

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT

SBD 40 REPLACE COLORADO RIVER BR (08-0R380)

Resolution SHOPP-P-2425-01B

(to 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) effective on August 15, 2024 (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

- 3.1 Whereas at its 3/22/2024 meeting the Commission approved the State Highway Operation and Protection Program and included in this program of projects the SBD 40 REPLACE COLORADO RIVER BR (54-0415), 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**, the Project Report attached hereto as **Exhibit B**, the Performance Metrics Form, if applicable, attached hereto as **Exhibit C**, as the baseline for project monitoring by the Commission.
- 3.2 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 , "Adoption of Program of Projects for the Active Transportation Program", dated
- ☐ Resolution , "Adoption of Program of Projects for the Local Partnership Program", dated
- ☐ Resolution , "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
- ☒ Resolution G-24-34 "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated 3/22/2024
- ☐ Resolution , "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

- 4.3 All signatories agree to adhere to the Commission's 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 to Caltrans on a quarterly basis; on the progress made toward the implementation of the project, including scope, cost, schedule, and anticipated benefits/performance metric outcomes.
- 4.7 Caltrans agrees to prepare program progress reports 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 Caltrans agrees to submit a timely Project Performance Analysis as specified in the Commission's SB 1 Accountability and Transparency Guidelines.
- 4.10 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 and performance metric outcomes during the course of the project, and retain those records for six years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 4.11 The 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 six 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 Performance Metrics
See Performance Metrics Form, if applicable, attached as Exhibit C.
- 5.4 Additional Provisions and Conditions *(Please attach an additional page if additional space is needed.)*

Attachments:

- Exhibit A: Project Programming Request Form
Exhibit B: Project Report
Exhibit C: Performance Metrics Form *(if applicable)*

SIGNATURE PAGE

TO

PROJECT BASELINE AGREEMENT

Project Name **SBD 40 REPLACE COLORADO RIVER BR (54-0415)**

Resolution **SHOPP-P-2425-01B**

(to be completed by CTC)





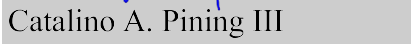
Project Applicant

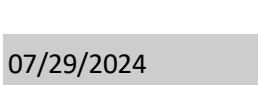




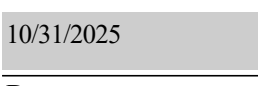
Implementing Agency




Catalino A. Pining III
District Director
California Department of Transportation

Tony Tavares
Director
California Department of Transportation

Tanisha Taylor
Executive Director
California Transportation Commission

August CTC SB1 SHOPP Baseline Agreement

Final Audit Report

2024-07-29

Created:	2024-07-23
By:	Lauren Applegate (s147989@dot.ca.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAAI_0SYj_0LuOHY3egKDZ47BVNTT9bxs4c

"August CTC SB1 SHOPP Baseline Agreement" History

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-  Agreement completed.
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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:	06/11/24 01:08:56 PM
District	EA	Project ID		PPNO	Project Manager		
08	0R380	0812000067		3001S	QUACH, BACSON D		
County	Route	Begin Postmile	End Postmile	Implementing Agency			
SBD	40	R 153.9	R 154.64	PA&ED	Caltrans		
				PS&E	Caltrans		
				Right of Way	Caltrans		
				Construction	Caltrans		
Project Nickname							
SBD 40 REPLACE COLORADO RIVER BR (54-0415)							
Location/Description							
Near Needles, from Park Moabi Road to Topock Road at the Colorado River Bridge No. 54-0415. Bridge replacement. Caltrans will be the lead agency and will share half of all costs with Arizona Department of Transportation (ADOT) as indicated via a signed Letter of Intent. This is a Construction Manager/General Contractor (CMGC) project.							
Legislative Districts							
Assembly:	33	Senate:	16	Congressional:	08		
PERFORMANCE MEASURES							
	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Bridge Health		87984			87984	Square feet of bridge deck
Programmed Condition	Bridge Health	87984			20712	108696	Square feet of bridge deck
Project Milestone						Actual	Planned
Project Approval and Environmental Document Milestone						02/21/24	
Right of Way Certification Milestone							04/02/26
Ready to List for Advertisement Milestone							04/15/26
Begin Construction Milestone (Approve Contract)							01/21/27
FUNDING (Allocated amounts are shaded)							
Component	Fiscal Year	SHOPP					Total
PA&ED	17/18	2,650					2,650
PS&E	22/23	5,524					5,524
RW Support	22/23	431					431
Const Support	25/26	10,268					10,268
RW Capital	25/26	8,000					8,000
Const Capital	25/26	49,616					49,616
Total		76,489					76,489

Memorandum

To: LYLE STOCKTON
SHOPP
HQ Financial Programming

Date: July 3, 2024

File: 08-0R380
0812000067
08-SBd-40-
R153.9/R154.64

From: Bacson Quach, PE
Project Manager
District 8

Subject: **PROJECT STATUS UPDATE**

This memorandum is written to accompany the Baseline Agreement for the referenced project.

The Project was programmed into the 2018 SHOPP Program originally for FY 23/24 RTL delivery. District processed a PCR proposing to move RTL delivery from FY23/24 to FY24/25 due to delays experienced during execution of the cooperative agreement language between Arizona DOT and Caltrans. Additionally, the District processed a PCR proposing to move the RTL delivery from FY24/25 to 25/26 in order to perform the geotechnical study which required a higher-level environmental document in lieu of a CE/CE. Currently, a PCR is being processed for the October 2024 CTC amendment to correct the performance objective from 108,696 sq ft. to 109,788 sq ft. based on the most recent calculations. Also, note that the actual PM for the project is as stated in the CTIPS and AMT R153.9/R154.64, however, in the PR the end PM was rounded to be R154.7. The update to performance objective is the only difference between the Project Report versus what is shown in the Baseline Agreement as Baseline Agreement reflects current project status.

Below tables summarize the project schedule and the funding breakdowns as processed through various PCRs.

Current and Proposed Major Milestones (PAED was achieved 02/21/02024):

	RW Cert M410	RTL M460	AWARD M500	CCA M600
PPR	4/2/2026	4/15/2026	1/21/2027	2/1/2030
PRSM	4/2/2026	4/15/2026	1/21/2027	2/1/2030
Fact Sheet	4/2/2026	4/15/2026	1/21/2027	2/1/2030
PR/SPR	4/2/2026	4/15/2026	1/21/2027	2/1/2030

Funding Summary (in x1000):

Component	Programmed	Allocated	PCR #1	PCR #2	PCR#3	0 Phase G-12	> 120 Request	CTIPS
PAED Support	\$2,650	\$3,115	\$2,650	\$2,650	\$2,650	\$3,115	—	\$2,650
PS&E Support	\$3,759	\$5,524	\$3,759	\$3,759	\$3,759	—	\$5,524	\$3,759
RW Support	\$431	\$431	\$431	\$431	\$431	—	—	\$431
Const. Support	\$10,268	\$10,268	\$8,332	\$8,332	\$10,268	—	—	\$10,268
RW Capital	\$8,000	\$8,000	\$169	\$169	\$8,000	—	—	\$8,000
Const. Capital	\$49,616	\$49,616	\$28,800	\$28,800	\$49,616	—	—	\$49,616

Note: Details of the funding changes and justifications can be found in the attached PCRs. The project funding is split 50/50 with Arizona DOT and Caltrans for PAED Support, PSE Support, Construction Support, and Construction Capital.

Attachments: PCR #1, PCR #2, PCR#3, Draft PCR#4

C: Anthony Liao
Martha Santana
Martin Villanueva
Md Shaheed

Project Report

for Project Approval

On Route Interstate 40 (I-40)

Between Park Moabi Rd

And Topock Rd

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:

CS Rebecca Guirado
REBECCA GUIRADO, Deputy District Director, Right of Way

APPROVAL RECOMMENDED:

MS B. S. Quach
BACSON QUACH, Project Manager

SO Kurt Heidelberg
KURT HEIDELBERG, Deputy District Director, Environmental Planning

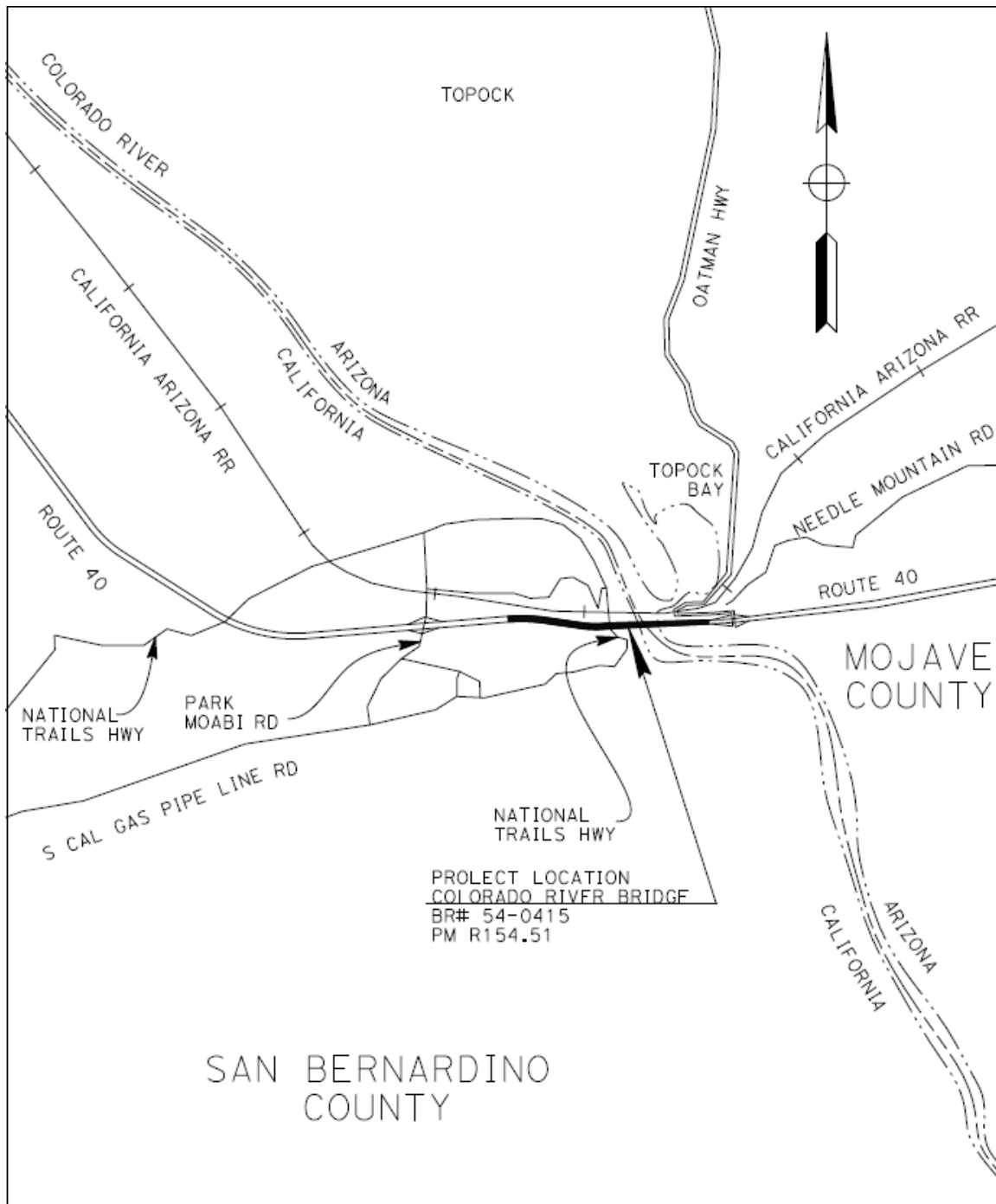
SS Haissam Yahya
HAISSAM YAHYA, Deputy District Director, Traffic Operations

CQ Jesus Galvan Jr
JESUS GALVAN, Deputy District Director, Design

PROJECT APPROVED:

Catalino A. Pining III 02/21/2024
CATALINO A. PINING III, District 8 Director Date

Vicinity Map



In San Bernardino County on Route 40 near Needles between Park Moabi Road and Topock Road in Mojave County Arizona, at the Colorado River Bridge

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.



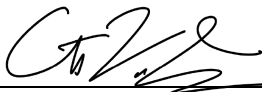
REFAAT EL SHERIF, REGISTERED CIVIL ENGINEER

1/26/2024

DATE



CONCURRED BY:



CAT QUACH, ACTING BRANCH CHIEF, DESIGN I

01/26/24

DATE

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1. INTRODUCTION

Project Description:

Interstate 40 (I-40) is a major east-west transportation route within San Bernardino County that connects the states of California (CA) and Arizona (AZ) with the Colorado River Bridge (CA Br. No. 54-0415, AZ Br. No. 957) spanning the CA/AZ state line. To improve the bridge deck integrity and accommodate all permit vehicle traffic, the California Department of Transportation (Caltrans) District 8, in cooperation with the Arizona Department of Transportation (ADOT), is proposing a project to replace the Colorado River Bridge at existing alignment. The Colorado River Bridge is located at the Stateline near Needles in San Bernardino County, CA and Topock in Mojave County, AZ (Attachment A).

This project is classified as a Category 4B project (Attachment J) as defined in the Project Development Procedures Manual (7th Edition, Part 2, Chapter 8, and Section 5) because of its minimal economic, social, and environmental significance. The project category was approved by the Deputy District Director for Design on April 11th, 2023.

Project Limits	CA: 08-SBd-40-PM R153.9/R154.7 AZ: MO-40-0.0/0.6	
Number of Alternatives	1 Build, 4 Rejected, and 1 No Build	
	Current Cost Estimate:	Escalated Cost Estimate:
Capital Outlay Support	\$ 38,265,000	\$ 38,265,000
Capital Outlay Construction	\$ 83,117,934	\$ 99,231,788
Capital Outlay Right-of-Way	\$ 7,999,975	\$ 7,999,975
Funding Source	2022 SHOPP, 20.xx.201.110/ Contribution from Arizona State	
Funding Year	2022 SHOPP	
Type of Facility	4 Lane Divided Freeway	
Number of Structures	1	
SHOPP Project Output	1 Bridge	
Environmental Determination or Document	Environmental Impact Report/Environmental Assessment (EIR/EA)	
Legal Description	In San Bernardino County Near Needles at Colorado River Bridge (BR# 54-0415)	
Project Development Category	4B	

2. RECOMMENDATION

It is recommended that this Project Report be approved using the preferred alternative and authorization granted to proceed to the next phase of the project. 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, in accordance with the plan as presented.

3. BACKGROUND

Project History

The Project Study Report-Project Development Support (PSR-PDS) was approved on December 19th, 2016. The PSR-PDS consists of five alternatives: Alternatives 1 and 2 proposes replacing the bridge deck and strengthening the steel girders to increase load capacity; Alternatives 3 and 4 propose full bridge replacement; and Alternative 5 is the no build alternative.

Alternative 1 - Deck Replacement and Strengthening (non-standard shoulders)

Alternative 2 - Deck Replacement and Strengthening (standard shoulders)

Alternative 3 - Bridge Replacement (standard shoulders)

Alternative 4 - Bridge Replacement and Realignment (standard shoulders)

Alternative 5 - No Build

Alternative 1 has been rejected at the PSR-PDS stage due to the low probability of the design exception approval. Alternative 2 was rejected at the PA&ED phase by the PDT and ADOT, the partner agency, on September 21th, 2020 based on reduced cost-benefit ratio, long term maintenance issues, and difficulties with emergency lane closures. Alternative 3 is renamed to “Replace Bridge at Existing Alignment”. Alternative 4 is split into two specific alternatives: replace bridge (realign to the north) and replace bridge (realign to the south) to analyze realignment impacts to both sides of the existing bridge. As a result, the above mentioned alternatives have evolved into the following alternatives considered for this project that are discussed in detail in section 5 of this report:

Alternative 1: Replace Bridge at Existing Alignment (standard shoulders)

Alternative 2: Replace Bridge (Realign to the North) (standard shoulders)

Alternative 3: Replace Bridge (Realign to the South) (standard shoulders)

Alternative 4: No-Build

Change in this nomenclature was presented and approved by PDT on September 21st, 2020.

Community Interaction

During the PA&ED phase, efforts have been made to engage and partner with local agencies. The County of San Bernardino, ADOT, California Trucking Association, Colorado River Board, California Agricultural Inspection Station, and San Bernardino County Transportation Authority were notified about the scope and location of the project via letters and emails on March 27th, 2023. There is no known opposition to the proposed project.

When Phase 1 commences, the local agencies will be asked to participate in the Project Development Team (PDT) meetings.

During the construction phase of the project, Caltrans's Public Information Officers in coordination with the Resident Engineer will arrange and facilitate outreach programs to inform and engage local residences, business, and agencies about the construction process and issues that may arise.

Existing Facility

The Colorado River Bridge at Topock was originally built in 1966. The bridge is a seven span structure comprised of continuous steel plate girders on reinforced concrete pier walls and reinforced concrete open-end seated abutments on steel "H" piles, with the exception of Pier 2 which is supported on a spread footing. The total length of the structure is 1,294 feet. The bridge deck is a cast in place (CIP) reinforced concrete deck. The bridge currently accommodates four 12-foot lanes of traffic (two in each direction) separated by a median barrier. The existing bridge has non-standard 2 foot inside shoulders and 4 foot outside shoulders with Type 2 bridge rails. Within this segment I-40 has a posted speed of 70 miles per hour (mph) and a design speed of 85 mph.

In 1963, an interagency agreement was finalized between the California Department of Public Works and the Arizona Highway Department regarding the planning, construction and maintenance of this structure. Article III, paragraph 4 states that both parties will equally and jointly assume responsibility for the maintenance, policing, repairing, replacing or reconstructing of this bridge. Paragraph 5 states that the division of costs for planning, construction, maintenance, policing, repairing, replacing or reconstructing of the bridge will be shared equally between both states without regard for the actual location of the interstate boundary line in the vicinity of the bridge. In 1987, a subsequent agreement was finalized between the CA and AZ Departments of Transportation. This agreement states in Section I, paragraph 4 that CA will assume one half of the costs of all maintenance and/or repair work for this structure. Section II, paragraph 1 states that AZ will reimburse CA for one half of the costs of maintenance or repair and any related engineering work performed.

4. PURPOSE AND NEED

Purpose:

The purpose of this project is to improve the safety and integrity of this structure by addressing deck deterioration and strengthening the girders to increase the load rating. The safety of the traveling public will also be enhanced because standard lane and shoulder widths are proposed as well as upgrades to the bridge rail system.

Need:

The concrete deck of the Colorado River Bridge has begun to deteriorate. There are spalls and delaminations along the outside shoulders, and transverse cracks throughout the transverse top mat rebar. The top mat transverse rebars are exposed with inadequate concrete cover. If no rehabilitation is done, the existing deterioration will worsen and ultimately compromise the integrity and safety of the structure. In addition, the bridge has a permit vehicle rating of PPPGO (Purple permit rating for 5, 7 and 9-axle vehicles and reduced permit ratings of Green and Orange for 11 and 13 axle vehicles respectively).

4A. Problem, Deficiencies, Justification

According to the Structure Replacement and Improvement Needs (STRAIN) Report, the bridge deck is deteriorating. There are several areas of spalls and delaminations along the outside shoulders, particularly in the westbound direction. There are transverse cracks across the bridge deck that are spaced within the transverse top mat rebar. Several of the top mat transverse rebars are exposed with inadequate concrete cover.

Currently, the bridge load rating for permit vehicles is PPPGO rated with no Asphalt Concrete on the deck. To maintain the existing deck would require adding a polyester concrete overlay to the deck, at a minimum. Such an overlay may degrade the load rating for permit vehicles further to an unacceptably low level.

Inside and outside shoulder widths on the Colorado River Bridge do not meet current Highway Design Manual (HDM) standards.

4B. Regional and System Planning

The proposed project is consistent with CA, AZ, FHWA, regional, and local planning goals. I-40 is a major transcontinental transportation corridor linking Southern California with the East Coast, spanning eight southern states with a total of 2,554 miles; 154.7 miles are in Caltrans District 8 consisting of four-lane freeway with truck climbing lanes at major grades. Within CA, I-40 carries a high volume of truck traffic transporting goods across the nation and a significant volume of recreational trips to the Mojave Desert, the Colorado River, and states to the east.

I-40 is also a major east-west transportation route within San Bernardino County and connects the states of CA and AZ with the Colorado River Bridge, spanning the CA/AZ state line. The bridge is used for interstate travel and goods movement between CA and states to the east beginning with AZ.

4C. TrafficCurrent and Forecasted Traffic

A Traffic Analysis was conducted for the Colorado River Bridge on I-40. See Table 1 for traffic data.

**Table 1 - Summary of Traffic Data
I-40 PM R153.9 to PM R154.7**

Traffic Data Information			
Year(s) Requested	2020	2031	2051
Annual Average Daily Traffic (AADT)	14,900	21,500	30,900
2-way Peak Hour Volume (PHV)	1,500	1,730	2,030
One-way PHV	930	1,040	1,220
Directional Split	60%	60%	60%
Truck Percentage in AADT	60%	60%	60%
Truck Percentage in DHV	30%	30%	30%

Collision Data Analysis

During the three-year period from August 1, 2019 to July 31, 2022, the actual accident rates for I-40, within the project limits, during the three-year period were compared to the statewide average for similar types of facilities. This data was generated on March 3, 2023. A summary of the Caltrans Traffic Accident Surveillance and Analysis System (TSAS), Traffic Selective Accident Retrieval (TSAR), and Selective Accident Rate Calculation (Table B) for collision rates (Fatal, Fatal plus Injury, Total) for the proposed project depicting collision rates per Million Vehicle Miles (MVM) for segments greater or equal to 0.5 miles are shown in the tables below:

**Table 2 - Summary of Collision Rates
I-40 PM R153.9 to PM R154.7
From August 1, 2019 to July 31, 2022**

Actual Rates and Average Rates						
Location I-40	Actual Accident Rates (per Million Vehicle Miles)			Average Rates (per Million Vehicle Miles)		
	Fatal	Fat+Inj	Total¹	Fatal	Fat+Inj	Total¹
I-40, PM R153.9- R154.7	0.00	0.16	1.05	0.015	0.21	0.57

1. All reported crashes (includes Property Damage Only (PDO) Crashes)

**Table 3 - Summary of Types of Collisions
I-40 PM R153.9 to PM R154.7
From August 1, 2019 to July 31, 2022**

Type of Collision								
Head-On	Side-swipe	Rear-End	Broadside	Hit-Object	Overturn	Auto-Ped	Other	Not Stated
0%	7.7%	0%	0%	61.5%	15.4%	0%	15.4%	0%

The traffic collision data for I-40 from PM 153.9 to PM 154.7 show that the actual total accident rate is greater than the total average accident rate for similar facilities statewide and

the major types of collisions are Hit-object (61.5%) and Overturn (15.4%), with the primary collision factor being Other Than Driver, Other Violation, Improper Turn, and Speeding. The addition of standard outside shoulders to I-40 would allow drivers more room to return to the roadway and avoid hitting the barriers or guardrails.

5. ALTERNATIVES

5A. Viable Alternatives

Alternative 1: Replace Bridge at Existing Alignment (Preferred)

This alternative proposes to construct a new bridge on the existing alignment. The new bridge deck will have standard shoulder and lane widths. With this alternative, the bridge (No. 54-0670) at the National Trails Hwy undercrossing does not need replacing (Attachment B), there will be less right of way and environmental impacts, and no nonstandard features when compared to alternatives 2 and 3. For these reasons, and more outlined in the sections below, this is the preferred alternative.

Proposed Engineering Features

The proposed bridge is a six-span Cast-In-Place/Pre-Stressed (CIP/PS) Box Girder structure, 1,294 ft in length (matching the existing bridge). Pier foundations will be on large diameter Cast-In-Drilled-Hole (CIDH) piles. The 84-foot wide deck will carry two 12-foot lanes, a 5-foot inside shoulder and a 10-foot outside shoulder in each direction. Other features include a Type 60M concrete barrier in the median and CA ST-75 bridge rails. The final structure type will be selected during the PS&E phase.

Staging Requirements

This alternative will require two major stages. Stage 1 will remove half of the existing bridge; then construct one half of the new bridge; allowing traffic on the remaining half of the existing bridge. During this time, traffic will be limited to one lane in each direction. The lanes will be 12 feet in each direction with two feet outside shoulders. Stage 2 will shift traffic to the newly constructed portion of the deck then remove the rest of existing bridge and build the second half of the new bridge. This traffic reduction will remain through the length of the construction zone and construction period.

Nonstandard Design Features

The proposed project is designed according to the current Caltrans highway design manual within the CA state limits and designed according to ADOT standards within the AZ State limits. There are no nonstandard features within the project limits.

Utility and Other Owner Involvement

This alternative will need coordination with Pacific Gas & Electric (PG&E) who has infrastructure on the CA side flood plain under the bridge. Potholing will be conducted during

phase 1 of the project to locate and note all utilities within the project limits. Design efforts will also be done to locate existing utilities and protect them throughout the construction phase.

Railroad involvement

The BNSF railroad bridge is a parallel bridge crossing the Colorado River at the same location. It is anticipated that the proposed improvement would not permanently impact the railroad with this alternative. However, a Temporary Construction Easement (TCE) may be necessary on the AZ side of the project.

Erosion Control

This project will use native vegetation to stabilize the soil while maintaining the visual character of the area.

Nonmotorized and Pedestrian Features

Pedestrian Facilities

I-40 is a controlled access facility and does not allow for pedestrian traffic.

Bicycle Facilities

Currently, there are no designated bicycle lanes or other bicycle infrastructure within the project limits. Bicyclists are allowed to travel on the shoulders of I-40 since there is no parallel bicycle facility. This alternative will widen the shoulder to standard width providing bicyclists with a large area to travel.

Cost Estimate

The current capital outlay cost, including construction and right of way, for this alternative is \$91,118,000 with a total project cost of \$129,383,000.

	Replace at existing alignment (CIP/PS BOX)
Roadway	\$25,502,570
Structures	\$57,615,364
Right of Way	\$7,999,975
Support	\$38,265,000
Total Cost	\$129,383,000

Right of Way

A temporary construction easement is required on the AZ side from multiple parcels including the BNSF Railroad. California State Lands Commission will require new lease agreement for this new bridge construction. Each State Agency will acquire their perspective right of way

within their jurisdiction. The attached right of way data sheet (Attachment D) accounts for the CA right of way capital cost and the attached right of way project cost estimate (Attachment E) accounts for the AZ right of way capital cost.

5B. Rejected Alternatives

Alternatives 1 and 2: Deck Replacement and Strengthening

An alternative was considered to rehabilitate the bridge by deck replacement (standard shoulders) and strengthening structure as mentioned in the PSR-PDS under Alternative 2. This alternative proposes to replace the bridge deck including bridge rails; and strengthen the structure and foundation for permit vehicle traffic; and the bridge deck would be widened to accommodate current standards. This alternative was rejected by the PDT and ADOT on September 21st, 2020 based on reduced cost-benefit ratio, long term maintenance issues and difficulties with emergency lane closures.

Alternative 2: Replace Bridge (Realign to the North)

This alternative proposes realignment to the north of existing I-40 centerline allowing the construction of the new bridge to take place while the existing bridge remains fully operational. Staging will only be necessary for transitioning the new realigned bridge to the existing I-40 centerline alignment on both ends of the bridge. With this alternative, the bridge at the National Trails Hwy Undercrossing will also need to be replaced. Additionally, a minor realignment is proposed to the Oatman Hwy to accommodate the bridge realignment on the AZ side. For the above reasons along with the need for nonstandard design features and a greater environmental and right of way impact, this alternative was not chosen as the preferred alternative.

Alternative 3: Replace Bridge (Realign to the South)

This alternative will realign to the south of the existing I-40 centerline and this will allow the construction of the new bridge to take place while the existing bridge is still operational. Staging will be only necessary for transitioning the new realigned bridge to the existing I-40 centerline alignment on both ends of the bridge. The bridge at the National Trails Hwy Undercrossing will also need to be replaced with this alternative (Attachment B). For the above reason along with the need for nonstandard design features and a greater environmental and right of way impact, this alternative was not chosen as the preferred alternative.

Alternative 4: No-Build

Under the No-Build Alternative, the existing Colorado River Bridge would remain in place. No construction or modification of the bridge would occur. The No-Build Alternative includes only projects that are currently planned and programmed in the study area. This alternative represents the baseline against which impacts associated with alternative strategies for the bridge will be assessed. This alternative does not satisfy the purpose and need of the project.

6. CONSIDERATIONS REQUIRING DISCUSSION

6A. Hazardous Waste

An Initial Site Assessment Report was prepared by Stantec Consulting Services Inc., November 19th, 2021. An Initial Site Assessment (ISA) Checklist was updated January 11th, 2023. A Site Investigation Report was completed by Stantec Consulting Services, Inc., January 11th, 2023. The project risk for potentially hazardous waste involvement is medium. (Attachment G).

6B. Value Analysis

A Value Analysis (VA) study, sponsored by Caltrans, District 8, and ADOT was conducted for this project.

The VA study was conducted early in the PA&ED phase of the project and was approved on July 23rd, 2021. Multiple alternatives were recommended during the VA study. The following are the three recommended alternatives:

- Construct a lightweight, cantilevered, multi-use bicycle and pedestrian path on one side of the bridge
- Extend work trestles in lieu of temporary retaining walls and earthwork
- Reduce number of piers for PA&ED Alternatives 2 & 3 (North and South Alignments)

The three alternatives were studied and ultimately rejected due to structural limitations and a lack of multimodal connectivity in the area.

6C. Resource Conservation

The project will require removal of asphalt concrete pavement, concrete and aggregate base. The removed materials will be stockpiled on-site and recycled for new construction uses where feasible. The non-recycled materials will be removed and properly disposed of off-site.

6D. Environmental Compliance

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans for the Federal Highway Administration (FHWA), which is the NEPA-lead agency for this project. This project is excluded from Caltrans' NEPA assignment because the project crosses state boundaries. An Environmental Impact Report/Environmental Assessment was signed (Attachment H) and has been prepared in accordance with Caltrans' environmental procedures, as well as State CEQA guidelines and federal environmental regulations, and is the appropriate document for the proposed project. Senate Bill 147 was signed July 10, 2023 and is valid until December 31, 2033. The bill amended sections 395, 3511, 4700, 5050, and 5515 of the Fish and Game Code and added Section 2081.15. The bill authorizes the

California Department of Fish and Wildlife (CDFW) to issue a 2081 Incidental Take Permit for fully protected species using the permitting structure in CESA that would authorize the take of a fully protected species resulting from impacts attributable to the implementation of critical infrastructure projects if certain conditions are satisfied. Because razorback sucker, California black rail, and Yuma Ridgway's rail are CDFW fully protected species, Caltrans, in coordination with CDFW, may apply for a 2081 Incidental Take permit under California Endangered Species Act (CESA) for these species.

6E. Air Quality Conformity

This project falls under the category of project type listed in 40 CFR 93.126 (Table 2). All projects listed under Table 1 or 40 CFR 93.126 (Table 2) are exempt from all emissions analyses. Hence, no Air Quality Study is needed for the project and further transportation air conformity requirements do not apply to the project.

6F. Title VI Considerations

Implementation of the viable alternative will not result in any disproportionately high or adverse impacts on minority or low-income neighborhoods or communities. Caltrans and FHWA policies demonstrate a commitment to Title VI of the Civil Rights Act, which provides that 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.

6G. Noise Abatement Decision Report

This project falls under Type I project categories of 23 CFR 772.7 in the Traffic Noise Analysis Protocol: New construction or reconstruction projects. Per the Traffic Noise Analysis Protocol a Noise Abatement Decision Report was prepared and approved on May 26th, 2022. The report examined the inclusion of a soundwall on the eastbound edge of outside shoulder for all alternatives, but the wall was ultimately not included.

6H. Life-Cycle Cost Analysis

A Life-Cycle Cost Analysis will be performed during the design phase.

6I. Reversible Lanes

This project does not qualify as a capacity increasing or a major street or highway realignment project and reversible lanes will not be considered.

7. OTHER CONSIDERATIONS AS APPROPRIATE

7A. Route Matters

A Supplemental Freeway Agreement dated April 11th, 1966, between Caltrans and the County of San Bernardino reflects existing County road connections to I-40 within the vicinity of this project. This project is not proposing new or major modifications to existing road connections, as such no superseding freeway agreement is required.

7B. Transportation Management Plan

A Transportation Management Plan (TMP) has been prepared to identify traffic mitigation measures to be implemented during construction of proposed improvements (Attachment I). Public Information/Public Awareness Campaign, Traveler Information Strategies, and Incident Management are recommended TMP strategies for this project. During construction, continuous access for pedestrian and bicycle traffic will be maintained.

7C. Public Hearing Process

Caltrans provided an opportunity for public review and comment on the Draft Environmental Impact Report/Environmental Assessment and a public hearing was conducted on June 29th, 2023. No comments were received during the public meeting. Local agencies sent in formal letters as comments to the draft environmental document. The agencies provided comments on various aspects of the project, such as the effects of construction staging on traffic during construction and discussion of impacts to environmental resources. All of the provided comments were considered in the discussion and selection of the preferred alternative. Local officials and agencies were notified by letter during the inception of the project.

7D. Cooperative Agreements

A Cooperative Agreement which set forth the terms and conditions for ADOT and Caltrans, and outlines respective responsibilities, is in place. The agreement covers only the PA/ED phase of the project. Separate agreements are being processed for the PS&E and Right of Way acquisition phases of the project. An agreement for the construction phase of the project will be processed during the PS&E Phase.

7E. Report on Feasibility of Providing Access to Navigable Rivers

Colorado River is a navigable waterway that is within the limits of this project. There will be coordination with the United States Coast Guard during the design phase. Public access and ability to navigate on the Colorado River will not be limited during construction.

7F. Stage Construction

The proposed Stage Construction Plans will be required and will vary in complexity. A more specific stage construction will be developed during the design phase. The project will

consist of at least two major construction stages.

Temporary Trestles:

A system of trestles will be constructed along each side of the existing bridge and under the existing bridge. These trestles would be used as a work platform for foundation construction, material, hauling, falsework erection, and existing bridge removal. A 50-ft opening will be provided for navigation during construction. Therefore, access to these trestles will be required from the CA side and AZ side. Access roads that lead to the trestles from CA and AZ will also be required.

7G. Accommodation of Oversize Loads

The proposed project will be designed to accommodate oversized loads. Construction activities are expected to affect the flow of oversized loads only during the construction period due to the construction staging, allowing for one lane in each direction. The oversized loads will be rerouted to State Route 62 to the South.

7H. Graffiti Control

Graffiti control measures will be specified in accordance with approved Caltrans methods. Further consideration will be taken once the bridge and retaining wall types are determined.

7I. Asset Management

Caltrans is responsible for developing projects that maintain the safety, condition, and operation of the State Highway System. Project needs are the result of inspections, analysis, and system planning conducted. The performance objective identified by the Headquarters (HQ) SHOPP Manager have been entered into the SHOPP tool. This project achieves the performance objectives which are consistent with the Transportation Asset Management Plan, Ten-Year SHOPP Plan, and Five-Year Maintenance Plan. See Attachment M for SHOPP Performance Measures.

7J. Complete Streets

I-40 is not designated as a bicycle facility. Bicycles are allowed on the segment of I-40 that encompasses the project limits because there is not a parallel alternative route. Widening the shoulders to ten-foot width will provide shoulder continuity and access for bicycle travelers.

7K. Climate Change Considerations

Greenhouse Gas Reduction Measures

There is no impact to Greenhouse Gas Reduction Measures (GHG) emissions and climate change. No further analysis is required. Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32, set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. While some

GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

7L. Broadband and Advance Technologies

The proposed improvements will not impact the accommodation for wired broadband facilities, fueling opportunities for zero-emission vehicles, and provisions of infrastructure-to-vehicle communications for transitional or fully autonomous vehicles. Based on Operations (Traffic Management Support) recommendation, there will be no broadband in this project.

7M. Alternative Delivery Method

To facilitate and enhance the PS&E delivery for this project the contract manager/general contractor (CMGC) process will be incorporated. A general contractor will be selected based on a request for proposal selection process and will be included as part of the PDT during the PS&E phase of the project.

8. FUNDING, PROGRAMMING AND ESTIMATE

Funding

This project has been programmed in the 2022 SHOPP, 20.xx.201.110 with Contribution from Arizona State Pavement Rehabilitation Program for delivery in the 2025/2026 Fiscal Year. The current estimated construction cost is \$83,117,934 and the estimated right of way cost is \$7,999,975. It has been determined that this project is eligible for Federal-aid funding.

Programming

Fund Source		Fiscal Year Estimate							
20.XX.201.010	Current Estimate	21/22	23/24	25/26	Total Escalated Estimate	ADOT Share of Estimate	Caltrans Share of Estimate	Caltrans Programmed /Approved Amount*	Caltrans Estimate Difference from Programmed
Component		In thousands of dollars (\$1,000)							
PA&ED Support	\$6,230	\$6,230			\$6,230	\$3,115	\$3,115	\$3,115	\$0
PS&E Support *	\$11,048		\$11,048		\$11,048	\$5,524	\$5,524	\$3,759	\$1,765
Right of Way Support **	\$451		\$451		\$451	\$236	\$451	\$431	\$20
Construction Support	\$20,536			\$20,536	\$20,536	\$10,268	\$10,268	\$10,268	\$0
Total Support	\$38,265	\$6,230	\$11,499	\$20,536	\$38,265	\$19,143	\$19,358	\$17,573	\$1,785
Right of Way	\$8,000			\$8,000	\$8,000	\$69	\$8,000	\$8,000	\$0
Construction	\$83,118			\$99,232	\$99,232	\$49,616	\$49,616	\$49,616	\$0
Total Capital	\$91,118			\$107,232	\$107,232	\$49,685	\$57,616	\$57,616	\$0
Grand Total	\$129,383	\$6,230	\$11,499	\$127,768	\$145,497	\$76,759	\$76,974	\$75,189	\$1,785
							Support/Capital Ratio: 35.7%		

* The procurement for the final need is being negotiated with the functions. The increase in PS&E is due to the change in scope from bridge rehabilitation to bridge replacement and a change in the contractor selection process to CM/GC in lieu of lowest bidder. A PCR was not processed due to the funding for phase 1 being in the current fiscal year.

** Adjustment for additional funds will be requested at the time of fund allocation.

The support/capital ratio of 35.7% is within the statewide average of 37.7% for similar projects. ADOT and Caltrans will split the cost of the project 50/50, except for the right of way support and capital. Each agency will acquire all right of way required for the project within their respective jurisdiction and pay for 100% of their respective right of way capital and support costs needed to do so.

Estimate

The estimated current construction cost is \$83,117,934 and the estimated right of way cost is \$7,999,975. See the Preliminary Cost Estimate for a breakdown of construction cost (Attachment C), Right of Way Data Sheet (Attachment D) for the CA right of way cost, and Right of Way Project Cost Estimate (Attachment E) for the AZ right of way cost.

9. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month Day, Year)	Milestone Designation (Target/Actual)
Begin Environmental	M020	May 5 th , 2020	Actual
Circulation Of Draft Environmental Document	M120	June 14 th , 2023	Actual
PA & ED	M200	January 31 st , 2023	Target
PS&E TO DOE	M377	October 2 nd , 2025	Target
Structural PS&E	M378	September 2 nd , 2025	Target
Right Of Way Certification	M410	April 2 nd , 2026	Target
Ready To List	M460	April 15 th , 2026	Target
Construction Contract Package to DES-OE	M475	July 31 st , 2026	Target
Headquarters Advertise	M480	November 1 st , 2026	Target
Award	M495	January 2 nd , 2027	Target
Approve Contract	M500	February 2 st , 2027	Target
Contract Acceptance	M600	May 1 st , 2030	Target
End Project Expenditures	M800	November 1 st , 2031	Target
Final Project Closeout	M900	November 1 st , 2032	Target

10. RISKS

See the Risk Register in Attachment L for more details

The following items are summarized from the risk register developed by the PDT:

- As a result of a permit required from the US. Coast Guard, the review process and approval may take longer than anticipated and delivery schedule may not allow time to process these permits. This may delay the project schedule and may increase the cost.
- As a result of not knowing the exact details of the preferred structure, utility conflict may occur which will impact the project cost and schedule.
- The project is located in the vicinity of several large well-known Historic Properties. If project plans subsequently encroach on the boundaries of these sites, then additional testing, consultation, and mitigation will be required. Thereby, the project cost may increase, and schedule may be delayed.
- Due to the multiple interstate agency coordination and the number of government agency jurisdictions requiring various permit and approval processes, if there is disagreement between agencies on protocols and findings, unforeseen mitigation, additional surveys/monitoring, and/or restrictive measures to satisfy environmental approvals may be needed. This may increase project cost and delay the schedule.
- There may be birds nesting under the bridge or in the trees and shrubs within the project area. If nesting birds are present during construction, this may delay the schedule and increase the cost.
- If BMP measures cannot be implemented prior to construction or prior to specified construction activities, then the construction schedule may be delayed.

- As a result of anticipating a long-term onsite plant establishment period per the CDFW 1600 permit, and offsite restoration work per the CDFW 2081 permit, a Child Project is needed to address these costs. Because the design is anticipated in Phase 1, permits are not yet acquired, and anticipated costs and support may exceed the current estimate. There is a risk that there may not be enough funds allocated and programmed into the Child Project to cover all costs. This may impact project schedule and cost.
- Since Pacific gas and Electric company (PG&E) habitat restoration is anticipated to be completed by the time this Project begins construction, habitat restoration may improve habitat suitability for some listed species under The Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA) that was previously analyzed as not suitable. Based on habitat suitability and/or positive detections, this may require a reevaluation, additional technical studies, USFWS section 7 Consultation, CDFW 2081 permit, and/or associated avoidance, minimization, and mitigation measures. This may impact project cost and schedule.
- The Cooperative Agreement between CT and ADOT for PSE phase has not yet been finalized. Any delay in executing this Agreement may result in schedule delay and impact the project cost.
- If we don't receive the geotechnical permits for three locations within body of waters in time to complete geotechnical borings in the late fall/winter 2024/2025, then due to the fully protected species/restricted work windows, (February 01 to September 30) we will not be able to proceed with geotechnical boring in that season. This may delay the schedule and impact cost.
- Geotech will be outsourcing the the work to consultant. it is not certain that consultant will have time to start the work in time to prepare the reports. This may result in schedule delay.
- The foundation design is based on Structure preliminary geotechnical report (SPGR). Any discrepancy/change in geotechnical information may cause to redesign the foundation. This may result in cost increase and schedule delay.
- In order to minimize the environmental impact, Long span bridge type is preferred, which poses the significant challenges for structure design. The complex structure may result in a higher cost.
- As a result of bridge replacement, traffic handling/detours will be required. The following items may be required: Community Impact Analysis; Public Awareness Campaign; Utilities, Public Services, or Emergency Services Assessments. This may increase the project capital cost and delay the construction schedule.
- Due to Potential soil liquefaction lateral spreading need to be further investigated. Ground improvements, or deep foundations, may be used to reduce or even eliminate lateral spreading hazards. This would impact the project cost and schedule.
- As a result of Pacific Gas and Electric Company's (PG&E's), environmental remediation activities, conducted by DTSC at Topock Compressor Station close to the project site, PG&E activities and/or assets may be potentially affected by Caltrans' I-40 Colorado River Bridge Replacement Project. If the bridge replacement activities intercept, obstruct or hinder PG&E's groundwater and contaminated soil removal plans or remediation infrastructures (wells, pipelines, communication lines and power lines), this could potentially lead to shut down of the project which would lead to massive delays and losses.

- As a result of DTSC's implementation of revegetation mitigation directly below the current I-40 bridge, all proposed bridge-replacement alternatives may impact the vegetation that has been replanted. Any “take” of vegetation from the revegetation program due to impacts from the bridge replacement project would impact the long-term success and establishment of native vegetation and may ultimately lead to shut down of the project which would lead to massive delays and losses.
- If the Project construction exceeds Dec 31, 2033, whereby species impacts may occur, then SB 147 is no longer valid, and the Project cannot have “take” to CDFW Fully Protected Species (Yuma Ridgeway’s rail, black rail, and razorback sucker), which may result in a stop work order on the Project permanently or until legislation can be pursued. This will adversely impact the project cost and schedule.
- As a result of differing site conditions, difficult drilling/caving conditions/groundwater impact may occur during the foundation construction, which will lead to impacts on cost and schedule.
- New permit for bridge is being sought from State Lands Commission. The project will require Caltrans to submit a lease application through the Commission’s OSCAR portal. The application will also require Caltrans to submit an Approximate Expense Deposit (\$3,000.00) to cover reimbursable staff costs for processing, and a filing fee (nominal, \$25). The deposit into the State Parks fund is cited in Streets & Highways Code section 101.5 and is not a State Lands Commission requirement. The SLC doesn’t specify the amount nor verify the deposit, this amount is usually determined by an appraisal.
- If phase 1 opening is delayed beyond Feb 2024, the project schedule would be impacted.
- If the Child EA does not created by early design and is not adequately funded, Caltrans will be unable to meet all CDFW 1600 and/or 2081 permit requirements and this will impact the project cost and schedule.

11. EXTERNAL AGENCY COORDINATION

Federal Highway Administration (FHWA)

This Project Report has been reviewed by Caltrans' FHWA Liaison, Sergio Avila, on September 26th, 2023 and this project is eligible for federal aid funding. Per the current Joint Stewardship and Oversight Agreement (Agreement) between the Caltrans and Federal Highway Administration (FHWA), dated May 28th, 2015, this project is considered to be a Delegated Project. However, should any future situation/circumstance that will potentially classify the project for Risk-based Project Involvement (RBPI) occur, Caltrans shall notify FHWA. FHWA will reassess this project to determine if the project is selected for RBPI and identify the specific FHWA involvement.

Calif. Department of Fish & Game

1602 Streambed Alteration Agreement
2081 Incidental Take Permit

U.S. Army Corp. of Engineers

404 Permit (Streams/Floodplain)

Colorado River Regional Water Quality Control Board
401 Water Quality Certification

County Flood Control Department
Flood Control Channel, Work Permit

U.S. Coast Guard
Project Concurrence and Permit

United States Fish and Wildlife Service
Section 7 Consultation Biological Opinion

Arizona Department of Environmental Quality/Environmental Protection Agency
401 Water Quality Certification

State Lands Commission
New Bridge Lease required for Colorado River Bridge

State Legislature
Project Exemption from California Fish and Game Code

Havasu National Wildlife Refuge
Additional Right of Way will be required for Alternatives 2 and 3

12. PROJECT REVIEWS

District Program Advisor/Maintenance	Mike Ristic	Date	9/26/23
Acting Headquarters Project Delivery Coordinator	Paul Gennaro	Date	9/24/23
Project Manager	Elaheh Hadipour	Date	9/19/23
District Design Liaison/FHWA/ADA	Sergio Avila	Date	10/11/23
District Safety Review	Kevin Chen	Date	9/23/23
Constructability Review	Ihab Boulos	Date	9/20/23

13. PROJECT PERSONNEL

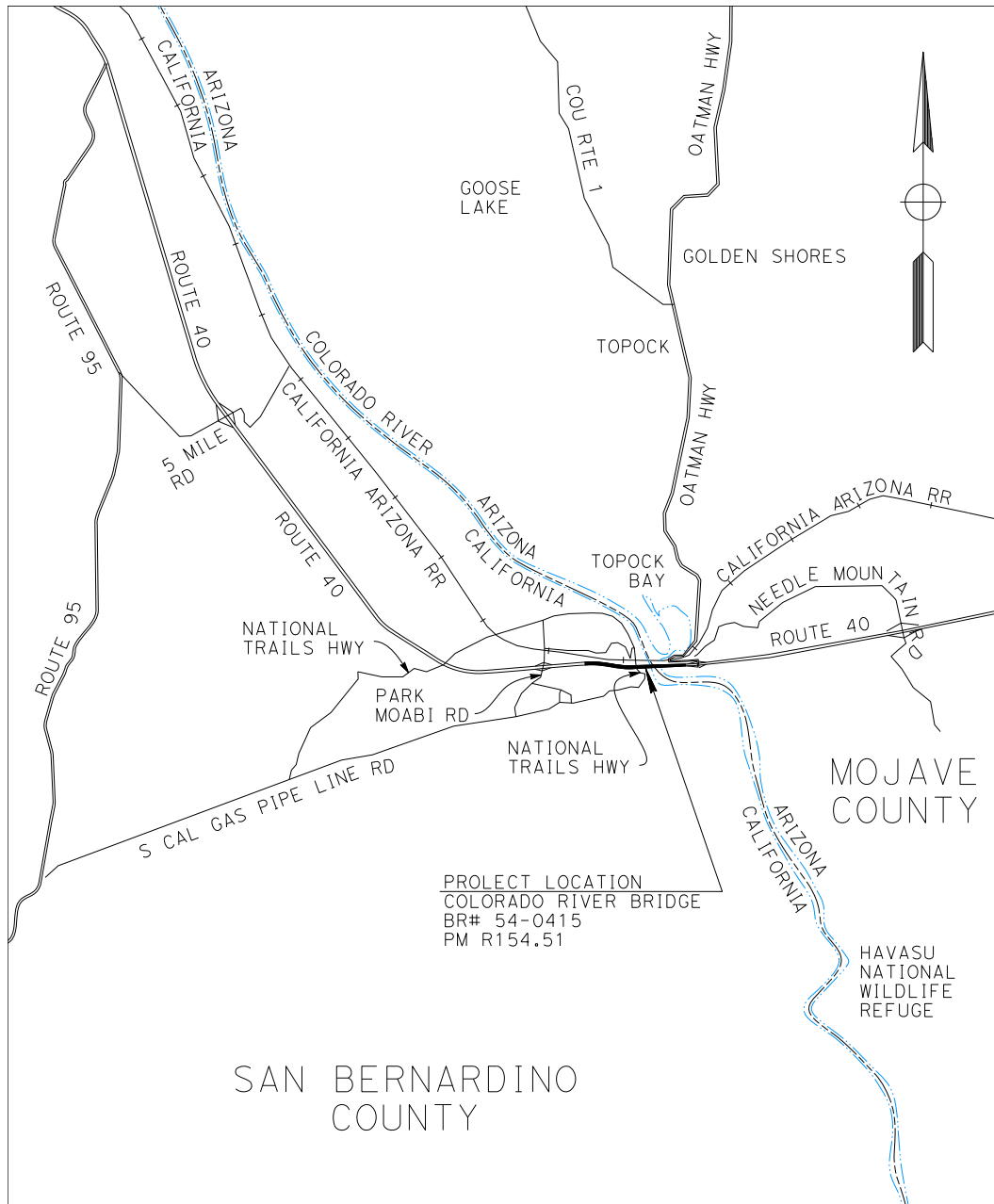
Name	Title & Branch	Phone Number
Cat Quach	Office Chief, Design I	(909) 501-9333
Refaat El Sherif	Project Engineer, Design I	(909) 806-3204
Bac Son Quach	Project Manager, Project Management	(951) 830-6017
Siva Sivakkolunthar	Office Chief, Traffic Operations COS	(909) 383-4065
Gabrielle Duff	Branch Chief, Environmental Studies B	(909) 501-5142
Julie Scrivner	Associate Environmental Planner	(909) 260-8265
Christine Senteno	Office Chief, Right of Way	(909) 693-9087

14. ATTACHMENTS (Number of Pages)

- A. Location map (1)
- B. Typical Layouts and Cross Sections (10)
- C. Preliminary Cost Estimate (10)
- D. Right of Way Data Sheet (11)
- E. Right of Way Project Cost Estimate (1)
- F. Storm Water Data Report-signed cover sheet (1)
- G. Initial Site Assessment Checklist (2)
- H. Environmental Document (7)
- I. Transportation Management Plan (5)
- J. Project Category Assignment (2)
- K. Project Study Report – Project Development Support (1)
- L. Risk Register (8)
- M. SHOPP Performance Measures (1)
- N. Field Review Sign-In Sheet (2)

Attachment A

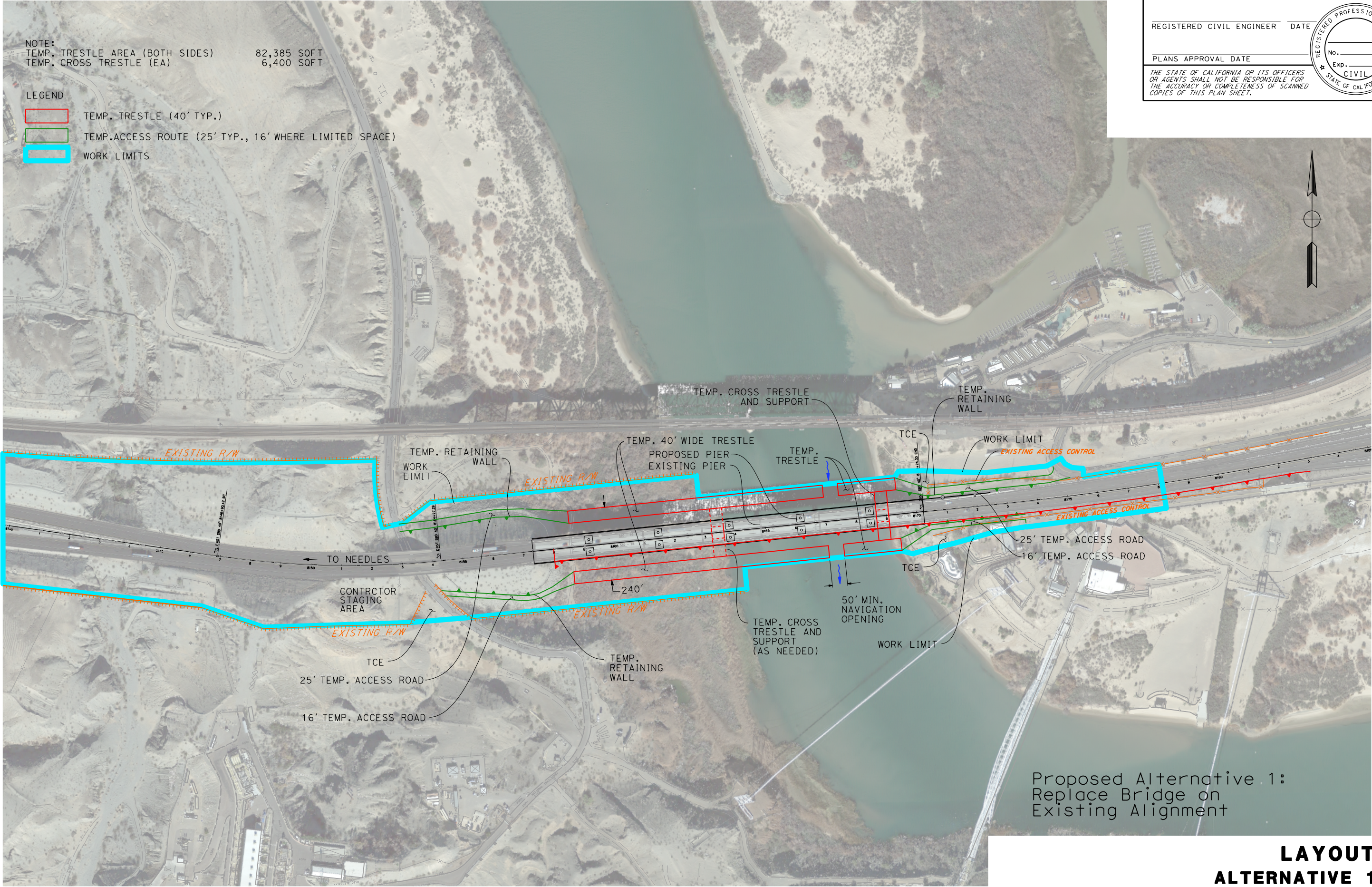
Location Map



In San Bernardino County on Route 40 near Needles between Park Moabi Road and Topock Road in Mojave County Arizona, at the Colorado River Bridge

Attachment B

Typical Layouts and Cross Sections



LAYOUT
ALTERNATIVE 1
NO SCALE
L-1

NOTE:
1. 24" DIAM. PILES SPACED 4' TO 10'
ACROSS EACH BENT. DISTANCE BETWEEN
BENTS=15' TO 30'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

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.

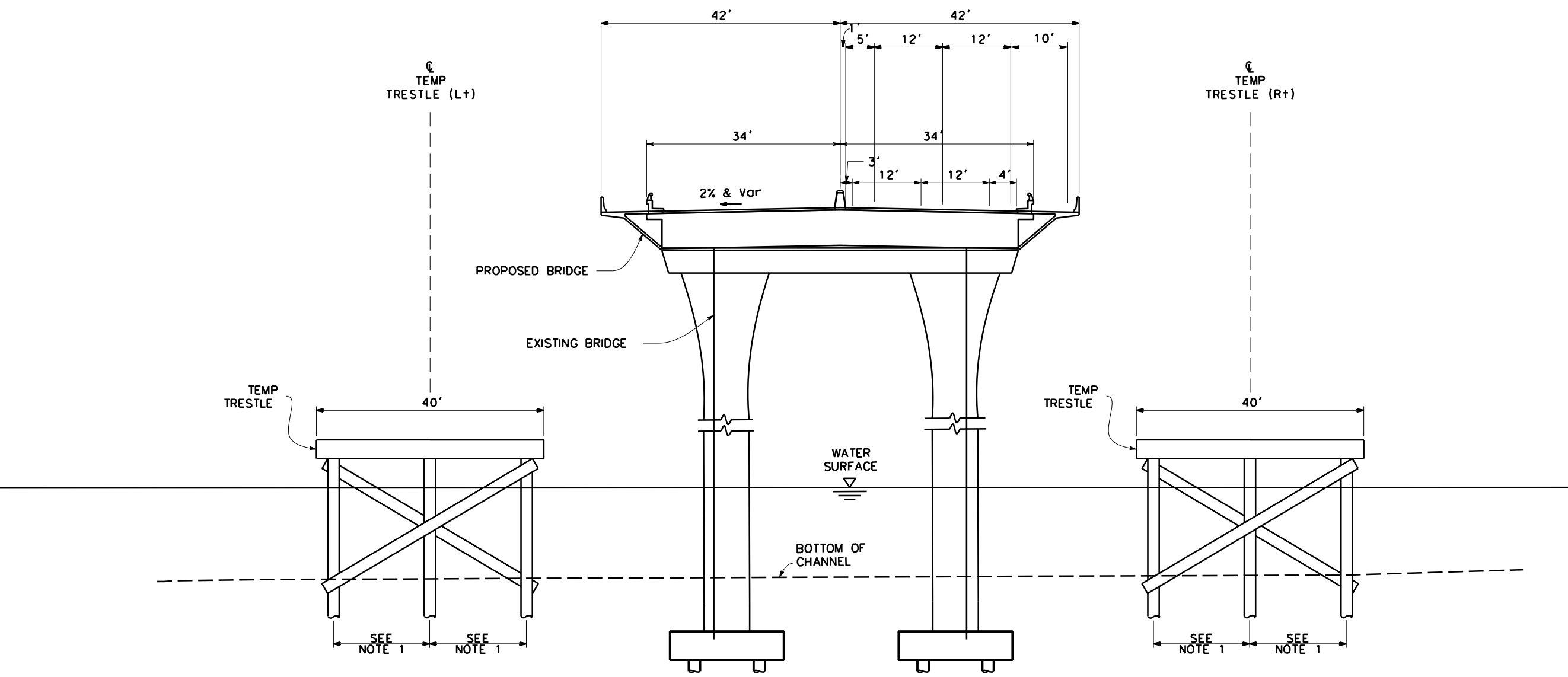
REGISTERED PROFESSIONAL ENGINEER

No.

Exp.

CIVIL

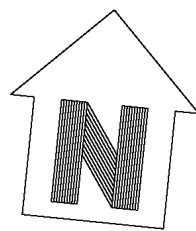
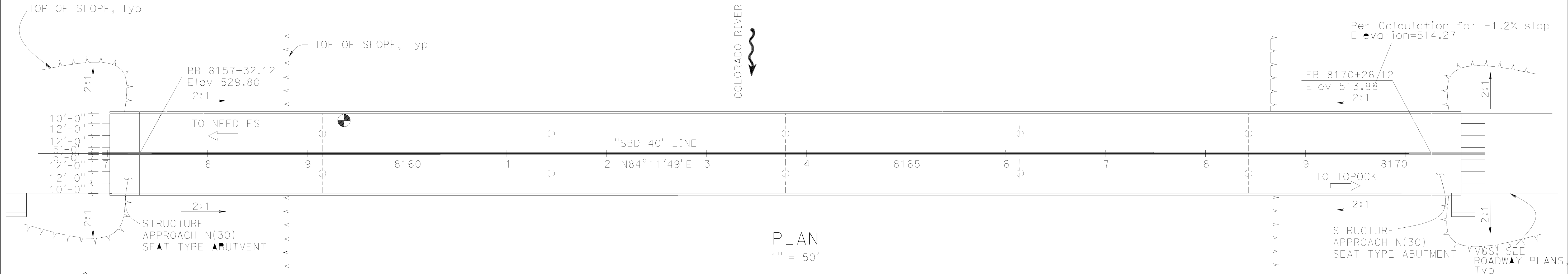
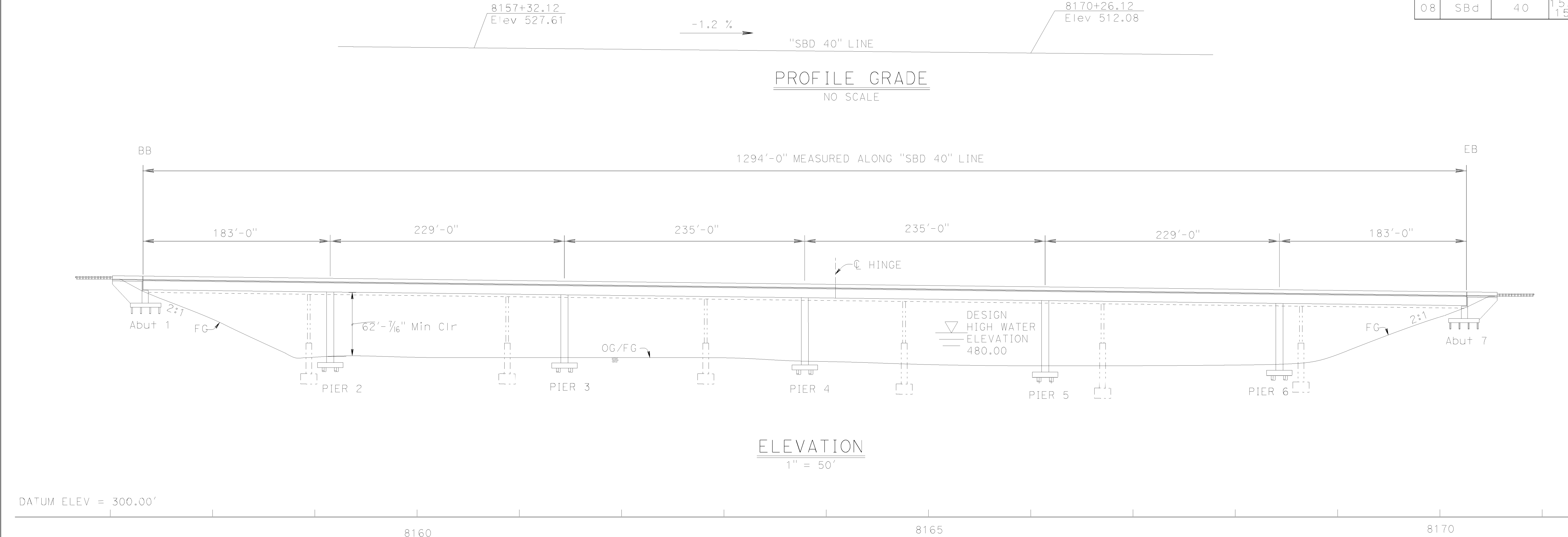
STATE OF CALIFORNIA



IMP RTE 40
STA 8158+50 TO STA 8169+50

ALTERNATIVE 1
TYPICAL TRESTLE SECTION
NO SCALE

Dist	COUNTY	ROUTE	POST MILE
08	SBD	40	153.90 / 154.70



NOTE:
For bridge removal limit and sequence,
see "CONSTRUCTION STAGE" sheet.

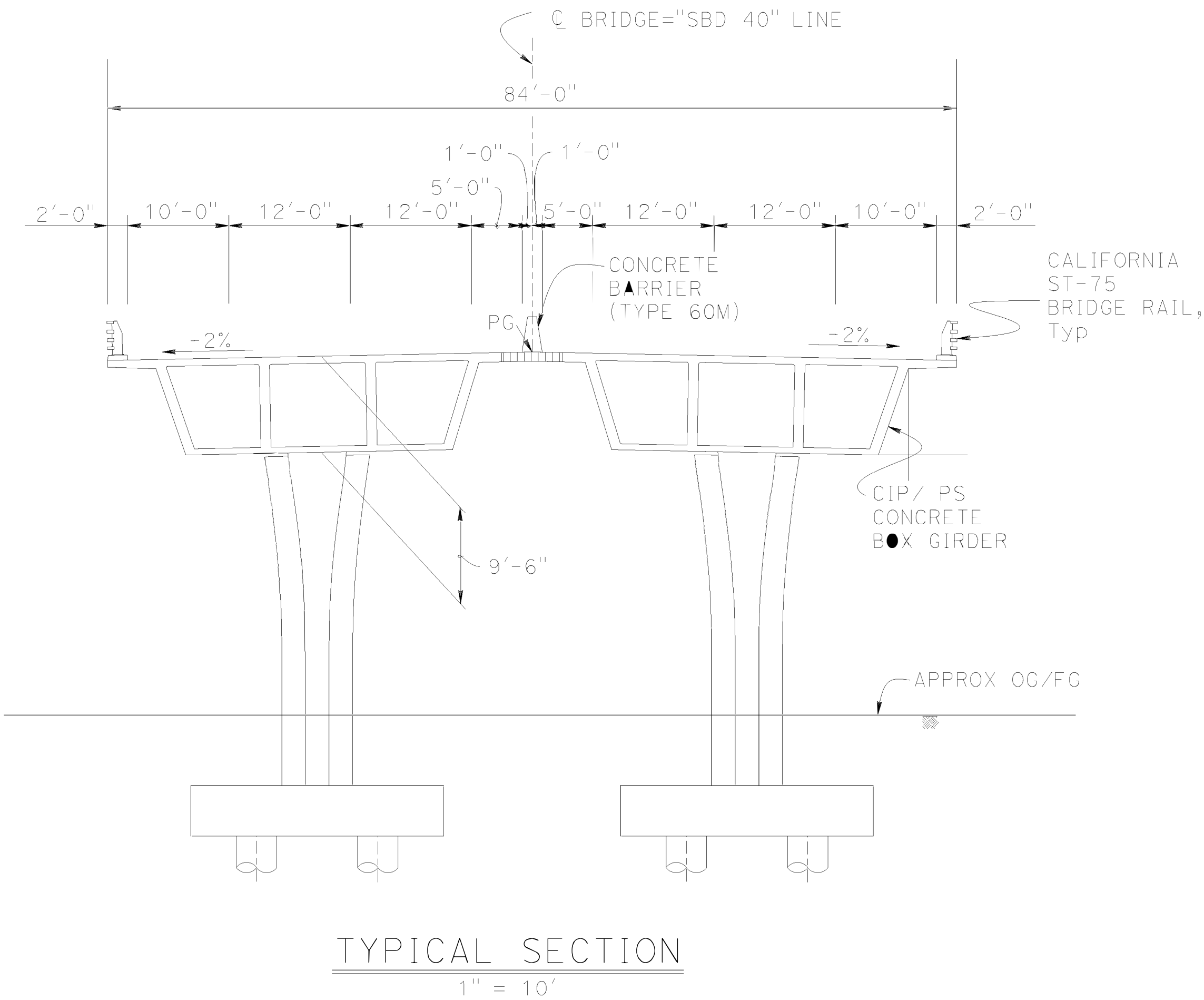
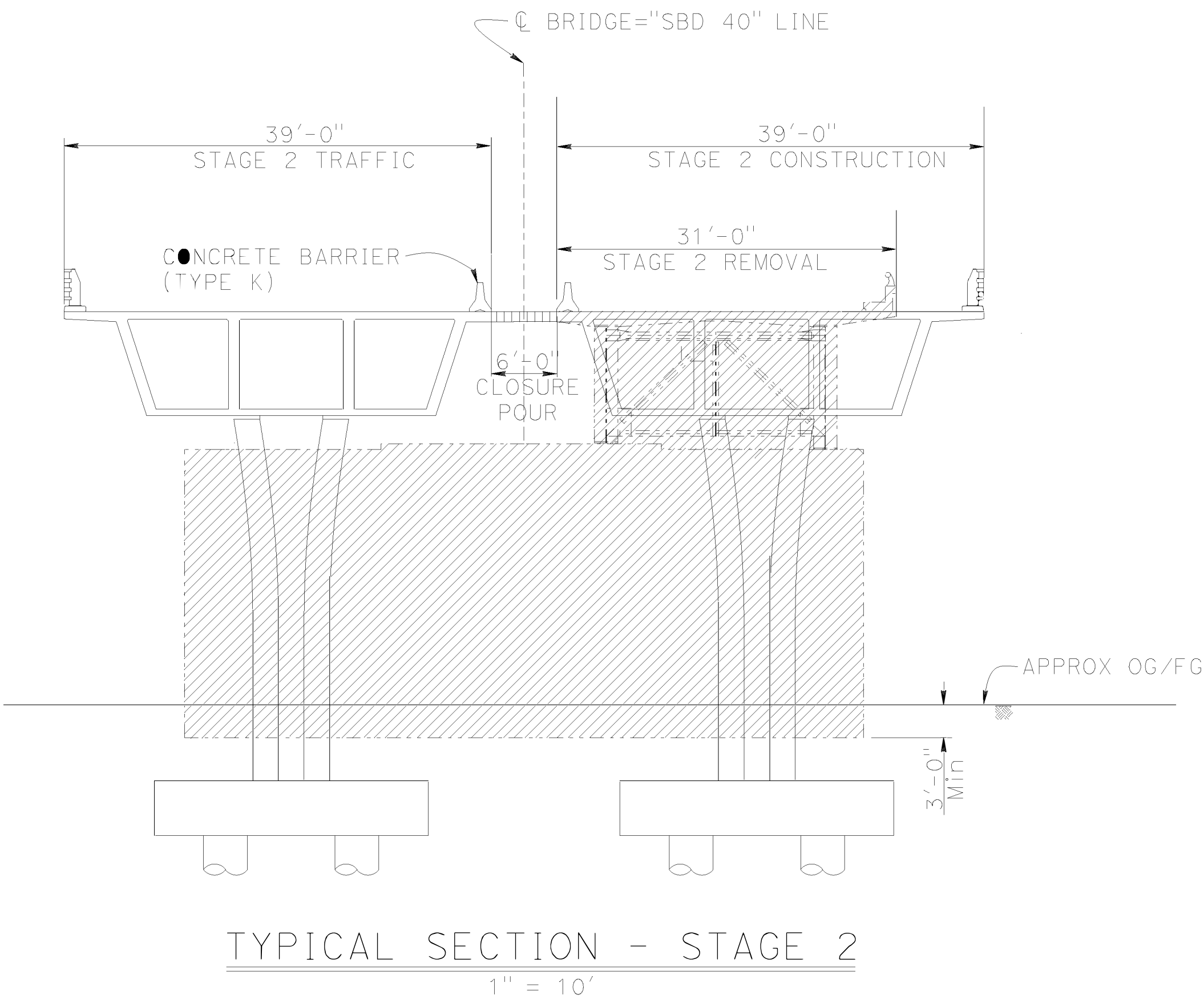
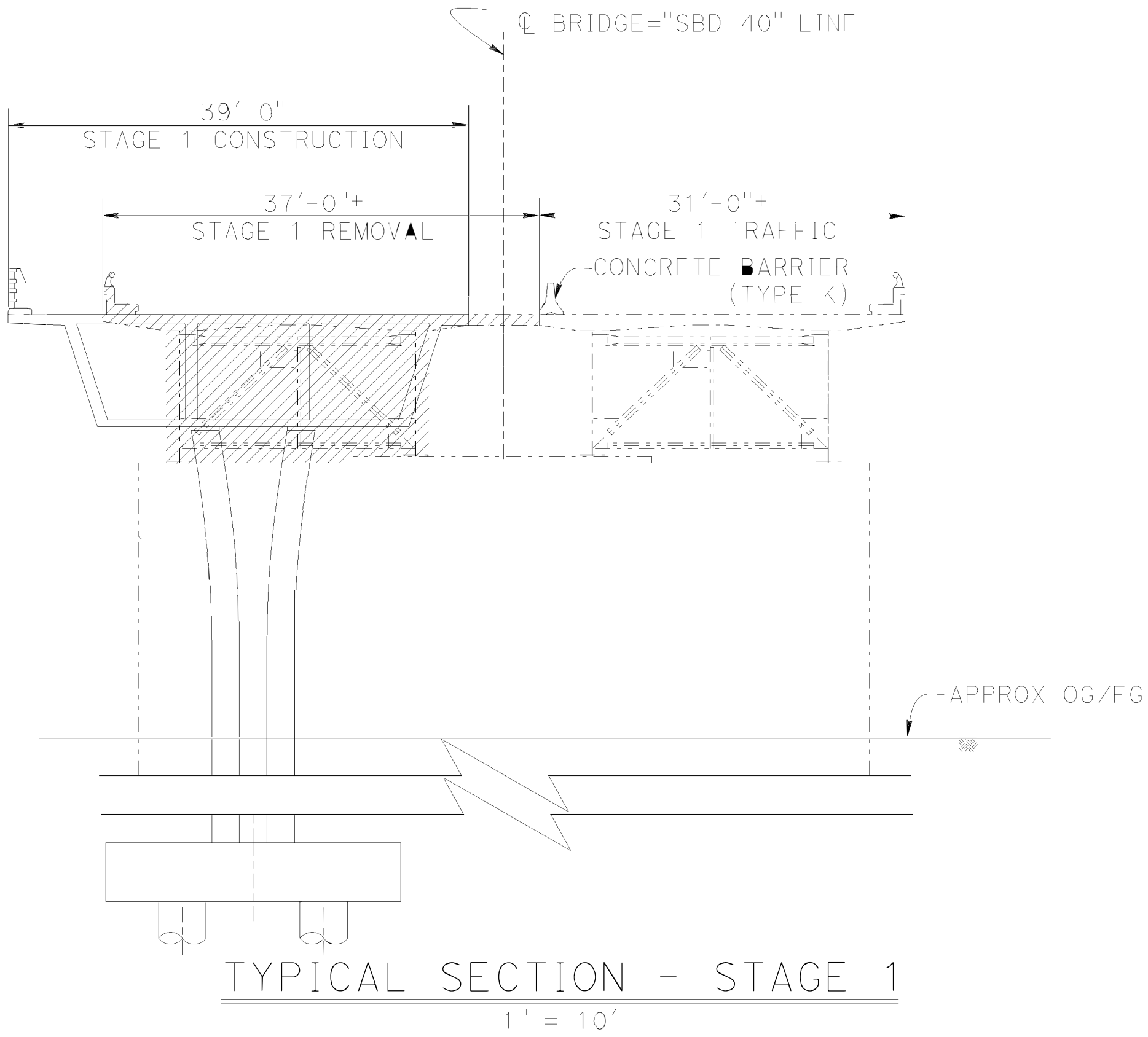
LEGEND:
----- Existing structure
Minimum Vertical clearance

DESIGNED BY J. Fang	DATE 09-09-19
DRAWN BY C. Pham	DATE 02-25-20
CHECKED BY E. B. Mu	DATE 11-20-19
APPROVED H. Ng	DATE 02-28-20

STRUCTURE DESIGN
DESIGN BRANCH
20

ALT 1 / SHEET 1 OF 2	
CIP/PS BOX GIRDER	
PLANNING STUDY	
COLORADO RIVER BRIDGE AT TOPOCK (REPLACE)	
UNIT: 3622	BRIDGE No.: 54-0415
PROJECT EA: 0R380	PROJECT No. & PHASE: 08120000670

Dist	COUNTY	ROUTE	POST MILE
08	SBd	40	153.90 / 154.70



NOTES:

- Underwater OG elevation considered per As-Built.
- Footing elevations are determined per As-Built. No scour is considered per underwater inspection report dated 10/23/2018
- The scour data for foundation design will be determined by structure hydrology/hydraulic report and the site-specific geotechnical investigation during the design phase.
- Potential soil liquefaction and lateral spreading need to be further investigated.
- Site corrosive information is not available currently.
- Trestle is required for material handling
- The cofferdam is required for foundation construction
- 2 traffic lanes will be maintained during construction.
- For utilities that are involved with this project, coordination with the Utilities Owners is required for relocation.
- Minimum 50' horizontal and 23' vertical clearance for navigation water way must be maintained during the construction.

LEGEND:

- Existing structure
- Bridge removal
- Closure pour

ALT 1 / SHEET 2 OF 2

CIP/PS BOX GIRDER

CONSTRUCTION STAGE

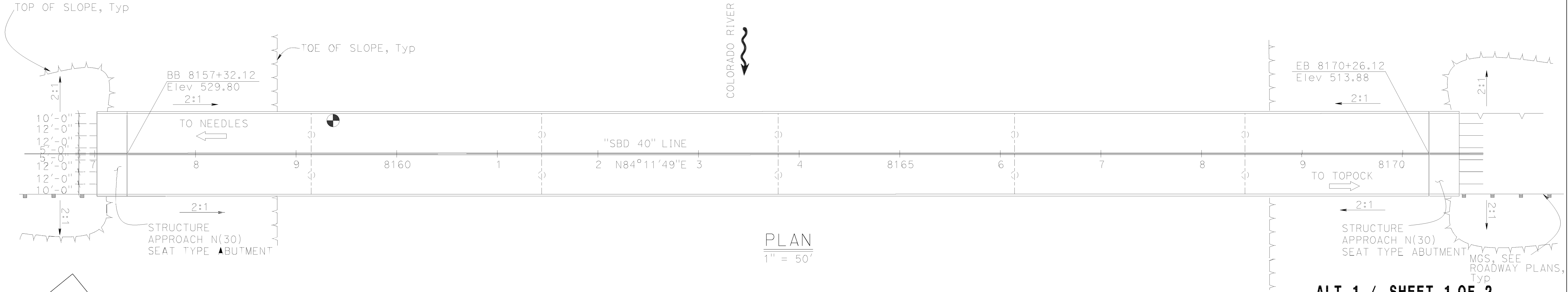
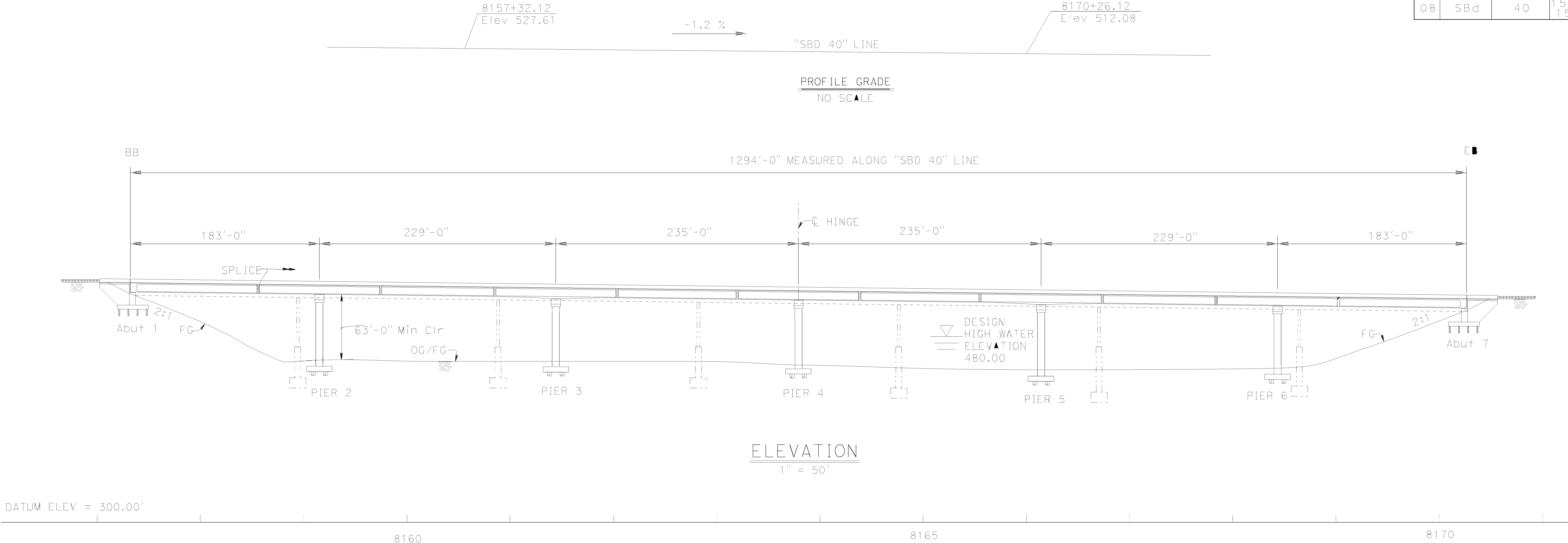
COLORADO RIVER BRIDGE AT TOPOCK (REPLACE)

UNIT: 3622	BRIDGE No.: 54-0415
PROJECT EA: OR380	PROJECT No. & PHASE: 08120000670

DESIGNED BY J. Fang	DATE 09-09-19
DRAWN BY C. Pham	DATE 02-26-20
CHECKED BY E. B. Mu	DATE 11-20-19
APPROVED H. Ng	DATE 02-28-20

STRUCTURE DESIGN
DESIGN BRANCH
20

Dist	COUNTY	ROUTE	POST MILE
08	SBd	40	153.90 / 154.70



ALT 1 / SHEET 1 OF 2

NOTE:
For bridge removal limit and sequence,
see "CONSTRUCTION STAGE" sheet.

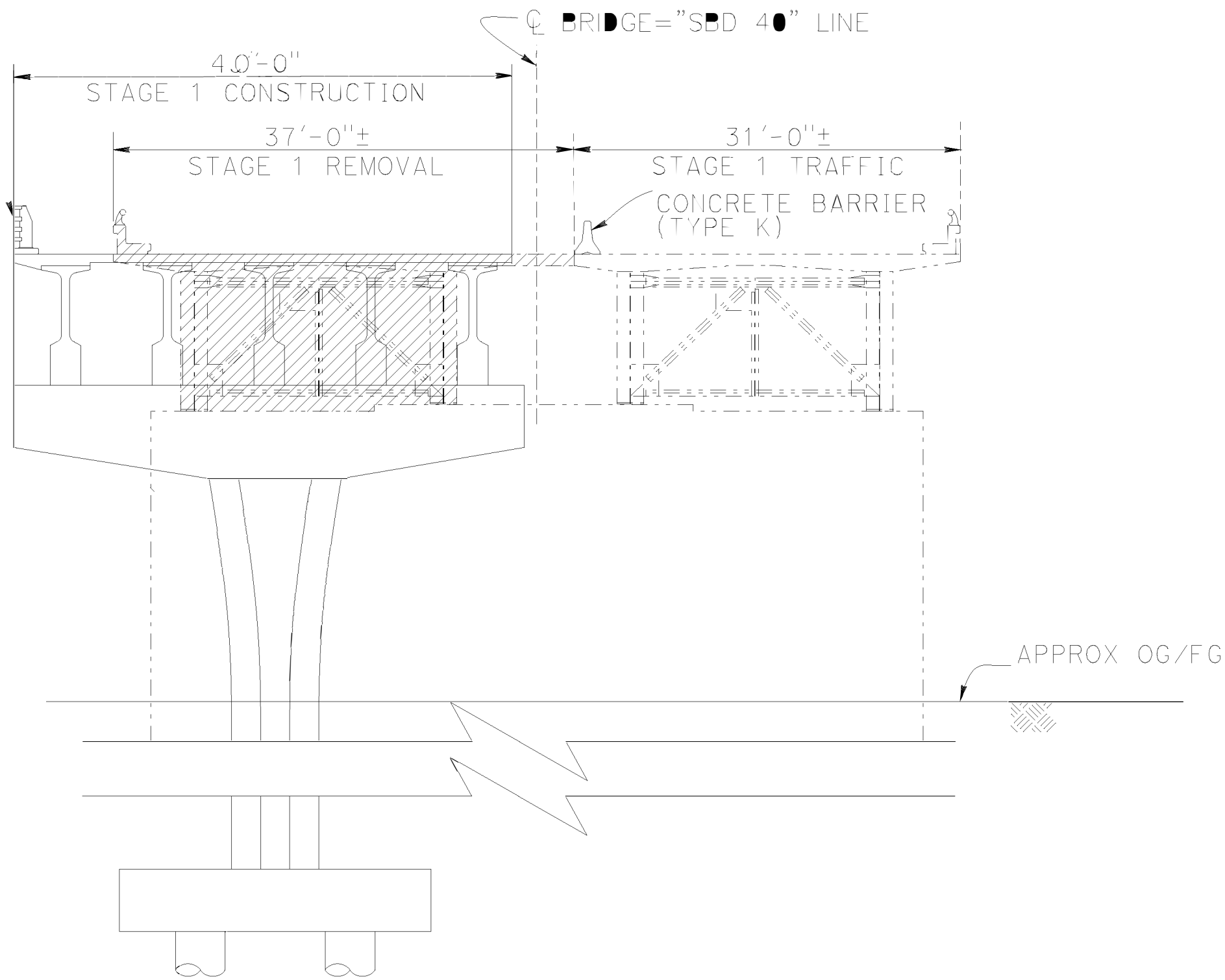
LEGEND:
----- Existing structure
Minimum Vertical clearance

DESIGNED BY J. Fang	DATE 09-09-19
DRAWN BY C. Pham	DATE 02-26-20
CHECKED BY E. B. Mu	DATE 11-20-19
APPROVED H. Ng	DATE 02-28-20

STRUCTURE DESIGN
DESIGN BRANCH
20

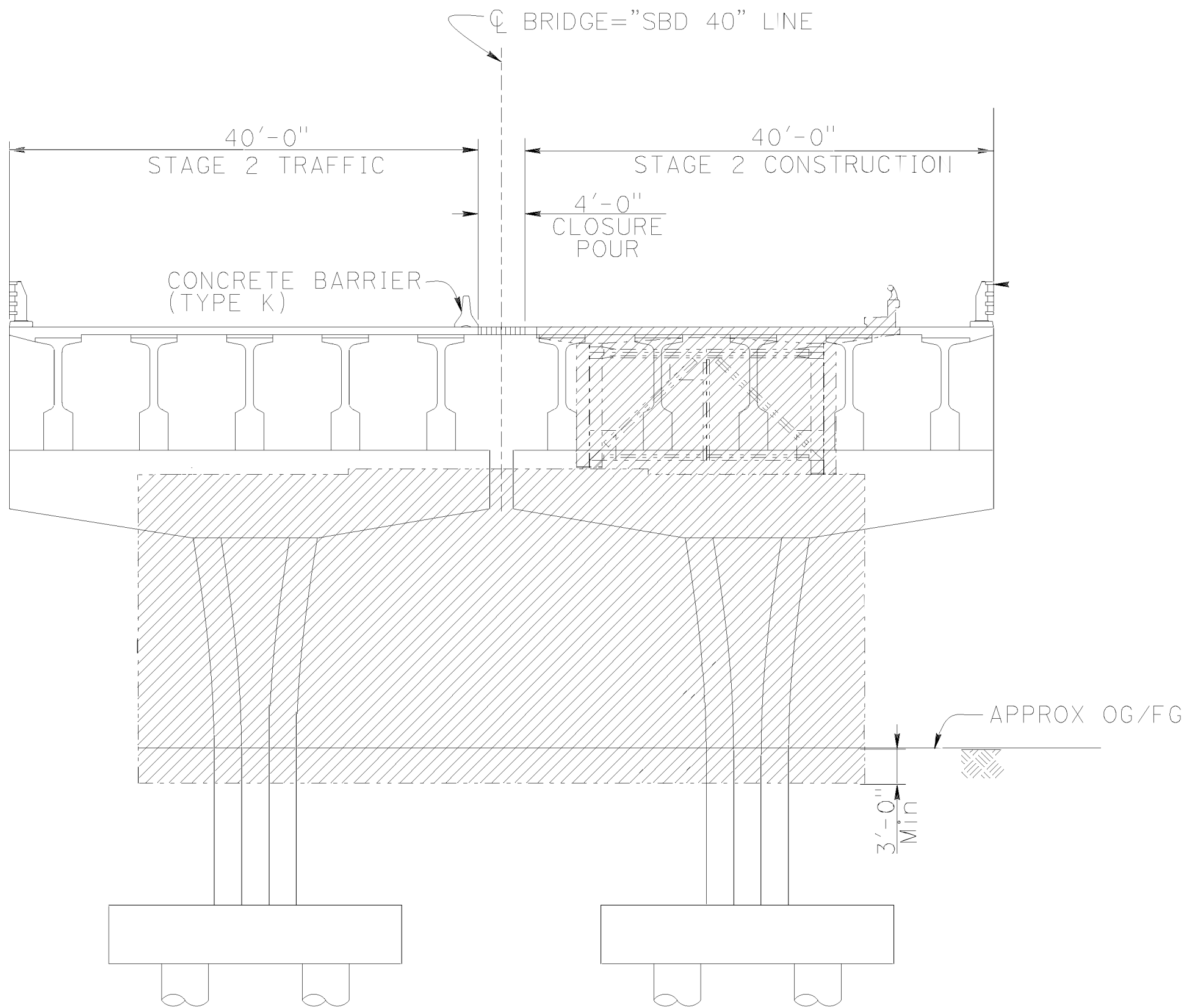
PC/PS SPLICED GIRDER	
PLANNING STUDY	
COLORADO RIVER BRIDGE AT TOPOCK (REPLACE)	
UNIT: 3622	BRIDGE No.: 54-0415
PROJECT EA: OR380	PROJECT No. & PHASE: 08120000670

Dist	COUNTY	ROUTE	POST MILE
08	SBd	40	153.90 / 154.70



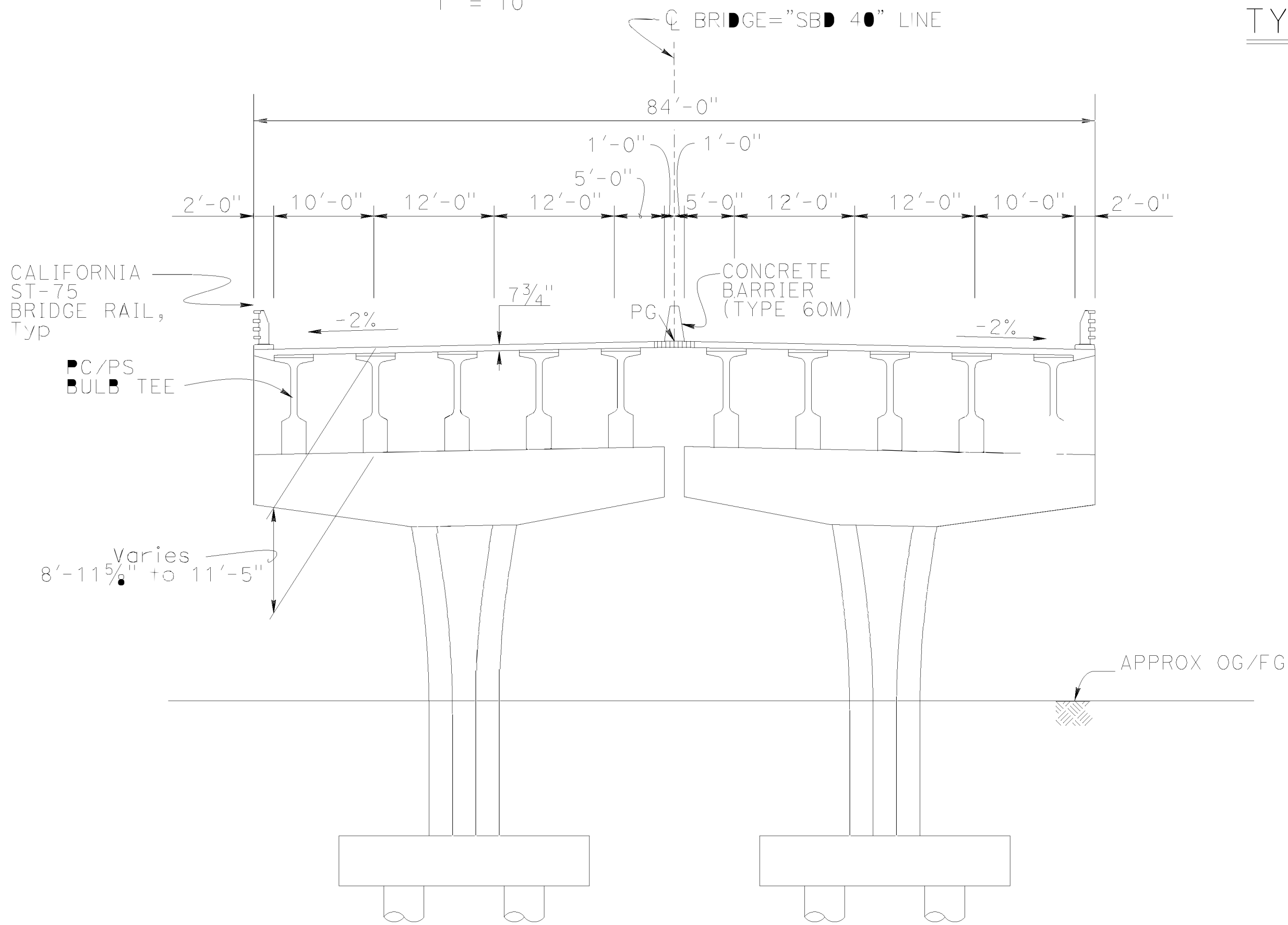
TYPICAL SECTION - STAGE 1

1" = 10'



TYPICAL SECTION - STAGE 2

1" = 10'



TYPICAL SECTION

1" = 10'

NOTES:

- Underwater OG elevation considered per As-Built.
- Footing elevations are determined per As-Built. No scour is considered per underwater inspection report dated 10/23/2018.
- The scour data for foundation design will be determined by structure hydrology/hydraulic report and the site-specific geotechnical investigation during the design phase.
- Potential soil liquefaction and lateral spreading need to be further investigated.
- Site corrosive information is not available currently.
- Trestle is required for material handling.
- The cofferdam is required for foundation construction.
- 2 traffic lanes will be maintained during construction.
- For utilities that are involved with this project, coordination with the Utilities Owners is required for relocation.
- Minimum 50' horizontal and 23' vertical clearance for navigation water way must be maintained during the construction.

LEGEND:

- Existing structure
- Bridge removal
- Closure pour

ALT 1/ SHEET 2 OF 2

PC/PS SPLICED GIRDER

CONSTRUCTION STAGE

COLORADO RIVER BRIDGE AT TOPOCK (REPLACE)

UNIT: 3622	BRIDGE No.: 54-0415
PROJECT EA: OR380	PROJECT No. & PHASE: 08120000670

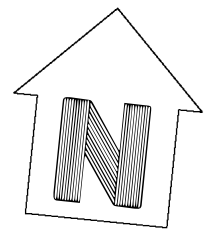
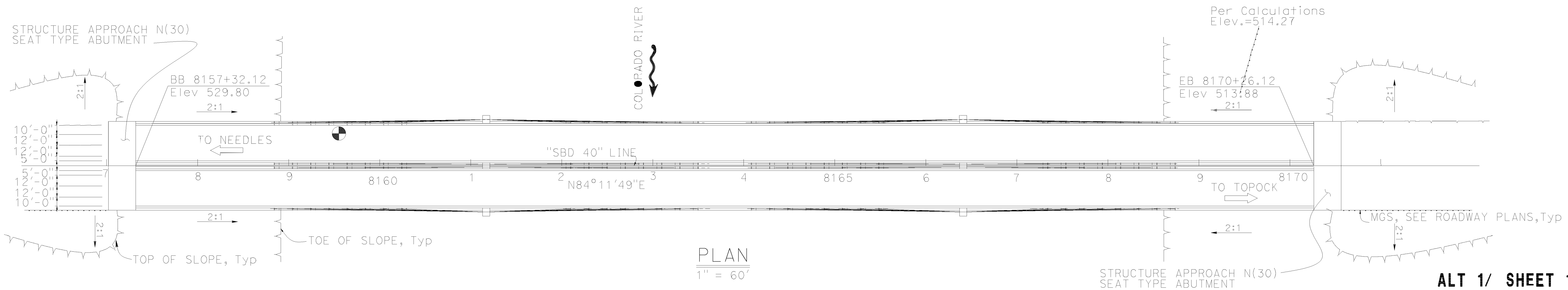
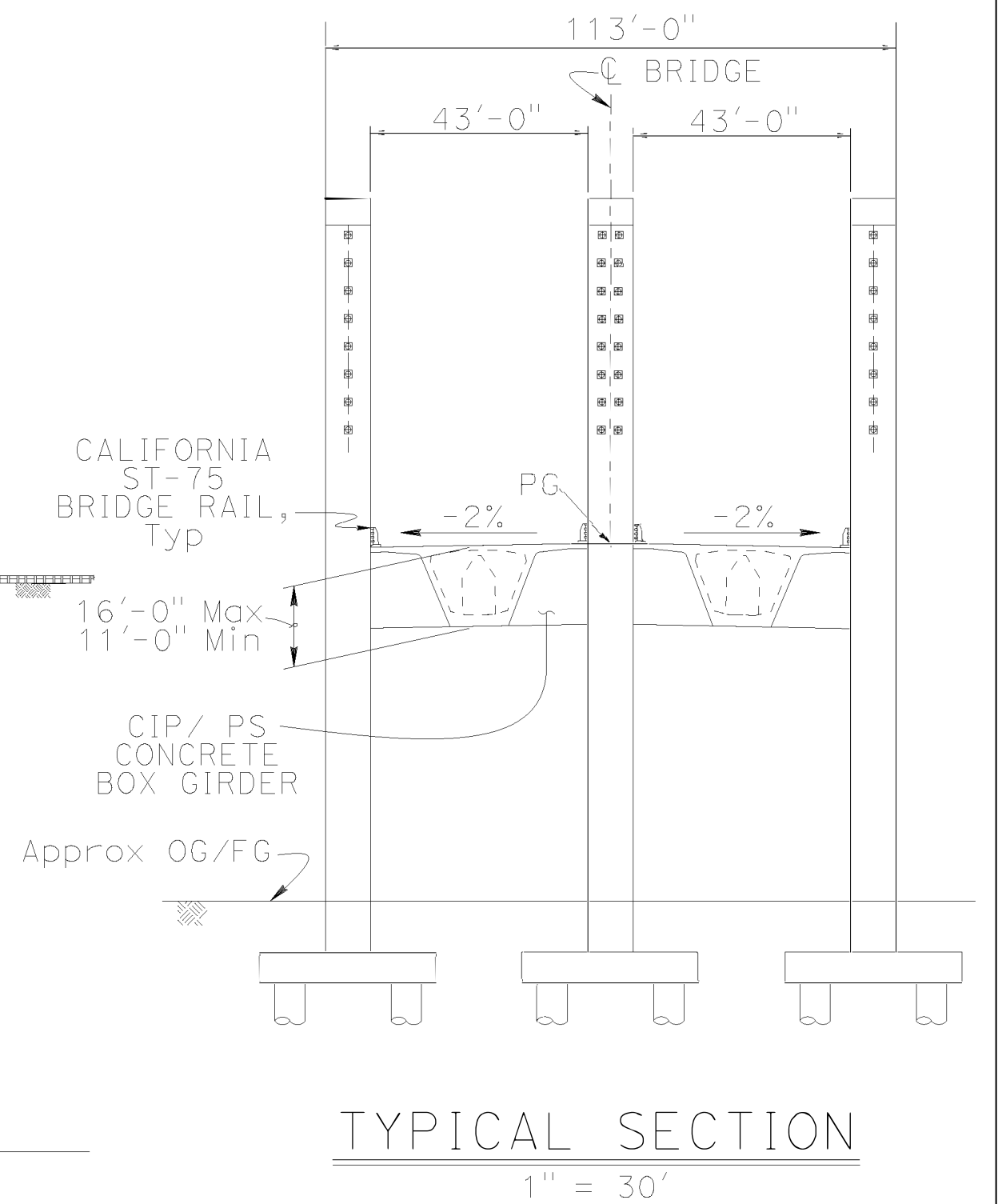
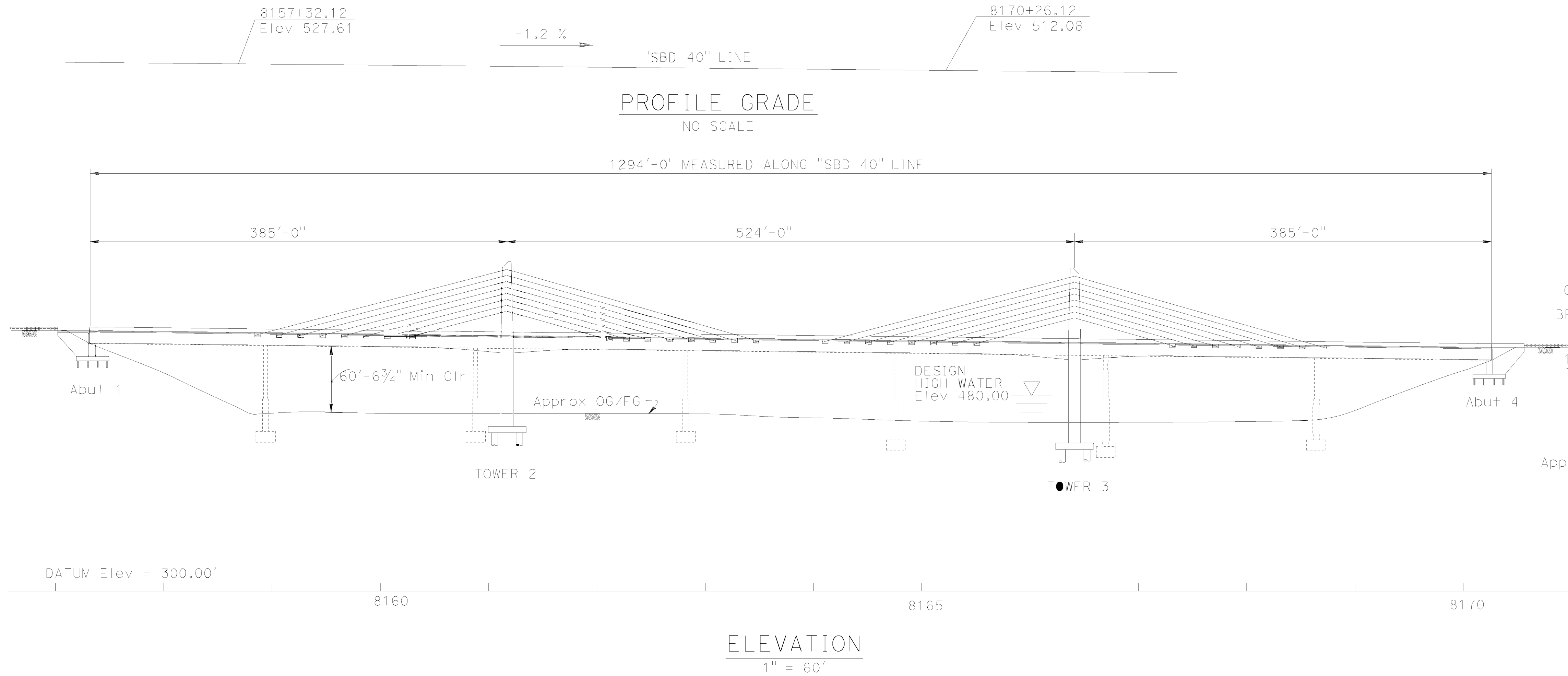
DESIGNED BY J. Fang	DATE 09-09-19
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STRUCTURE DESIGN

DESIGN BRANCH

20

Dist	COUNTY	ROUTE	POST MILE
08	SbD	40	153.90/ 154.70



NOTE:
For bridge removal limit and sequence,
see "CONSTRUCTION STAGE" sheet.

LEGEND:

----- Existing structure

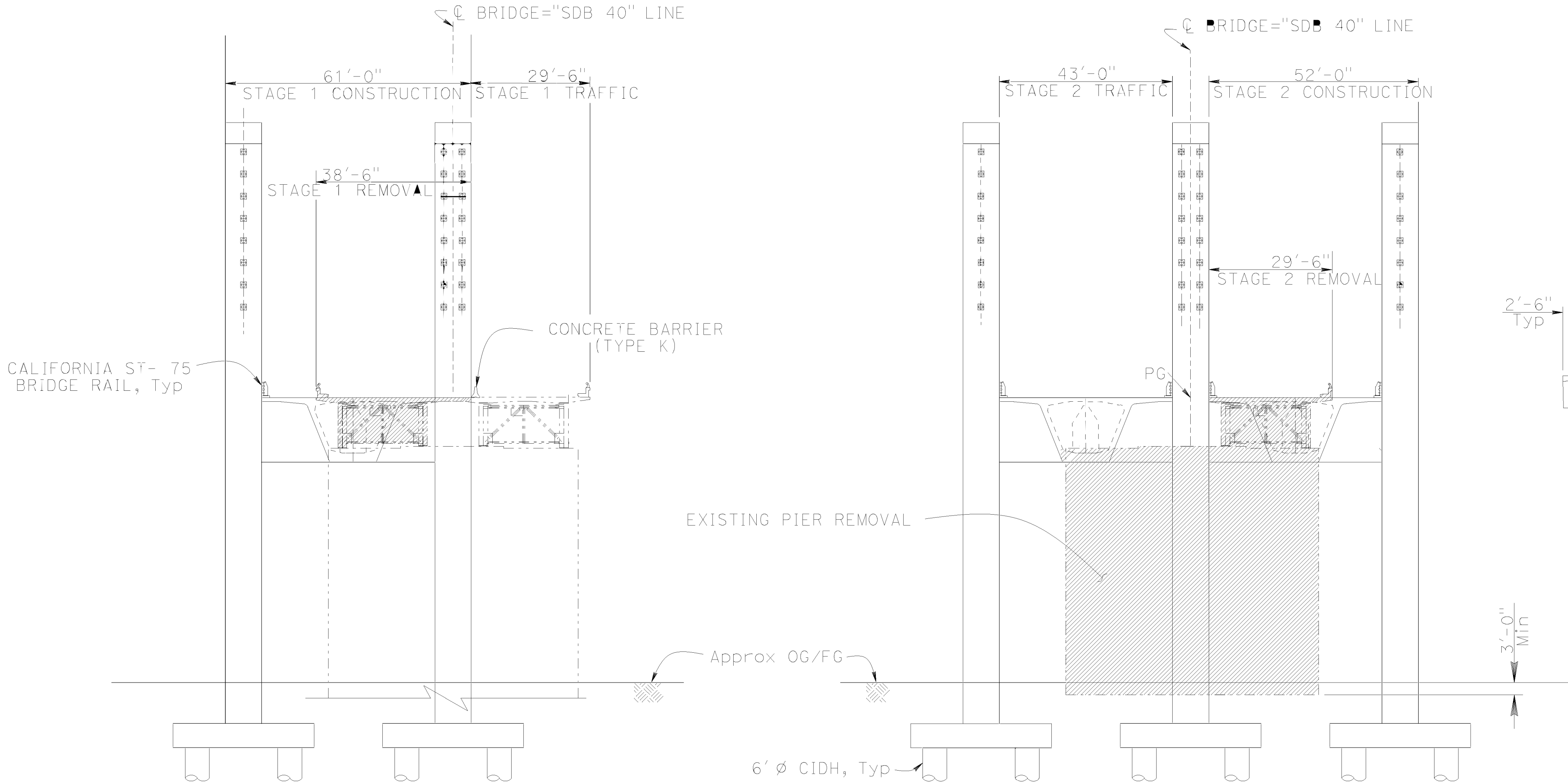
Minimum Vertical clearance

DESIGNED BY J. Fang	DATE 09-09-19
DRAWN BY C. Pham	DATE 02-26-20
CHECKED BY H. Iraninejadian	DATE 11-20-19
APPROVED H. Ng	DATE 02-28-20

STRUCTURE DESIGN
DESIGN BRANCH
20

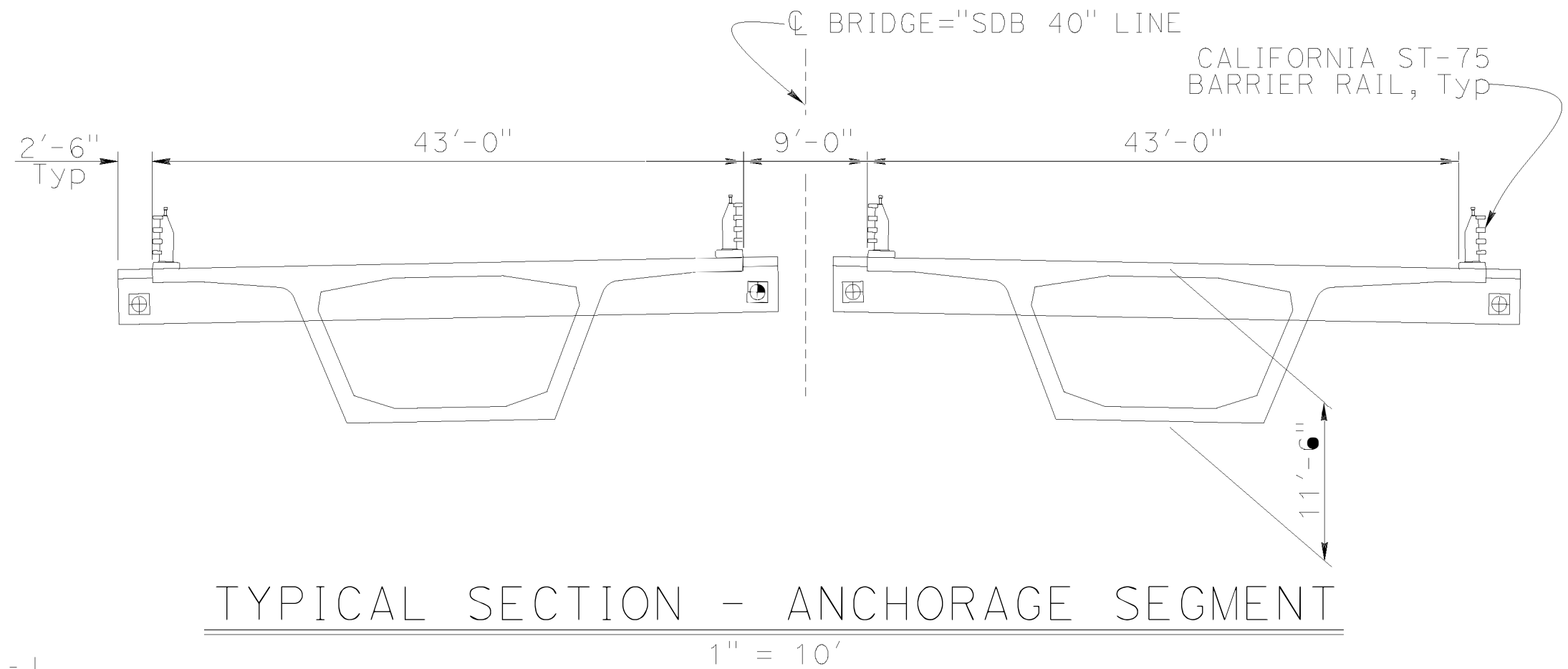
ALT 1/ SHEET 1 OF 2	
CIP/PS EXTRADOSED BRIDGE	
PLANNING STUDY	
COLORADO RIVER BRIDGE AT TOPOCK (REPLACE)	
UNIT: 3622	BRIDGE No.: 54-0415
PROJECT EA: OR380	PROJECT No. & PHASE: 08120000670

Dist	COUNTY	ROUTE	POST MILE
08	SBd	40	153.90 / 154.70



TYPICAL SECTION - STAGE 1
1" = 20'

TYPICAL SECTION - STAGE 2
1" = 20'

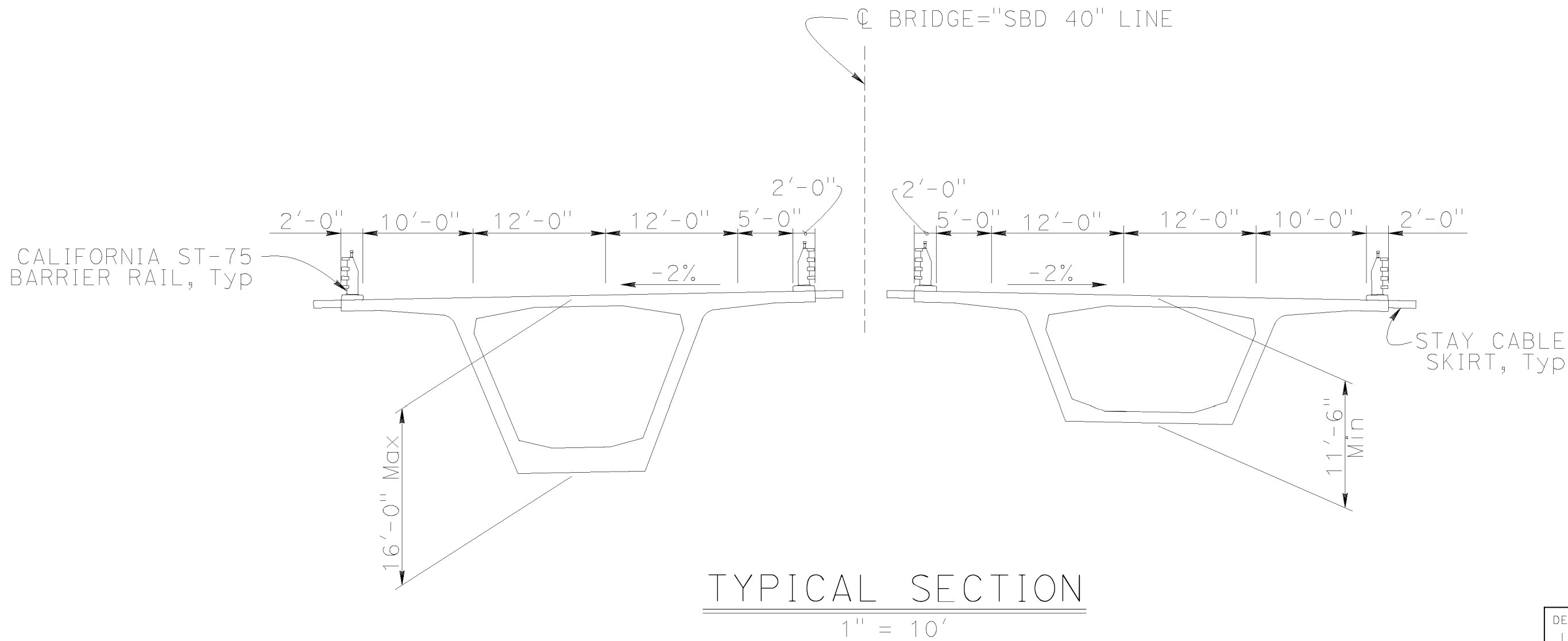


TYPICAL SECTION - ANCHORAGE SEGMENT
1" = 10'

- LEGEND:
- Existing structure
 - /// Bridge removal

NOTES:

- Underwater OG elevation considered per As-Built+.
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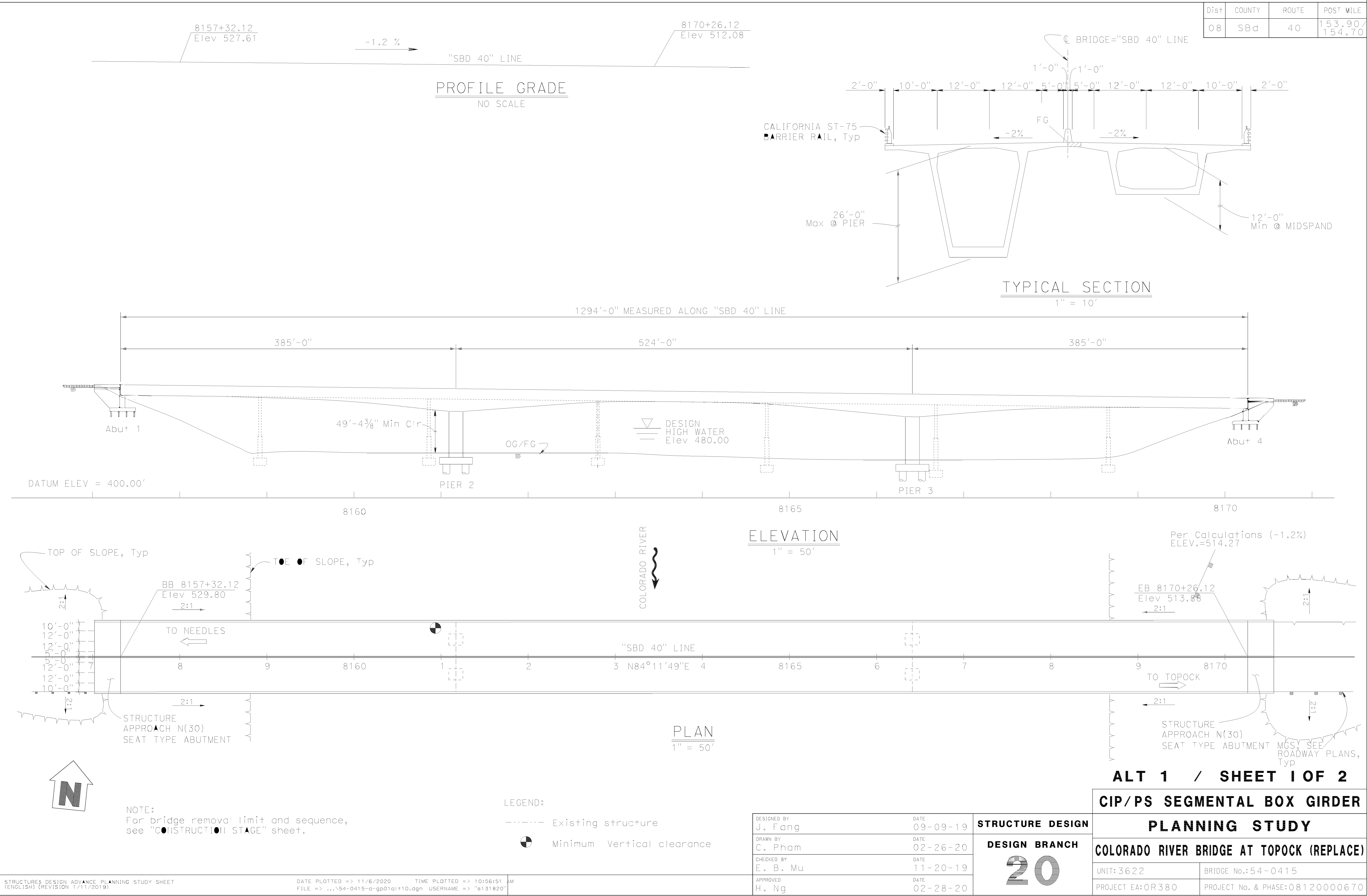
TYPICAL SECTION
1" = 10'

ALT 1/ SHEET 2 OF 2

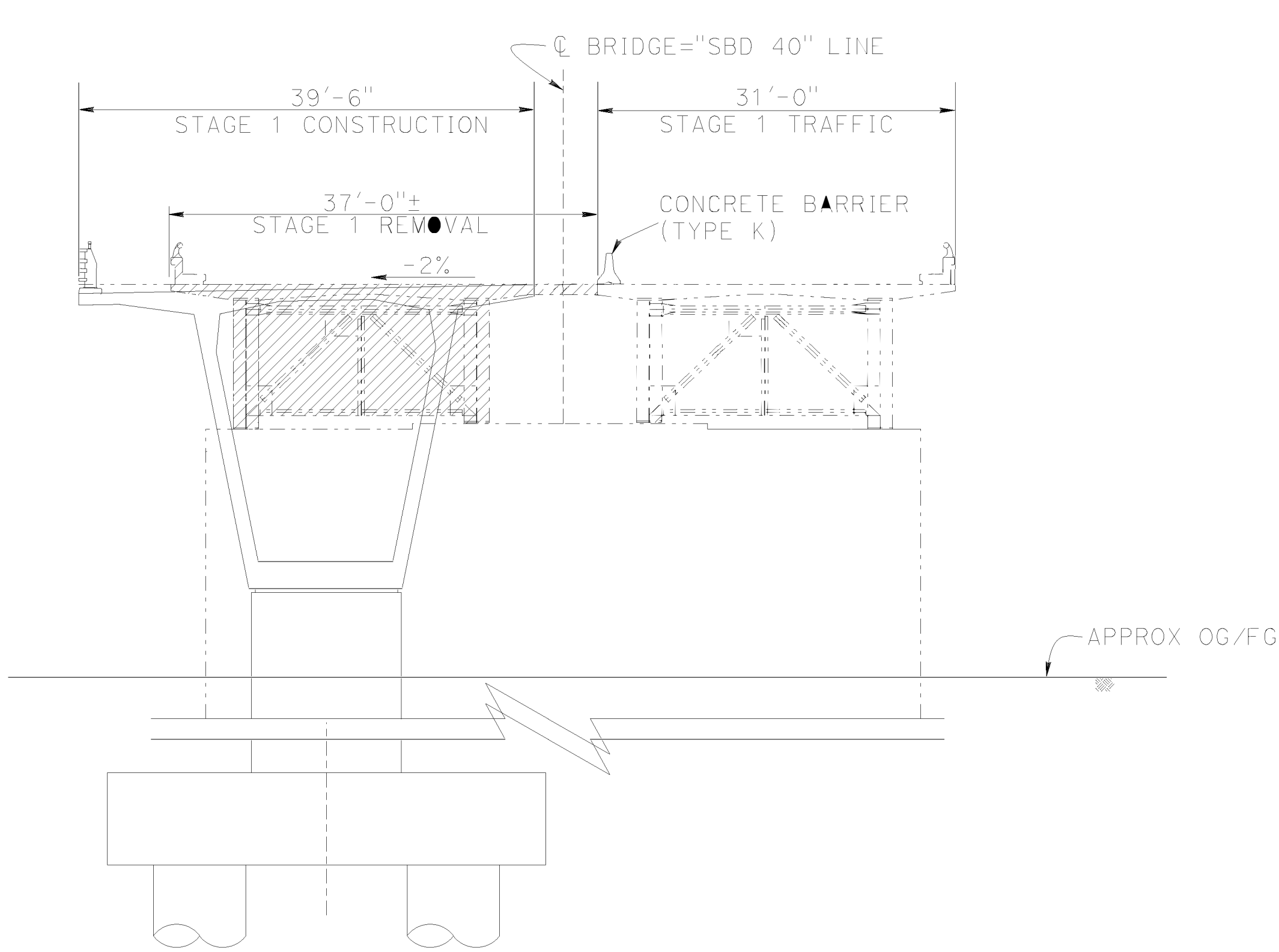
CIP/PS EXTRADOSED BRIDGE	
CONSTRUCTION STAGE	
COLORADO RIVER BRIDGE AT TOPOCK (REPLACE)	
UNIT: 3622	BRIDGE No.: 54-0415
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STRUCTURE DESIGN
DESIGN BRANCH
20

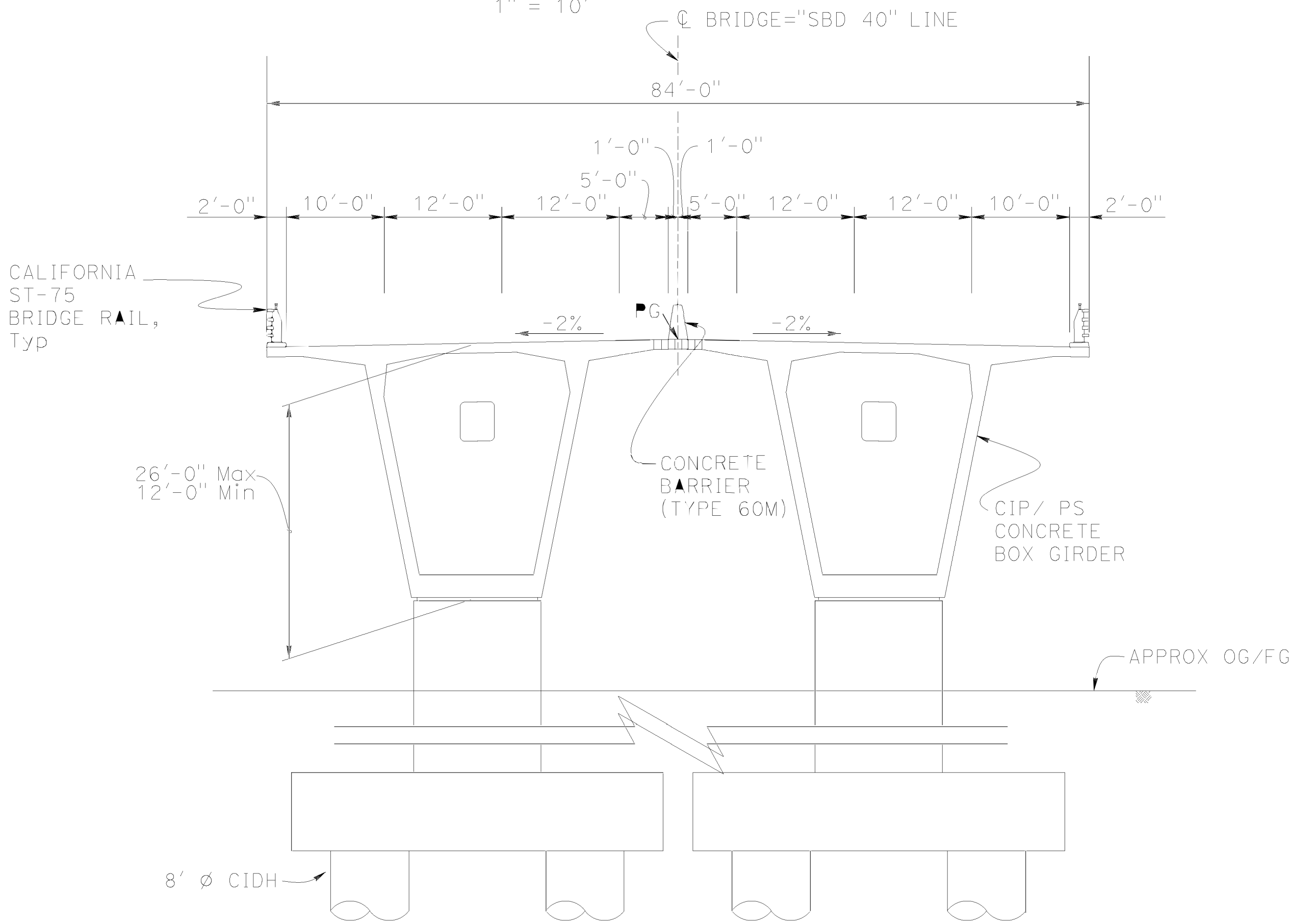


Dist	COUNTY	ROUTE	POST MILE
08	SBd	40	153.90 / 154.70



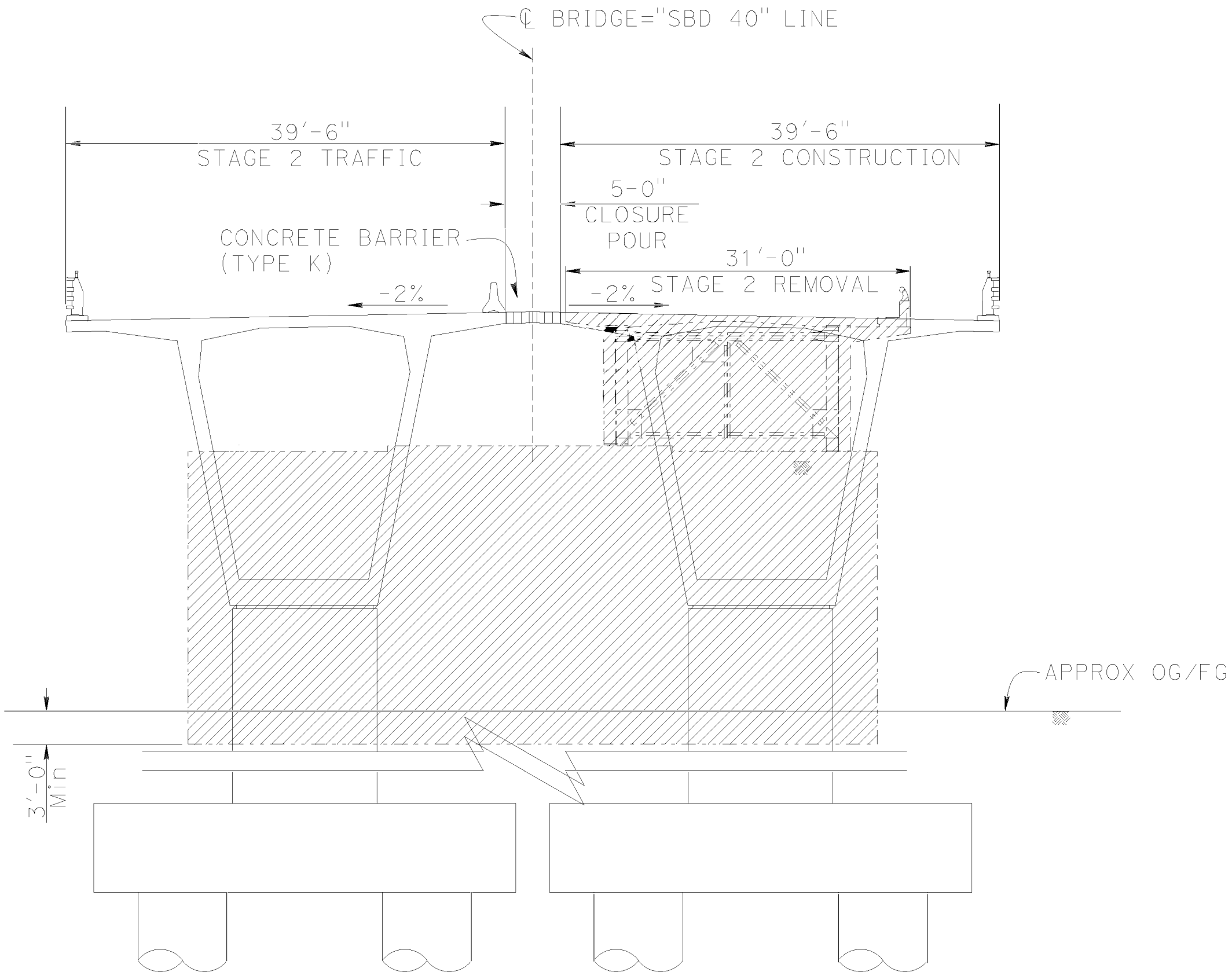
TYPICAL SECTION - STAGE 1

1" = 10'



TYPICAL SECTION

1" = 10'



TYPICAL SECTION - STAGE 2

1" = 10'

NOTES:

1. Underwater OG elevation considered per As-Built.
2. Footing elevations are determined per As-Built. No scour is considered per underwater inspection report dated 10/23/2018
3. The scour data for foundation design will be determined by structure hydrology/hydraulic report and the site-specific geotechnical investigation during the design phase.
4. Potential soil liquefaction and lateral spreading need to be further investigated.
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LEGEND:

- Existing structure
- Bridge removal
- Closure pour

ALT 1 / SHEET 2 OF 2

CIP/PS SEGMENTAL BOX GIRDER

CONSTRUCTION STAGE

COLORADO RIVER BRIDGE AT TOPOCK (REPLACE)

UNIT: 3622	BRIDGE No.: 54-0415
PROJECT EA: OR380	PROJECT No. & PHASE: 08120000670

DESIGNED BY J. Fang	DATE 09-09-19
DRAWN BY C. Pham	DATE 02-26-20
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APPROVED H. Ng	DATE 02-28-20

STRUCTURE DESIGN

DESIGN BRANCH

20

Attachment C

Preliminary Cost Estimates

Project Report Cost Estimate

Project ID: 0818000040

Type of Estimate : Project Report
Program Code : 0R380
Project Limits : PM 153.59 TO 0.624 Into Arizona
Description:

Scope : Rehab/Replace Colorado River Bridge

Alternative : ALT 1. Replace Colorado River BR. On existing I-40 Alignment

	Current Cost	Escalated Cost
ROADWAY ITEMS	\$ 25,502,570	\$ 30,446,686
STRUCTURE ITEMS	\$ 57,615,364	\$ 68,785,102
SUBTOTAL CONSTRUCTION COST	\$ 83,117,934	\$ 99,231,788
RIGHT OF WAY	\$ 7,999,975	\$ 7,999,975
TOTAL CAPITAL OUTLAY COST	\$ 91,118,000	\$ 107,232,000
PA/ED SUPPORT	\$ 6,230,000	\$ 6,230,000
PS&E SUPPORT	\$ 11,048,000	\$ 11,048,000
RIGHT OF WAY SUPPORT	\$ 451,000	\$ 451,000
CONSTRUCTION SUPPORT	\$ 20,536,000	\$ 20,536,000
TOTAL CAPITAL OUTLAY SUPPORT COST*	\$ 38,265,000	\$ 38,265,000
TOTAL PROJECT COST	\$ 129,383,000	\$ 145,497,000

If Project has been programmed enter Programmed Amount \$ 75,189

Date of Estimate (Month/Year) Month / Year
4 / 2023
Estimated Date of Construction Start (Month/Year) 1 / 2027
Number of Working Days 600 Working Days
Estimated Mid-Point of Construction (Month/Year) Month / Year
10 2027
Number of Plant Establishment Days Days

Estimated Project Schedule

PID Approval December-16
PA/ED Approval November-23
PS&E July-25
RTL March-26
Begin Construction January-27

Approved by Project
Manager

Elaheh Hadipour

2/14/2023

(909) 665-3495

Date

Phone

I. ROADWAY ITEMS SUMMARY

Section		Cost
1	Earthwork	\$ 2,416,500
2	Pavement Structural Section	\$ 1,311,200
3	Drainage	\$ 2,000,000
4	Specialty Items	\$ 5,152,500
5	Environmental	\$ 6,048,700
6	Traffic Items	\$ 1,193,300
7	Detours	\$ 700,000
8	Minor Items	\$ 635,500
9	Roadway Mobilization	\$ 1,334,380
10	Supplemental Work	\$ 696,200
11	State Furnished	\$ 753,400
12	Contingencies	\$2,096,300
13	Overhead	\$ 1,164,590
TOTAL ROADWAY ITEMS		\$ 25,502,570

Estimate Prepared By _____ 2/13/2023 (909) 501-9183
Josh Medina, Transportation Engineer Date Phone

Estimate Reviewed By _____ 2/13/2023 (213) 317-0002
Refaat El Sherif, Project Engineer Date Phone

By signing this estimate you are attesting that you have discussed your project with all functional units and have incorporated all their comments or have discussed with them why they will not be incorporated.

SECTION 1: EARTHWORK

Item code	Unit	Quantity	Unit Price (\$)	Cost
160101 Clearing & Grubbing	LS	1 x	10,000.00 = \$	10,000
170101 Develop Water Supply	LS	1 x	150,000.00 = \$	150,000
190101 Roadway Excavation	CY	10,000 x	60.00 = \$	600,000
190103 Roadway Excavation (Temporary Access	CY	3,000 x	32.00 = \$	96,000
192037 Structure Excavation (Retaining Wall)	CY	11,500 x	31.00 = \$	356,500
193013 Structure Backfill (Retaining Wall)	CY	10,000 x	99.00 = \$	990,000
193031 Pervious Backfill Material (Retaining Wall)	CY	2,000 x	107.00 = \$	214,000
194001 Ditch Excavation	CY	x	= \$	-
198001 Imported Borrow	CY	x	= \$	-
198007 Imported Material (Shoulder Backing)	TON	x	= \$	-
XXXXXX Some Item		x	= \$	-

TOTAL EARTHWORK SECTION ITEMS	\$ 2,416,500
--------------------------------------	---------------------

SECTION 2: PAVEMENT STRUCTURAL SECTION

Item code	Unit	Quantity	Unit Price (\$)	Cost
150771 Remove Asphalt Concrete Dike	LF	x	= \$	-
150860 Remove Base and Surfacing	CY	x	= \$	-
153103 Cold Plane Asphalt Concrete Pavement	SQYD	x	= \$	-
153215 Remove Concrete (Curb and Gutter)	CY	x	= \$	-
250201 Class 2 Aggregate Subbase	CY	124 x	109.00 = \$	13,516
250401 Class 4 Aggregate Subbase	CY	x	= \$	-
260203 Class 2 Aggregate Base	CY	1,262 x	166.00 = \$	209,492
280000 Lean Concrete Base	CY	89 x	433.00 = \$	38,537
290201 Asphalt Treated Permeable Base	CY	x	= \$	-
360200 Base Bond Breaker	SQYD	53 x	3.00 = \$	159
365001 Sand Cover	TON	x	= \$	-
374002 Asphaltic Emulsion (Fog Seal Coat)	TON	x	= \$	-
374492 Asphaltic Emulsion (Polymer Modified)	TON	x	= \$	-
3750XX Screenings (Type XX)	TON	x	= \$	-
377501 Slurry Seal	TON	x	= \$	-
390095 Replace Asphalt Concrete Surfacing	CY	x	= \$	-
390132 Hot Mix Asphalt (Type A)	TON	2,784 x	143.00 = \$	398,112
390136 Minor Hot Mix Asphalt	TON	x	= \$	-
390137 Rubberized Hot Mix Asphalt (Gap Graded)	TON	x	= \$	-
393003 Geosynthetic Pavement Interlayer	SQYD	x	= \$	-
39405X Shoulder Rumber Strip (HMA, Type XX Inder	STA	x	= \$	-
394071 Place Hot Mix Asphalt Dike	LF	x	= \$	-
394074 Place Hot Mix Asphalt Dike (Type C)	LF	924 x	565.00 = \$	522,060
394076 Place Hot Mix Asphalt Dike (Type E)	LF	x	= \$	-
394090 Place Hot Mix Asphalt (Misc. Area)	SQYD	x	= \$	-
397005 Tack Coat	TON	4 x	2,625.00 = \$	10,500
401000 Concrete Pavement (Ramp Termini)	CY	x	= \$	-
401050 Jointed Plain Concrete Pavement	CY	204 x	582.00 = \$	118,728
401108 Replace Concrete Pavement (Rapid Strength	CY	x	= \$	-
404092 Seal Pavement Joint	LF	x	= \$	-
404094 Seal Longitudinal Isolation Joint	LF	x	= \$	-
413112A Repair Spalled Joints (Polyester Grout)	SQYD	x	= \$	-
413115 Seal Existing Concrete Pavement Joint	LF	x	= \$	-
420102 Groove Existing Concrete Pavement	SQYD	x	= \$	-
420201 Grind Existing Concrete Pavement	SQYD	x	= \$	-
731502 Minor Concrete (Misc. Const)	CY	x	= \$	-
731530 Minor Concrete (Textured Paving)	SQFT	x	= \$	-
XXXXXX Some Item		x	= \$	-

TOTAL STRUCTURAL SECTION ITEMS	\$ 1,311,200
---------------------------------------	---------------------

SECTION 3: DRAINAGE

Item code	Unit	Quantity	Unit Price (\$)	Cost
150206 Abandon Culvert	LF	x	= \$	-
150805 Remove Culvert	LF	x	= \$	-
150820 Modify Inlet	EA	x	= \$	-
152430 Adjust Inlet	LF	x	= \$	-
155003 Cap Inlet	EA	x	= \$	-
193114 Sand Backfill	CY	x	= \$	-
510502 Minor Concrete (Minor Structure)	CY	x	= \$	-
510512 Minor Concrete (Box Culvert)	CY	x	= \$	-
62XXXX XXX" APC Pipe	LF	x	= \$	-
64XXXX XXX" Plastic Pipe	LF	x	= \$	-
65XXXX XXX" RCP Pipe	LF	x	= \$	-
66XXXX XXX" CSP Pipe	LF	x	= \$	-
68XXXX Edge Drain	LF	x	= \$	-
69XXXX XXX" Pipe Downdrain	LF	x	= \$	-
70XXXX XXX" Pipe Inlet	LF	x	= \$	-
70XXXX XXX" Pipe Riser	LF	x	= \$	-
70XXXX XXX" Flared End Section	EA	x	= \$	-
703233 Grated Line Drain	LF	x	= \$	-
72XXXX Rock Slope Protection (Type and Method)	CY	x	= \$	-
721420 Concrete (Ditch Lining)	CY	x	= \$	-
721430 Concrete (Channel Lining)	CY	x	= \$	-
729010 Rock Slope Protection Fabric	SQYD	x	= \$	-
750001 Miscellaneous Iron and Steel	LB	x	= \$	-
XXXXXX Additional Drainage	LS	1	x 2000000 = \$	2,000,000
XXXXXX Some Item		x	= \$	-

TOTAL DRAINAGE ITEMS	\$ 2,000,000
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SECTION 4: SPECIALTY ITEMS

Item code	Unit	Quantity	Unit Price (\$)	Cost
070012 Progress Schedule (Critical Path Method)	LS	x	= \$	-
141120 Treated Wood Waste	LB	13,127	x 0.72 = \$	9,451
150662 Remove Metal Beam Guard Railing	LF	x	= \$	-
150668 Remove End treatment for double thrie beam barri	EA	x	= \$	-
25525 Remove Double Thrie beam barrier	LF	x	= \$	-
153250 Remove Sound Wall	SQFT	x	= \$	-
141120 Treated Wood Waste	LB	x	= \$	-
49XXXX CIDH Concrete Piling (<i>Insert Diameter</i>)	LF	x	= \$	-
510060 Structural Concrete (Retaining Wall)	CY	2,500	x 832.00 = \$	2,080,000
510133 Class 2 Concrete (Retaining Wall)	CY	x	= \$	-
510524 Minor Concrete (Sound Wall)	CY	x	= \$	-
5110XX Architectural Treatment (<i>Insert Type</i>)	SQFT	x	= \$	-
511048 Apply Anti-Graffiti Coating	SQFT	x	= \$	-
5136XX Reinforced Concrete Crib Wall (<i>Insert Type</i>)	SQFT	x	= \$	-
518002 Sound Wall (Masonry Block)	SQFT	x	= \$	-
520103 Bar Reinf. Steel (Retaining Wall)	LB	1700000	x 1.50 = \$	2,550,000
80XXXX Fence (<i>Insert Type</i>)	LF	x	= \$	-
832005 Midwest Guardrail System	LF	x	= \$	-
832007 Midwest Guardrail System (Wood Post)	LF	874	x 37.00 = \$	32,338
839310 Double Thrie Beam Barrier	LF	x	= \$	-
839581 End Anchor Assembly SFT	EA	x	= \$	-
839543 Transition Railing (Type WB-31)	EA	2	x 5,080.00 = \$	10,160
8395XX Terminal System (Type CAT)	EA	x	= \$	-
8395XX Alternative Flared Terminal System	EA	x	= \$	-
839576 End Cap (Type A)	EA	3	x 420.00 = \$	1,260
839561 Rail Tensioning Assembly	EA	x	= \$	-
839640 Concrete Barrier (Type 60M)	LF	1,206	x 110.00 = \$	132,660
839641 Concrete Barrier (Type 60MA)	LF	1,291	x 175.00 = \$	225,925
839717 Concrete Barrier (Type 732B-Modified)	LF	x	= \$	-
839710 Concrete Barrier (<i>Type 60</i>)	LF	x	= \$	-
839752 Remove Guardrail	LF	833	x 10.00 = \$	8,330
839774 Remove Concrete Barrier	LF	2,496	x 41.00 = \$	102,336
839584A Crash Cushion	EA	x	= \$	-

TOTAL SPECIALTY ITEMS	\$ 5,152,500
------------------------------	---------------------

SECTION 5: ENVIRONMENTAL

5A - AVOIDANCE MEASURES

Item code	Unit	Quantity		Unit Price (\$)		Cost
160110 ESA Fencing	LF	1,000	x	30.50	= \$	30,500
146002 Monitoring	LS	1	x	2,407,800.00	= \$	2,407,800
803210 DT Fence	LF	1,000	x	15.00	= \$	15,000
800360 Exclusionary Fence	LF	1,000	x	60.00	= \$	60,000
146003 Bat Panels/NRPP	LS	1	x	363,100.00	= \$	363,100
140003 Asbestos Compliance Plan	LS	1	x	25,000.00	= \$	25,000
Subtotal Environmental						\$ 2,901,400

5B - LANDSCAPE AND IRRIGATION

Item code	Unit	Quantity		Unit Price (\$)		Cost
66898 Additional Plant Establishment Work (1 year)	LS	1	x	125,000.00	= \$	125,000
160110 Temporary High-Visibility Fence	LF	3,500	x	4.50	= \$	15,750
200052 Prune Existing Plants	LS		x		= \$	-
202039 Slow Release Fertilizer	LB		x		= \$	-
204008 Plant (Group H)	EA	1,585	x	3.50	= \$	5,548
204011 Plant (Group K)	EA		x		= \$	-
204035 Plant (Group A)	EA	435	x	12.00	= \$	5,220
204036 Plant (Group B)	EA		x		= \$	-
204099 Plant Establishment Work 90 Days	LS		x		= \$	-
205033 Gravel Mulch	SQFT	3,000	x	3.50	= \$	10,500
205035 Wood Mulch	CY	8	x	250.00	= \$	2,000
206400 Check And Test Existing Irrigation Facilities	LS		x		= \$	-
206405 Remove Irrigation Facilities	LS		x		= \$	-
208448 Riser Sprinkler Assembly	EA		x		= \$	-
208594 3/4" Plastic Pipe Schedule 40 Supply Line	LF		x		= \$	-
208739 10" Corrugated High Density Polyethylene Pipe	LF		x		= \$	-
209801 Maintenance Vehicle Pullout	EA		x		= \$	-
210010 Move-in/Move-out	EA	4	x	2,500.00	= \$	10,000
210121 Duff (Acre)	ACRE	14	x	5,250.00	= \$	73,500
210252 Bonded Fiber Matrix (Sqft)	SQFT	619,000	x	0.20	= \$	123,800
210430 Hydroseed	SQFT					
780400 Architectural Treatment (Veneer)	LS	1	x	1,728,460.92	= \$	1,728,461
Subtotal Landscape and Irrigation						\$ 2,099,778

5C - NPDES

Item code	Unit	Quantity		Unit Price (\$)		Cost
130100 Job Site Management	LS	1	x	150,000.00	= \$	150,000
130300 Prepare Stormwater Pollution Prevention Plan (SWPF)	LS	1	x	6,000.00	= \$	6,000
130330 Stormwater Annual Report	EA	4	x	2,000.00	= \$	8,000
130505 Move In/Move Out	EA	8	x	2,000.00	= \$	16,000
130560 Temporary Soil Binder	SQYD	30,500	x	0.50	= \$	15,250
130560 Temporary Fence (Type ESA)	LF	8,000	x	35.00	= \$	280,000
130570 Temporary Cover	SQYD	2,000	x	7.00	= \$	14,000
130620 Temporary Drainage Inlet Protection	EA	5	x	450.00	= \$	2,250
130640 Temporary Fiber Roll	LF	15,000	x	8.00	= \$	120,000
130680 Temporary Silt Fence	LF	9,000	x	6.00	= \$	54,000
130900 Temporary Concrete Washout	LS	1	x	20,000.00	= \$	20,000
130710 Temporary Construction Entrance/Exit	EA	8	x	4,000.00	= \$	32,000
130730 Street Sweeping	LS	1	x	80,000.00	= \$	80,000
131201 Temporary Creek Diversion	LS	1	x	50,000.00	= \$	50,000
XXXXXX Permanent Treatment BMPS*	LS	1	x	200,000.00	= \$	200,000
XXXXXX Some Item						

Supplemental Work for NPDES

(These costs are not accounted in total here but under Supplemental Work on sheet 7 of 11).

066595 Water Pollution Control Maintenance Sharing*	LS	1	x	6,000.00	= \$	6,000
066596 Additional Water Pollution Control**	LS	1	x	12,000.00	= \$	12,000
066597 Storm Water Sampling and Analysis***	LS		x		= \$	-
066916 Annual Construction General Permit Fees	EA	4	x	860.00	= \$	3,440
XXXXXX Some Item						

Subtotal NPDES (Without Supplemental Work) \$ 1,047,500

*Applies to all SWPPPs and those WPCPs with sediment control or soil stabilization BMPs.

**Applies to both SWPPPs and WPCP projects.

*** Applies only to project with SWPPPs.

TOTAL ENVIRONMENTAL \$ 6,048,700

SECTION 6: TRAFFIC ITEMS

6A - Traffic Electrical

Item code	Unit	Quantity	Unit Price (\$)	Cost
066861 Maintain Existing and Temporary Electric	EA	1	x 1,000.00	= \$ 1,000
150760 Remove Sign Structure	EA		x	= \$ -
151581 Reconstruct Sign Structure	EA		x	= \$ -
152641 Modify Sign Structure	EA		x	= \$ -
5602XX Furnish Sign Structure	LB		x	= \$ -
5602XX Install Sign Structure	LB		x	= \$ -
56XXXX XXX" CIDHC Pile (Sign Foundation)	LF		x	= \$ -
860090 Maintain Existing Traffic Management	LS	1	x 1,000.00	= \$ 1,000
860810 Inductive Loop Detectors	EA		x	= \$ -
86055X Lighting & Sign Illumination	LS		x	= \$ -
8607XX Interconnection Facilities	LS		x	= \$ -
8609XX Traffic Monitoring Stations	LS		x	= \$ -
860XXX Signals & Lighting	LS	1	x	= \$ -
8611XX Ramp Metering System (Location X)	LS		x	= \$ -
8611XX Ramp Metering System (Location X)	LS		x	= \$ -
86XXXX Fiber Optic Conduit System	LS		x	= \$ -
872135 Modifying Traffic Monitoring Stations	LS	1	x 50,000.00	= \$ 50,000
XXXXX Some Item				
Subtotal Traffic Electrical				\$ 52,000

6B - Traffic Signing and Striping

Item code	Unit	Quantity	Unit Price (\$)	Cost
070030 Lead Compliance Plan	LS	1	x 2,000.00	= \$ 2,000
120090 Construction Area Signs	LS	1	x 27,000.00	= \$ 27,000
150701 Remove Yellow Painted Traffic Stripe	LF	20,000	x 3.50	= \$ 70,000
150710 Remove Traffic Stripe	LF	40,000	x 0.55	= \$ 22,000
150713 Remove Pavement Marking	SQFT		x	= \$ -
150742 Remove Roadside Sign	EA	6	x 150.00	= \$ 900
152320 Reset Roadside Sign	EA			
152390 Relocate Roadside Sign	EA	2	x 720.00	= \$ 1,440
150722 Remove Pavement Marker	EA	420	x 3.20	= \$ 1,344
850111 Pavment Marker (Retroreflective)	EA	420	7.00	\$ 2,940
560XXX Furnish Sign Panels	SQFT	53	35.00	\$ 1,855
840504 4" Thermoplastic traffic stripe (Sprayable)	LF	60,000	1.00	\$ 60,000
820107 Delineator (Class 1)	EA	12	70.00	\$ 840
024146 Remove Thermoplastic Traffic Stripe	LF	1,129	2.30	\$ 2,597
Subtotal Traffic Signing and Striping				\$ 192,916

6C - Stage Construction and Traffic Handling

Item code	Unit	Quantity	Unit Price (\$)	Cost
120100 Traffic Control System	LS	1	x 10,000.00	= \$ 10,000
120120 Type III Barricade	EA		x	= \$ -
120143 Temporary Pavement Delineation	LF		x	= \$ -
12016X Channelizer	EA	200	x 30.00	= \$ 6,000
128650 Portable Changeable Message Signs	EA	6	x 2,500.00	= \$ 15,000
129000 Temporary Railing (Type K)	LF	5,000	x 50.00	= \$ 250,000
129100 Temp. Crash Cushion Module	EA	84	x 230.00	= \$ 19,320
129099A Traffic Plastic Drum	EA	100	x 40.00	= \$ 4,000
839603A Temporary Crash Cushion (ADIEM)	EA			
820130 Object marker	EA		x 0.00	= \$ -
XXXXXX Traffic Management Plan	LS	1	x 644,000.00	= \$ 644,000
Subtotal Stage Construction and Traffic Handling				\$ 948,320

TOTAL TRAFFIC ITEMS	\$ 1,193,300
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SECTION 7: DETOURS

Include constructing, maintaining, and removal

Item code	Unit	Quantity	Unit Price (\$)	Cost
0713XX Temporary Fence (Type X)	LF		x	= \$ -
07XXXX Temporary Drainage	LS	1	x	= \$ -
120143 Temporary Pavement Delineation	LF		x	= \$ -
1286XX Temporary Signals	EA		x	= \$ -
129000 Temporary Railing (Type K)	LF		x	= \$ -
190101 Roadway Excavation	CY		x	= \$ -
198001 Imported Borrow	CY		x	= \$ -
198050 Embankment	CY		x	= \$ -
250401 Class 4 Aggregate Subbase	CY		x	= \$ -
260201 Class 2 Aggregate Base	CY		x	= \$ -
390132 Hot Mix Asphalt (Type A)	TON		x	= \$ -
XXXXXX Some Item	LS	1	x 700,000.00	= \$ 700,000

TOTAL DETOURS \$ 700,000

SUBTOTAL SECTIONS 1-7 \$ 12,708,300

SECTION 8: MINOR ITEMS

8A - Americans with Disabilities Act Items

ADA Items LS 0.0% \$ -

8B - Bike Path Items

Bike Path Items 0.5% \$ 63,542

8C - Other Minor Items

Other Minor Items 0.0% \$ -

Total of Section 1-7 \$ 12,708,300 x 5.0% = \$ 635,415

TOTAL MINOR ITEMS \$ 635,500

SECTIONS 9: MOBILIZATION

Item code 999990 Total Section 1-8 \$ 13,343,800 x 10% = \$ 1,334,380

TOTAL MOBILIZATION \$ 1,334,380

SECTION 10: SUPPLEMENTAL WORK

Item code	Unit	Quantity	Unit Price (\$)	Cost
066015 Federal Trainee Program	LS		x	= \$ -
066063 Traffic Management Plan - Public Informati	LS	0	x 0.00	= \$ -
066090 Maintain Traffic	LS	1	x 5,000.00	= \$ 5,000
066094 Value Analysis	LS		x	= \$ -
066204 Remove Rock & Debris	LS		x	= \$ -
066222 Locate Existing Cross-Over	LS		x	= \$ -
066670 Payment Adjustments For Price Index Fluc	LS		x	= \$ -
066700 Partnering	LS	0	x 0.00	= \$ -
066866 Operation of Existing Traffic Management	LS		x	= \$ -
066920 Dispute Review Board	LS		x	= \$ -
66860 Maintain existing electrical systems during construction	LS	1	x 5,000.00	= \$ 5,000
66670 Compensation adjustment for price index for fluctuations of paving asphalt	LS	1	1,000.00	\$ 1,000

Cost of NPDES Supplemental Work specified in Section 5C = \$ 18,000

Total Section 1-8 \$ 13,343,800 5% = \$ 667,190

TOTAL SUPPLEMENTAL WORK \$ 696,200

SECTION 11: STATE FURNISHED MATERIALS AND EXPENSES

Item code	Unit	Quantity	Unit Price (\$)	Cost
066063 Public Information	LS	1	x 3,000.00 =	\$3,000
066105 RE Office	LS	1	x 51,200.00 =	\$51,200
066803 Padlocks	LS		x =	\$0
066838 Reflective Numbers and Edge Sealer	LS		x =	\$0
066901 Water Expenses	LS		x =	\$0
066062A COZEEP Expenses	LS	1	x 32,000.00 =	\$32,000
06684X Ramp Meter Controller Assembly	LS		x =	\$0
06684X TMS Controller Assembly	LS		x =	\$0
06684X Traffic Signal Controller Assembly	LS		x =	\$0
066915 Board of Equalization treated wood waste generation	LS		x =	\$0

Total Section 1-8 \$ 13,343,800 5% = \$ 667,190

TOTAL STATE FURNISHED	\$753,400
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SECTION 12: TIME-RELATED OVERHEAD

Estiamted Time-Releated Overhead (TRO) Percentage (0% to 10%) = 10%

Item code	Unit	Quantity	Unit Price (\$)	Cost
070018 Time-Related Overhead	wday	600	X 1940.98333 =	\$1,164,590

TOTAL TIME-RELATED OVERHEAD	\$1,164,590
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SECTION 13: CONTINGENCY

(Pre-PSR 30%-50%, PSR 25%, Draft PR 20%, PR 15%, after PR approval 10%, Final PS&E 5%)

Total Section 1-11 \$ 13975080 x 15% = \$2,096,262

TOTAL CONTINGENCY	\$2,096,300
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II. STRUCTURE ITEMS

	<u>Bridge 1</u>	<u>Bridge 2</u>	<u>Bridge 3</u>
DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Bridge Name	Colorado River BR.		Temporary Trestle
Bridge Number	54-415		54-XXX
Structure Type	Cast-in-place/Pre-stressed Box Girder	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	84.00 LF	LF	80.00 LF
Total Bridge Length (Feet)	1307.00 LF	LF	1150.00 LF
Total Area (Square Feet)	109788 SQFT	0 SQFT	92000 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$503.00	\$0.00	\$26.00

COST OF EACH STRUCTURE	\$55,223,364.00	\$0.00	\$2,392,000.00
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DATE OF ESTIMATE	00/00/00	00/00/00	00/00/00
Name	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Bridge Number	57-XXX	57-XXX	57-XXX
Structure Type	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Width (Feet) [out to out]	0.00 LF	0.00 LF	0.00 LF
Total Length (Feet)	0.00 LF	0.00 LF	0.00 LF
Total Area (Square Feet)	0 SQFT	0.00 SQFT	0.0 SQFT
Structure Depth (Feet)	0.00 LF	0.00 LF	0.00 LF
Footing Type (pile or spread)	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
Cost Per Square Foot	\$0.00	\$0.00	\$0.00

COST OF EACH STRUCTURE	\$0.00	\$0.00	\$0.00
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TOTAL COST OF BRIDGES	\$57,615,364.00
TOTAL COST OF BUILDINGS	\$0.00

TOTAL COST OF STRUCTURES¹	\$57,615,364.00
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Estimate Prepared By: Jason Fang
Division of Structures

10/13/2022
Date

¹Structure's Estimate includes Overhead and Mobilization.
Add more sheets if needed. Call them 9a, 9b, 9c, ..., etc

III. RIGHT OF WAY

Fill in all of the available information from the Right of Way data sheet.

A)	A1)	Acquisition, including Excess Land Purchases, Damages & Goodwill,	\$	55425.00
	A2)	Railroad	\$	20000.00
	A3)	Federal Lands - Special Use	\$	
B)		Acquisition of Offsite Mitigation	\$	7067000.00
C)	C1)	Utility Relocation (State Share)	\$	0.00
	C2)	Potholing (Design Phase)	\$	9400.00
D)		Railroad Acquisition	\$	0.00
E)		Clearance / Demolition	\$	0.00
F)		Relocation Assistance (RAP and/or Last Resort Housing Costs)	\$	0.00
G)		Title and Escrow	\$	1500.00
H)		Project Permit Fees	\$	164622.25
I)		Condemnation Settlements (Items G & H applied to items A + B)	\$	17077.00
		0%		
J)		Design Appreciation Factor	\$	0.00
		0%		
K)		Utility Relocation (Construction Cost)	\$	0.00
L)		ADOT Right of Way Cost	\$	69000.00

M)	TOTAL RIGHT OF WAY ESTIMATE	\$7,404,024
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(Excluding Item #8 - Hazardous Waste)

N)	TOTAL R/W ESTIMATE: Escalated	\$7,404,024
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O)	Right of Way Support	\$	10,000
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Support Cost	Marissa Cofer	(909) 518-4119
Estimate Prepared By	Project Coordinator ¹	Phone
Utility Estimate	Randy Davis	(909) 371-9112
Prepared By	Utility Coordinator ²	Phone
R/W Acquisition	Stephen Hensley	(909) 518-4355
Estimate Prepared By	Right of Way Estimator ³	Phone

¹ When estimate has Support Costs only ² When estimate has Utility Relocation

³ When R/W Acquisition is required

Attachment D
Right of Way Data
Sheet

M E M O R A N D U M

To: RAFAAT EL SHERIF
Design I

From: CHRISTINE SENTENO
RW Project Coordination

Date: September 27, 2023 - Update
File: 08-SBd 40 PM – R153.9/R154.7
Project: Bridge Rehabilitation and/or
Replacement
E.A./P.N.: 0R3800 / 0812000067

We have completed an estimate of the right of way costs for the above-referenced project based on the request received on **September 8, 2023**, and the following assumptions and limiting conditions:

- ☐ Mapping received did not provide sufficient detail to determine the limits of the right of way requirements and/or to determine damages to the remainder parcels impacted by the project.
- ☒ Additional right of way requirements may be anticipated but are not defined due to the preliminary nature of the early design requirements.
- ☐ We have determined that there are no right of way functional involvements in the proposed project at this time as currently designed.
- ☒ Due to the preliminary nature of the project scope/mapping, utility estimate was provided without the benefit of As-Built maps or potholing.
- ☒ Other: **Please see remarks in federal as well as railroad portions of RWDS.**

Right of Way Engineering will require a minimum of 0 months after receiving final Right of Way Requirements to deliver Right of Way Appraisal mapping (M224).

Right of Way will require a minimum of 24 months prior to certification of the subject project after receiving final Right of Way Appraisal maps, necessary environmental clearances, and approved freeway agreements (M225).

Shorter lead times may lead to additional Right of Way resources, an increased number of eminent domain actions and possibly result in missing the certification date. Any of these actions may reflect adversely on the District's other programs or the Department's and/or District's public image.

*NOTE: THE WORKPLAN WILL BE SENT SEPARATELY AND ARE BASED ON THE INFORMATION PROVIDED WITH THE DATA SHEET REQUEST. IF THERE IS A CHANGE IN SCOPE, A REVISED DATA SHEET AND WORKPLAN WILL BE PROVIDED.

Attachments:

- [XX] Right of Way Data Sheet
[XX] Utility Information Sheet
[XX] Railroad Information Sheet
[XX] Government Lands Information Sheet
[XX] M.C.C.E.

EVNT RW	_____
COST RW1 - 6	_____
TEXT TI	_____
SCAN	10/9/23
CLASS	_____
AGRE	_____
TPRC	_____

RIGHT OF WAY DATA SHEET

08-SBd 40 PM – R153.9/R154.7
 Bridge Rehabilitation and/or
 Replacement
 0R3800 / 0812000067

(Form #)

Current 9-Phase Programming: \$ 169,000.00

1. Right of Way Cost Estimate:

	Value
A. Acquisition, including Excess Lands, Damages, Goodwill, Major Rehabilitation, and Permits to Enter	\$ 0.00
Railroad	\$ 0.00
Federal Lands – Lease Application/Cost Recovery	\$ 30,025.00
B. Acquisition of Offsite Mitigation.	\$ 7,087,450.00
C. Utility - Relocation (State share)	\$ 750,000.00
- Potholing (20 Potholes @ \$500.00)	\$ 10,000.00
D. RAP	\$ 0.00
E. Clearance/Demolition	\$ 0.00
F. Title and Escrow Fees	\$ 0.00
G. Project Permit Fees	\$ 122,500.00
H. Condemnation Costs	\$ 0.00
Total R/W Estimate:	\$ 7,999,975.00

2. Anticipated Date of Right of Way Certification February 3, 2026

3. Parcel Data:

Type	Dual/Appr	Utility Involvement	RR Involvement	Yes
X _____	_____	U4-1 _____	C&M Agreement	_____
A _____	_____	-2 _____	Svc Contract	_____
B _____	_____	-3 <u>2</u> _____	OE Clearances/ Clauses	<u>1</u> _____
C _____	_____	-4 _____	LIC/ROE	_____
D _____	_____	U5-7 _____		
		-8 _____		
Total Parcels _____		-9 <u>2</u> _____	Federal Lands	Yes _____
			Number of Parcels	_____

Areas: Right of Way: S.F. _____
 Excess: S.F. _____
 No. Excess Land Parcels: _____

Misc. R/W Work
 RAP Displacement _____
 Clear/Demo _____
 Const Permits _____
 Condemnation _____
 Permits to Enter-ENV _____

RIGHT OF WAY DATA SHEET

08-SBd 40 PM – R153.9/R154.7
 Bridge Rehabilitation and/or
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 0R3800 / 0812000067

(Form #)

4. Are there major items of Construction Contract Work?

Yes ____ No X (If yes, explain.)

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).

Type and Number of Parcels: Total Number of Larger Parcels 0

Fee _____
 Easements _____

6. Is there an effect on assessed valuation?

Yes ____ Not Significant ____ No X (If yes, explain.)

7. Are utility facilities or rights of way affected?

Yes ____ No X (See attached Utility Information Sheet)

The following checked items may seriously impact lead time for utility relocation:

- ☐ Longitudinal policy conflict(s).
☐ Environmental concerns impacting acquisition of potential easements.
☐ Power lines operating in excess of 50 KV and substations.

8. Are railroad facilities or rights of way affected? Yes X No ____

(See attached Railroad Information Sheet)

9. Were any previously unidentified sites with hazardous waste and/or material found?

Yes ____ None Evident X

(If yes, attach memorandum per R/W Manual, Chapter 4, Section 4.01.10.00.)

10. Are State or Federal rights of way affected?

Yes X No ____ (See attached Government Lands Information Sheet)

Agencies Involved: Bureau of Land Management, US Fish & Wildlife and State Land Commission

Rights/Permissions Required: Cooperative Work Agreement

11. Are RAP displacements required? Yes ____ No X

No. of single family ____ No. of business/nonprofit ____

No. of multi-family ____ No. of farms ____

Based on Draft/Final Relocation Impact Statement/Study dated _____, it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

12. Are there material borrow and/or disposal sites required?

Yes ____ No X (If yes, explain.)

13. Are there potential relinquishments and/or abandonments?

Yes ____ No X (If yes, explain.)

14. Are there existing and/or potential Airspace sites?

Yes ____ No X (If yes, explain.)

RIGHT OF WAY DATA SHEET

08-SBd 40 PM – R153.9/R154.7
 Bridge Rehabilitation and/or
 Replacement
 0R3800 / 0812000067

(Form #)

15. Is it anticipated that all Right of Way work will be performed by CALTRANS staff?

Yes X No (If no, discuss.)

Evaluations prepared by:

Right of Way Estimator: STEPHEN HENSLEY, Associate Right of Way Agent
 Railroad Coordinator: LYND SAY CAMPANELLA, Associate Right of Way Agent
 Utility Coordinator: JAMES DAVIS, Associate Right of Way Agent
 Federal Lands: KRISTINE FLINT, Associate Right of Way Agent
 Right of Way Engineering: KEVIN WINGATE, Transportation Land Surveyor

Reviewed By:

Gustavo Gutierrez

GUSTAVO GUTIERREZ
 Project Coordinator
 District 8, Right of Way

Date: 09/28/2023

Reviewed By:

Christine Senteno

CHRISTINE SENTENO
 Senior-RW Agent, Project Coordination
 District 8, Right of Way

Date: 09/28/2023

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper subject to the limiting conditions set forth, and I find this Data Sheet complete and current.

Susan Esparza

SUSAN ESPARZA
 Project Delivery Manager
 District 8, Right of Way

Date: 10/03/2023

Rebecca Guirado

REBECCA GUIRADO,
 Deputy District Director
 District 8, Right of Way and Land Survey

Date: 10/03/2023

REVISIONS			APPROVAL	
No.	Date	Reason for Revision	Project Coordinator	Sr. RW Agent

RIGHT OF WAY DATA SHEET

08-SBd 40 PM – R153.9/R154.7
 Bridge Rehabilitation and/or
 Replacement
 0R3800 / 0812000067

(Form #)

This utility estimate was prepared using "project specific" data and unit values. This information is not to be utilized for the updating or preparation of this, or any other Right of Way Cost Report or Utility Information Sheet.

UTILITY INFORMATION SHEET

1. List of utility companies in the project area:

Mojave Pipeline Operating Company, Terradex Inc., SoCal Gas-transmission, PG&E Gas-transmission, c/o Needles, Route 66 Broadband LLC., Transwestern Pipeline Company, Frontier

2. Type and name of utilities in conflict and agreements required:

Underground gas, electric.

Notice to Owners and Utility Agreements may be expected.

3. Is any facility a longitudinal encroachment in existing or proposed access controlled right of way? Explain

Disposition of longitudinal encroachment(s):

- ☒ None
☐ Relocation required.
☐ Exception to policy needed.
☐ Other. Explain

4. Additional information concerning utility involvement on this project. Is there any special circumstances/facilities requiring additional lead time?

None.

5. Potholing costs: **\$10,000** (20PH x \$500)

Total estimated cost of State's obligation for utility relocation on this project:
 (Phase 9 funding) **\$750,000**

Facility Owner	Type of Relocation (facility)	Quantity (i.e., LF of waterline, # of manholes, # poles, etc.)	Cost of Each relocation	Total Cost of relocations	Estimated Grand Total including contingency
SoCal Gas	12" gas	300LF	\$1,500LF	450,000	562,500
PG&E Electric	12kv electric	300LF	\$500LF	150,000	187,500
Total					\$750,000

Utility Involvement

U4-1 _____ total number of expected owner expense involvements

-2 _____ total number of expected State expense involvements-conventional highway, no Federal aid

-3 2 _____ total number of expected State expense involvements-freeway, no Federal aid

RIGHT OF WAY DATA SHEET

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Bridge Rehabilitation and/or
Replacement
0R3800 / 0812000067

(Form #)

-4_____ total number of expected State expense involvements-conventional or freeway, with
Federal aid

U5-7_____ total number of expected utility verifications, which will not result in involvements

-8_____ total number of expected utility verifications, 50% which will result in involvements, and 50%
will not

-9 2_____ total number of expected utility verifications, which will result in involvements

Prepared By: James Davis

Date: 9/27/23

Right of Way Utility Estimator

Reviewed By: Vincent Lundblad
VINCENT LUNDBLAD
Senior Right of Way Agent, Utilities

Date: 9/27/23

RIGHT OF WAY DATA SHEET

08-SBd 40 PM – R153.9/R154.7
 Bridge Rehabilitation and/or
 Replacement
 0R3800 / 0812000067

(Form #)

RAILROAD INFORMATION SHEET

1. Describe railroad facilities or rights of way affected.

Per the previous data sheet completed in 2022 -- this project is in coordination with Arizona Dept. of Transportation (ADOT). The scope of Alternative 1- build for this project includes replacing the SBd-40 Colorado River (54-0415) bridge between California and Arizona on its existing alignment. BNSF-owned railroad tracks on its own bridge are north of the project and run parallel to the Colorado Bridge. The railroad bridge will not be affected by the project.

A review of map layouts and a summary page submitted by Design indicates railroad involvement is limited to attaining a 18,705 sq. ft. TCE from BNSF from parcel 210-48-009 on the Arizona side of the Colorado River bridge. In regard to the railroad, all work on the California side will be done within the CT right of way and outside of 25' of any railroad tracks, therefore, no railroad involvement is anticipated on the California side of the project under the current scope of work for this alternative build.

2. When branch lines or spurs are affected, would acquisition and/or payment of damages to businesses and/or industries served by the railroad facility be more cost effective than construction of a facility to perpetuate the rail service? Yes ____ No **X** (If yes, explain.)
3. Discuss types of agreements and rights required from the railroads. Are grade crossings requiring service contracts, or grade separations requiring construction and maintenance agreements involved?
As per the previous data sheet completed in 2022 -- an environmental permit to enter has already been attained. No other agreements/rights are needed.

4. Remarks (non-operating railroad right of way involved?):
Since railroad tracks are near the project's scope, a railroad clearance memo with a 5-1.20c clause may be needed at the time of the project's certification. If the scope of work changes and/or the railroad tracks become effected, the railroad portion of the data sheet will need to be revised to reflect railroad involvement, which may affect lead time and increased costs.

5. 4-Phase Cost: \$ **0**
 Explanation: (Flagging)

9-Phase Cost: \$ **0 (Since environmental permit has already been completed)**
 Explanation: (ROE, Svc Contract)

6. PMCS Input Information

RR Involvement	<u>Yes (A TCE will be needed within Arizona boundary by ADOT)</u>
C&M Agreement	_____
SVC Contract	_____
OE Clearances/ Clauses	<u>1</u>
LIC/ROE	_____

Anticipated Lead time: **No additional lead time is anticipated.**

Prepared By: *Lyndsay Campanella*
 LYNDsay CAMPANELLA
 Right of Way Railroad Coordinator

Date: 09/26/2023

Reviewed By: *Aidee Arpon*
 AIDEE ARPON
 Senior Right of Way Agent, Acquisitions

Date: 9/26/2022

RIGHT OF WAY DATA SHEET08-SBd 40 PM – R153.9/R154.7
Bridge Rehabilitation and/or
Replacement
0R3800 / 0812000067

(Form #)

FEDERAL LANDS INFORMATION SHEET

Are Federal Lands involved?Yes ☒ No ☐ (If "Yes," provide the following information.)

Agencies Involved:

☐ Army Corps of Engineers	☐ GSA	☐ US Postal Service
☐ BIA	☐ National Parks	☐ Veterans Administration
☒ BLM	☒ US Fish & Wildlife	☒ Other <u>State Lands Commission</u>
☐ Dept. of Parks & Recreation	☐ US Forest Service	☐ Other _____

Rights/Permissions Required:

☒ Cooperative Work Agreement	☐ Letter of Concurrence	☐ Right of Way Grant
☐ Cost Recovery	☐ Letter of Consent	☐ Special Use Permit
☐ Courtesy Letter	☐ Mineral Agreement	☐ Timber Sale
☐ Easement	☐ Perfection of Title	☐ Transfer of Jurisdiction
☐ Highway Easement	☐ Right of Entry	☐ Other _____

9-Phase Cost Anticipated (if any) _____

Explanation:

Remarks:

State Lands Commission will require new lease agreement for Colorado River Bridge, PRC572. Lease application will require an Approximate Expense Deposit of \$5,025.00 for staff labor costs. A reasonable value of Right of Way, determined by an appraisal will be deposited into the State Parks and Recreation Fund per Streets and Highways Code Section 101.5.

APN: 065016114, United States Fish and Wildlife (USFW), Havasu National Wildlife Reserve (HNWR).

APN: 065016109, BLM, temporary construction and permanent easements will be required.

Once confirmed rights required, permanent or temporary, Federal Lands Coordinator work with HNWR and BLM to start acquisition process.

Cost Recovery Agreement for \$25,000.00 may be requested from BLM for staff labor costs.

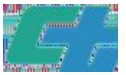
Anticipated Lead time: 24 Months

Prepared By: Kristine Flint
KRISTINE FLINT
Right of Way Federal Lands Coordinator

Date: September 25, 2023

Reviewed By: 
ADEE ARPON
Senior Right of Way Agent, Acquisitions

Date: 9/25/2023



Mitigation and Compliance Cost Estimate (MCCE)

PART 1 - PROJECT INFORMATION

DIST-CO-RTE: 08 - SBD - 040 **PM/PM:** 153.900/154.700

EA/Project Number: 08-0R380_ / 0812000067

Project Name: SBD 40 COLORADO RIVER BR REHAB

Form Completed by: SH; AM, AC, KR, EL

Project Manager: HADIPOUR, ELAHEH **Phone:**

Date: 9/26/2023

MCCE Phase prepared for: DED

PART 2 - ENVIRONMENTAL COMMITMENTS FOR PERMANENT IMPACTS

Environmental Commitments for Alternative:

Commitment	Design \$	FY	Ac/Crd	ROW \$ Planned	FY	ROW \$ Actual	Pd	Construction \$	FY
Archaeological									
Monitoring							☐	\$625,300	26/27
ESA Fencing							☐	\$10,500	26/27
Biological									
DT Fence (803210)							☐	\$15,000	26/27
Exclusionary Fence (800360)							☐	\$60,000	26/27
NRPP (146003)							☐	\$10,000	26/27
Bat panels (146003)							☐	\$353,100	26/27
TO JD update	\$50,000	23/24					☐		
TO BMMP update	\$20,000	24/25					☐		
Mitigation - CDFW bank credits			1	\$117,000	25/26		☐		
Mitigation - 401/404/BO ILF			33	\$1,450,000	25/26		☐		
Mitigation - off-site restoration	\$2,000,000		16	\$5,000,000	25/26		☐		
Monitoring (146002) onsite	\$250,000			\$500,000	33/34		☐		
Annual 401 Fee				\$2,763	27/28		☐		
Annual 401 Fee				\$2,984	28/29		☐		
Annual 401 Fee				\$3,223	29/30		☐		
Annual 401 Fee				\$3,481	30/31		☐		
Annual 401 Fee				\$3,759	31/32		☐		
Annual 401 Fee				\$4,060	32/33		☐		
Monitoring (146002)							☐	\$1,782,500	26/27
ESA Fencing (160110)							☐	\$20,000	26/27

PART 3 - PERMITS AND AGREEMENTS

Permit/Agreement	ROW \$ Planned	FY	ROW \$ Actual	Pd	Construction \$	FY
CEQA Review				☐		
1600	\$15,152.4	25/26		☐		
1600 Geotech	\$3,860.25	23/24		☐		
2081 - Incidental Take Permit	\$60,509.97	25/26		☐		
401	\$20,262.7	25/26		☐		
401 Pre-Certified	\$2,610.36	23/24		☐		
TOTAL	\$2,320,000		\$7,189,665.68		\$2,876,400	

Approved by:

Tracey D'Aoust Roberts for GABRIELLE DUFF

Environmental Branch Chief (Print Name)

Signature

9/28/2023

Date

If Right of Way Capital is needed:

Christine Senteno

Right-of-Way Office Chief (Print Name)

Signature

09/28/2023

Date

If cultural and biology mitigation totals more than \$500,000:

Tracey D'Aoust Roberts

Environmental Office Chief (Print Name)

Signature

9/28/2023

Date

Submitted to PM on: _____ Initial _____

Comments (explanation and risk management plan attached)**Biological Resources:**

RW Summary: Acquisition of Offsite Mitigation (various) = \$7,067,000; Project Permit Fees = \$164,622.25; estimated WD = 600

--Bio Monitoring of bridge work (based on 600 WD, 2FT/1PT monitor, permitted biologists).

--BEEs: high visibility ESA Fencing (4,000 LF x \$5/LF = \$20,000); temp DT fencing (1,000 LF x \$15/LF = \$15,000); exclusionary chain link fence (2,000 LF x \$30/LF = \$60,000); Natural Resources Protection Plan (NRPP) complex project assume \$10,000 LS; bat panels [(535ft of joint) x (2 joints) x (0.5 bat utilization) x (60% alt habitat requirement) x (\$3,300/panel)/3LF = \$353,100] or 107 bat panels).

Mitigation bank credits estimated at \$117,000/ac; ILF credits estimated at \$1/sq-ft; off-site 2081-related restoration estimated based on past Child EA costs. Long-term Monitoring of on-site restoration work estimated based on initial costs.

-Permits: 1600, 2081, and 401 permit fees based on 2023 fee schedules, assumed annual increases, and assumed amendments needed.

-- Child EA(s) needed for ITP funding security and anticipated long-term on-site restoration work required by the 1600 permit; split to occur at 1 Phase allocation, total of \$7.75 million is \$5.5M capital/

\$2.25M support. Assuming high costs to reduce risk, given that the design is anticipated in Phase 1 and the preferred alternative is not yet selected, permits are not yet acquired. All estimates are subject to change as the project advances and additional information is acquired.

Cultural - Capital Funds:

Arch and tribal monitoring Phase 1 Task Order – (38 Geotech days, WBS 280.50) 38 days x 8 hours = 304 hours x \$200.00 = \$60,800.00

Other direct costs Phase 1 Task Order – (Lodging, meals, mileage, incidentals WBS 280.50) – \$250.00 per diem. 38 x 250 = \$9,500.00

Arch and tribal monitoring Phase 3 Task Order – (600 construction days, 300 requiring monitoring WBS 280.50)

300 days x 8 hours = 2400 hrs x \$200.00 = \$480,000.00

Other direct costs Phase 3 Task Order – (Lodging, meals, mileage, incidentals WBS 280.50) – \$250.00 per diem. 300 x \$250 = \$75,000

Total: \$625,300.00

Phase 1 Task order: \$70,300.00

Phase 3 Task order: \$555,000.00

Attachment E
Right of Way
Project Cost
Estimate

RIGHT OF WAY PROJECT COST ESTIMATE STATEWIDE (ALTERNATIVE 1)

TRACS NUMBER:	F0080 - Alternative 1
HIGHWAY:	TOPOCK - KINGMAN HWY
SECTION:	TOPOCK T.I.
FEDERAL NUMBER:	
ESTIMATED TOTAL PARCELS:	See attached
ESTIMATED TOTAL ACRES:	See attached
R/W COORDINATOR:	Matt Tolman
DATE:	07/31/20

STAFF / CONSULTANTS		Staff Charges	Outside Consultants	
		RIGHT OF WAY COORDINATOR	\$40,000.00	
		RIGHT OF WAY APPRAISALS	\$15,000.00	\$42,000.00
		RIGHT OF WAY TITLES	\$30,000.00	
		RIGHT OF WAY PLANS (See bottom of Cost Estimating Form for Final R/W Monumentation Estimate) Preliminary Engineering Only	\$15,000.00	
		RIGHT OF WAY ACQUISTION / RELOCATION	\$44,000.00	
		TRIBAL COORDINATION	\$0.00	
		R/W PROPERTY MANAGEMENT	\$0.00	
		OPERATIONS	\$10,000.00	
		Subtotal	\$154,000.00	\$42,000.00
		Total	\$196,000.00	
LAND AND IMPROVEMENTS COST		Estimated Property Acquisition Cost WITHOUT Government Agency Land Cost	\$46,000.00	
		Government Agency Land Cost		
		Estimated Condemnation and Settlement Factor (Estimated Condemnation and Settlement factor are calculated at 50% of the Acquisition Cost Estimate for risk of Administrative Settlements and Condemnation Settlements. DO NOT INCLUDE GOVERNMENT AGENCY LAND.)	\$23,000.00	
		Estimated Property Acquisition cost <u>NOT</u> subject to Condemnation		
		Estimated Relocation Cost	\$0.00	
		Land & Relocation Total	\$69,000.00	
		STAFF/CONSULTANTS with LAND AND IMPROVEMENTS COST (Estimate does not include ICAP. ICAP is added to Total Project Estimate by PM.)		
		\$265,000.00		
O1C		Staff Charges	Outside Consultants	
Final Right of Way Monumentation (Estimate may need to be revised at 60% design. The PM & C&S need to include this amount as a BELOW THE LINE construction item.)				
Total		\$0.00		
11C		Staff Charges	Outside Consultants	
Demolition (Including abandonment of Wells)				
Total		\$0.00		
TOTAL LAND IMPROVEMENT COST		\$69,000.00		
ESCALATED STAFF/CONSULTANT TOTAL (20% ESCALATION RATE)		\$235,200.00		
GRAND TOTAL		\$304,200.00		

Attachment F
Storm Water Data
Report



Dist-County-Route: 08-SBd-40
Post Mile Limits: R153.9/R154.6
Type of Work: Bridge Rehabilitation and/or Replacement
Project ID (EA): 0812000067 (EA OR3800)
Program Identification: 2022 SHOPP; 201.110/HA21
Phase: ☐ PID ☒ PA/ED ☐ PS&E

Regional Water Quality Control Board(s): Colorado River (Region 7)
Total Disturbed Soil Area: 7.0 acres PCTA: 4.77 acres
Alternative Compliance (acres): 0 acres ATA 2 (50% Rule)? Yes ☐ No ☒
Estimated Const. Start Date: 11/13/2026 Estimated Const. Completion Date: 09/05/2029
Risk Level: RL 1 ☒ RL 2 ☐ RL 3 ☐ WPCP ☐ Other: _____
Is MWELo applicable? Yes ☐ No ☒
Is the Project within a TMDL watershed? Yes ☐ No ☒
TMDL Compliance Units (acres): N/A
Is the Project within a Significant Trash Generating Area (STGA)? Yes ☐ No ☒
Trash Compliance Units (acres): N/A
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 is required at PS&E only.

Behzad Sedighi 4/27/2023
Behzad Sedighi, Registered Project Engineer Date

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

Elaheh Hadipour 04/27/2023
Elaheh Hadipour, Project Manager Date

Michael Lemke 4/27/2023
Michael Lemke, Maintenance Representative Date

Steven Magallanes 4/27/2023
Steven Magallanes, Landscape Architect
Representative Date

[Stamp Required at PS&E only] Gregory Clark 05/02/2022
Greg Clark, District SW Coordinator Date

Attachment G

Initial Site Assessment

INITIAL SITE ASSESSMENT (ISA) CHECKLIST - Update

DATE: **01/24/2023**

PROJECT INFORMATION:

District **08** County **SBd** Route **40** Postmile **153.9/154.7** EA **0R380** PN **0812000067**
AZ/MO/0.00/0.60

Description of Work:

Replace the Colorado River Bridge (California Br No.54-0415, Arizona Bridge No.957); the following four alternatives are proposed:
Alternative 1: Replace the bridge at the existing alignment; Alternative 2: Replace bridge (Realign to the north); Alternative 3: Replace bridge (Realign to the south); Alternative 4: Under the No-Build Alternative. ESR Rev. #2 added geotechnical investigations and revised the postmile limits of the project in each state. It proposed conducting 13 rotary core borings; repair deck deterioration and strengthen the girders to increase the load rating to accommodate all permit vehicle traffic; standard lane and shoulder widths are proposed, a standard median barrier and a standard bridge railing system will be implemented; the work will include road alignment, road widening, detours, construct access roads, disposal/borrow sites, equipment staging areas, drainage culverts, railroad, R/W acquisition, TCE, ground disturbance, vegetation removal, and pile driving.

Project Engineer Refaat El Sherif Telephone: (909) 383-6891
 Environmental Coordinator Julie Scrivner Telephone: (909) 806-3969
 DATE ISA NEEDED 2/03/2023

Attach the project location map and an aerial photo to this checklist to show the location of proposed R/W and all known and/or potential hazardous waste sites.

- Project Features: New R/W? **YES** Excavation? **YES** Railroad Involvement? **YES**
 Structure Demolition/Modification? **YES** Utility Relocation? **YES**
- Project Setting: Rural - **YES** Urban - **NO**
 Current Land Uses: Existing State Highway / Bridge
 Adjacent Land Uses: Light Industrial, Commercial, Residential
 (Industrial light industry, commercial, agriculture, residential, other)
- 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 all information available pertinent to the proposed project. IS PROJECT AFFECTING SITES LISTED ON CORTESE LIST? IF YES, DESCRIBE SITE: _____
- Conduct Field Inspection GeoTracker, EnviroStor & Mineral hazards Info Maps Date 8/25/2022

Storage Structures/Pipelines:				Contamination: (spills, leaks, illegal dumping, etc.)		Hazardous Materials: (asbestos, lead, etc.)	
USTs	NO			Surface Staining	NO	Buildings	NO
Surface tanks	NO			Oil Sheen	NO	Sprayed-on Fireproofing	TBD
Sumps	NO	Ponds	NO	Odors	NO	Pipe Wrap	TBD
Drums	NO	Basins	NO	Vegetation damage	NO	Friable Tile	NO
Transformers	NO			Other	N/A	Acoustical Plaster	NO
Landfill	NO					Serpentine	NO
Other	N/A					Paint	TBD
						Other	N/A

Other comments and/or observations:

Colorado bridge crosses the Colorado River and is shared between the States of California and Arizona, with the majority of the structure in Arizona. Two BNSF 'cleanup program sites' were identified south of the project, in addition to one Leaking Underground Storage Tank (LUST) site. This ISA Checklist update includes the updates in ESR #2 as well as the information from the soil investigation conducted for the project in January 2023. Soil may be re-used or disposed as unregulated material in accordance with conditions of the ADL Agreement (2016a).

Add the following Standard Special Provisions to the PS&E package:

SSP 6-1.03B: Conditions for use of local material from non-commercial source.

SSP 7-1.02K(6)(j)(iii): earth material containing lead; requires a lead compliance plan (LCP) and item 070030 for LCP,

SSP 14-9.02: Asbestos NESHAP notification.

SSP 14-11.16: Asbestos-Containing Const. Materials in Bridges; requires an asbestos compliance plan (ACP) and item 140003 for ACP,

If the project work includes the removal and/or upgrade of guardrail system, add **SSP 14-11.14** Treated Wood Waste.

Hazardous concentrations of lead paint were found on bridge support beams (silver red paint) which may pose a hazard to workers during removal, scraping, cutting or torching leaded paint components. The contractor is responsible for implementing a monitoring program and protective measures to protect workers and the public from exposure to leaded materials. Requirements for protecting workers who may be exposed to lead are provided in Title 8 CCR, Section 1532.1.

NSSP 14-11.17: Lead Paint in Structures; requires HQs approval.

ISA DETERMINATION:

Does the project have potential hazardous waste involvement? MEDIUM RISK
 If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Preliminary Site Investigation? **NO** If yes, explain, and give estimate of additional time required: _____

ISA CONDUCTED BY:

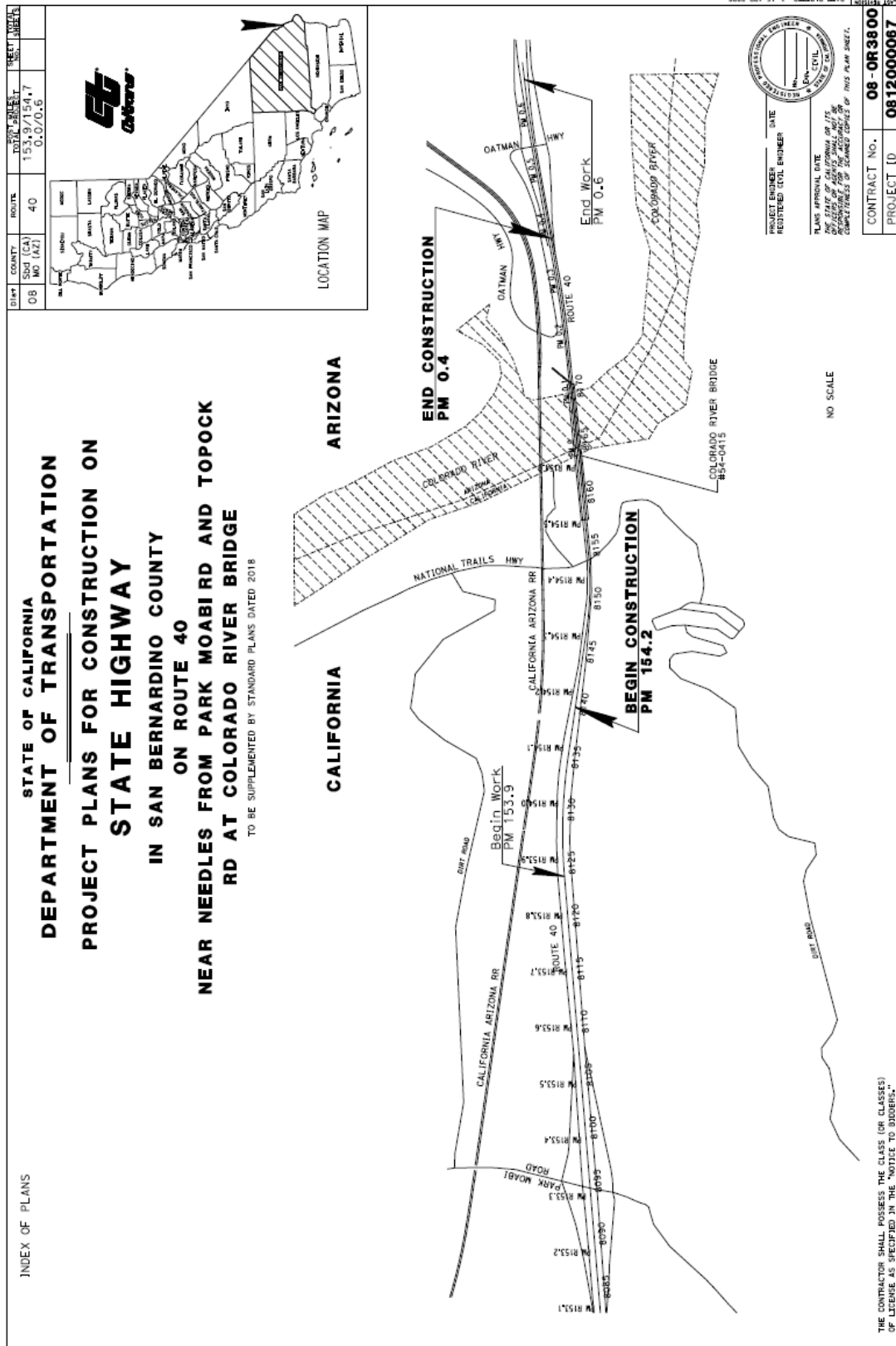
Neil Azzu

DATE: **01/24/2023**

Neil Azzu - ENVIRONMENTAL ENGINEERING MS-824
 DISTRICT 08 HAZARDOUS WASTE (909) 697-9470

PROJECT INFORMATION:

District 08 County SBd Route 40 Postmile 153.9/154.7 EA OR380 PN 081200006



Attachment H Environmental Document

I-40 Colorado River Bridge Replacement Project

SAN BERNARDINO COUNTY, CALIFORNIA

MOHAVE COUNTY, ARIZONA

District 8-SBD-40 PM 153.9/154.7 (CA); PM 0.0/0.6 (AZ)

08-0R380, Project 0812000067, Federal Aid Number HAD-CA FHWA 2022_0818_001

Final Environmental Impact Report / Environmental Assessment and Final Section 4(f) Evaluation with Finding of No Significant Impact



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



December 2023

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General Information About This Document

The California Department of Transportation (Caltrans), in coordination with the Federal Highway Administration (FHWA), has prepared this Environmental Impact Report/Environmental Assessment (EIR/EA) with Finding of No Significant Impact for the project located on I-40 in San Bernardino County, California and in Mohave County, Arizona along postmile (PM) 153.9 and PM 154.7 in California and PM 0.0 and 0.6 in Arizona, between National Trails Highway and Oatman Highway. Caltrans is the lead agency under the California Environmental Quality Act (CEQA) and the Federal Highway Administration (FHWA) is the lead agency under the National Environmental Policy Act (NEPA). The document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures. The Draft EIR/EA circulated to the public for 45 days between June 14, 2023 and July 28, 2023. An extension was granted on July 28, 2023 to allow the public to review and comment until August 11, 2023. A partial recirculated Draft EIR was circulated to the public for 45 days between August 18, 2023, and October 2, 2023 to provide additional information and clarification on the potential effects of the project on cultural and tribal resources. Comments received during this period are included in Chapter 4. Changes to the document made since the draft document circulation are shown with change bars in the left margin and track changes. Minor editorial changes and clarifications are not shown. Additional copies of this document and the related technical studies are available for review at the Caltrans District 8 Office (464 W 4th Street, San Bernardino, 92401) on weekdays from 8am to 4pm.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans District 8, Attn: Gabrielle Duff, Branch Chief, Environmental Studies 'B' 464 West 4th Street, MS-829, San Bernardino, CA 92401-1400; 909-501-5142 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech-to-Speech) or 711.

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Replace the Colorado River Bridge (California Bridge No. 54-0415, Arizona Bridge No. 957) spanning the California/Arizona state line on Interstate 40, near Topock, Arizona.

FINAL ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT and Final Section 4(f) Evaluation with Finding of No Significant Impact

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C); 49 USC 303, and/or 23 USC 138

THE STATE OF CALIFORNIA
Department of Transportation
And
Federal Highway Administration

Cooperating Agencies:
Arizona Department of Transportation
US Army Corps of Engineers
US Coast Guard

Responsible Agencies:
California State Lands Commission

Date

2/20/2024

Date

1/5/2024

Date

Elissa K.
Konove

Digitally signed by Elissa K.
Konove
Date: 2024.02.13 15:01:49
-08'00'

Elissa Konove, FHWA
Acting Division Administrator (HDA-
CA) Federal Highway Administration
NEPA Lead Agency
Approval for NEPA purposes only

KARLA SNYDER PETTY Digitally signed by KARLA SNYDER PETTY
Date: 2024.02.20 16:22:53 -07'00'

Karla S. Petty FHWA
Division Administrator (HDA-AZ)
Federal Highway Administration
NEPA Lead Agency
Approval for NEPA purposes only



Catalino A. Pining III
Caltrans District 8 Director
California Department of Transportation
CEQA Lead Agency

The following persons may be contacted for more information about this document:

Federal Highway Administration, California Division
Shawn Oliver, Senior Environmental Specialist
650 Capitol Mall, Suite 4-100
Sacramento, CA 95814 (916) 498-5001

Federal Highway Administration, Arizona Division
Greta Halle, Environment and Equity Specialist
4000 N. Central Ave., Ste. 1500
Phoenix, AZ 85012 (602)-382-8974

California Department of Transportation
Gabrielle Duff, Senior Environmental Planner
464 West 4th Street, 8th Floor
San Bernardino, CA 92401-1400 (909) 501-5142

**FEDERAL HIGHWAY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

FOR

Colorado River Bridge Replacement Project

The Federal Highway Administration (FHWA) and The California Department of Transportation (Caltrans) have determined that Alternative 1 (replace bridge on existing alignment) will have no significant impact on the human and natural environment. This FONSI is based on the attached NEPA/CEQA document which was determined to be an Environmental Assessment (EA)/Environmental Impact Report (EIR) which has been evaluated by FHWA and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. The attached EA/EIR provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required per 23 CFR 771.119. FHWA takes full responsibility for the accuracy, scope, and content of the attached EA.

**KARLA SNYDER
PETTY**

Digitally signed by KARLA
SNYDER PETTY
Date: 2024.02.20 16:24:41 -07'00'

FHWA Division Administrator (HDA-AZ)

Date

Elissa K. Konove

Digitally signed by Elissa K. Konove
Date: 2024.02.13 15:13:16 -08'00'

FHWA Acting Division Administrator (HDA-CA)

Date

Attachment I
Transportation Management
Plan

Form was developed by Saleh Yadegari (September 2014)

TMP Elements	EA #/ID#	0R380 / 08 1200 0067	Date	7/19/2022
Note: A checkmark in the box means you need to include this in the project unless staging, material, or work hour changes eliminate the need for the item. A ? in front means TMP anticipates this - please check into this. A blank box means the item is not needed at this time based on the information received.				

Public Affairs officer's 1st. & last name	Phone number
---	--------------

1	Public Information/Public Awareness Campaign (PAC). Developer: Remember to obtain the estimate from Public affairs by contacting Terri Kasinga. Procedure is in the file under 3- TMP matters	Estimated Cost

BEES 066063 (Traffic Management Plan-Public Information). Cost to be reduced by Public Affairs (PA) and Construction Liaison (CL) only. Show under **State Furnished** as the **total** of PA+CL.

\$ 20,000

- 1.1 ☐ Include Rideshare information in PA/CL project material to encourage vehicles reduction in work area
- 1.2 ☒ Brochures and Mailers
- 1.3 ☐ Media Releases (& minority media sources)
- 1.4 ☐ Paid Advertising
- 1.5 ☐ Public Meetings/PAC Mtgs./Speakers Bureau (show cost also for room rental)
- 1.6 ☐ Hand deliver notices to vicinity
- 1.7 ☐ Broadcast fax service
- 1.8 ☒ Telephone Hotline OR
- 1.9 ☒ 1-800-COMMUTE (The telephone number is shown on CS-Info signs) -
- 1.10 ☐ Visual Information (videos, slide shows, etc.)
- 1.11 ☐ Local cable TV and News
- 1.12 ☒ Traveler Information System (Internet)
- 1.13 ☐ Internet, E-mail, Social Media
- 1.14 ☐ Notification to targeted groups:
 - ☐ Revised Transit Schedules/maps
 - ☐ Rideshare organizations
 - ☐ schools
 - ☐ organizations representing people with disabilities
 - ☐ bicycle organizations
- 1.15 ☐ Include PA/CL/Consultant resources in WPS
- 1.16 ☐ Commercial traffic reporters/feeds - e.g. brief Traffic Information people (TIP) group
- 1.17 ☐ Insert SSP's

"A representative of the Contractor, at Superintendent level or higher, and authorized to commit the Contractor, shall attend and participate in all Public Awareness Campaign meetings. Time commitment for the meeting(s) varies from two to four hours per month."
- 1.18 ☐ Other

Section 1 Total \$ 20,000

2 Motorist Information Strategies
Project team needs to coordinate with Traffic Design!

- 2.1 ☐ Existing Overhead Changeable Message Signs (Stationary)
- ☐ New Installation (Stationary) - BEES 860532 CHANGEABLE MESSAGE SIGN SYSTEM - list locations

- 2.2 ☐ Portable Changeable Message Signs (PCMS) - BEES 066578

This strategy is in addition to Traffic Design's PCMS for regular traffic handling within the project limits and is used for advising motorists to divert at remote advance decision points - outside the usual project limits. This also allows for advanced motorist information - e.g. a week ahead. Their placement may need to be cleared **environmentally**. Placement should be of sufficient distance prior to decision points as determined by the Resident Engineer.

of PCMS **4** Unit cost/month \$ 1,000.00 Months needed **36** \$ 144,000

- 2.3 ☒ Lane Closure System Website
- 2.4 ☒ Caltrans Highway Information Network (CHIN)
- 2.5 ☐ Radar Speed Message Sign (Specter sign) BEES 066064 (approx. EA @ \$30,000)
- 2.6 ☐ Bicycle and pedestrian information, e.g. Detour maps
- 2.7 ☐ Automated Workzone Information System (AWIS) BEES 120105
 - consult with TMP Developer prior to updating SSP 12-3.35A(1) for AWIS
 - refer to Section 12-3.35, page 156 to 158 of the 2015 Standard Spec.

TMP Elements	EA #/ID#	0R380 / 08 1200 0067	Date	7/19/2022
---------------------	----------	----------------------	------	-----------

2.8 ☐ Other

Section 2 Total	\$ 144,000
------------------------	------------

3 Incident Management

3.1 CHP's Construction or Maintenance Zone Enhanced Enforcement Program – COZEED or MAZEED. BEES 066062 - show under "State or Agency furnished" in the Cost Estimate.

Make sure to consider the LC hours and add CHP driving time to/from their office

Day COZEED: To protect active closures

hours/day	CHP vehicles	# of officers.	Rate/Hr.	
600	8	1	\$ 100	\$ 480,000

Night COZEED: To protect active closures

# of nights	hours/night	CHP vehicles	# of officers. Nights need 2 per car	Rate/Hr.	
0	0	0	2	\$ 100	\$ -

3.2 Freeway Service Patrol (FSP) for Construction (CFSP) \$/hr./truck \$55

BEES 066065 - show under "State or Agency furnished" in the Cost Estimate

Short duration or remote area CFSP usually is bid with much higher hourly rates. If enhancement of program FSP feasible, CFSP could tie into the lower long-term FSP rates.

# of trucks	# of days	Hours per day	
A For service within the regular FSP hours			\$0

For service outside the regular FSP hours

B Extended Peak hour coverage			\$0
-------------------------------	--	--	-----

C Support during night closures			\$0
---------------------------------	--	--	-----

D Weekend support			\$0
-------------------	--	--	-----

Local agency (SAFE) support	8%	\$0
8% of truck cost		

CFSP CHP support	5%	\$0
5% of truck cost only if within regular FSP and area		

Equipment/Supplies	10%	\$0
% of truck cost unless more detail available		

Consult with the Inland Empire division of CHP or the border division in the southern Riverside county to select the method which is acceptable for the B,C,D that are outside the regular FSP hours or area.

Method 1

CFSP/CHP support	20%	\$0
20% of truck cost or		

CFSP Dispatcher @

# of days	# of nights	hours	# of FSP	Rate	# of FSP vehicles	
		0		\$ 45.00		\$ -
		0				

CFSP CHP Officers (See Cozeep rate)

# of days	# of nights	hours	# of officers	Rate	# of CHP vehicles	
0	0	0	1	\$ 45.00	0	\$ -
0	0	0	2	0	0	\$ -

- ☐ Cooperative Agreement or Task Order with SAFE for \$0
- ☐ Task Order with CHP (State-wide Master Agreement for FSP support). for \$0
- ☐ Contact District FSP Coordinator for task orders.
- ☐ Service Contract
- ☐ Local Agency will arrange CFSP with SAFE
- ☐ Local Agency will arrange CFSP administration with CHP

TMP Elements	EA #/ID#	0R380 / 08 1200 0067	Date	7/19/2022
--------------	----------	----------------------	------	-----------

3.2 Total \$0

3.3 ☐ Other

Section 3 Total \$ 480,000

4 Construction Strategies

Contact DTM, at 909-383-6262, to get Delay Calculations, Lane Requirement Charts (LRC), Table Z and Special events list. Inform DTM of any concerns/commitments regarding special LC days, times, seasons, events; environmental restrictions; if work may be affected by snow and low or high temperatures. E.g. excessive heat may delay HMA operations lane openings which may increase traffic impact when vehicles overheat in the queue; etc. If traffic volumes vary significantly between seasons, consider 2 sets of LRCs to avoid CCOs.

4.1 This TMP presumes that work is planned as below. If different, TMP needs to be revised. The Project Engineer shall ensure all appropriate lane requirement charts are included.

- ☐ Off peak
- ☐ Night
- ☐ Weekend

4.2 Expected facility closures and requirements

- ☐ Flagging
- ☐ Shoulder
- ☒ Lane
- ☐ Street
- ☐ Ramp
- ☐ Connector*
- ☐ Extended Weekend Closures*
- ☐ Total Facility Closures*

*Consult with TMP developer and the DTM regarding COZEEP & other costs. Provide proposed detour and traffic diversion plans for review.

CAUTION: If the Lane Requirement Chart (LRC) for full mainline closures, of one or both directions on a highway or freeway, does not show the maximum number of allowable closures, the PS&E shall not be certified by DTM/TMP.

- 4.3 ☐ Coordinate with adjacent ongoing and planned construction projects - also on detour routes.
- 4.4 ☐ BEES 066008 Incentives
- 4.5 ☐ Strictly enforce construction CPM schedule
- 4.6 ☐ 10-Min. Delay Penalty Contact DTM at 909-838-6262 for 10 Min. Delay Penalty Calculations.
- 4.7 ☐ Other

Section 4 Total \$ -

5 Demand Management (DM)

Project team needs to coordinate with RCTC/SANBAG/CVAG

Traffic diversion may increase available work hours.

- 5.1 ☐ A co-op will be executed - mentioned in PSR or PR.
- ☐ Instead of a co-op, 15% is added to the cost of DM elements since the payment to the local agency will be routed through the contractor.
- Instead of a co-op, the local agency will make their own arrangements with RCTC/SANBAG/CVAG.
- PA/CL or local agency need to inform commuters through RCTC/SANBAG. Funds part of PA/CL.
- 5.2 ☐ HOV Lanes/Ramps (New or Convert)
- 5.3 ☐ Park-and-Ride Lots
- 5.4 ☐ Parking Management/Pricing (Coordination with local agency is required)
- 5.5 ☐ BEES 066067 Rideshare Promotion
- 5.6 ☐ Other

Section 5 Total \$ -

6 Alternate Route Strategies

Caution - signed detours may require environmental clearance. Traffic diversion may increase available work hours. Please work with Traffic Design. BEES 066060 - ADDITIONAL TRAFFIC CONTROL

- 6.1 ☐ Add Capacity to Freeway connector
- 6.2 ☐ Ramp Closures
- 6.3 ☐ Temporary Highway Lanes or Shoulder Use
- 6.4 ☐ Parking Restrictions
- 6.5 ☐ Street Improvements
 - ☐ State R/W - Signals, Widen, etc.
 - ☐ Local R/W - Signals, Widen, etc. co-op or permit may be needed
- 6.6 ☐ Local Street USE - co-op or Permit may be needed
- 6.7 ☐ Traffic Control Officers (see 3.1 COZEEP)
- 6.8 ☐ Signed detour - using State routes
- 6.9 ☐ Signed detour - using local streets and roads. Coordinate with corresponding local agency.
- 6.10 ☐ Adjust signals
- 6.11 ☐ Temporary bicycle or pedestrian facilities
- 6.12 ☐ Other

Section 6 Total \$ -

TMP Estimate					
Developed by	Saleh Yadegari	EA#/ID#	0R380 / 08 1200 0067	Date	7/19/2022
TMP developer: Amounts under the cost column will automatically be copied from the TMP elements					
TMP Elements				Cost	
1. Public Information				\$20,000	
2. Motorist Information Strategies				\$144,000	
3. Incident Management				\$480,000	
4. Construction Strategies				\$0	
5. Demand Management (DM)				\$0	
6. Alternate Route Strategies				\$0	
Total TMP Estimate				\$ 644,000	

Attachment J
Project Category
Assignment

Memorandum

To: MAHMUDA AKHTER
ACTING DEPUTY DISTRICT DIRECTOR
DESIGN

Date: April 11, 2023

File: 08-SBd-40
PM R153.9/R154.6
MO 0/0.6
At Colorado River
Bridge
Bridge rehabilitation
&/or replacement
EA 0R380
PN:0812000067
201.110 HA21

Ben Amiri
From: BEN AMIRI
Office Chief
Design I

Subject: REQUEST FOR PROJECT DEVELOPMENT CATEGORY APPROVAL

In accordance with Chapter 8, Section 5 of the Project Development Procedures Manual, your approval is requested to assign the above-mentioned project to Category 4B.

Design I is preparing the Project Report (PR) for the above-referenced project. Caltrans District 8 in Coordination with Arizona Department of Transportation (ADOT) are proposing to replace the Colorado River Bridge (California Br. No. 54-0415, Arizona Bridge no.957) on I-40 to improve the bridge integrity and accommodate all permit vehicle traffic.

Currently there are three viable alternatives under consideration:

- Replace bridge on existing alignment (Alt. 1)
- Replace bridge by realigning to North (Alt. 2)
- Replace bridge by realigning to South (Alt. 3)

The Category 4B is recommended based on the following project considerations:

1. The project will not require additional right of way.
2. The project will not increase highway traffic capacity.
3. The project is of minimal economic, social, and environmental significance.

If you have any questions or need additional information, please contact Project Engineer, Joshua Medina at (909) 501-9183, or me at (909) 501-9388.

Approved:



Mahmuda Akhter
Acting Deputy District Director
Design

04/11/2023

Date:

c: CQuach, Design Manager
EHadipour, Project Manager

JMedina/CM

Attachment K
Project Study Report –
Project Development Support
(PSR-PDS)

CA:08-Sbd-40- 153.90/154.64

AZ:MO-40-00/0.60

Project No. 0812000067

EA 0R380K

October/2016

PROJECT STUDY REPORT-PROJECT DEVELOPMENT SUPPORT (PSR-PDS)

To

Request Approval to Proceed with Formal Studies for Long Lead 2016 SHOPP Project

On Interstate 40

Between Park Moabi Road

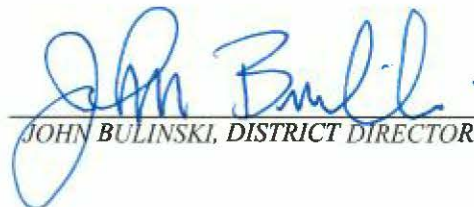
And Topock Road

APPROVAL RECOMMENDED:



MOHAMMAD B. MOLLAZADEH, PROJECT MANAGER

APPROVED:



JOHN BULINSKI, DISTRICT DIRECTOR

12/19/16

DATE

Attachment L

Risk Register



EA 0R380 QUALITATIVE RISK REGISTER

EA 0R380			Phase: 0			SBD 040 PM: R 153.9/ R 154.6 MO 040 PM: 0.0/ 0.6			PM: Elaheh Hadipour		Const Capital Estimate: \$41,729K		Project Description: BRIDGE REHABILITATION AND/OR REPLACEMENT				Project Location: IN SBD CO NR NEEDLES BETWEEN PARK MOABI RD AND TOPOCK RD AT COLORADO RIVER BRIDGE (BR #54-0415)			
Program Code: 201.110, 400.100 /			M200 Target: 12/15/2						ARM: Julia Eigenbrod		R/W Capital Estimate: \$8,000K									
Risk No.	Status	Type	Date of Origin	Updated	Category	Title	Risk Statement	Relevancy/Current Status/Assumptions/Comments/Triggers	Probability	Cost Impact				Schedule Impact		Response Strategy	Response Actions	Risk Owner		
			Originator							Ph	Impact	Ph	Impact	Ph	Impact					
1	Active	Threat	5/8/2019	10/19/2023	Design	U.S. Coast Guard (USCG) Permits	As a result of a permit required from the US Coast Guard, the review process and approval may take longer than anticipated and delivery schedule may not allow time to process this permit. This may delay the project schedule and may increase the cost.	As a result of location and nature of work, there will be need for various permits, which will need to be in place prior to advertising the project. These permits include Coast guard permits, which is only required in phase -1 prior to RTL. The process may take 9 to 12 months from submitting the application.	Very Low	0				0		Mitigate	Early in phase 1 Design will submit the necessary plans to US Coast Guard so that there is sufficient time to process this permit. PM, Design, Structure and Environmental will coordinate, as early as possible and will work with US Coast Guard on getting the permits in time. PM may adjust the schedule if needed.	Ben Amiri		
			1							Very Low			1	Low						
			2								9		2							
			3								4		3	Very Low						
6	Active	Threat	5/24/2019	10/19/2023	Utilities	Utilities Conflict	As a result of not knowing the exact structure detail of the preferred alternative, utility conflict may occur which will impact the project cost and schedule.	It has been identified that are transmission gas lines, electrical / communication and power poles within the footprint of the project. Currently it is unknown if such utilities will be impacted by the construction of the bridge.	Low	0				0		Mitigate	UEW and ADOT will evaluate the footprint of the proposed bridge early in the PS&E phase to avoid any major impact on existing utilities such as power poles, gas lines, data and communication cables etc. Potholing will be done early during design phase to avoid any utility impacts to help Structural Design with the final plans. If any utility impact is identified, UEW will work closely with R/W Utilities early in PSE phase and will coordinate with utility owners as well. Any utility relocation will be planned prior to contract approval. PM may have to adjust project cost and schedule based on future findings.	Max Auyeung		
			1							Low			1	Low						
			2							Low	9	Low	2	Low						
			3								4	Low	3	Low						
23	Active	Threat	6/12/2020	10/12/2023	Environmental	Historic Properties	The project is located in the vicinity of several large well-known Historic Properties. If during design the project footprint is found to encroach on the boundaries of these sites then additional testing, consultation, and mitigation will be required. Thereby, the project cost may increase, and schedule may be delayed.	The environmental footprint was identified during PAED for the three alternatives. Due to ongoing technical studies and based on past experience with these types of projects, additional work and change in scope in previously unidentified area may need to be done.	Very Low	0				0		Avoid	In case of change to identified footprint, Environmental will work with design to avoid impacts to the historical properties. If impacts can not be avoided and this risk materializes, coordination with regulatory agencies may be needed. PM may adjust cost and schedule as necessary.	Steven Holm		
			1							Low			1	Very Low						
			2							Very Low	9	Very Low	2	Very Low						
			3							Low	4	Low	3	Very Low						
26	Active	Threat	6/12/2020	10/19/2023	Environmental	Unforeseen Environmental Costs and Delays as a Result of Multiple Resource Agencies	Due to the multiple interstate agency coordination and the number of government agency jurisdictions requiring various permit and approval processes, if there is disagreement between agencies on protocols and findings, unforeseen mitigation, additional surveys/monitoring, and/or restrictive measures to satisfy environmental approvals may be needed. This may increase project cost and delay the schedule.	Agency Coordination includes: USFWS, CDFW, ADOT, AZGFD, ADEQ, MSCP, USBR, SLC, BLM, FHWA, EPA, USACE, RWQCB, AZSHPO, CASHPO, ASM, ACHP, (other state and federal agencies may be added as the project progresses). Approvals: USFWS BO, MSCP, Section 4f, ADOT, FHWA, permits (401, 404, 1602 & 2081) are required for this project prior to construction. USFWS Havasu Wildlife Refuge and general coordination with landowners may also be needed.	Moderate	0				0		Mitigate	Environmental will coordinate with Design early in the design phase and continue to coordinate with resource agencies. Design may provide layouts in lieu of 95% PS&E to show impacts to jurisdictional areas to expedite some of the permits processes. PM will coordinate this effort.	Gabrielle Duff		
			1							Low			1	Low						
			2								9	Moderate	2							
			3							Low	4	Low	3	Low						



EA 0R380 QUALITATIVE RISK REGISTER

EA 0R380			Phase: 0			SBD 040 PM: R 153.9/ R 154.6 MO 040 PM: 0.0/ 0.6			PM: Elaheh Hadipour		Const Capital Estimate: \$41,729K		Project Description: BRIDGE REHABILITATION AND/OR REPLACEMENT		Project Location: IN SBD CO NR NEEDLES BETWEEN PARK MOABI RD AND TOPOCK RD AT COLORADO RIVER BRIDGE (BR #54-0415)			
Program Code: 201.110, 400.100 /			M200 Target: 12/15/2						ARM: Julia Eigenbrod		R/W Capital Estimate: \$8,000K							
Risk No.	Status	Type	Date of Origin	Updated	Category	Title	Risk Statement	Relevancy/Current Status/Assumptions/Comments/Triggers	Probability	Cost Impact				Schedule Impact		Response Strategy	Response Actions	Risk Owner
			Originator							Ph	Impact	Ph	Impact	Ph	Impact			
29	Active	Threat	6/12/2020	9/12/2023	Environmental	Nesting Birds	There may be birds nesting under the bridge or in the trees and shrubs within the project area. If nesting birds are present during construction, this may delay the schedule and increase the cost.	Potential nesting bird habitat exists on the bridge structure as well as vegetation that may be removed prior to construction. Special status bird surveys conducted by Caltrans consultants, PGE Reports, and USFWS marsh bird surveys have identified several bird species including listed and migratory birds.	High	0				0		Mitigate	Bio will provide DOE SSPs (SSP 14-6.03A, 14 -6.03B, 14-6.03D(1), 14-6.03D(3)). Contractor-supplied Biologist (CSB) will perform pre-construction nesting surveys. Monitoring and/or work buffers may be established if a positive active nest is identified. Work may continue in other locations. It is recommended to perform tree and or vegetation removal outside the nesting season, in which the nesting season is regarded as Feb 1 to Sept 30. It may be possible to exclude birds from the bridge prior to nesting season to avoid work windows restrictions. PM may adjust the cost and schedule if needed.	Craig Wentworth
			1										1					
			2								9		2					
			3							Low	4	Low	3	Low				
30	Active	Threat	6/12/2020	10/19/2023	Environmental	Roosting Bats	If Bat Management and Mitigation Plan (BMMP) measures cannot be implemented prior to construction or prior to specified construction activities, then the construction schedule may be delayed.	Bat surveys conducted during PA&ED found roosting bats in Bat Cave Wash culvert and I-40 CO River Bridge. A draft BMMP was developed; however, we will need to be refined in the design phase to coincide with the appropriate construction schedule including exclusion timing and alternative roosting habitat structures. A BMMP will be an agency permit condition.	Moderate	0				0		Mitigate	Biology will work closely with Design, Resource Agencies, and a qualified bat biologist to identify and determine feasible measures such as work windows, exclusion, lighting, etc. PM may need to adjust the cost and schedule if needed.	Craig Wentworth
			1										1					
			2								9	Low	2					
			3							Low	4	Low	3	Low				
34	Active	Threat	8/29/2022	10/19/2023	Environmental	Child Projects Resources	As a result of anticipating a long-term onsite plant establishment period per the CDFW 1600 permit, and offsite restoration work per the CDFW 2081 permit, a Child Project is needed to address these costs. Because the design is anticipated in Phase 1, permits are not yet acquired, and anticipated costs and support may exceed the current estimate. There is a risk that there may not be enough funds allocated and programmed into the Child Project to cover all costs. This may impact project schedule and cost.	Per correspondence and previous experience with CDFW, multiple years of onsite plant establishment is anticipated to address impacts triggering the CDFW 1600 permit. Additionally, the Master Funding Agreement between Caltrans and CDFW requires that a Child Project is created for any Caltrans Project requiring a 2081 permit, which assures mitigation funding is set aside in an account separate from the main transportation Project. Caltrans Biology is planning to pursue a 2081 permit once state legislature exemption is achieved regarding fully protected species for this project. If a Child Project is not established on time, CDFW will not provide a 2081 permit to Caltrans, this preventing construction from occurring, affecting schedule. If the Child project is not adequately funded, Caltrans will be unable to meet all CDFW 1600 and/or 2081 permit requirements.	Low	0				0		Mitigate	D8 Biology is working with D8 Landscape and the Project Manager to create the Child Projects based on current assumptions and estimated costs. D8 Biology has begun and will continue early coordination with CDFW. The cost of these mitigation is currently escalated to capture the future cost increase.	Adam Compton
			1							Low			1	Low				
			2								9	Low	2					
			3								4	Low	3	Low				
35	Active	Threat	9/22/2022	10/19/2023	Environmental	New Biological Resources due to PG&E Habitat Restoration.	Since Pacific gas and Electric company (PG&E) habitat restoration is anticipated to be completed by the time this Project begins construction, habitat restoration may improve habitat suitability for some listed species under The Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA) that was previously analyzed as not suitable. Based on habitat suitability and/or positive detections, this may require a reevaluation, additional technical studies, USFWS section 7 Consultation, CDFW 2081 permit, and/or associated avoidance, minimization, and mitigation measures. This may impact project cost and schedule.	Based on email coordination 9/27/23, PGE anticipates restoration complete by Oct 2026. "The entire mitigation planting (restoration area) site was planted last year with the required amount of mitigation plants. Irrigation will continue once every 3 weeks through October 2026. That might be reduced if we continue to have success. The success criteria for the mitigation plantings/ restoration is 75% success rate at the end of the 5-year monitoring period. The final plants were planted in October 2022. We do not anticipate having to replant as we currently have a 96.4% success rate."	Low	0				0		Mitigate	Biology is in close coordination with resource agencies as well as PG&E to identify as early as possible if any additional reevaluation may be needed. PM may need to adjust the cost and schedule as necessary.	Craig Wentworth
			1							Low			1	Low				
			2								9	Low	2					
			3							Low	4	Low	3	Moderate				



EA 0R380 QUALITATIVE RISK REGISTER

EA 0R380			Phase: 0			SBD 040 PM: R 153.9/ R 154.6 MO 040 PM: 0.0/ 0.6			PM: Elaheh Hadipour		Const Capital Estimate: \$41,729K		Project Description: BRIDGE REHABILITATION AND/OR REPLACEMENT				Project Location: IN SBD CO NR NEEDLES BETWEEN PARK MOABI RD AND TOPOCK RD AT COLORADO RIVER BRIDGE (BR #54-0415)			
Program Code: 201.110, 400.100 /			M200 Target: 12/15/2						ARM: Julia Eigenbrod		R/W Capital Estimate: \$8,000K									
Risk No.	Status	Type	Date of Origin	Updated	Category	Title	Risk Statement	Relevancy/Current Status/Assumptions/Comments/Triggers	Probability	Cost Impact				Schedule Impact		Response Strategy	Response Actions	Risk Owner		
			Originator							Ph	Impact	Ph	Impact	Ph	Impact					
36	Active	Threat	9/28/2022	10/19/2023	Utilities	ADOT Utilities	This risk is the same as Risk # 6 above but applies to ADOT.	This risk is the same as Risk # 6 above but applies to ADOT.	Low	0				0		Mitigate	This risk is the same as Risk # 6 above but applies to ADOT.	ADOT		
			1							Low			1	Low						
			2							Low	9	Low	2	Low						
			3								4	Low	3	Low						
37	Active	Threat	9/28/2022	10/19/2023	Project Mgmt	Delays in Cooperative Agreement	The Cooperative Agreement between CT and ADOT for PSE phase has not yet been finalized. If there is delay in execution of the COOP between CT and ADOT for the PS&E and RW phase, the project schedule might be impacted	Since the COOP is between two states of California and Arizona, and it identifies each sates roles and finical responsibilities, the review process take longer than usual. The COOP has been reviewed by Design, RW and legal in both ADOT and CT. Legal in both AZ and CA need to concur with COOP terms and changes. The legal review time is varies and depend on their availability	Low	0				0		Avoid	The COOP has been reviewed by Design, RW and legal in both ADOT and CT. Legal in both AZ and CA need to concur with COOP terms and changes. The continues coordination's between all these reviewers are needed to COOP execution. PM will elevate to higher management if the review takes longer than expected.	Elaheh Hadipour		
			1							Low			1	Low						
			2							Low	9		2	Low						
			3								4		3							
39	Active	Threat	2/1/2023	10/19/2023	Environmental	Permits for Geotech Borings	If we don't receive jurisdictional permits required for three geotechnical work locations within jurisdictional waters in time to complete geotechnical borings in fall/winter 2024/2025 (October 1 to January 31), then due to the fully protected species/restricted work windows (February 01 to September 30), we will not be able to proceed with geotechnical boring until fall/winter 2025/2026. This may delay the schedule and impact cost.	The project will require 1602, 401, and 404 jurisdictional permits. The project has confirmed detections of federally-listed, state-listed, and state fully protected species. Legislation to exempt fully protected species and allow “take” under CDFW 2081 has passed. The permit process can be started after FED and PR approved.	Moderate	0				0		Mitigate	The PDT and Environmental will continue to coordinate closely to ensure that information is received quickly and efficiently. Bio Permitting will coordinate early with agency partners and prioritize these permits. Bio will prioritize locations with no permits or restrictions. Regulatory Agencies may decide to take the whole 120 days to process the permits. Structures needs preliminary geotechnical report at least 15 months prior to July 2nd 2025. PM may need to adjust the schedule if needed.	Adam Compton		
			1										1	Moderate						
			2								9		2							
			3								4	Low	3	Moderate						
40	Active	Threat	5/8/2023	10/19/2023	Geotechnical	Consultant Availability	Geotech will be outsourcing the work to consultant. If there is any change to the boring schedule agreed on the TO then it is not certain that consultant will have time to do the job and prepare the reports. This may result in schedule delay.	If drilling/boring done by end of Feb-2024, PFR could be ready by June -2024 Str PSE M378 target 7/2/25	Moderate	0				0		Avoid	Geotech will work on task order to make sure it is ready as soon as they have permits for borings. They will communicate and work with consultant to make sure they can start work after receiving the task order. PM needs to coordinate any changes to the boring schedule early with geotech.	James Majors		
			1										1	Moderate						
			2								9		2							
			3								4		3	Low						



EA 0R380 QUALITATIVE RISK REGISTER

EA 0R380			Phase: 0			SBD 040 PM: R 153.9/ R 154.6 MO 040 PM: 0.0/ 0.6			PM: Elaheh Hadipour		Const Capital Estimate: \$41,729K		Project Description: BRIDGE REHABILITATION AND/OR REPLACEMENT				Project Location: IN SBD CO NR NEEDLES BETWEEN PARK MOABI RD AND TOPOCK RD AT COLORADO RIVER BRIDGE (BR #54-0415)			
Program Code: 201.110, 400.100 /			M200 Target: 12/15/2						ARM: Julia Eigenbrod		R/W Capital Estimate: \$8,000K									
Risk No.	Status	Type	Date of Origin	Updated	Category	Title	Risk Statement	Relevancy/Current Status/Assumptions/Comments/Triggers	Probability	Cost Impact				Schedule Impact		Response Strategy	Response Actions	Risk Owner		
			Originator							Ph	Impact	Ph	Impact	Ph	Impact					
41	Active	Threat	5/22/2023	10/19/2023	Str Design	Bridge Foundation Design	The foundation design is based on Structure preliminary geotechnical report (SPGR). Any discrepancy/change in geotechnical information may cause to redesign the foundation. This may result in cost increase and schedule delay.	Currently, SPGR is available. All geotechnical information are based on historical records. Final geotechnical report will be available late summer 2024.	Moderate	0				0		Mitigate	Structure Design will request geotechnical report, and will provide confirmation of foundation Type/system. Cost estimate will be revised based on the selected foundation type. PM may need to adjust the cost and schedule as necessary.	Jason Fang		
			1							Low			1	Low						
			2								9		2							
			3								4	Low	3	Low						
42	Active	Threat	5/22/2023	10/19/2023	Str Design	Long Span Bridge Type	In order to minimize the environmental impact, Long span bridge type is preferred, which poses the significant challenges for structure design. Also, for a long span bridge, structure depth may reach 26' at pier, which will reduce vertical navigation clearance in vicinity of pier. The complex structure may result in a higher cost.	The bridge design should use as few in-stream piers as possible. The width of the piers, perpendicular to the direction of flow, should not be in excess of what is necessary for safe and adequate structural support. The shape of the bridge pier and the angle of its placement in the flow need to be investigated as well. Minimum vertical/horizontal navigation clearance should be provided by Design and bridge design will take whatever measures to reduce structure depth (if the measures taken don't affect structure quality significantly) to meeting the clearance requirement.	Low	0				0		Mitigate	Structure will optimize the design to lower the cost, more sophisticated and detail analysis will be pursued at early stages of the structure design. Specialized software's may be required to use, such as CSiBridge and Midas civil, they allow for quick and easy design and retrofitting of steel and concrete bridges. DES will notify the PM early of any cost increase. PM may have to adjust cost during Fund Allocation Request.	Jason Fang		
			1										1							
			2								9		2							
			3								4	High	3	Low						
43	Active	Threat	5/22/2023	10/19/2023	Traffic Design	Traffic handling	As a result of bridge replacement, traffic handling/detours will be required. The following items may be required: Community Impact Analysis; Public Awareness Campaign; Utilities, Public Services, or Emergency Services Assessments. If the cost associated with these activities exceed the amount in the current estimate, then this may increase the project capital cost and delay the construction schedule.	More study and traffic analysis of the traffic handling will be needed. COZEPP will need to be present and in addition, Freeway Service Patrol will need to be available during high commute hours to remove disabled vehicles. During PS&E, detail traffic handling plans and construction staging will be prepared. Based on this information, we will know how much COZEPP involvement is needed and also if public awareness campaign is needed etc.	Low	0				0		Mitigate	District traffic design will propose a detail traffic handling plan. Traffic handling/detour Plans will be developed and TMP costs (i.e. Public Information, Community Outreach, etc.) will be included in the Project cost estimate. PM may need to adjust cost and schedule accordingly.	Oscar Alejandre		
			1										1							
			2								9		2							
			3								4	Low	3	Very Low						
44	Active	Threat	5/22/2023	10/3/2023	Str Design	Soil Liquefaction	Due to Potential soil liquefaction lateral spreading need to be further investigated. Ground improvements, or deep foundations, may be used to reduce or even eliminate lateral spreading hazards. This would impact the project cost and schedule.	According to preliminary studies, liquefaction may occur in some locations.	Moderate	0				0		Mitigate	Structure design will work closely with geotechnical to minimize the impact. Performing subsurface investigation and testing the material at the project location in PSE phase will provide enough information to mitigate the issue by selecting adequate construction methodology. Additional cost will be included in the cost estimate. PM may need to adjust the project cost and schedule.	Jason Fang		
			1							Very Low			1	Low						
			2								9		2							
			3								4	Moderate	3	Low						



EA 0R380 QUALITATIVE RISK REGISTER

EA 0R380			Phase: 0			SBD 040 PM: R 153.9/ R 154.6 MO 040 PM: 0.0/ 0.6			PM: Elaheh Hadipour		Const Capital Estimate: \$41,729K		Project Description: BRIDGE REHABILITATION AND/OR REPLACEMENT		Project Location: IN SBD CO NR NEEDLES BETWEEN PARK MOABI RD AND TOPOCK RD AT COLORADO RIVER BRIDGE (BR #54-0415)			
Program Code: 201.110, 400.100 /			M200 Target: 12/15/2						ARM: Julia Eigenbrod		R/W Capital Estimate: \$8,000K							
Risk No.	Status	Type	Date of Origin	Updated	Category	Title	Risk Statement	Relevancy/Current Status/Assumptions/Comments/Triggers	Probability	Cost Impact				Schedule Impact		Response Strategy	Response Actions	Risk Owner
			Originator							Ph	Impact	Ph	Impact	Ph	Impact			
46	Active	Threat	8/24/2023	10/19/2023	Environmental	Hazardous Waste - PG&E Environmental Remediation Activities.	As a result of Pacific Gas and Electric Company's (PG&E's), environmental remediation activities, conducted by DTSC at Topock Compressor Station close to the project site, PG&E activities and/or assets may be potentially affected by Caltrans' I-40 Colorado River Bridge Replacement Project. If the bridge replacement activities intercept, obstruct or hinder PG&E's groundwater and contaminated soil removal plans or remediation infrastructures (wells, pipelines, communication lines and power lines), this could potentially lead to shut down of the project which would lead to massive delays and losses.	Pacific Gas and Electric Company's (PG&E's) Topock Compressor Station is located south of I-40 on the California side of the Colorado River, at 145453 National Trails Highway. PG&E's Topock Compressor Station compresses natural gas so it can be transported through pipelines to PG&E's customers in northern and central California. In a coordinated effort in 2011, DOI and DTSC selected the final groundwater remedy to address chromium in groundwater near the Topock Compressor Station. Two of the fourteen contaminated areas are located within Caltrans' ROW, one area along the west bound lane of I-40 and one area is below I-40 in Bat Cave Wash.	Moderate	0				0		Mitigate/Accept	Environmental will work closely with DTSC and PG&E, conduct periodic meetings to provide project updates, and share information. Construction should proceed with care to protect workers. Environmental Engineering conducted soil investigation for the part of the project footprint on land and applied proper SSPs. Further soil investigations for deep excavations/pile drilling will be conducted during construction to determine proper disposal of excess soil. PM may have to adjust for possible mitigation costs.	Paul Phan
			1							Low			1	Moderate				
			2							Low	9	Very Low	2	Low				
			3							Low	4	Low	3	Moderate				
47	Active	Threat	8/24/2023	10/19/2023	Environmental	Vegetation Protection	As a result of DTSC's implementation of revegetation mitigation directly below the current I -40 bridge, all proposed bridge-replacement alternatives may impact the vegetation that has been replanted. Any "take" of vegetation from the revegetation program due to impacts from the bridge replacement project would impact the long-term success and establishment of native vegetation and may ultimately lead to shut down of the project which would lead to massive delays and losses.	The location of the revegetation project was determined in coordination between DTSC, PG&E and the U.S. Fish and Wildlife Service. DTSC's recommendation for the preferred build alternative is based on a comparison of the proposed alignments with the existing remedy infrastructures and gas pipeline alignments around the site. The proposed Alternative 1 - existing alignment will have the least impact to DTSC's remedy infrastructure and is the preferred alternative from DTSC's perspective. The second preferred alternative would be Alternative 3 - as the southern alignment would impact less DTSC infrastructures, but also existing gas pipeline and sensitive habitat in comparison to Alternative 2 - the northern alignment.	Moderate	0				0		Avoid	Environmental will work closely with DTSC and PG&E, conduct periodic meetings to provide project updates, and share information. Construction should proceed with care to protect workers.	Craig Wentworth
			1							Low			1	Low				
			2							Very Low	9	Very Low	2	Very Low				
			3							Very Low	4	Low	3	Very Low				
48	Active	Threat	8/30/2023	10/19/2023	Environmental	Air Quality	If the project is not exempt, then an air quality study will be required for this project. However, the air quality study cannot be conducted unless traffic analysis / study is finalized. Additional time (5-6 months) may be required to conduct air quality study which may increase support cost and delay the schedule.	Traffic study data could be used to develop the air quality report. The Colorado bridge project has 3 build alternatives, the preferred alternative is not yet identified. Each alternative requires a separate study to compare and select the best alternative. Before final decision to perform air study, the PDT should decide on preferred alternative to avoid delays.	Low	0				0		Avoid	Environmental Engineering will perform air quality study for each build alternative to determine the preferred alternative. PM will evaluate any potential cost increase or schedule delay.	Paul Phan
			1							Very Low			1	Low				
			2								9		2					
			3								4		3					
49	Active	Threat	9/8/2023	10/19/2023	Environmental	CDFW Take	If the Project construction exceeds Dec 31, 2033, whereby species impacts may occur, then SB 147 is no longer valid, and the Project cannot have "take" to CDFW Fully Protected Species (Yuma Ridgeway's rail, black rail, and razorback sucker), which may result in a stop work order on the Project permanently or until legislation can be pursued. This will adversely impact the project cost and schedule.	SB 147, enacted into law on July 10, 2023 and until December 31, 2033, authorizes CDFW to issue a permit using the permitting structure in CESA that would authorize the take of a fully protected species resulting from impacts attributable to the implementation of critical infrastructure projects if certain conditions are satisfied, which this Project qualifies. The provisions of the bill relating to Reconciling the Fully Protected Species with the California Endangered Species Act sunset at the end of 2033. The Project intends to pursue CDFW 2081 permits for "take" of CDFW FP Species.	Very Low	0				0		Mitigate	Caltrans intends to pursue CDFW 2081 for take of FP Species (Yuma Ridgeway's rail, black rail, and razorback sucker) utilizing SB 147. PDT and Environmental will coordinate in future if construction is anticipated past Dec 31, 2033.	Craig Wentworth
			1										1					
			2								9		2					
			3							High	4	High	3	Very High				



EA 0R380 QUALITATIVE RISK REGISTER

EA 0R380			Phase: 0			SBD 040 PM: R 153.9/ R 154.6 MO 040 PM: 0.0/ 0.6			PM: Elaheh Hadipour		Const Capital Estimate: \$41,729K		Project Description: BRIDGE REHABILITATION AND/OR REPLACEMENT		Project Location: IN SBD CO NR NEEDLES BETWEEN PARK MOABI RD AND TOPOCK RD AT COLORADO RIVER BRIDGE (BR #54-0415)			
Program Code: 201.110, 400.100 /			M200 Target: 12/15/2						ARM: Julia Eigenbrod		R/W Capital Estimate: \$8,000K							
Risk No.	Status	Type	Date of Origin	Updated	Category	Title	Risk Statement	Relevancy/Current Status/Assumptions/Comments/Triggers	Probability	Cost Impact				Schedule Impact		Response Strategy	Response Actions	Risk Owner
			Originator							Ph	Impact	Ph	Impact	Ph	Impact			
50	Active	Threat	9/11/2023	10/19/2023	Geotechnical	Differing Site Conditions	As a result of differing site conditions, difficult drilling/caving conditions/groundwater impact may occur during the foundation construction, which will lead to impacts on cost and schedule.	Existing borings are available from the original bridge construction. These borings provide some subsurface information; however, the soil classifications/lithology, groundwater table elevations, in-situ testing, laboratory testing are not current and/or up to current standards. The contractor may claim differing site conditions if current borings are not provided due to inadequate information to determine the size/provide construction equipment, necessity of (drilling) casing, necessity of slurry (wet spec) construction, and/or other difficulties encountered during construction.	Moderate	0				0		Mitigate	Geotechnical design will perform borings at each bridge support location during the project design phase. If this risk materializes the PM may need to adjust cost and schedule as necessary.	James Majors
			1										1					
			2								9		2					
			3							Low	4	Low	3	Low				
51	Active	Threat	9/12/2023	10/19/2023	Right of Way	New Permit from Lands Commission	The cost of the New permit for bridge is being sought from State Lands Commission. The project will require Caltrans to submit a lease application through the Commission's OSCAR portal. The application will also require Caltrans to submit an Approximate Expense Deposit (\$3,000.00) to cover reimbursable staff costs for processing, and a filing fee (nominal, \$25). The deposit into the State Parks fund is cited in Streets & Highways Code section 101.5 and is not a State Lands Commission requirement. The SLC doesn't specify the amount nor verify the deposit, this amount is usually determined by an appraisal. Continued -	Continued--- Staff references the deposit requirement in the lease and staff report considered by the Commission, but otherwise the details are left up to Caltrans and State Parks and occur outside the SLC application process. This may increase cost and possible resources for project. Relevancy: SLC has provided new lease examples. It appears an appraisal of bridge within SLC lease area will require an appraisal. Appraisal amount needs to be deposited in a state parks fund. Extensive coordination with SLC will be required. 24 months should be adequate for completion to achieve RW Certification. Cost is unknown and can not be determined until appraisal is complete.	Very Low	0				0		Mitigate	FLC will be in constant communication with SLC during process to address all questions and comments. Cost Recovery Agreement is required in the amount of \$3,000 plus \$25 processing fee. SLC portion of bridge lease requires appraisal and an amount. PM may need to adjust cost as needed.	Kristine Flint
			1							Very Low			1					
			2								9	Very Low	2					
			3								4		3					
52	Active	Threat	9/14/2023	10/19/2023	Project Mgmt	Survey work and Bridge Site Data Submittal (BSDS) preparation	If phase 1 opening is delayed beyond Feb 2024, this will result in delaying the survey work needed for design, therefore the project schedule might be impacted.	With the current PA&ED schedule, the earliest phase 1 opening would be mid-Feb. 2024, after CTC voting in January 2024. Survey needs to start their work as soon as phase 1 opens so the BSDS could be prepared and Structure design can start their design work. The PS&E phase has already been shortened by 8 months due to PA&ED date extension from March 2023 to Nov. 2023 as a result of environmental constrains. Structure design needs 18-24 months from MS221 to MS378.	Low	0				0		Mitigate	PM will making sure the PA&ED is on schedule, COOP executed and funding request submitted on time to CTC in January 2024. If this risk could not be prevented and materializes, then the district might need to change the funding year for this project.	Elaheh Hadipour
			1							Very Low			1	Moderate				
			2								9		2					
			3								4		3	Low				
53	Active	Threat	9/20/2023	10/19/2023	Project Mgmt	Child EA Creation	If the Child EA is not created by early design and is not adequately funded, Caltrans will be unable to meet all CDFW 1600 and/or 2081 permit requirements and this will impact the project cost and schedule.	As a result of anticipating a long-term onsite plant establishment period per the CDFW 1600 permit,and offsite restoration work per the CDFW 2081 permit, a Child Project is needed to address these costs after construction completed. This risk is connected to Risk #34.	Low	0				0		Avoid	PM will coordinate with D8 Biology and D8 Landscape to make sure the updated MCCE reflects the fund needed for the child EA. A PCR will be necessary to allocate the funds needed for the mitigation requirement.	Elaheh Hadipour
			1										1	Low				
			2							Low	9	Low	2					
			3								4	Low	3					



EA 0R380 QUALITATIVE RISK REGISTER

EA 0R380				Phase: 0			SBD 040 PM: R 153.9/ R 154.6 MO 040 PM: 0.0/ 0.6			PM: Elaheh Hadipour		Const Capital Estimate: \$41,729K		Project Description: BRIDGE REHABILITATION AND/OR REPLACEMENT				Project Location: IN SBD CO NR NEEDLES BETWEEN PARK MOABI RD AND TOPOCK RD AT COLORADO RIVER BRIDGE (BR #54-0415)			
Program Code: 201.110, 400.100 /				M200 Target: 12/15/2						ARM: Julia Eigenbrod		R/W Capital Estimate: \$8,000K									
Risk No.	Status	Type	Date of Origin	Updated	Category	Title	Risk Statement	Relevancy/Current Status/Assumptions/Comments/Triggers	Probability	Cost Impact				Schedule Impact		Response Strategy	Response Actions	Risk Owner			
			Originator							Ph	Impact	Ph	Impact	Ph	Impact						
54	Active	Threat	11/21/2023	11/28/2023	Project Mgmt	Support Cost Increase	Any delay in approval of the increase in support cost due to the utilization of CMGC process as an alternative delivery method may affect project schedule.	Two percent of the current capital cost associated with having CM on board will be added to phase 1 resources through a Supplemental fund request. This amount is shared between ADOT and CT and would need to be approved prior to procurement. Any delay in the approval of this increase may effect the timely use of CM and affect the project schedule and phase opening. Current plan is to apply for the Supplemental funds at March '24 CTC. ADOT already agreed with the increased support cost.	Low	0				0		Accept	PM will work with Programming to submit the Supplemental fund request for PSE support at the March '24 CTC. PM is in the process of adding the additional support cost language in the Co-op.	Elaheh Hadipour			
			1										1	Low							
			2								9		2								
			3								4		3								
55	Active	Opportunity	11/21/2023	11/28/2023	Project Mgmt	CM Role	Having the CM on board is an opportunity that needs to be managed and utilized properly. CM may be able to aid in coordinating with various agencies and provide innovative/alternative methods of construction with less impact to traffic etc. This may bring some cost and/or schedule saving.	If the CM on board is not used properly, the increase in cost could not be justified. Design and DES who requested the CM to be on board could benefit from the CM the most, if they mange the work order expected from CM.	Moderate	0				0		Enhance	To maximize and enhance the use of CM, coordination between PM, DES, Design and the rest of team is needed. PM will coordinate and make sure the project stays on schedule and within cost. Design and DES also need to prioritize and manage the work order that is needed to be done by CM. Any changes affecting the project delivery need to be communicated between the parties and ADOT expeditiously.	Elaheh Hadipour			
			1										1								
			2								9		2								
			3							Very Low	4	Low	3	Low							

RISK REGISTER CERTIFICATION (ACCOUNTABILITY CHECKPOINTS) FORM

PPM-0001 (REV 07/2013)

The risk register is to be approved and signed-off by the District Deputies* listed below for all scalability levels. By signing this form, you are certifying that you have reviewed the risks documented in the register and agree that they have been managed to the extent possible by the PDT.

<u>Project Information</u> ☐ Capital Project ☐ Major Maintenance Project (Check One)		Total Estimated Const Cost: \$41,729,000
Project ID/District-EA	0812000067	0R380
Project Description	BRIDGE REHABILITATION AND/OR REPLACEMENT	
Project Manager (PM)	Bacson Quach	
Risk Management Coordinator	Md Shaheed	
☐ No Risk Register Certification Required -- Check box if project is less than \$1 million in total cost and risk register not prepared. Sign below and submit this form with PID, PA&ED, PS&E submittals, and RE Handoff Files (as applicable).		
Project Manager Signature		

<u>PID (Recommended for Capital Projects Only excluding Minor Projects)</u>	
Project Manager	Date:
Deputy District Director, Planning	Date:
Deputy District Director, Design	Date:
Deputy District Director, Construction	Date:
Deputy District Director, Right of Way	Date:
Deputy District Director, Environmental	Date:
Deputy District Director, Project Management	Date:

<u>PA&ED (Required for Capital Projects Only)</u>			
Project Manager	<u>Sign</u>	<u>Electronically signed by Elaheh Hadipour</u>	Date: November 8, 2023
Deputy District Director, Design	<u>Sign</u>	<u>Electronically signed by Mahmuda Akhter</u>	Date: December 5, 2023
Deputy District Director, Construction	<u>Sign</u>	<u>Electronically signed by Christy Connors</u>	Date: November 28, 2023
Deputy District Director, Right of Way	<u>Sign</u>	<u>Electronically signed by Rebecca Guirado</u>	Date: November 13, 2023
Deputy District Director, Environmental	<u>Sign</u>	<u>Electronically signed by Kurt R Heidelberg</u>	Date: November 9, 2023
Deputy District Director, Project Management	<u>Sign</u>	<u>Electronically signed by Anthony Liao</u>	Date: November 8, 2023

<u>Prior to PS&E (Required for Capital Projects and Major Maintenance Projects)</u>	
Project Manager	Date:
Deputy District Director, Design	Date:
Deputy District Director, Construction	Date:
Deputy District Director, Right of Way	Date:
Deputy District Director, Environmental	Date:
Deputy District Director, Project Management	Date:

<u>RE File Hand-off (Recommended for Capital Projects and Major Maintenance Projects)</u>	
Project Manager	Date:
Deputy District Director, Construction	Date:

Attachment M
SHOPP
Performance
Measures

SHOPP Project - Accomplishment - Performance Measures - Benefits

District: 08 **Tool ID:** 11280 **Project ID:** 0812000067 **EA:** 0R380 **Co-Rte-PM:** SBD-040-R153.9/R154.643 (Primary Location)

Res In PID WP: 10/23/13 **Project Manager:** Ashraf Habbak

Save to Excel

☒ Bridge ☐ Pavement ☐ Drainage ☐ Facilities ☒ Safety, Signs & Lighting ☐ Mobility ☐ Roadside ☒ Complete Streets ☒ Sustainability /Climate Change ☐ Advance Mitigation /Mitigation ☐ Major Damage & Betterments ☐ Green-house Gases ☐ Relinquishment

Performance & Accomplishments (PRG)

	ActID	Activity Detail	Performance Objective	Unit of Measurement	Quantity	Pre-Good	Pre-Fair	Pre-Poor	New	Post-Good	Post-Fair	Post-Poor	HQ Program Review - Agree with District?	HQ Comment	Review Date	Performance Change Date After Review	Comment
1	A02	Bridge Replacement/New Construction (201.110, .111, .113, .322)	Bridge and Tunnel Health	Square Feet	108688.0		87984.000		20704.0	87984.000							
2	A02		Bridge Scour Mitigation			87984.000				87984.000							
3	A02		Bridge Seismic Restoration			87984.000				87984.000							
4	A02		Bridge Goods Movement Upgrades				87984.000			87984.000							
5	A03	Bridge Rail (201.112)	Bridge Rail Replacement and Upgrade	Linear Feet	4038.0	1346.000	2692.000			4038.000							
6	A07	Fish Passage	No Performance Objective in the SHSMP	Yes/No	No												No
7	A08	Number of Bridges	No Performance Objective in the SHSMP	Each	1.0												
8	E07	Guard Rail (201.010, .015)	No Performance Objective in the SHSMP	Linear Feet	200.0	200.000				200.000							
9	E20	Widen Shoulders (201.010, .015)	No Performance Objective in the SHSMP	Linear Feet	2750.0	2750.000				2750.000							
10	H07	Class III Bike Routes	No Performance Objective in the SHSMP	Linear Feet	2587.0				2587.0								
11	H09	Bike Lane Gap Closure	No Performance Objective in the SHSMP	Each	0.25				0.25								TBD
12	I01	Total Maximum Daily Load Mitigation (Stormwater Mitigation) (201.335)	Storm Water Mitigation	Acres													yes
13	I02	Roadway Adapted to Address Climate Change Threats/Vulnerability	No Performance Objective in the SHSMP	Centerline Miles	0.25		0.250			0.250							yes
14	I08	Install Led Lighting (Not Counted Above)	No Performance Objective in the SHSMP	Each	1.0				1.0								TBD

Attachment N
Field Review Sign-
in Sheet



OR380 - Sign-in Sheet
08-SBD-040- PM 153.9/154.7
Bridge Rehabilitation and Replacement

Date: January 14, 2020

Time: 11AM-1PM

California / Arizona

Subject: Joint Field Review Meeting

Location:

Border

Name	Division	Function	Telephone	Unit Number	Initials
Ashraf Habbak	PPM	Project Manager	909 806-3259	4392	AH
Ben Amiri	Design	Branch Chief	909 383 6872	2242	BA
Darcy Davis	Const	RE	760 326 4684		DD
Gabrielle Duff	Environmental Planning	Senior Env. Planner	X 6933	2217	gd
Omar Galvan Haissam Yahya	Traffic Operations		909-383-5322 909 383 4065	2279	OG
Howard Ng	DES / Structures Design	Structures Design	909 598 6367	3622	HN
Janet Lipscomb	Construction	Constructability	(909) 888 2141	2311	JL
Jason Fang	DES / Structures Design	Project Engineer	909 595 4035	3622	JF
Jeff Buck					
Joanna Lopez	Maintenance		(760) 856-2282		
Julie Scrivner	Environmental Planning	Planner	909 806 3969	2217	JAS
Karen Riesz	Environmental Planning	Regulatory Permits / Biology	(909) 383-6386	2210	
Manuel Zapata	Construction	Inspections	957 2323556	4176	MZ
Marissa Cofer	ROW	Project Coordination	(909) 383-2870	2304	MC
Mina Pezeshpour	DES / Structures Design	Structure Design	909.992.9983	3588	MP
Navaphan Viboolmate	Arizona DOT		602 712 3478		NAV
Pe-Shen Yang	Arizona DOT	Assistant State Bridge Engineer	602 712 8606		PSY
Refaat El Sherif	Design	Project Engineer	909 383 6891	2242	RE
Salvador Castaneda	Dist. 8 Maintenance	Supervisor	909 877-3705	2365	SC
TIM STUBBS	CALTRANS DS BRIDGE CREW	CHML	909 877-3705 626 482-7925	2365	



OR380 - Sign-in Sheet
08-SBD-040- PM 153.9/154.7
Bridge Rehabilitation and Replacement

Date: January 14, 2020

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California / Arizona

Subject: Joint Field Review Meeting

Location:

Border

Name	Division	Function	Telephone	Unit Number	Initials
Tricia Lewis	ADOT- NW District Development	development	928-326-1062		TL
Eric Stanford	ADOT Utility				Phone
Matt Tolman	ADOT R/W				Phone
JOSE A. TORRES	OB CONSTRUCTION	CONSTRUCTION Inspection	(909) 609-1380	4176	SA
MALISA LIENG	DE ENV. PLANNING		(909) 383-6442	2202	ML
Todd Steinberger	ADOT NW Dist.	Support Asst. DE	928-681-6039	4510	TS
Jeff Baumeister	ADOT	supervisor	928-814-9950	5321	JB
Joshua Wilkin	ADOT	ETT	602-920-7265		Sh
Chris Duffield	ADOT FDO	Tech IV	928-814-9951	5321	CD
Brandon Nguyen	ADOT EP	Environmental PLANE	602-712-6971		BN