Status Update:
Diablo Road Trail

CIP Project C-055
September 12, 2018
Diablo Road Trail

A long-term vision to close a bicycle and pedestrian trail gap
Diablo Road Trail

A long-term vision to close a bicycle and pedestrian trail gap
Danville Bicycle & Trail Network: 1989
Danville Bicycle & Trail Network: 2018
Danville Bicycle & Trail Network: 2018

Trail Gap
Diablo Road Trail: Conceptual Alignment
Diablo Road Trail: Conceptual Alignment
Magee Property: Development Requirements
Magee Property: Conceptual Trail Alignment

Questions about the Trail:

1. Funding (Is it a real project?)
2. Features (Would it be paved?)
3. Feasibility (Can it be built?)
4. Alternative (What about bike lanes?)
Magee Property: Conceptual Trail Alignment

Questions about the Trail:

1. Funding *(Is it a real project?)*
   - **Answer:** Yes

2. Features *(Would it be paved?)*
   - **Answer:** Yes

3. Feasibility *(Can it be built?)*
   - **Answer:** Yes

4. Alternative *(What about bike lanes?)*
   - **Answer:** Analysis completed
Feasibility Analysis

Assessment of Options:
1. Road Crossings
2. Drainage Crossings
3. Hill Alignments

Estimate of Costs
Roadway Crossing Options

**ROAD CROSSING SUMMARY**

<table>
<thead>
<tr>
<th></th>
<th>Private Driveway</th>
<th>Fairway Drive West</th>
<th>Fairway Drive East</th>
<th>Calle Arroyo</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td>900'</td>
<td>400'</td>
<td>300'</td>
<td>450'</td>
</tr>
<tr>
<td><strong>Potential Impacts</strong></td>
<td>Minimal</td>
<td>Minimal</td>
<td>Minimal</td>
<td>Minimal</td>
</tr>
<tr>
<td><strong>Roadway Visibility</strong></td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Adequate</td>
</tr>
<tr>
<td><strong>Trail Amenities</strong></td>
<td>Yes, limited</td>
<td>Yes, limited</td>
<td>Yes, limited</td>
<td>No</td>
</tr>
<tr>
<td><strong>Cost Estimate</strong></td>
<td>$120,000 - $140,000</td>
<td>$80,000 - $100,000</td>
<td>$80,000 - $100,000</td>
<td>$90,000 - $110,000</td>
</tr>
</tbody>
</table>
Drainage Crossing Options

<table>
<thead>
<tr>
<th>Drainage Crossing</th>
<th>Summary</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bridge Length</strong></td>
<td>Prefabricated 10' wide bridge</td>
<td>75'</td>
<td>75'</td>
<td>75'</td>
<td>85'</td>
</tr>
<tr>
<td><strong>Potential Impacts</strong></td>
<td>Tree removal, stream &amp; habitat intrusion</td>
<td>Minimal</td>
<td>Minimal</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Street Access</strong></td>
<td>Connection to street crossings</td>
<td>Fairway Dr (west)</td>
<td>Clydesdale Dr &amp; Fairway Dr (west)</td>
<td>Fairway Dr (east)</td>
<td>Calle Arroyo</td>
</tr>
<tr>
<td><strong>Cost Estimate</strong></td>
<td>Cost estimate for drainage crossing only</td>
<td>$500,000 - $700,000</td>
<td>$250,000 - $350,000</td>
<td>$600,000 - $800,000</td>
<td>$600,000 - $800,000</td>
</tr>
</tbody>
</table>
Hill Alignment Options
Diablo Road Trail: Feasibility Study Summary
Analysis: Diablo Road Widening for Bike Lanes

Project Limits: Diablo Road, Green Valley Road to Mt. Diablo Scenic
Distance: 1.35 miles

In-House Assessment:
1. Road configuration (What would it look like)
2. Potential Impacts (Environmental and fiscal)
Analysis: Diablo Road Widening for Bike Lanes

42-Foot Roadway Cross Section provides for:

- Two 12-foot travel lanes
- Two 5-foot bike lanes
- Two (2-ft and 3-ft) shoulders
- One 3-foot drainage swale

Lane and shoulder widths consistent with current AASHTO standards
"As the gateway to Mount Diablo State Park, Diablo Road itself is an important scenic corridor ... [and] retains the character of a country road. The Town strongly supports retention of this character and protection of the views and vista from the road."

- Danville 2030 General Plan
Analysis: Diablo Road Widening for Bike Lanes (cont’d)

Environmental Impact include

• Removal of 341 Oak trees
• Grading of 61,000+ cubic yards of soil
• Constructing ~5,450 linear feet of retaining walls, ranging from 3-17 feet high
• Realigning Green Valley Creek
• Relocating 47 utility poles and all fire hydrants
• Temporary one-lane travel on Diablo Road during 18-24 month construction period
## Analysis: Diablo Road Widening for Bike Lanes

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Design</strong></td>
<td></td>
</tr>
<tr>
<td>Engineering, surveys, geotechnical services, environmental permits</td>
<td>$8,100,000</td>
</tr>
<tr>
<td><strong>Site Preparation</strong></td>
<td>$23,758,000</td>
</tr>
<tr>
<td>• Site mobilization and traffic control:</td>
<td>$7,000,000</td>
</tr>
<tr>
<td>• Tree removal (341 Oak trees):</td>
<td>$1,705,000</td>
</tr>
<tr>
<td>• Removal of fences, road rail, retaining walls, drainage systems, etc.</td>
<td>$1,863,000</td>
</tr>
<tr>
<td>• Clearing and grubbing:</td>
<td>$3,500,000</td>
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<tr>
<td>• Utility relocation (47 poles; all fire hydrants):</td>
<td>$6,500,000</td>
</tr>
<tr>
<td>• Culvert crossing and creek realignment:</td>
<td>$2,950,000</td>
</tr>
<tr>
<td>• Miscellaneous administrative:</td>
<td>$240,000</td>
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<tr>
<td><strong>Construction</strong></td>
<td>$15,751,074</td>
</tr>
<tr>
<td><strong>Contingency (15%)</strong></td>
<td>$7,141,361</td>
</tr>
<tr>
<td><strong>Estimated Total (Design &amp; Construction):</strong></td>
<td>$54,750,435</td>
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</table>

Comparison: I-680 Auxiliary Lanes, Segment 2 = Approx. $34 million
Diablo Road Trail (CIP Project C-055)

Recommendation

- Accept informational status update
- Provide conceptual feedback

Questions?