Proposed FY 2020 Program Budget Amendment: Del Mar Bluffs Stabilization
Transportation Committee Item 10 | September 20, 2019

Del Mar Bluffs Location

Coast Boulevard

Del Mar Bluffs Project Area

Torrey Pines Overhead Bridge
Del Mar Bluffs Stabilization Update

**Phase IV improvements**
- Repair existing drainage structures
- Use piles to stabilize slopes and sea walls

**Requesting project budget increase**
- From $3 million to $5.781 million

**Phase IV funding status**
- We have $2 million STIP funding allocated by CTC on March 14, 2019
- DRMT has recommended to CTC to extend award by six months
- Recommend accepting $2.534 million in funding from California Natural Resource Agency (CNRA) to fully fund construction

**Phase V**
Start design and environmental clearance with balance of CNRA funds

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Del Mar Bluffs Stabilize Headwall MP 244.3
Del Mar Bluffs
New Piling at Sea Walls

Stabilize sea walls below 13th, 11th, and 8th Streets

Del Mar Bluffs IV Bid Results

The project was advertised for bid in July 2019
1. The Engineer’s Estimate (EE) was $1.45 million
2. Two bids were received on August 7, 2019
   • Low bid was $2.85 million
   • Second bid was $3.82 million

The difference between the low bid and the Engineer’s Estimate was mainly due to the difference in unit cost for the soldier piles on the beach to support three aging seawalls
### Del Mar Bluffs IV Bid Review

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Amount</th>
<th>Amount</th>
<th>Amount</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>18</td>
<td>13th Street Seawall Piles</td>
<td>53</td>
<td>EA</td>
<td>$225,250</td>
<td>$768,500</td>
<td>$543,250</td>
<td>1. Contractor priced risk higher for working on the beach</td>
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<td>15</td>
<td>11th Street Seawall Piles</td>
<td>29</td>
<td>EA</td>
<td>$216,978</td>
<td>$420,500</td>
<td>$203,522</td>
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<td>21</td>
<td>7th Street Seawall Piles</td>
<td>11</td>
<td>EA</td>
<td>$45,452</td>
<td>$159,500</td>
<td>$114,048</td>
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</table>

**Seawall Subtotal**

$487,680 $1,348,500 $860,820

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item Description</th>
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<th>Unit</th>
<th>Amount</th>
<th>Amount</th>
<th>Amount</th>
<th>Notes</th>
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<tbody>
<tr>
<td>11</td>
<td>Job Site Management</td>
<td>1</td>
<td>LS</td>
<td>$20,000</td>
<td>$200,000</td>
<td>$180,000</td>
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<tr>
<td>1</td>
<td>Mobilization/De-Mob.</td>
<td>1</td>
<td>LS</td>
<td>$115,000</td>
<td>$250,000</td>
<td>$135,000</td>
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</table>

**Top five bid Items higher than EE**

$622,680 $1,798,500 $1,175,820

1. Contractor priced risk higher for working on the beach
2. Steel tariffs of 25%
3. Bid price escalation running at 7.5%

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**High Bid Related to Risk for Working on Beach in Tidal Zone at Low Tide**

[Image of Del Mar Bluffs IV bid review]
Walls Need to be Repaired to Stabilize Toe of Bluff

Although the bids are higher than engineer’s estimate, we recommend proceeding with the low bid. Advancing this project reduces risk of further bluff failures.

Recommendation

The Transportation Committee is asked to recommend that the Board of Directors approve an amendment to the FY 2020 Program Budget to:

1. accept $2.534 million in funding from the California Natural Resource Agency General Fund Grant for construction of bluff stabilization measures; and

2. adopt Resolution No. 2020-07, the authorizing resolution for grant funds from the California Natural Resource Agency.
Questions

Staff Contacts

*Jim Linthicum, Director of Mobility Management and Project Implementation*

Bruce Smith, (619) 699-1907, bruce.smith@sandag.org

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**Structural Steel Price Index**

U.S. Bureau of Statistics

Note: Steel tariffs of 25% imposed on imports in early March 2018

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**Note:** The chart shows the producer price index for fabricated structural metal manufacturing, with a peak in 2018. The data is sourced from the U.S. Bureau of Labor Statistics. The graph indicates a significant increase in the price index, especially from 2017 to 2018.
Caltrans Construction Index
Cumulative % increase and Compounding Rate of increase

Source: Caltrans Office of the Engineer
http://dot.ca.gov/hr/enc/en/contractor_info/ - Highway Construction Cost Index - Exhibit A

Number of Bidders Declining

Average Number of Bidders (All Caltrans Projects)
Source: Caltrans Office of the Engineer
http://dot.ca.gov/hr/enc/en/cost_index/historical_reports/ - Highway Construction Cost Index - Summary
BUILD NCC PHASE ONE - STATUS

In Construction
San Elijo Lagoon Restoration
Complete Mid-2020

Completed
Coastal Rail Trail

Completed
San Elijo Lagoon Rail Bridge

Ready for Construction
I-5 Express Lanes
Spring 2020

In Construction
I-5 Express Lanes & San Elijo Lagoon Highway Bridge
Open to Traffic Late 2021
## BUILD NCC PHASE ONE - STATUS

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>CONSTRUCTION CAPITAL AND SUPPORT (M)</th>
<th>% COMPLETE AUGUST</th>
<th>ORIGINAL OPEN TO TRAFFIC</th>
<th>TARGET OPEN TO TRAFFIC</th>
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</thead>
<tbody>
<tr>
<td>San Elijo Highway Bridge &amp; Community Enhancements</td>
<td>$257</td>
<td>61%</td>
<td>Oct-20</td>
<td>Fall 2021</td>
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<tr>
<td>Manchester Ave. – Palomar Airport Rd. Express Lanes</td>
<td>$305</td>
<td>22%</td>
<td>Aug-21</td>
<td>Aug-21</td>
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<tr>
<td>San Elijo Lagoon Restoration</td>
<td>$117.3</td>
<td>78%</td>
<td>Feb-21</td>
<td>Jul-20</td>
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<tr>
<td>San Elijo Lagoon Double Track + Chesterfield</td>
<td>$70.2</td>
<td>99%</td>
<td>Jun-19</td>
<td>May-19</td>
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<tr>
<td>Palomar Airport Rd. – SR 78 Express Lanes</td>
<td>$110</td>
<td>Future GMP</td>
<td>Late 2022</td>
<td>Late 2021</td>
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</table>

### CONSTRUCTION PROGRESS

Falsework Removal at the San Elijo Lagoon Highway Bridge
CONSTRUCTION PROGRESS

Install Fiber Optic Conduits – Preparing for the Next OS

CONSTRUCTION PROGRESS

Place Geo-Grid
CONSTRUCTION PROGRESS

Build Structural Section

CONSTRUCTION PROGRESS

Pave Asphalt and Place Rebar Cages
CONSTRUCTION PROGRESS

Opened First Half of Encinitas Blvd./Santa Fe Dr. Bike/Ped Improvements
San Elijo Lagoon Restoration

CONSTRUCTION PROGRESS

Paving and Traffic Switch

$208.5 M Current Budget
$122.3 M Expended

Contingency:
$9.8 M Base
$3.0 M Remaining

Schedule:
October 2020 Base
Fall 2021 Target

61% Work Complete
57% Time

SAN ELIJO LAGOON HIGHWAY BRIDGE

PROJECT HEALTH

Percent of Completion

Percent of Time

$208.5 M Current Budget
$122.3 M Expended

Contingency:
$9.8 M Base
$3.0 M Remaining

Schedule:
October 2020 Base
Fall 2021 Target
I-5 EXPRESS LANES (MANCHESTER TO PALOMAR)

**Progress:**
$256.0$ M Current Budget  
$50.4$ M Expended

**Contingency:**
$20.7$ M Base  
$3.8$ M Remaining

**Schedule:**
August 2021 Base  
August 2021 Target

PROJECT HEALTH

22% Work Complete  
21% Time

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SAN ELIJO LAGOON RESTORATION

**Progress:**
$104.7$ M Current Budget  
$69.0$ M Expended

**Contingency:**
$5.7$ M Base  
$8.5 - 10$ M Remaining

**Schedule:**
February 2021 Base  
July 2020 Target

PROJECT HEALTH

78% Work Complete  
45% Time
SAN ELIJO LAGOON DOUBLE TRACK

Progress:
$55.6 M Current Budget
$54.3 M Expended

Contingency:
$1.2 M Base
$1.5 M Remaining

Schedule:
June 2019 Base
May 2019 Completed

RISKS AND OPPORTUNITIES

Opportunities

<table>
<thead>
<tr>
<th>Type</th>
<th>Topic</th>
<th>Status</th>
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<tbody>
<tr>
<td>Cost &amp; Schedule</td>
<td>Eliminate Offshore Material Disposal from San Elijo Lagoon</td>
<td>✔</td>
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<tr>
<td>Cost &amp; Schedule</td>
<td>Advance STIP Funds for Express Lanes between Palomar Airport Road and SR 78 from FY 2022/2023 to 2020/2021</td>
<td>Ongoing</td>
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<tr>
<td>Program</td>
<td>HOV Lane Conversion to Express Lanes</td>
<td>Ongoing</td>
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<tr>
<td>Cost &amp; Schedule</td>
<td>Program SHOPP Funds for I-5 Operational Improvements at Palomar Airport Road</td>
<td>Ongoing</td>
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Risks

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<tbody>
<tr>
<td>Cost &amp; Schedule</td>
<td>Construct Remaining I-5 Bridge Foundations at the San Elijo Lagoon</td>
<td>Ongoing</td>
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<tr>
<td>Cost</td>
<td>Construction Escalation for Express Lanes between Palomar Airport Road and SR 78</td>
<td>Ongoing</td>
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</table>
**LATE 2019/EARLY 2020 MILESTONES**

October 2019  Begin planting in the San Elijo Lagoon

November 2019  Begin public outreach for I-5 traffic switch at San Elijo Lagoon Highway Bridge

January 2020  Shift all I-5 traffic to new outside bridges at the San Elijo Lagoon

January 2020  Complete I-5 median paving in Encinitas and Carlsbad, shift traffic to inside shoulder

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- Email us at BuildNCC@KeepSanDiegoMoving.com
- Call (844) NCC-0050
- Text BuildNCC to 313131 to receive construction alerts
- Follow us on Twitter @SDCaltrans
- Like us on Facebook SANDAGregion | CaltransDistrict11
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- Watch more at SANDAGregion | CaltransVideo