
20.10.201.120	Prior	20/21	21/22	22/23	23/24	24/25	Future	Total	
Component	In thousands of dollars ($1,000)								
PA&ED Support	3,187	211	0	0	0	0	0	3,398	3,500
PS&E Support	0	1,213	2,716	68	0	0	0	3,996	3,500
Right-of-Way Support	0	565	440	221	228	234	1,076	2,764	2,500
Construction Support	0	0	0	1,682	2,092	2,149	4,765	10,687	12,000*
Right-of-Way			15,258					15,258	5,000
Construction			100,622					100,622	85,000*
Total	3,187	1,9898	119,036	1,971	2,320	2,383	5,841	136,725	111,500

*This project is G-13 contingency.

A Project Change Request will be prepared to request additional funds for Right-of-Way Cost and Construction Cost.

The estimated working days is 450.

The support cost ratio is 17.99%.

See **Attachment P,** *Programming Sheet,* for more information.

Estimate

The escalated cost for capital construction cost is $100,622,000. The Marysville Underpass and Binney Junction Underpass structures account for approximately 55% of the project's cost. This includes the two new structures and the staging associated with completing the construction of the new structures. For roadway, the big-ticket items are the roadway structural section, sidewalk/driveway improvements, and new signals/lighting which accounts for approximately 7% of the project's cost.

See **Attachment Q,** *Cost Estimate,* for more information.

9. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	03/16/2016	Actual
BEGIN ENVIRONMENTAL	M020	08/14/2016	Actual
BEGIN PROJECT	M040	08/01/2016	Actual
CIRCULATE DPR & DED EXTERNALLY	M120	09/18/2020	Actual
PA & ED	M200	12/07/2020	Target
R/W REQUIREMENTS	M224	12/15/2020	Target
REGULAR R/W	M225	02/17/2020	Target
GENERAL PLANS	M275	06/15/2021	Target
CIRCULATE PLANS IN DISTRICT	M300	12/10/2021	Target
PS&E TO DOE	M377	03/04/2022	Target
DRAFT STRUCTURES PS&E	M378	12/10/2021	Target
PROJECT PS&E	M380	04/12/2022	Target
RIGHT OF WAY CERTIFICATION	M410	04/14/2022	Target
READY TO LIST	M460	04/29/2022	Target
HEADQUARTERS ADVERTISE	M480	05/24/2022	Target
AWARD	M495	08/05/2022	Target
APPROVE CONTRACT	M500	09/01/2022	Target
CONTRACT ACCEPTANCE	M600	12/15/2026	Target
END PROJECT EXPENDITURES	M800	12/15/2029	Target
FINAL PROJECT CLOSEOUT	M900	12/15/2031	Target

10. RISKS

High Risk Issues –

Right-of-Way Certification – As a result of insufficient lead time, Right-of-Way Certification is at risk. To minimize risk to project schedule, either a reduced scope to eliminate railroad parcels/crossings or at least 26 months from PA/ED to the Right-of-Way Certification date will be required to maintain project schedule.

Right-of-Way Acquisition – Due to the number of complex parcels, right of way acquisition timeline may take longer than current schedule. This could delay the start of construction by one season, increasing the construction costs and extending the time for Right of Way Certification.

Utility Relocation – The potholing process may be delayed due to permissions required for Kinder Morgan's utility line and other permit requirements.

Railroad Staging – Due to the complex nature of coordination with UPRR, meeting the current schedule may not be feasible and may result in delay in Right-of-Way Certification and may add costs to the project.

Buried Man-made Objects – Unanticipated buried man-made objects uncovered during construction may require removal and disposal resulting in additional costs for

the project.

Preferred Rail Design – The preferred rail design will not be reviewed by UPRR until the 30% plans are submitted. The preferred design does not meet the criteria set by the UPRR Liaison, as the bridges shall be replaced in-kind. One of the proposed alternatives offsets the Binney Junction Underpass to the south to optimize the roadway geometrics, removes the bridge abutment from the levee and, and removes the cost of the temporary bridge with the associated staging.

West Levee – Due to the conform location with the Simmerly Slough project, the west levee will be impacted. The current roadway design will shave the inside of the existing west levee, which is widened by the Simmerly Slough project. Impacting the west levee may trigger seepage analysis and mitigation. Due to the cemetery on the water side of the west levee, seepage mitigation would require a cutoff wall.

Transportation Analysis Report – The re-evaluation of the traffic analysis to include the installation of a traffic signal at 16th Street would require additional time and resources that would impact circulation of the draft environmental document. In addition, it would require the results to be submitted to environmental for a revised air quality conformance analysis.

408 Permit Process – Critical path items for delivery of 408 permit process must be completed in a timely manner to allow adequate time for review of provided documentation. These items include completion of 65% plans, completion of 401, 404, Section 7, and Section 106 permits.

Medium/Low Risk Issues –

There is one medium risk issue, the project's Cultural Resources. Since there is a high possibility of buried man-made objects, there is a possibility that remains and/or resources will be found underneath the pavement excavation during construction. This risk could have the potential for delays to project schedule and delays during the construction phase of the project.

See **Attachment R,** *Risk Register,* for more information.

11. EXTERNAL AGENCY COORDINATION

Federal Highway Administration

No review has been coordinated with FHWA at this time. This project is an Assigned Project in accordance with the current FHWA and Caltrans Joint Stewardship and Oversight Agreement.

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 14 – 33 USC 408

Regional Water Quality Control Board

Clean Water Act Section 401 Water Quality Certification

12. PROJECT REVIEWS

Scoping team field review Project Development Team Date 07/03/2020
Scoping team field review attendance roster attached.
District Program Advisor Shahna Thomas Date 09/02/2020
Headquarters SHOPP Program Advisor _____ Date _____
District Maintenance Patrick Bishop Date 09/02/2020
Headquarters Project Delivery Coordinator Carl Anderson Date _____
Project Manager Cameron Knudson Date 7/28/2020
FHWA _____ Date _____
District Safety Review _____ Date _____
Constructability Review _____ Date _____
Other _____ Date _____

13. PROJECT PERSONNEL

Name	Title	Division/Office	Phone Number
Cameron Knudson	Project Manager	Project Management	(530) 218-1820
Jalwat Ahmad	Acting Office Chief	Design	(530) 741-4360
Juan Rodriguez	Project Engineer	Design M2	(530) 741-4421
Jeff Rud II	Acting Branch Chief	Design M2	(530) 741-4067
Nicholas Chatham	Design Engineer	Design M2	(530) 741-4413
Michael Bartlett	Senior Environmental Planner	Environmental Planning	(530) 635-3430
Anthony English	Senior Bridge Engineer	Engineering Services	(530) 713-7869
Robert Floyd II	Transportation Engineer	Utilities Engineering	(530) 741-4107
Peter Fortune	Task Manager	A/E Contracting	(916) 274-0585
Ronald Guenther	Transportation Surveyor	Right of Way Engineering	(530) 634-7665
Benjamin Hargrove	Resident Engineer	Construction Engineer	(530) 682-8160
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Teresa Limon	Senior Highway/Traffic Ops	Highway Operations	(530) 741-5745
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Gilbert Mohtes-Chan	Information Officer	Public Information	(530) 741-4571
Jacob Pace	Senior Transportation Surveyor	Right of Way Engineering	(530) 741-7262
Vishal Ream-Rao	Transportation Planner	Advanced Planning	(530) 741-5130
Julia Riggins	Landscape Associate	Landscape Architect	(530) 741-5167
Marguerite Ritter	Assoc. Environmental Planner	Environmental Planning	(530) 741-4535
Stacey Sannar	Associate R/W Agent	Project Coordination	(530) 740-4808
Jason Chou	Senior Bridge Engineer	Engineering Services	(916) 227-8761
Diane Wang	Bridge Engineer	Engineering Services	(916) 227-8450
Dianira Soto	Assoc. Transportation Planner	Sustainability Manager	(530) 740-4905
Darlene Wulff	Transportation Engineer	Office of Local Assistance	(530) 741-5714

14. ATTACHMENTS (Number of Pages)

A. Location map (1)
B. 30% Preliminary Plans (12)
C. Preferred Alternative Exhibits (1)
D. Preliminary Drainage Report (62)
E. Landscape Architecture Assessment Sheet (6)
F. Right-of-Way Data Sheet (10)
G. Relocation Impact Statement (3)
H. Final Environmental Document
I. Section 408 Permit Hydraulics Study (16)
J. Noise Abatement Decision Report (110)
K. Railroad Noise and Vibration Technical Report (46)
L. Transportation Management Plan Data Sheet (3)
M. Stage Construction Concepts Exhibits (9)
N. Storm Water Data Report Cover Page (1)
O. Traffic Operational Analysis Report (78)
P. Programming Sheet (2)
Q. Cost Estimate (10)
R. Risk Register (5)