4.17 SEGMENT 17 - HARKINS SLOUGH

Segment 17A
Length: 4.00 miles (21,140 LF) - Buena Vista Drive and San Andreas Road intersection to Lee Road - cost reflected in table on page 4-94 for planning purposes only.

Segment 17B
Length: 3.58 miles (18,920 LF) - Buena Vista Drive and San Andreas Road intersection to Lee Road and rail line intersection via San Andreas Road/West Beach Street/Segment 18A/Lee Road. Segment length does not include Segment 18A length. Segment 17B cost and distance not reflected in project summary table nor total project figures.

4.17.1 SEGMENT 17 BOUNDARY DETERMINATION

Segment 17A
The boundary is determined by the physical setting and the change in rail corridor character from the northern starting point at San Andreas Road down the coast to Harkins Slough, a primary branch of Watsonville Slough. This is the one (1) spot where the rail corridor diverts away from the coastal edge and heads inland as it continues down the coast to Watsonville.

Segment 17B
The boundary is determined by the intersection of the rail line at Buena Vista Drive and San Andreas Road and proceeding downcoast to West Beach Street via existing San Andreas Road on-street facilities and then northeast to the intersection of West Beach Street and Thurwacher Road. The down coast boundary is determined by connecting via Lee Road back to the Segment 18 Coastal Rail Trail.

4.17.2 SEGMENT 17 DESCRIPTION

Segment 17A
Starting from the intersection crossing at San Andreas Road and Buena Vista Drive, the proposed Coastal Rail Trail will parallel Gallighan Slough to its convergence with Harkins Slough, following the inland side of the rail tracks. The rail right-of-way width varies from forty-five- (45-) feet wide to one-hundred-and-forty-eight- (148-) feet wide as it continues along the steep slope just down the coast from mile marker 7 to mile marker 4.5 at the Harkins Slough trestle. The Segment 17 stretch will require retaining walls to create a bench for the trail tread. This segment is heavily wooded with several smaller rail trestle bridge crossings over small drainages and sloping ravines.

The proposed Coastal Rail Trail will follow the inland rail right-of-way along several agricultural fields, a mineral quarry, and wooded slopes as it descends towards the Gallighan Slough-Harkins Slough wetland area. The alignment will require several preengineered bridges and culverts to cross several of the drainages along the steep slopes. Harkins Slough is the largest freshwater slough in California’s Central Coast region, and the four-hundred- (400-) foot crossing of the slough may require a boardwalk bridge structure adjacent to the rail line to...
reach down the coastal side of the slough. A possible interim alignment will divert the trail from the rail line at Gallighan Slough to an on-road alignment at Rountree Lane, Harkins Slough Road, and Lee Road, and will reconnect with the rail at the Lee Road junction. (This alignment was not evaluated or identified in this Master Plan.) The trail will require fencing along the agricultural operations and there is one (1) private, agricultural, dirt road, non-signalized rail crossing west of Lee Road. This segment connects with four (4) activity centers identified in Table 3.1.

Segment 17A proposed improvements include:

- 4.0 miles (21,140 LF) multi-use paved path (Class I) along the inland rail right-of-way
- Seven (7) rail bridge/culvert crossings of varying lengths
- One (1) private farm road crossing (one-half [1/2] mile west of Lee Road)
- One (1) private road crossing at Buena Vista Drive and one (1) additional private crossing
- This segment also includes fencing for agricultural operations and safety; additional fencing may be considered when project is implemented

Segment 17B

Starting from the intersection crossing at Buena Vista Drive and San Andreas Road, the project would utilize the existing San Andreas Road on-street network to provide connectivity to West Beach Street, then northeast to the intersection of West Beach Street and Thurwacker Road (southwest terminus of Coastal Trail segment 18A). San Andreas Road serves as the Pacific Coast Bicycle Route and connects down coast via West Beach Street and Thurwacker Road to Monterey County.

The Segment 17B alignment will utilize Coastal Trail segment 18A along West Beach Street to reach the intersection of West Beach Street and Lee Road. Segment 17B will continue from this intersection north along Lee Road back to the Rail Trail at the Segment 18 up coast terminus. This portion of Segment 17B will require development of on-street facilities.

Segment 17B proposed improvements include:

- 3.31 miles (17,490 LF) - Improvements to existing bicycle lane (Class II) facilities along San Andreas Road to West Beach Street
- 0.13 miles (680 LF) - Improvements to existing bicycle lane (Class II) facilities along West Beach Street to Thurwacker Road
- 0.14 miles (750 LF) - Development of bicycle lane (Class II) facilities along Lee Road to the Rail Trail Segment 18 up coast terminus

Note: Segment 17B improvements are not costed out on page 4-94 nor is the mileage reflected in the total project mileage. Segment 17A improvements are costed out for planning purposes only and are not to indicate an alignment preference.

For Segment 17 there shall be established a joint planning and implementation task force to make recommendations to the RTC and any other implementing agency prior to any trail design, development, or construction activities for this segment. The task force shall consider alternative trail alignments, including those identified in the Final Environmental Impact Report, for Segment 17 and recommend a final alignment. Membership on the task force shall include representation from adjacent property owners recommended by the County Farm Bureau, representation from the disabled community as recommended by the Commission on Disabilities, and representation from the bicycle community.
TABLE 4.17 Segment 17 - Harkins Slough

<table>
<thead>
<tr>
<th>Segment Length</th>
<th>4.00 miles (21,140 LF) - Harkins Slough</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail Trail Portion</td>
<td>4.00 miles (21,140 LF)</td>
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<tr>
<td>Coastal Trail Portion</td>
<td>0.0 miles (0 LF)</td>
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<tr>
<td>Segment Cost</td>
<td>$19,961,888</td>
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### Rail Trail Components

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paved Multi-Use Path</td>
<td>21,140</td>
<td>Linear Feet</td>
<td>Varies</td>
</tr>
<tr>
<td>Amenities (Fencing, Benches, Signage, Etc.)</td>
<td>1</td>
<td>Lump Sum</td>
<td>Varies</td>
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<tr>
<td>Bridge Structures</td>
<td>7</td>
<td>Each</td>
<td>Varies</td>
</tr>
<tr>
<td>At-Grade Crossings (Rail Tracks or Streets)</td>
<td>3</td>
<td>Each</td>
<td>Varies</td>
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**Rail Trail Construction SUBTOTAL** $12,476,180

### Coastal Trail Components

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paved Multi-Use Path</td>
<td>0</td>
<td>Linear Feet</td>
<td>Varies</td>
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<tr>
<td>Unpaved Trail</td>
<td>0</td>
<td>Linear Feet</td>
<td>Varies</td>
</tr>
<tr>
<td>On Street Facilities (Class II, III, and Sidewalks)</td>
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<td>Linear Feet</td>
<td>Varies</td>
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</table>

**Coastal Trail Construction SUBTOTAL** $0

### COST SUMMARY

<table>
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<tr>
<th>Description</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Construction TOTAL</td>
<td>$12,476,180</td>
</tr>
<tr>
<td>Design, Engineering, and PS&amp;E (Plans, Specifications, and Estimates) (15%)</td>
<td>$1,871,427</td>
</tr>
<tr>
<td>Environmental Permitting (10%)</td>
<td>$1,247,618</td>
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<tr>
<td>Construction Management (15%)</td>
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<td>Contingency (20%)</td>
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**SEGMENT TOTAL COST** $19,961,888

### Segment Features

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<tr>
<th>Description</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>Segment Jurisdictional Area</td>
<td>RTC - Rail ROW Owner, City of Watsonville, California Dept. of Fish and Wildlife (CDFW)</td>
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<tr>
<td>Rail Bridge Crossing (Wood Trestle)</td>
<td>Various bridges along segment</td>
</tr>
<tr>
<td>Major Drainage</td>
<td>Watsonville Slough</td>
</tr>
<tr>
<td>Minor Drainage</td>
<td>Various drainages along segment</td>
</tr>
</tbody>
</table>

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Rail Trail portion costed for planning purposes only and not to imply priority over other possible alignments.
Figure I-2 Segment 17 (A and B) proposed trail alignment (continued)

SEGMENT 17 ONLY

LEGEND

- Highlight - Segment 17A Alignment
- Highlight - Segment 17B Alignment

NOTE: No Alignment Preference is Indicated or Implied

Multi-Use Rail Trail Facilities
- Existing Paved
- Proposed Paved (Coastal Side of Tracks)
- Proposed Paved (Inland Side of Tracks)

Multi-Use Coastal Trail Facilities
- Previously Defined MBSST Core Alignment On-Street
- Existing Paved Off-Street (Class II)
- Proposed Paved Off-Street Multi-Use Path (Class II)
- Existing On-Street (Class II, Class III and/or Sidewalks)
- Proposed On-Street (Class II, Class III and/or Sidewalks)
- Existing Un-Paved Trail
- Proposed Un-Paved Trail
- Proposed Un-Paved Side Trail and Pacific Coast Bike Route (PCBR)

Alignment Symbols
- Alignement ID
- Segment Begin/End Point
- Alignment Connection Point
- Alignment Terminus Point
- Trail Bridge
- At Grade Crossing
- Crossing of Railroad Tracks
- Existing RR Bridge Crossing

Geographic Features
- Assessor Parcels
- Parcels with Recorded Access
- Protected Public Areas in Fee Streams
- School Location
- Transportation Features
- Public Parking
- Bus Stop
- Hwy 1 Bridge Crossing
- Santa Cruz Branch Rail Line Mile Posts

Existing Corridor Amenities
- Connection to Existing Trail Campground
- Public Restroom
- Barrier Free Facilities
- Overlook/Interpretive Sign
- Coastal Access
- Connection to Inland Trail Systems

SOURCE AND REFERENCE DATA

1) Base data from Santa Cruz County GIS.
2) Aerial photo from MAP – 2018.
3) Existing bike path and rail trail data from the SCCRTC.
4) Protected Areas data from the Bay Area Protected Areas Database (BPAD) – 2011.
5) Parcels with recorded access (provided/proTECTED public access) data from the California Coastal Commission.
6) National Elevation Dataset (NED) – 10 meter elevation grid point resolution.
Figure I-3  Segment 17 (A and B) proposed trail alignment (continued)
Figure I-5 Segment 17A trail section