



STATE ROUTE 174 SAFETY IMPROVEMENT PROJECT



District





- ❖ Scenic
- ❖ Rural
- ❖ Historically rich
- ❖ Relaxing



STATE ROUTE 174 SAFETY IMPROVEMENT PROJECT



District





Mission

Provide a safe,
sustainable, integrated
and efficient
transportation system to
enhance California's
economy and livability

❖ The Problem

- Collision History

❖ Solutions

- A more forgiving roadway

❖ Impacts and Benefits

❖ What's Next

- Collaboration with Caltrans and the public



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The Problem

Collision History 2010-2013

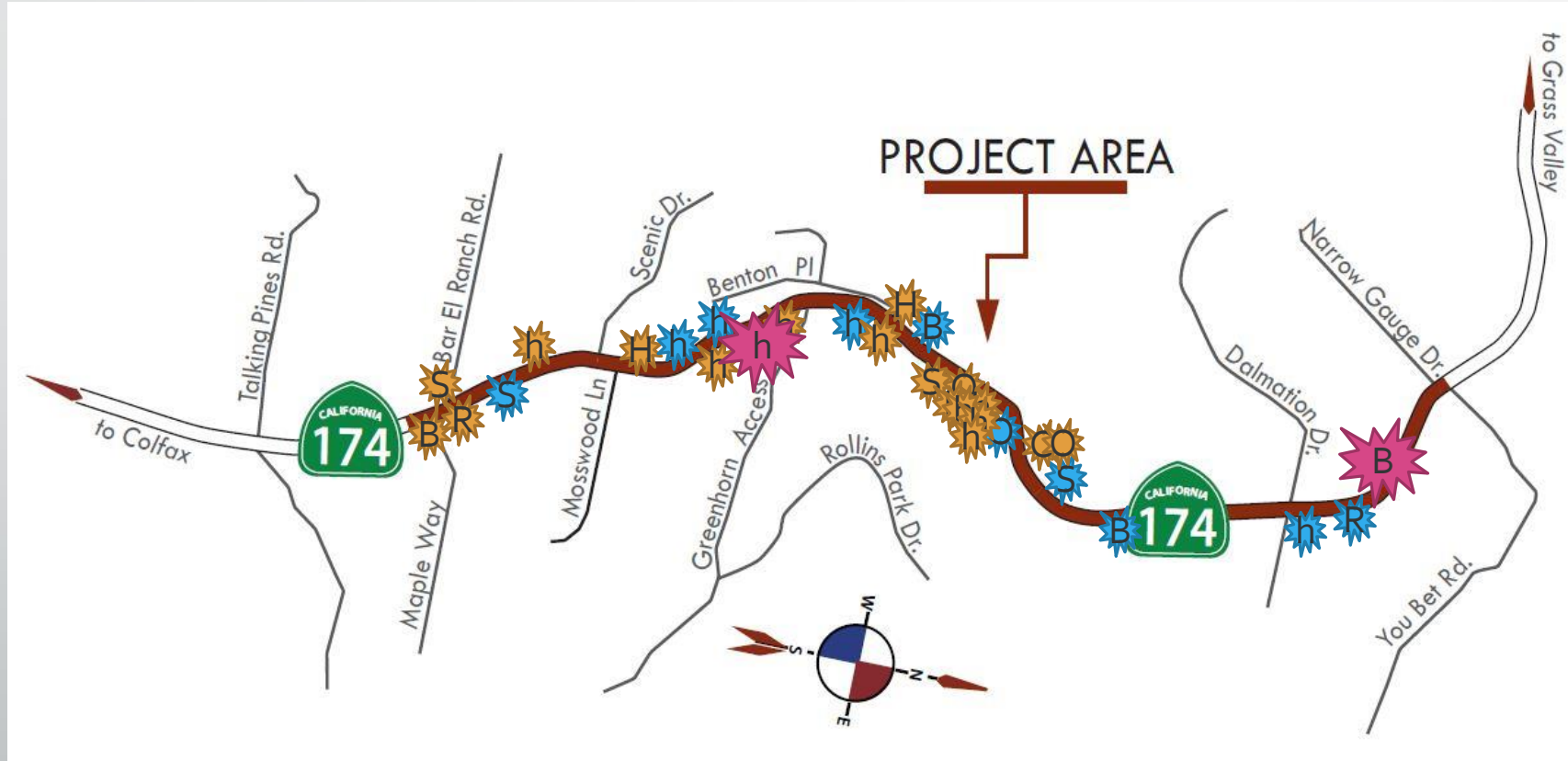
This segment of SR 174 is experiencing a pattern of run off road collisions where drivers are losing control and leaving the roadway, where they strike a fixed object such as a tree or embankment. - Caltrans District 3, Approved Project Report, September 6, 2016

Property Damage Only

Injury

Fatality

h - Hit Object - 14
B - Broadside - 4
O - Overturn - 4
S - Sideswipe - 4
H - Head On - 2
R - Rear End - 2



STATE ROUTE 174 SAFETY IMPROVEMENT PROJECT



The Problem

Collision History 2010-2013

This segment of SR 174 is experiencing a pattern of run off road collisions where drivers are losing control and leaving the roadway, where they strike a fixed object such as a tree or embankment. - Caltrans District 3, Approved Project Report, September 6, 2016

	SR 174	Statewide Average	
Total Collision Rate	2.02	1.22	1.7 times Statewide Average
Fatal Collision Rate	0.135	0.024	5.6 times Statewide Average
Fatal + Injury Collision Rate	1.35	0.56	2.4 times Statewide Average

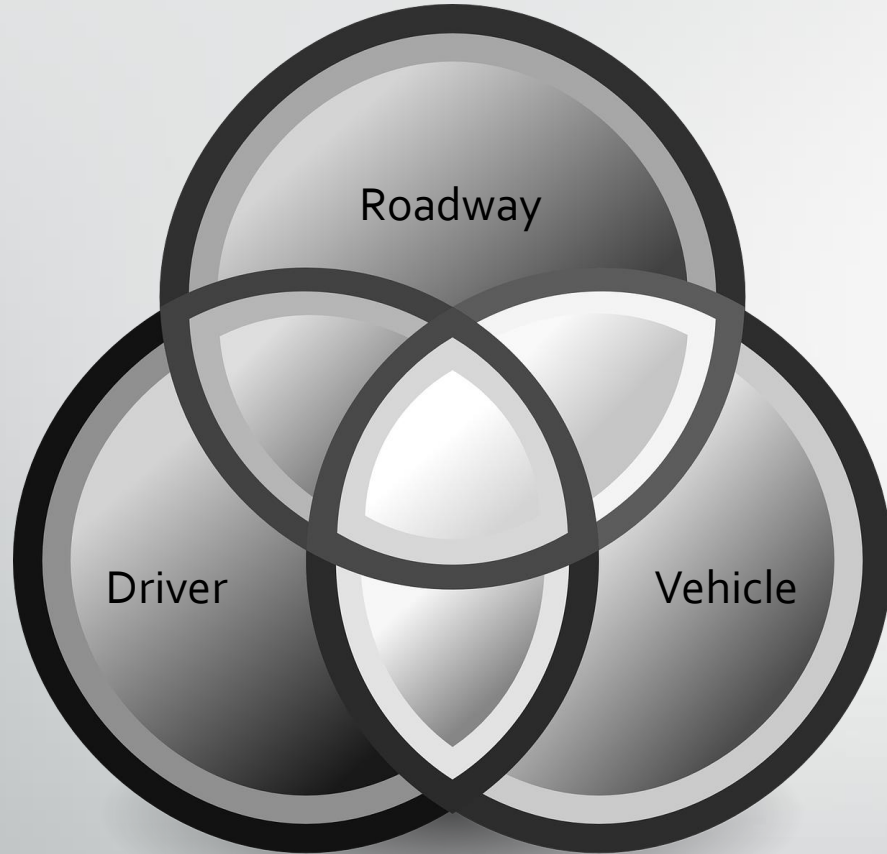


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The Problem

Collision History



Caltrans can only control one factor of a collision, the roadway.

This project provides proven counter measures to reduce the severity and the numbers of collisions.



STATE ROUTE 174 SAFETY IMPROVEMENT PROJECT



The Problem

Collision History

Caltrans is dedicated to making all of our roads and highways safer.

Per 23 U.S. Code § 148, every state is required to have a Highway Safety Improvement Program.

Caltrans constructs
all documented safety projects;
reducing collisions, injuries, and deaths on our roadways.



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Solutions

Caltrans Highway Design Manual - Full Standard Solution

- ❖ Standard Horizontal Curves
- ❖ Standard Vertical Curves
- ❖ 4:1 slopes
- ❖ 55 MPH
- ❖ 20' Clear Recovery Zone
(includes 8' shoulders)
- ❖ 12' lanes
- ❖ 8' shoulders

Highway 174 - Adaptive Solution

- ❖ Adaptive Horizontal Curves
- ❖ Adaptive Vertical Curves
- ❖ 2:1 slopes
- ❖ 45 MPH
- ❖ Up to 20' Clear Recovery Zone
(includes 8' shoulders)
- ❖ 12' lanes
- ❖ 8' shoulders



STATE ROUTE 174 SAFETY IMPROVEMENT PROJECT



Caltrans Highway Design Manual Solution

Highway 174 Adaptive Solution



STATE ROUTE 174 SAFETY IMPROVEMENT PROJECT

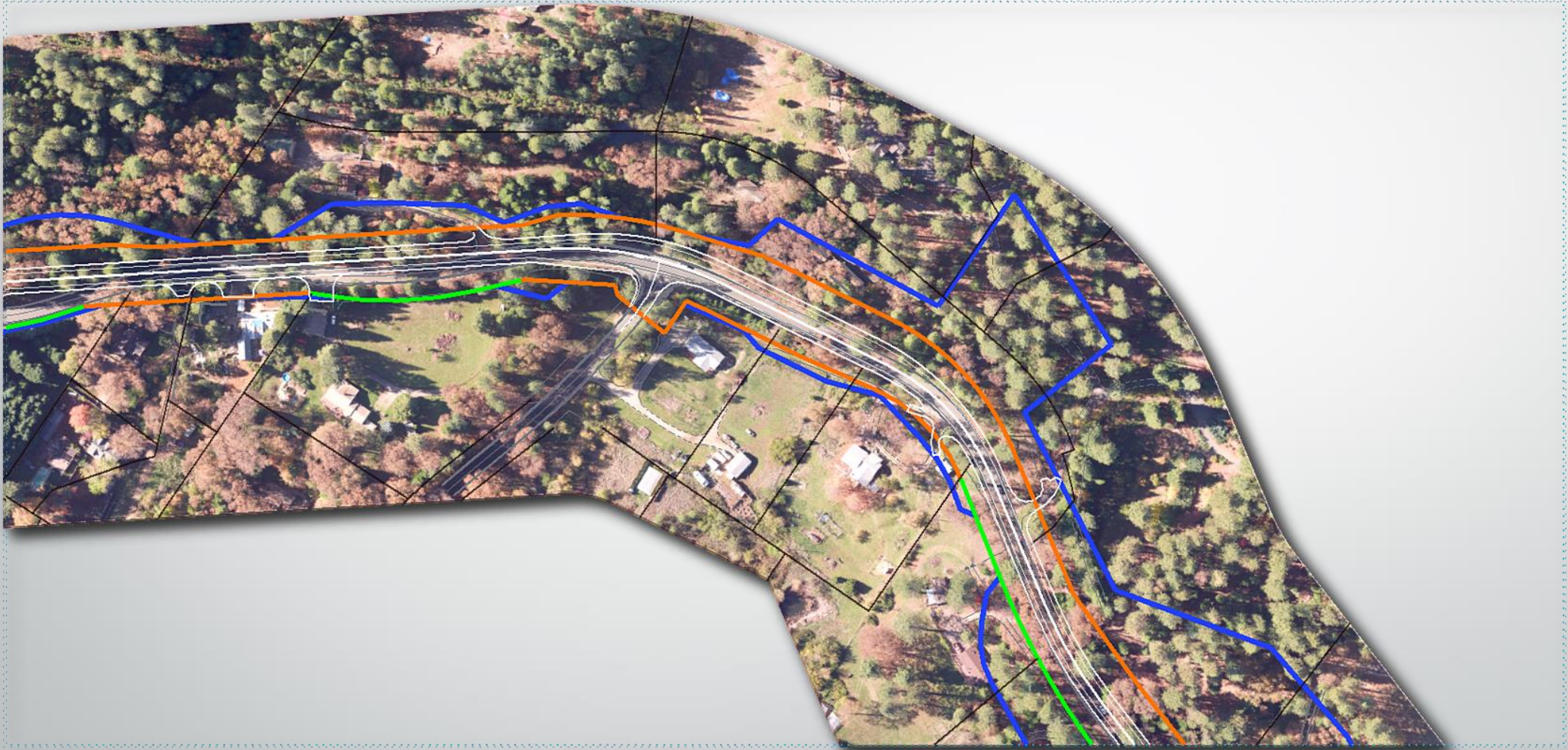


District

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Caltrans Highway Design Manual Solution

Highway 174 Adaptive Solution



STATE ROUTE 174 SAFETY IMPROVEMENT PROJECT

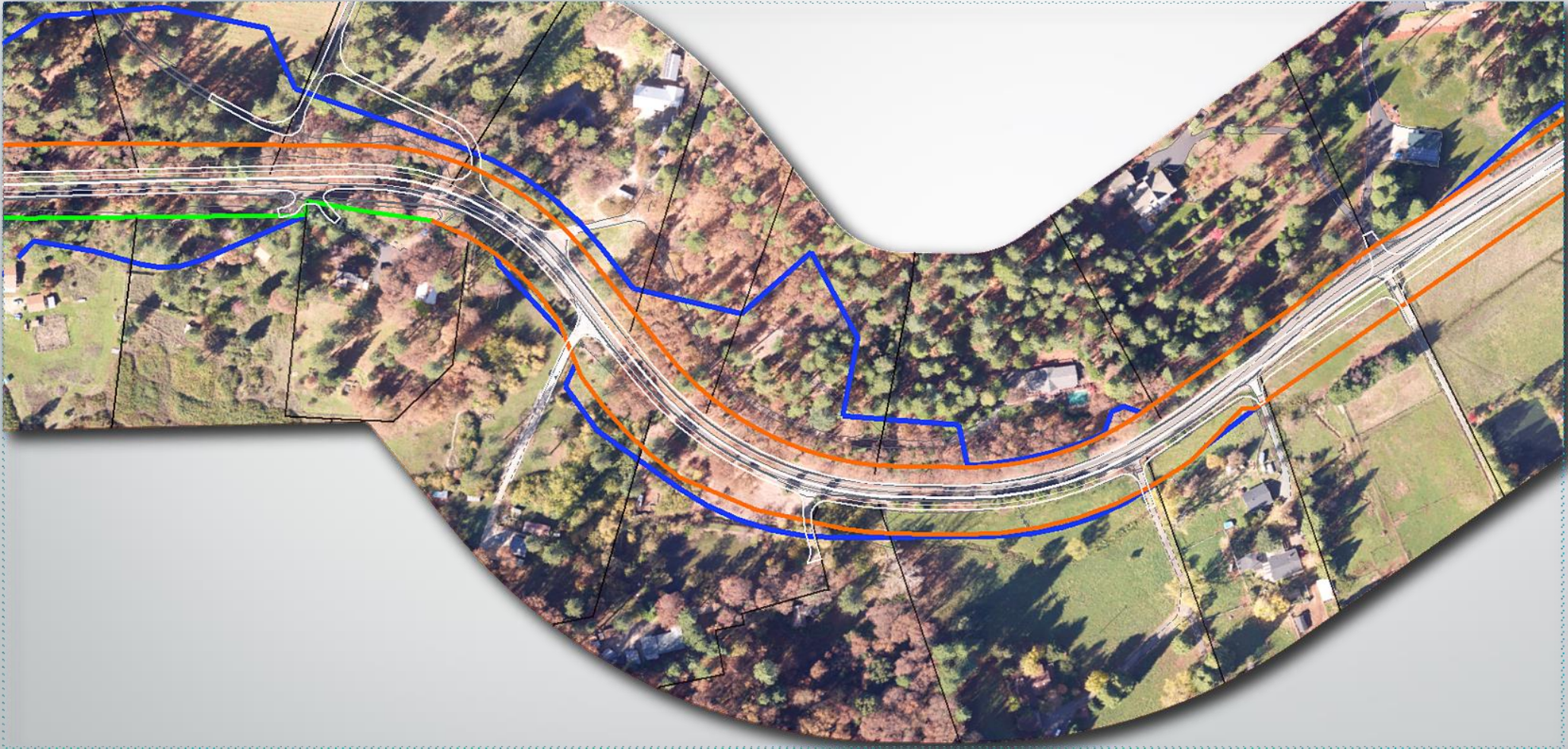


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Caltrans Highway Design Manual Solution

Highway 174 Adaptive Solution

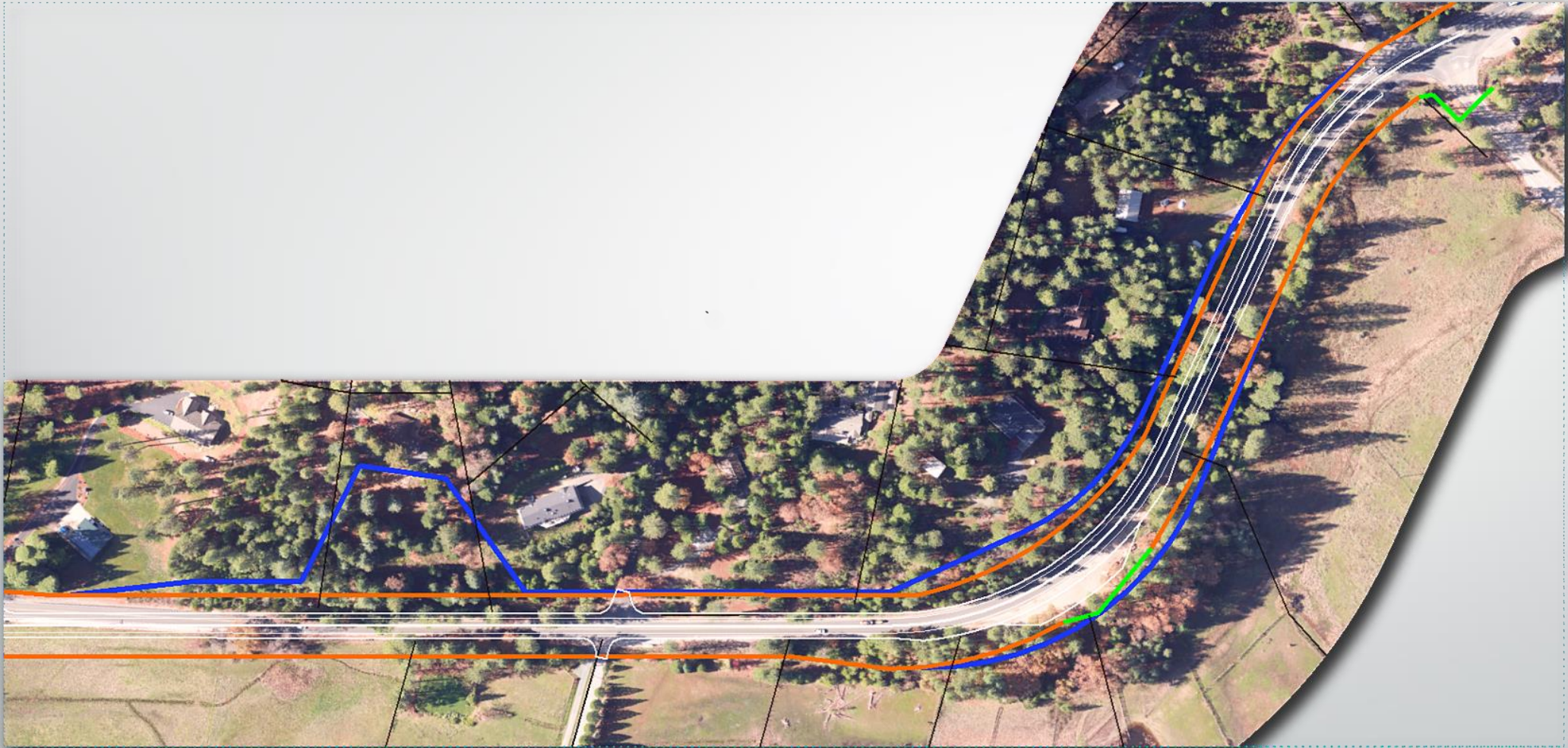


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Caltrans Highway Design Manual Solution

Highway 174 Adaptive Solution

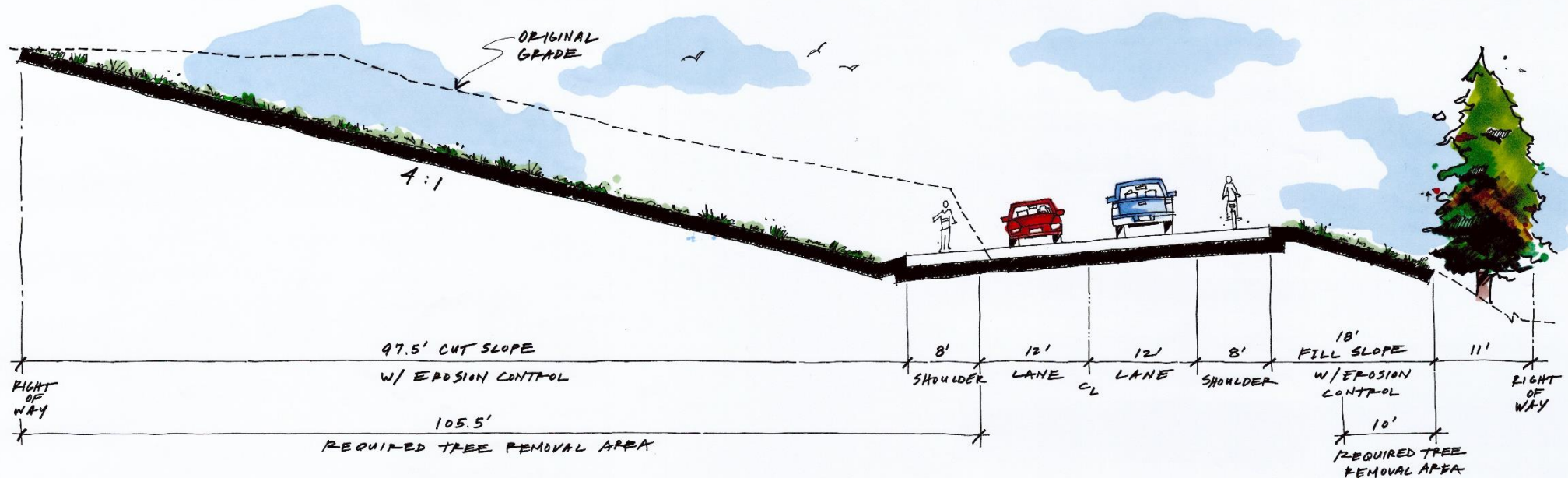


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Impacts and Benefits

Caltrans Highway Design Manual - Full Standard Solution

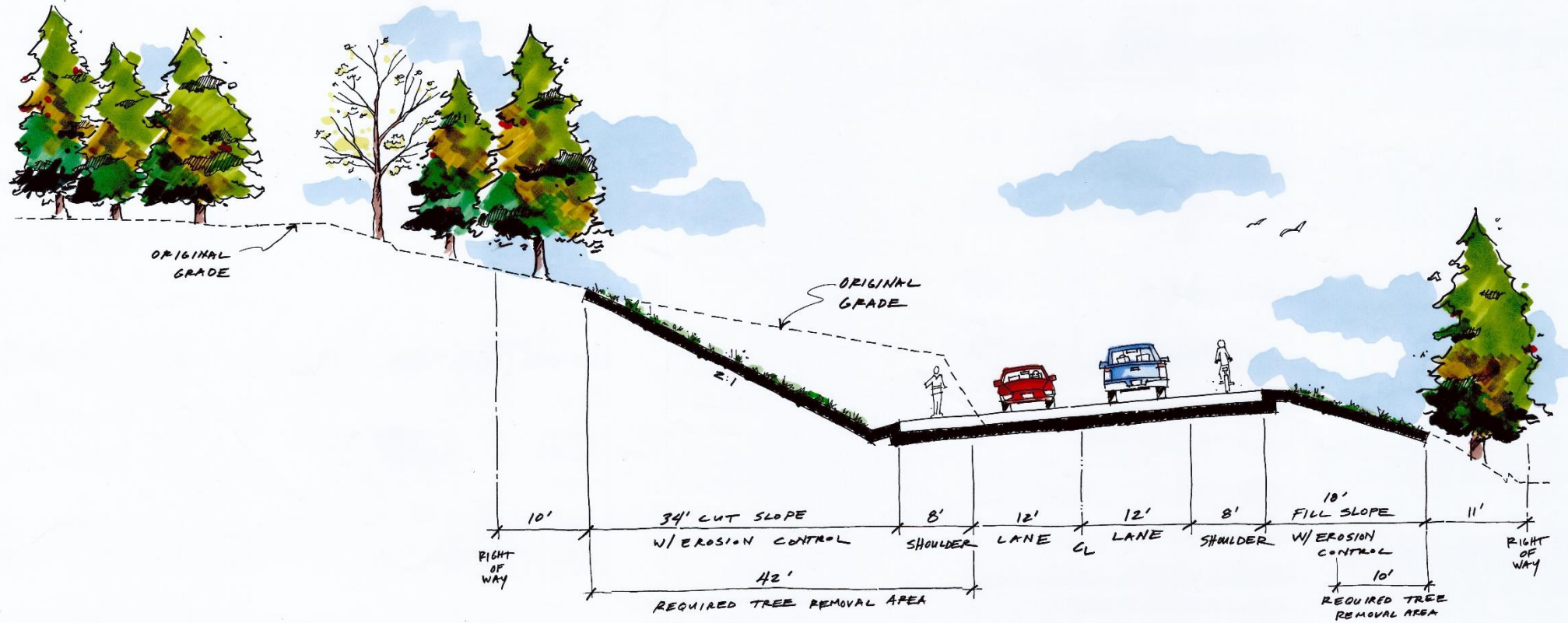


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Impacts and Benefits

174 Highway - Adaptive Solution



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Impacts and Benefits

PROJECT IMPACTS

- ❖ Right of Way acquisition affects 49 parcels
- ❖ Approximately 1,700 trees removed
- ❖ Utility relocations



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Impacts and Benefits

PROJECT BENEFITS - [What does 8ft shoulders and a 20ft CRZ get you?](#)

- ❖ Pedestrian and bicyclist friendly
- ❖ More room for recovery for an errant vehicle
- ❖ More room off the roadway to avoid drunk drivers, distracted drivers, speeding drivers, etc.
- ❖ More space for emergency vehicles including enforcement vehicles
- ❖ More space for other vehicles including mail carriers, garbage trucks, disabled vehicles and school busses
- ❖ Increased visibility around curves
- ❖ Fewer collisions, less property damaged
- ❖ More importantly...

SAVED LIVES



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Impacts and Benefits



Current



Adaptive



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What's Next

- ❖ Public input during the design
- ❖ Begin meeting with affected property owners
- ❖ Construction to begin Summer 2019



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