Matilija Dam Ecosystem Restoration Project

Camino Cielo Bridge Replacement

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October 1, 2020
Purpose of Camino Cielo Bridge Replacement

- To allow river restoration and provide fish passage.
- To convey flood and sediment flows.
Alternatives
Public Meeting – Held January 15, 2020

- Public Meeting held onsite (at local residence)
- Approximately 20 attendees, local residents and business owners
- Project need and alternatives presented
  - Alternative 2 (at existing alignment) overwhelmingly preferred
Alternative 2 – At Existing Alignment
Alternative 2 – At Existing Alignment

Looking north on Camino Cielo Road

Looking west on Camino Cielo Road
Alternative 2 – At Existing Alignment

Looking east on Camino Cielo Road

Roadway Elevation
Alternative 2 – At Existing Alignment

Looking south on Camino Cielo Rd at Conform

Looking upstream at Existing Bridge
Alternative 2 – At Existing Alignment
Alternative 2A – River Bridge

DEVELOPED ELEVATION

190' Bridge

TYPICAL SECTION
Alternative 2B – River Bridge
Alternative 2 – Direct Access Ramp Bridge
Alternative 2A – Road Layout
Alternative 2B – Road Layout
Alternative 2 – Retaining Wall

R/W
35’-100’
20’
LOL
EP
ETW
2’
10’
LOL
ETW
EP
10’
2’
3’
1:1
1.5” HMA TYPE B
9.5” CLASS 2 AB

RETAINING WALL

EXISTING CAMINO CIELO ROAD

ROCK SLOPE PROTECTION

CAMINO CIELO ROAD
"C-2A" LINE 504+31.19 TO 508+60.00
"C-2B" LINE 203+58.88 TO 210+88.00
NOT TO SCALE
Camino Cielo Bridge Construction Costs

<table>
<thead>
<tr>
<th>Item</th>
<th>Alt 2A Cost*</th>
<th>Alt 2B Cost*</th>
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</thead>
<tbody>
<tr>
<td>Roadwork</td>
<td>$2,910,000</td>
<td>$2,920,000</td>
</tr>
<tr>
<td>Retaining Walls</td>
<td>$4,780,000</td>
<td>$4,780,000</td>
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<tr>
<td>River and DAR Bridges</td>
<td>$8,360,000</td>
<td>$6,570,000</td>
</tr>
<tr>
<td>Total:</td>
<td>$16,050,000</td>
<td>$14,270,000</td>
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</tbody>
</table>

*Includes 25% Contingency. Cost in 2020 Dollars
Cost Saving Alternatives

• Conform road to existing as quickly as possible.
  • Existing road remains in floodplain and within 25 yr. storm
  • Retaining wall costs greatly reduced
  • Savings ~$3.0 M

• Eliminate DAR to Auric and leave existing road in place
  • Access will be via new road, then U-Turn back onto existing road
  • Savings ~$3.5 M
Cost Saving Alternatives

- Adjust DAR to connect to River Bridge further out in channel
  - DAR column further out in channel, adversely affecting hydraulics
  - Eliminates removal of rock outcropping
  - Savings ~$1.8 M

- Buy properties to eliminate need for DAR
  - Savings ~$3.7 M, minus acquisition costs

- Buy Epstein slope access to eliminate retaining wall (Alt 2A Only)
  - Wall currently needed to stay within existing ROW
  - Savings ~$1.3 M, minus acquisition costs
Questions?