



City of Del Mar Agenda Report

TO: Honorable Mayor and City Council Members

FROM: Joe Bride, Public Works Director
Tim Thiele, Engineering Services Manager
Via CJ Johnson, City Manager

DATE: November 9, 2020

SUBJECT: Informational Update on the Camino del Mar Bridge over the San Dieguito River Replacement Project

REQUESTED ACTION/RECOMMENDATION:

It is recommended that City Council receive this informational report on the Camino del Mar Bridge over San Dieguito River Replacement Project (Project).

EXECUTIVE SUMMARY:

The Camino del Mar Bridge over the San Dieguito River is structurally deficient, scour critical (foundation erosion), seismically and flood vulnerable, and hydraulically disruptive. The Project qualified for the Caltrans Eligible Bridge List in 2008, and is therefore, eligible for 88.5% reimbursement from the Federal Highway Bridge Program with Caltrans oversight/approval. The City has an active professional services agreement with Kleinfelder Inc., for preliminary engineering and environmental documentation in anticipation of future bridge replacement. This agenda report is intended to provide an informational update regarding the Project status and next steps.

On July 1, 2020, the design team submitted a draft Type Selection Report (dTSR) to Caltrans Local Assistance Engineers (DLAE) and Structures Local Assistance (SLA) for review and comment (Attachment A, Executive Summary to the dTSR). On September 10, 2020, the City received SLA's Condition Concurrence Memo agreeing with the City's proposed design approach, which was a major milestone in moving the environmental document forward (Attachment B).

On July 24, 2017, the City entered into a financing agreement with Caltrans to accept Federal Highway Administration (FHWA) financing for the Project. The agreement requires the City to begin construction within ten years or repay all FHWA funds previously paid to the City. To avoid repayment, the City must begin construction by July 24, 2027. The Project's current schedule lists the "Begin Construction" milestone in July 2025; leaving two years of project float to accomplish this critical milestone. Two years of project float is necessary to resolve any future delays such as differing site conditions, environmental challenges, agency approval delays, or regulatory changes. Delaying the

City Council Action:

project at this time would also increase total project costs due to price escalations, increasing regulatory requirements, and restart costs. Due to the requirements of the FHWA grant and the overall increase to the total cost of the Project caused by a delayed completion, staff recommends that the City continue to work on the Project as scheduled in order to meet the July 2025 milestone to begin construction.

DISCUSSION/ANALYSIS:

Summary of Project Accomplishments to Date

In January 2012, a Request for Qualifications (RFQ) was issued and Kleinfelder, Inc. was selected to conduct a bridge evaluation study, referred to as Work Stage A.

In October 2012, Caltrans provided concurrence with a bridge replacement scope as recommended by the Rehabilitation Strategy Report prepared by Kleinfelder on behalf of the City of Del Mar.

In May 2017, the City executed an Agreement with Kleinfelder for the Preliminary Engineering and Project Approval/Environmental Documentation (PA/ED) Phase of the project, also known as Work Stage B, which is the current work phase. The PA/ED phase includes a bridge type selection report, geometric approval drawings, and environmental document.

Public Outreach

As the PA/ED work has progressed, public input has been solicited to gain consensus on a preferred bridge type alternative for analysis in the environmental document. The following public meetings and interagency coordination meetings have been facilitated to provide informational updates and solicit feedback from key stakeholders:

- San Dieguito Lagoon Committee June 20, 2018
- Traffic and Parking Advisory Committee November 15, 2018
- City of Del Mar Open House January 10, 2019
- San Dieguito River Valley Conservancy February 11, 2019
- City Council Meeting April 1, 2019

During these meetings, several bridge type alternatives were presented and discussed. Additional discussion items included construction staging scenarios, parking impacts during bridge construction, projected sea level rise, project costs, and project schedule. Since the last City Council update, the design team has facilitated eight meetings with Caltrans DLAE and over a dozen internal technical workshops.

California Coastal Commission Coordination

The design team facilitated a staff-level coordination meeting with the California Coastal Commission on January 21, 2020.

Based on input collected from these meetings, and feedback from Caltrans' Conditional Concurrence Memo (Attachment B), the following recommendations are provided to

address bridge type, construction staging, temporary parking impacts, and projected sea level rise as further described below:

Bridge Type

Of the five (5) bridge alternatives carried forward in the dTSR, the preferred bridge type is a five-span, variable-depth, cast-in-place, pre-stressed concrete box girder with two columns per pier. Equal intermediate spans have lengths of 135-feet. The superstructure depth varies parabolically from 4-feet at the midspans and abutments to 7-feet at the piers. Two oblong columns with dimensions of 7.5-feet by 5-feet provide support at each pier with one column constructed in each construction stage. The columns are fixed at the tops and bottoms. The tops of the oblong columns have architectural flares in one direction.

The proposed bridge incorporates a 6-foot median, (2) 12-foot vehicle lanes, (2) 2.3-foot striped buffers, (1) 6-foot southbound bike lane, (1) 8-foot northbound bike lane, inboard Mash Type ST-75 (mod) rails and 8-foot (west) and 6-foot (east) protected sidewalks with (2) 1-foot outboard pedestrian metal railings with lighting, for a total bridge width of 68.6-feet.

The superstructure in this alternative is cast-in-place which will require falsework over the river channel with temporary deep foundations. This alternative has the least quantity of supports and foundations for the studied alternatives. However, the sizes of the columns and piles are larger. Also, the depth of the superstructure is greater at the supports. The replacement bridge is required to clear above the 100-year flood plain and therefore, will be higher than the existing bridge. To minimize the impacts of this taller bridge, the bridge (superstructure) depth will need to be designed as thin as possible.

Construction Staging Scenario

The bridge will be constructed in two stages to enhance emergency response time to the Beach Colony and allow for continuous vehicular and pedestrian access of Camino del Mar during construction. The decision to proceed with a bridge design with staged construction was determined by consensus at the various outreach meetings with the City of Del Mar's community groups, Traffic and Parking Advisory Board (TPAC), and City Council. Alternatives for staged construction versus full closure of the Camino del Mar Bridge were studied and presented. The community groups almost unanimously agreed to the staged construction option. TPAC preferred the staged construction approach since the cities of Del Mar and Solana Beach share emergency response resources, and any detour could cause an increase in response time during emergencies. Although this alternative would allow traffic to move through the area, the construction duration would last approximately 24 to 27 months.

Temporary Parking Impacts Caused by Construction Staging

Construction staging areas will temporarily impact on-street parking along both sides of Camino del Mar, both north and south of the San Dieguito River. Approximately 120 parking spaces are subject to temporary closures, however, construction contract specifications will prohibit the amount of parking spaces that be simultaneously closed.

Projected Sea Level Rise

Since the proposed bridge is located over a river and within the Coastal Zone, the Project is required to obtain a Coastal Development Permit (CDP) from the California Coastal Commission and comply with Caltrans Memo to Designers (MTD) 16-1 Hydraulic Design for Structures Over Waterways. Both entities require development of project-specific design criteria for accommodating the impacts of projected sea level rise (SLR).

The *City of Del Mar Coastal Hazards, Vulnerability, and Risk Assessment (Del Mar, CA)* was prepared by Environmental Science Associates (ESA) in July 2016 and includes an Addendum that was prepared in October 2018. In this report, ESA addressed the projected impacts of SLR in the City of Del Mar. The report cites National Research Council 2012 (NRC 2012) data, which was considered by the State to be the “best available science” at the time. The NRC 2012 data projected future SLR for the year 2100 (relative to year 2000) to be 37-inches for the “Mid-range” scenario and 66-inches for the “High-range” scenario. The year 2100 is the approximate end date of the 75-year design life for the Camino Del Mar Replacement Bridge.

In 2018, the State of California, Ocean Protection Council released an updated *Sea-Level Rise Guidance* document (2018 OPC) with new SLR projections to support planning for SLR in California. The State considers the 2018 OPC Guidance to be a replacement for the previous “best available science” projections from NRC 2012. The 2018 OPC data projected future SLR for the year 2120 to be 8.8-feet for the “Medium-High” scenario and for the year 2100 to be 10.2-feet for the “Extreme H++” scenario.

Projected SLR data from NRC 2012 and OPC 2018 was incorporated into project-specific hydraulic modeling prepared for the project. The Hydraulic and Sediment Transport Analyses for the Camino del Mar Bridge Replacement by Chang Consultants, dated September 5, 2018, contains the results of incorporating projected SLR impacts into a preliminary hydraulic model. For this preliminary hydraulic model, Chang used a base water surface elevation (WSE) of 8-feet (NAVD88) for the Pacific Ocean and generated WSEs for the following SLR scenarios:

- 100-year Flood Event (HEC-RAS)
- 38-inches of SLR (year 2100 “Mid-range” scenario per NRC 2012)
- 66-inches of SLR (year 2100 “High-range” scenario per NRC 2012)
- 8.8-feet of SLR (year 2120 “Medium-High” scenario per OPC 2018)
- 10-feet of SLR (year 2100 “Extreme H++” scenario per OPC 2018)

The design team prepared preliminary bridge designs for each resulting WSE that completely “cleared” or “passed” each SLR scenario for comparison. The design team reviewed the results of each preliminary bridge design that corresponds to each WSE scenario. Based on these preliminary bridge designs, the design team was able to make the following observations:

- At **Elevation ~5.5 WSE** (near Mean High, High Water, MHHW), the WSE is completely contained within the banks of the San Dieguito River and the shoreline of the Pacific Ocean.
- At **Elevation ~11 WSE** (overtopping range), the WSE begins to overtop the banks of the San Dieguito River and partially submerges the Del Mar Fairgrounds.
- At **Elevation ~12 WSE** (approximates 100-year Flood, HEC-RAS), the WSE begins to submerge portions of the Beach Colony basin and further submerges the Del Mar Fairgrounds.
- At **Elevation ~13 WSE** (100-year plus approximately 38-inches SLR), the WSE largely submerges portions of the Beach Colony basin and even further submerges the Del Mar Fairgrounds.
- At **Elevation ~14 WSE** (100-year plus approximately 66-inches SLR), the WSE significantly submerges portions of the Beach Colony basin and even further submerges the Del Mar Fairgrounds.
- At **Elevation ~16 WSE** (almost completely submerged), the WSE almost completely submerges the Beach Colony basin and the Del Mar Fairgrounds.
- SLR scenarios that result in WSEs higher than **Elevation ~16 WSE** further submerge the Beach Colony basin and the Del Mar Fairgrounds deeper underwater.
- WSEs for 8.8-foot and 10-foot SLR scenarios result in **Elevations ~17** and **~18**, even more submerged than Elevation ~16.
- WSEs between **Elevation ~12 WSE** and **Elevation ~13 WSE** (which approximates 38-inches SLR) are the highest elevations where the Camino Del Mar bridge remains partially usable (in service) connecting to areas south of the bridge.
- It would not be practicable to require the bridge to be elevated to clear all SLR scenarios, particularly the extreme SLR scenarios where the bridge would lead to a portion of the community submerged underwater.

Therefore, the design team concluded that:

- 38-inches SLR is the highest practicable WSE to consider for proposed bridge design.
- Adding additional height to the bridge, according to Caltrans, is considered unnecessary and an additional expense that would not be reimbursable by the Highway Bridge Program. If the City desires a higher bridge, then the City of Del Mar would bear the incremental costs of a bridge at a height above the 100-year plus approximately 38-inches of SLR.

The most feasible bridge design would be where the proposed bridge remains partially usable (in service) connecting to areas south of the bridge with roadway elevations that would continue to serve the Del Mar community in a partially submerged flooding condition whereas the proposed Camino del Mar roadway would be accessible by motor vehicle.

California Coastal Commission (CCC) Staff-Level Coordination Meeting Summary

On January 21, 2020, staff from the City of Del Mar met with staff from the CCC to discuss the City's proposed approach to bridge design criteria for accommodating projected SLR. The City team presented the analysis that was done to consider the design for a bridge that clears 66-inches of SLR, 8.8-feet of SLR, or extreme H++ 10-feet of SLR scenarios and explained that such designs would not meet the project objectives for the bridge. It was also explained that the City could risk loss of funding if the bridge design does not meet Caltrans HBP standards.

The City team explained that the objective is to have the proposed bridge connect to dry land on both sides of the river through the life of the connecting roads. Therefore, the City is seeking to design the replacement bridge to accommodate projected SLR, but not based on extreme SLR scenarios where the corresponding bridge would cease to be connected to a functional roadway system. The City's analysis considered topographic review of existing elevations, which show that the Beach Colony neighborhood area becomes largely submerged near WSEs projected for 38-inches of SLR (EI. ~13.0), without adaptive measures and ceases to function as a usable transportation system. It was reiterated that if the City were required to accommodate the most extreme SLR scenarios, it would increase project costs, would not serve the necessary transportation need, and would lose functionality connecting to the south.

Other Proposed Bridge Design Criteria under City consideration:

1. The proposed bridge preferred alternative would have a low vertical profile (but higher than existing bridge) that clears the WSE for the 100-year flood event plus 38-inches of SLR and which WSE does not overtop bridge deck ("dry deck") at 66-inches of SLR.
2. Clears the WSE for the 100-year flood event (meets FEMA standard) and the WSE for the 50-year flood event plus 2-feet of freeboard.
3. Effectively connects to dry land on both sides of the river until WSE causes Camino Del Mar to be submerged (underwater).
4. City is planning for future adaptation measures that will help to minimize the risk of flood inundation in this area.
5. Proposed Bridge soffit (low chord) would be lower than 66-inches of SLR but is expected to last through the lifespan of the connecting roads (at least 50 years into the future).

The City explained that they prefer a bridge alternative that clears the WSE from a 100-year flood event plus 38-inches of SLR and accommodates 66-inches of SLR that does not overtop the bridge ("dry deck"). CCC staff indicated that they understood the concerns raised by the City team and the rationale for the City's proposed approach and methodology to the bridge design.

Future Public Outreach Process

During this current phase (PA/ED phase) which is anticipated to extend through winter 2021, a recommendation will be obtained from the Planning Commission. The role of the Planning Commission will be to provide input on the draft environmental document with

a specific emphasis on compliance with local land use plans (i.e., Community Plan, Local Coastal Program, and Adaptation Plan) and applicable zoning (i.e., Lagoon Overlay Zone, Floodway Zone, and Floodplain Overlay Zone).

In a future phase of work, referred to as the Plans, Specifications, and Estimate (PS&E) phase, which is anticipated to extend until Winter 2023, a recommendation will be obtained from the Design Review Board. The role of the Design Review Board will be to provide input with a specific emphasis on the opportunities for aesthetic enhancements such as those relating to accessory bridge railings, pedestrian pavement, overlook benches, and lighting choices.

Estimated Project Timeline

Below is the anticipated timeline for the Project, including completion of the necessary environmental review, design, and an estimated target date for construction:

- Perform Environmental Technical Studies and Geotechnical Reports – Current Activities
- Draft Mitigated Negative Declaration (MND) – January 2021 to November 2021
- Public Review Period – October 2021
- Planning Commission Adopts MND (CEQA and NEPA) – November 2021 to February 2022
- Prepare Final Project Reports (Preliminary Engineering and Environmental document) for Caltrans – February 2022
- Future Phases:
 - California Coastal Commission Approval 2021-2022
 - Design Review Board (DRB) Review: 2021-2022
 - Project Plans, Specifications and Estimate (PS&E): 2022-2023
 - Construction: 2025-2026

PRIOR CITY COUNCIL REVIEW:

On April 1, 2019, the City Council received an informational report on the project status and approved a Second Amendment to the Agreement with Kleinfelder, Inc. in the amount of \$389,510 which included additional geotechnical investigations and additional details to be included in the Type Selection Report.

On February 20, 2018, the City Council approved a First Amendment to the Agreement with Kleinfelder, Inc. which included required revisions to the Agreement in order to comply with Federal Contract Provisions.

On April 17, 2017, the City Council approved an Agreement with Kleinfelder, Inc. totaling \$1,216,334 for the Preliminary Engineering and Project Approval/Environmental Documentation (PA/ED) Phase for the Project (Bridge No. 57C0209).

On June 20, 2016, the City Council approved changes to the City's 10-Year Capital Improvement Program, appropriating \$60,000 in local match funds for preliminary engineering for Fiscal Year 2016/2017.

FISCAL IMPACT:

There is no fiscal action to be taken by the City Council related to this agenda item.

The FHWA Highway Bridge Program (HBP) provides 88.53% of the funding (including local agency internal labor costs) for eligible bridge projects, leaving 11.47% to be covered by local funding sources. Note that FHWA will not compensate the City for architectural treatments in excess of 1% of the construction costs.

Below are updated estimated Project costs and timelines for the purposes of programming future budgets. Future work phase costs will be updated after completion of Preliminary Engineering. Federal and Local shares are based on current FHWA/Caltrans local bridge program requirements. The City is/will be responsible for the local match portion of the project costs.

Completed Project Phase / Activity	Fiscal Year of Work	Completed Cost	Federal Funds 88.53%	Local Match 11.47%
Rehabilitation Analysis Preliminary Engineering	FY2014 FY2017 - FY2020	\$222,750 \$1,038,000	\$197,201 \$918,941	\$25,549 \$119,059
Budgeted Project Phase / Activity	Fiscal Year of Work	Budgeted Cost	Federal Funds 88.53%	Local Match 11.47%
Preliminary Engineering	FY2021	\$520,000	\$460,356	\$59,644
Future Project Phase / Activity	Fiscal Year of Work	Total Future Cost	Federal Funds 88.53%	Local Match 11.47%
Preliminary Engineering	FY2022	\$350,000	\$309,855	\$40,145
Design	FY2023	\$1,500,000	\$1,327,950	\$172,050
Design	FY2024-FY2025	\$1,000,000	\$885,300	\$114,700
Construction	FY2025-FY2029	\$35,000,000	\$30,985,500	\$4,014,500

Totals		\$39,630,750	\$35,085,103	\$4,545,647
---------------	--	--------------	--------------	-------------

ENVIRONMENTAL IMPACT:

This informational update is exempt from preparation of an environmental document. An environmental analysis is being prepared for the project pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA).

ATTACHMENTS:

- Attachment A – Executive Summary to the draft Type Selection Report
- Attachment B – Caltrans’ Condition Concurrence Memo dated September 10, 2020



TYPE SELECTION REPORT SUBMITTAL PACKAGE - EXECUTIVE SUMMARY

June 19, 2020

Tim Thiele, PE, QSD
 City of Del Mar
 ENGINEERING MANAGER | MICHAEL BAKER INTL.
 1050 Camino Del Mar
 Del Mar, CA 92014
 p.760.603.6243



**Subject: Executive Summary Memorandum
 Submittal Package for Draft Type Selection Report
 Camino Del Mar Bridge #57C-0209 Replacement Project**

Dear Mr. Thiele

Please see attached Submittal Package that contains the Draft Type Selection Report and associated documents for Caltrans review and comment. This Submittal Package is made up of the following documents:

Document 1	Executive Summary Memorandum
Document 2	Project-Specific Design Criteria – June 2020
Document 3	Draft Type Selection Report (TSR)
Docs. 3A - 3H	Draft TSR Appendices A - H
Document 4	Draft Hydraulics Report – June 2020
Document 5	Draft Preliminary Foundation Report (PFR)
Document 6	Draft Preliminary Geotechnical Design Report (PGDR)
Document 7	Response to Comments Document – June 2020
Document 8	HBP Eligibility Matrix - June 2020
Document 9	Meeting Minutes from the 12/11/19 Meeting
Document 10	Meeting Minutes from the 1/15/20 Meeting

The purpose of this submittal package is to present the design team's Project-Specific Design Criteria (June 2020) and the Draft Type Selection Report (TSR) with many illustrative Appendices. The Draft TSR is supported by the Draft Hydraulics Report, Draft Preliminary Foundation Report (PFR), and Draft Geotechnical Design Report (PGDR).

Also contained within this submittal package are associated documents such as Response to Caltrans Comments from the Advanced Planning Study (APS) and previous meeting minutes.

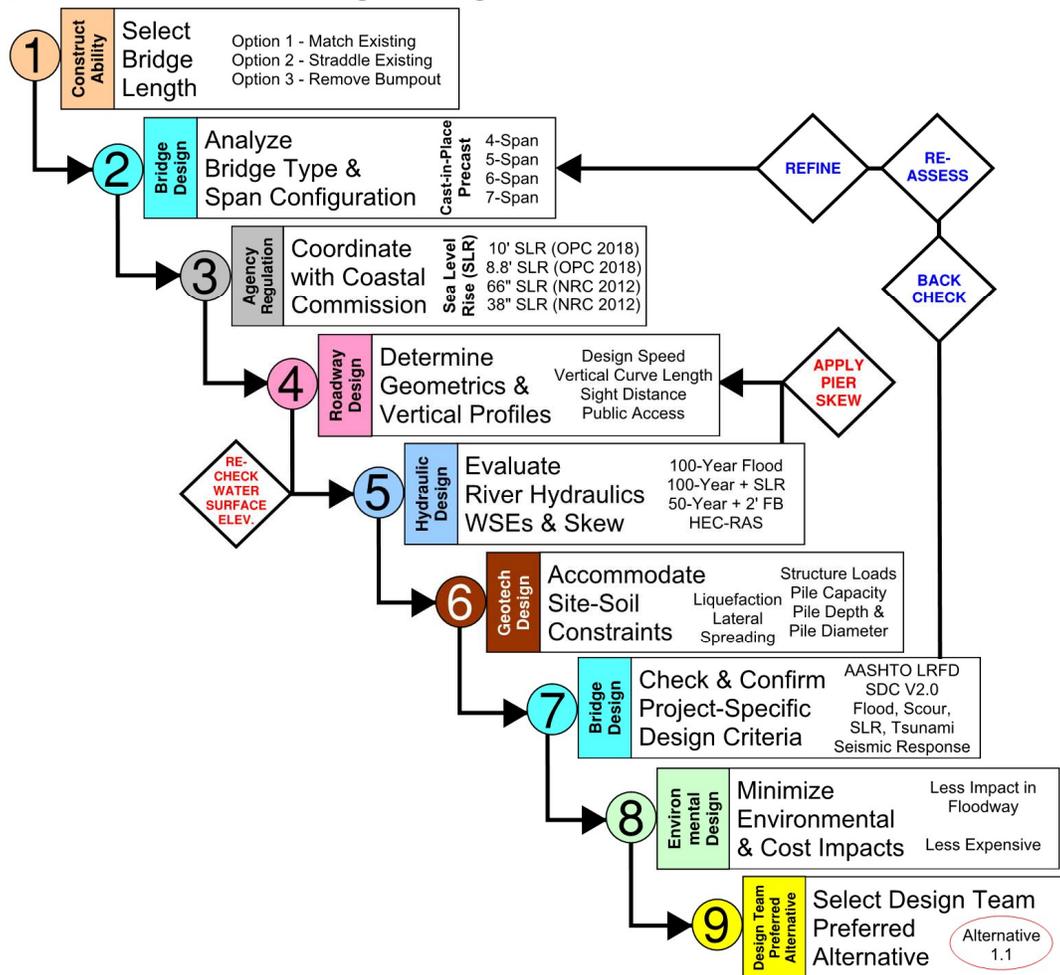
The intent of this submittal package is to begin building Project Development Team (PDT) consensus around one preferred alternative to initiate the Draft Project Report (DPR) and Draft Environmental Document (DED) for the project. Please review and comment.

The Draft TSR compares, contrasts, and evaluates multiple bridge options and includes detailed structural analysis of three primary alternatives plus two substructure variants:

Name	Bridge Type	Column Size	Number of Columns
Alternative 1.1	5-Span Cast-in-Place Prestressed Box Girder (Variable Depth)	7'-6" x 5'-0" oblong flare	2 columns per pier
Alternative 2.1	6-Span Cast-in-Place Prestressed Box Girder (Variable Depth)	7'-0" x 4'-6" oblong flare	2 columns per pier
Alternative 2.2	6-Span Cast-in-Place Prestressed Box Girder (Variable Depth)	4'-0" circular	4 columns per pier
Alternative 9.1	6-Span Precast Prestressed Wide-Flange Girder (Constant Depth)	7'-0" x 4'-6" oblong flare	2 columns per pier
Alternative 9.2	6-Span Precast Prestressed Wide-Flange Girder (Constant Depth)	4'-0" circular	4 columns per pier

The result of the Draft TSR process was to identify the design team's preferred alternative, namely Alternative 1.1. Please see below bridge design process that was followed to select the design team's preferred alternative. Please also see further below excerpts from the General Plan for this alternative. Please review and comment.

Camino Del Mar - Bridge Design Flow Chart



Coordination with CA Coastal Commission (CCC)

On January 21, 2020, staff from the City of Del Mar met with staff from the CCC to discuss the City's proposed approach to the analysis of bridge scenarios in consideration of projected Sea Level Rise.

The City explained that they prefer a bridge alternative that clears the 100-year floodplain plus 38-inches of Sea Level Rise and accommodates 66-inches of Sea Level Rise that does not overtop the bridge (“dry deck”). As of this meeting, the CCC staff are supportive of the City’s approach and methodology to address projected Sea Level Rise at this point in bridge design.

Therefore, the design team included 38-inches of Sea Level Rise as a part of the Project-Specific Design Criteria. Please see accompanying document Draft Hydraulics Report. Please also see Appendix B Sea Level Rise of the Draft TSR for more background information.

Hydraulic Design

One of the primary design criteria for the project is that the proposed bridge must be high enough so that the bottom soffit (low chord) clears the controlling flood elevation, including future sea level rise elevations. We named this controlling flood elevation as the “Control Elevation” in the Draft TSR.

The Control Elevation for the proposed bridge becomes the highest of three water surface elevations (WSEs) provided by the Hydraulic Engineer, shown below. For Alternative 1.1, the resulting Control Elevation is as follows:

- 50-year flood event (Q50) WSE plus 2-feet of freeboard = 14.55'
- 100-year flood event (Q100) WSE plus 38-inches of Sea Level Rise (SLR) = 14.15'
- 100-year flood (Q100) WSE = 14.09'

For Alternative 1.1, the entire bridge superstructure (soffit, girders, deck) is designed to be above elevation 14.55' NAVD88.

Bridge Cost Estimates

Please see below cost comparison of the bridge alternatives.

Bridge Cost Comparison	Cost	Cost/SF
Alternative 1.1: 5-Span Cast-in-Place P/S Box Girder (Variable Depth), 2 Columns/Pier	\$34,660,000	\$811
Alternative 2.1: 6-Span Cast-in-Place P/S Box Girder (Variable Depth), 2 Columns/Pier	\$34,770,000	\$813
Alternative 2.2: 6-Span Cast-in-Place P/S Box Girder (Variable Depth), 4 Columns/Pier	\$35,570,000	\$832
Alternative 9.1: 6-Span Precast P/S Wide-Flange Girder (Constant Depth), 2 Columns/Pier	\$34,870,000	\$816
Alternative 9.2: 6-Span Precast P/S Wide-Flange (Constant Depth), 4 Columns/Pier	\$35,410,000	\$828

Detailed cost estimates for bridge alternatives are shown in Attachment 1 at the back of the Draft TSR. This project is prepared in accordance with Caltrans standards and guidelines. Documents are submitted for review and comment by Caltrans District and SLA Oversight staff, in conjunction with the City of Del Mar.

Construction Staging Techniques

An Open House was held on January 10, 2019 at the City of Del Mar where two construction staging scenarios were presented to the public: Staged Construction and Full Closure. At this meeting, most community members preferred the staged construction scenario and City Council expressed their concerns regarding maintaining access for emergency response vehicles. Therefore, the PDT concurred that the staged construction scenario was the preferred approach at the April 1, 2019 PDT Meeting.

Please see below photo illustrating construction staging methods being used for the West Mission Bay project that are similar to the methods planned for the Camino Del Mar project. Please also see Appendix E, Construction Staging Package of the Draft TSR for more detailed information.

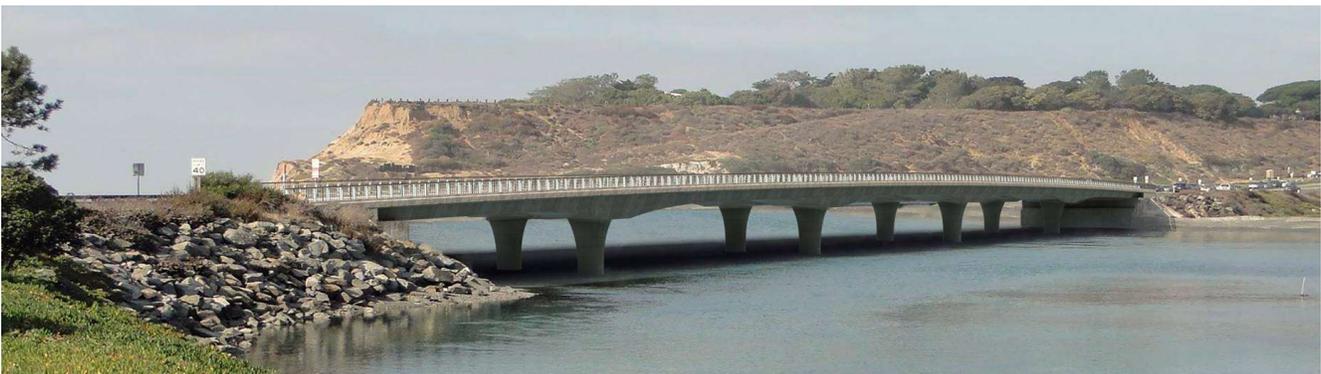


Please feel free to review and comment on any of the documents included within this submittal package.

The design team is available to discuss your review comments at a PDT Meeting or Bridge Technical Meeting in approx. one month, circa mid-July 2020, to begin the process of building consensus around a preferred alternative.

Sincerely
KLEINFELDER, INC.

Don Bloodworth, PE 60954
Engineer-of-Record



M e m o r a n d u m

*Making Conservation a
California Way of Life.***To: BING LUU-11**
District Local Assistance Engineer**Date:** September 10, 2020**File:** 11-SD-0000-DM
Camino Del Mar over
San Dieguito River
Ex. Br. No. 57C-0209**From: ROBERT M. JONES** [REDACTED]
Senior Bridge Engineer
Office of Special Funded Projects &
Structures Local Assistance
Division of Engineering Services**Subject: SLA/DES Conditional Concurrence Memo**

Per the City's submittal prioritized for DES review on July 21, 2020, Structures Local Assistance (SLA) has performed a cursory Division of Engineering Services (DES) review regarding the City's draft Bridge Type Selection Report (TSR) dated June 19, 2020 and related technical documents. SLA conditionally concurs with a 5-span cast in place-prestressed (CIP/PS) haunched box girder bridge type, as SLA recommends resolution of bridge-related HBP eligibility issues and bridge technical follow-up.

SLA/DES's cursory review of the City's draft TSR submittal revealed the City/consultant's recent bridge technical efforts have addressed a majority of our prior Caltrans technical comments, however, SLA recommends (re)addressing hydraulic skew, bridge length, abutment type, location, slope protection, and proposed substructure-foundation designs with follow-up studies demonstrating feasibility and cost effectiveness during final bridge design and PS&E development. DES SLA, Office of Geotechnical Services (OGS) and Structures Hydraulics (SH) technical comments have been provided for the City's follow-up (See Attachment).

Regarding HBP eligibility, SLA recommends that the District initially confirm HBP eligibility with the HBP Bridge Program Managers for the City's proposed bridge width. Please note that the draft TSR documents propose a total bridge width of 68'-6". The City's proposed bridge incorporates a 6' median, 2-12' lanes, 2-2'-3" striped buffers, 1-6' southbound bike lane, 1-8' northbound bike lane, inboard Mash Type ST-75 (mod) rails and 8'(west) and 6'(east) protected sidewalks with 2-1' outboard pedestrian metal railings with lighting. Additional backup documentation may be needed regarding proposed project aesthetics and other City proposed project features, including proposed profile, bridge length and width, inboard railings, overlooks, approach roadways, and slope protection.

Please contact Robert M. Jones at (916) 227-8032 for any questions or concerns.

Attachment

c: L. Newton/J. Wright- HQ-DLA
S. Vatti- OSFP/SLA Chief/ File*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*