

Bicycle Capital Improvement Program Project Update

December 5, 2017

Teresa Lopes, Senior Project Engineer

James Winslow, Senior Project Engineer



Outline

- ▶ Overview
- ▶ Project list...
 - Purpose and Need
 - Budgets
 - Timeframe
- ▶ Question and answer



CIP

- ▶ 57 Projects
- ▶ Bicycle Projects only
 - 9 projects; ~\$11 million
- ▶ Other Bike and Pedestrian Improvements
 - 15 projects
- ▶ Future grant funding

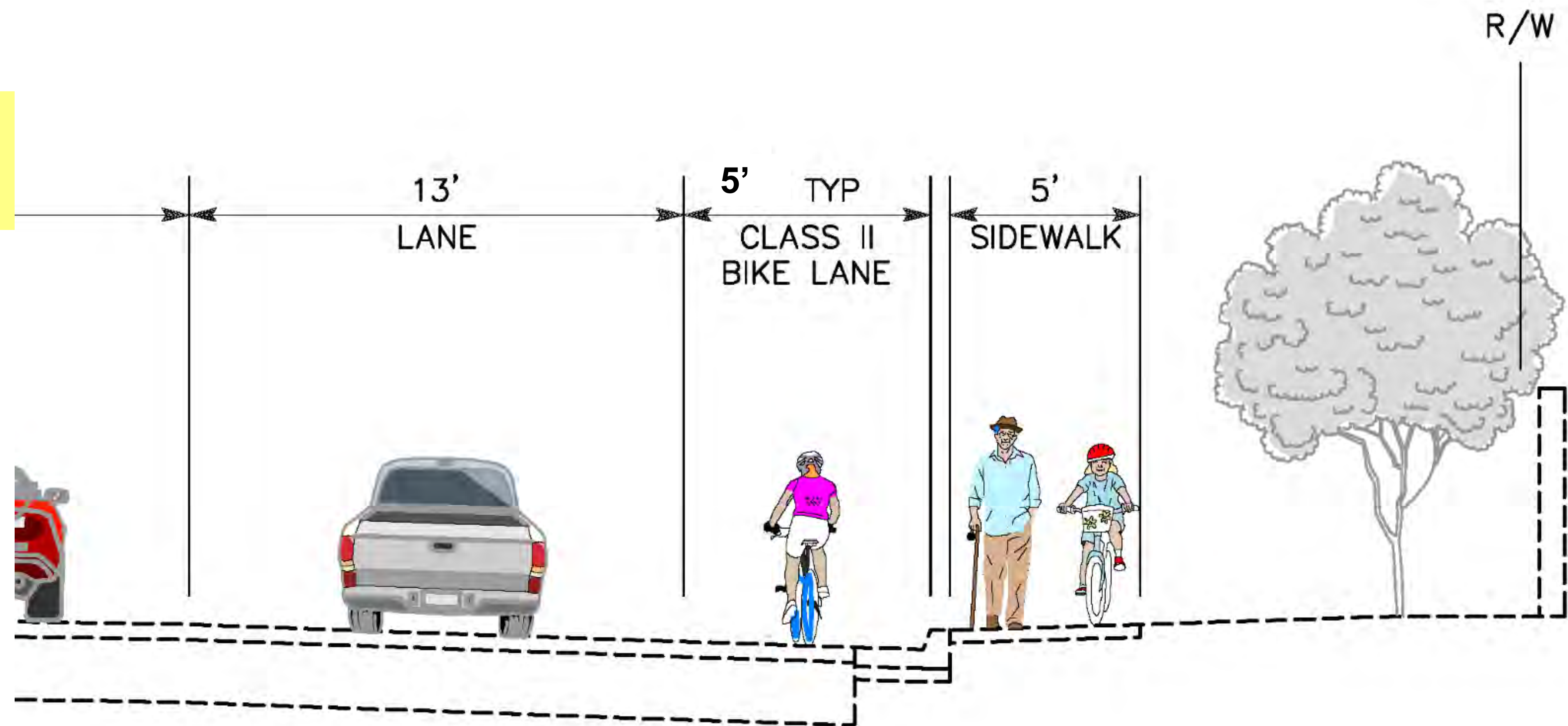
Hollister Class 1 Bike Path/Multi-Use Path

Hollister Class 1 Bike Path / Multi-Use Path

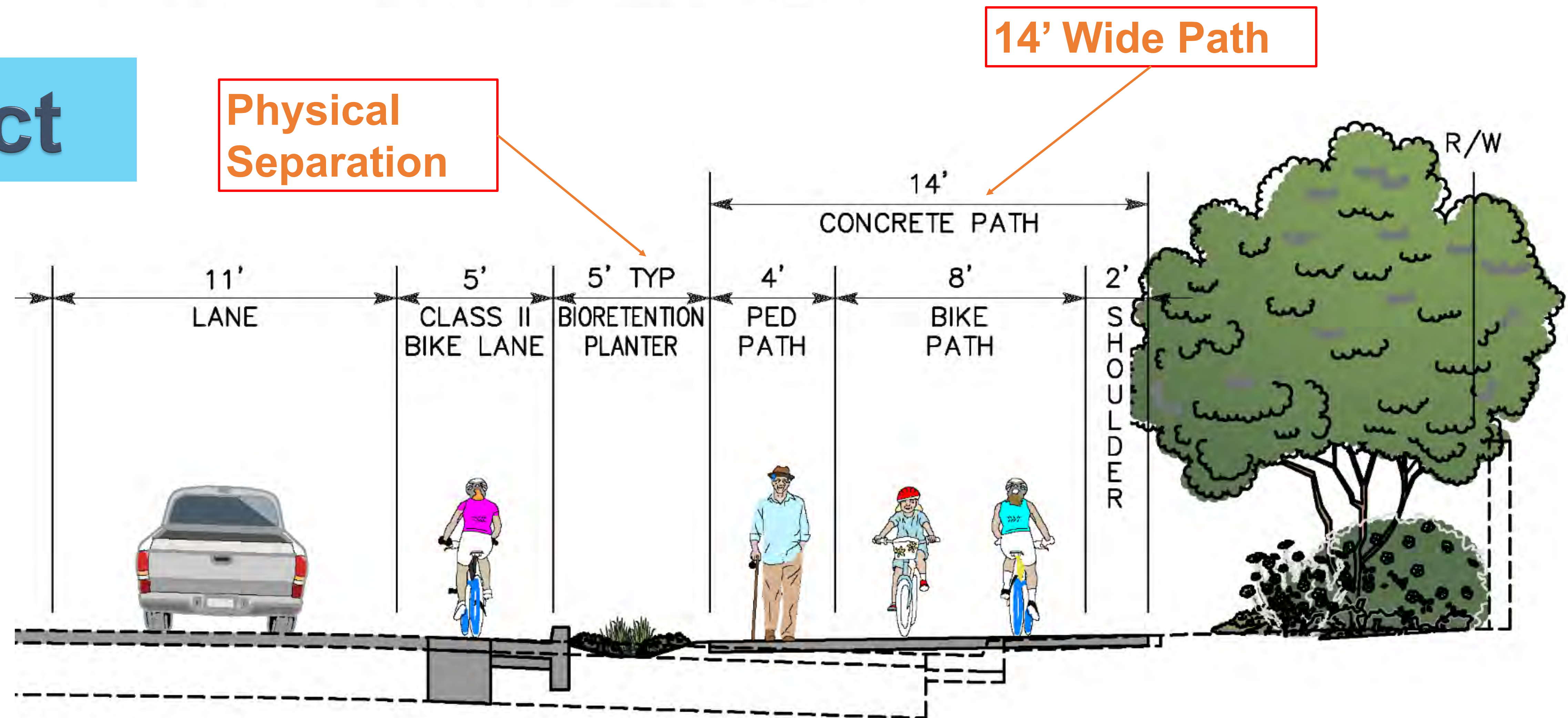
- ▶ Purpose and Need
- ▶ Budget
- ▶ Timeframe



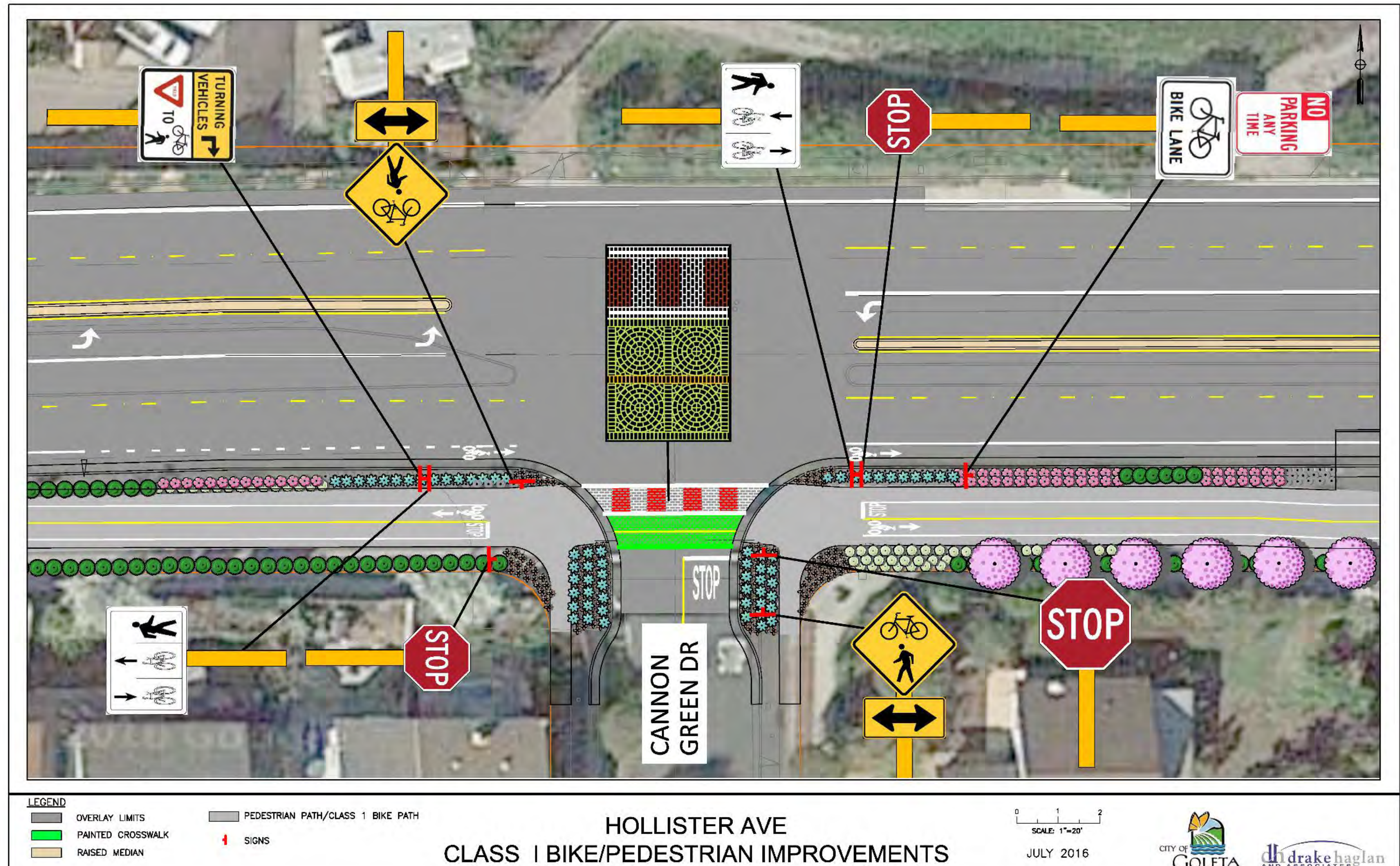
Existing



Project



Typical Crossing Pavement Markings and Signing



BEFORE



AFTER





BEFORE

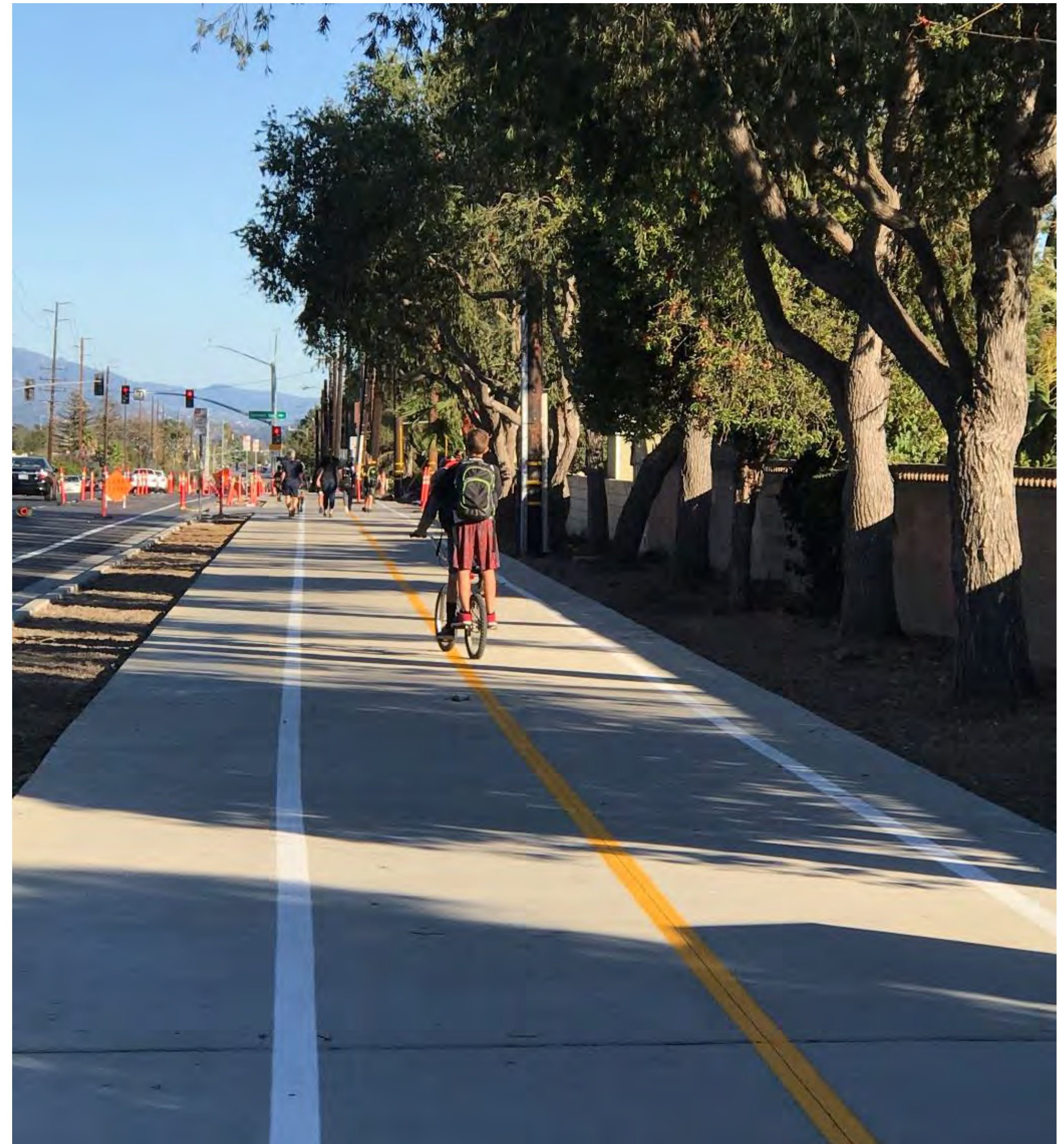
AFTER



BEFORE



AFTER



Ward Drive Class 2 Bike Lanes

Ward Drive Class 2 Bike Lane

- ▶ Purpose and Need
- ▶ Budget
- ▶ Timeframe





BEFORE



AFTER



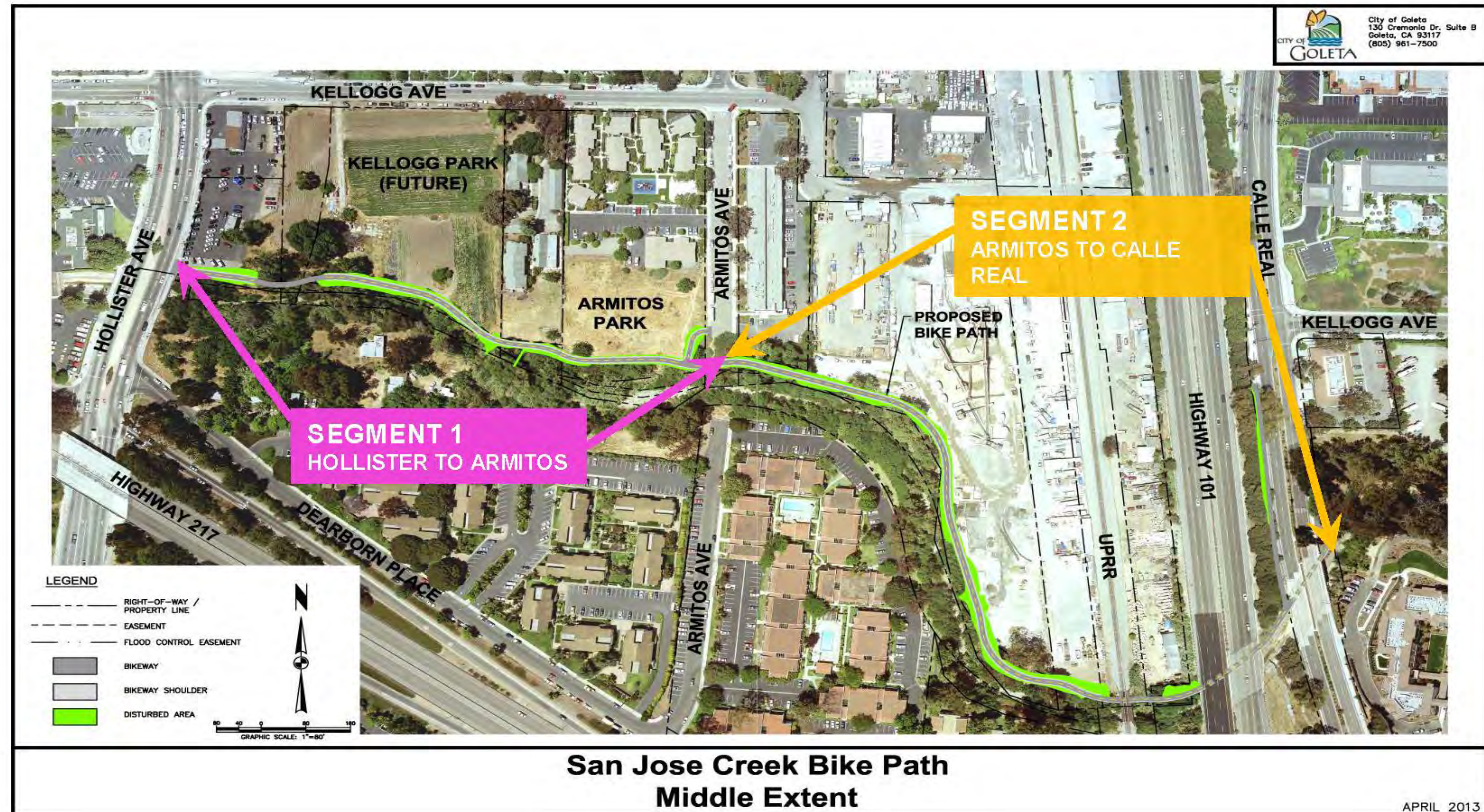
AFTER



AFTER

San Jose Creek Bike Path Middle Extent

San Jose Creek Class I Bike Path – Middle Extent Project Location Map

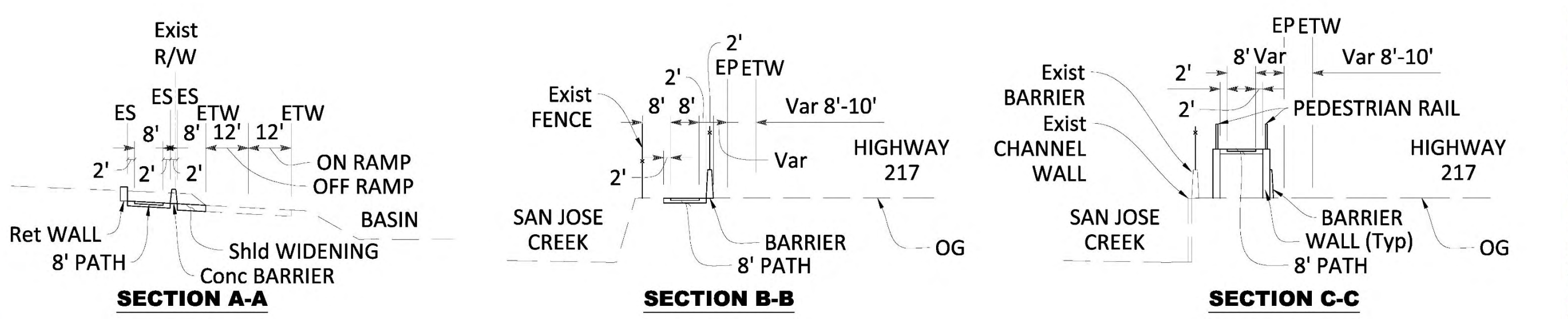
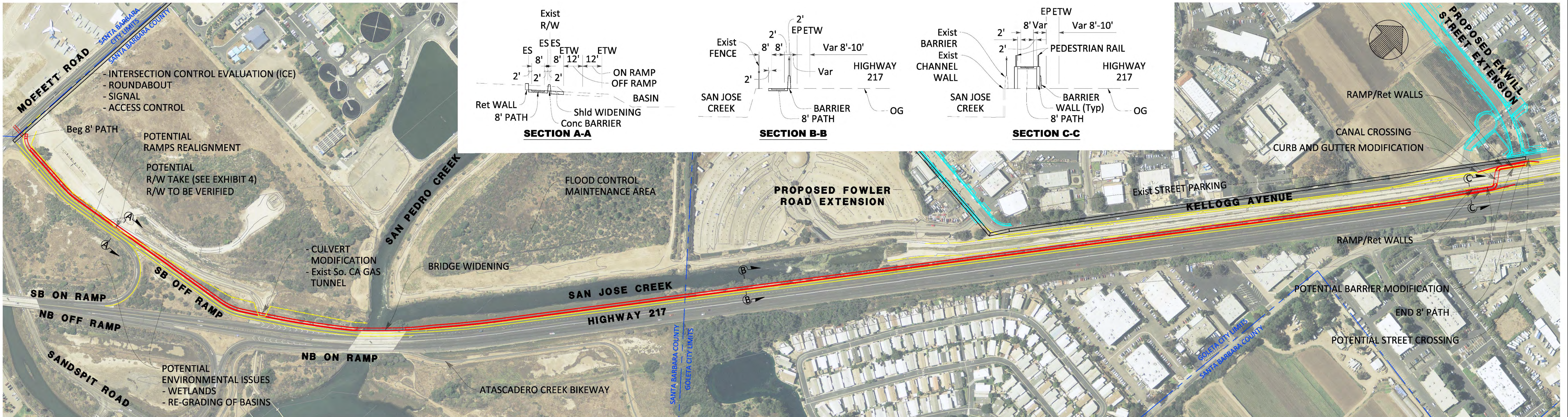


San Jose Creek Bike Path Southern Extent

San Jose Creek Bike Path Southern Extent

- ▶ Purpose and Need
- ▶ Budget
- ▶ Timeframe

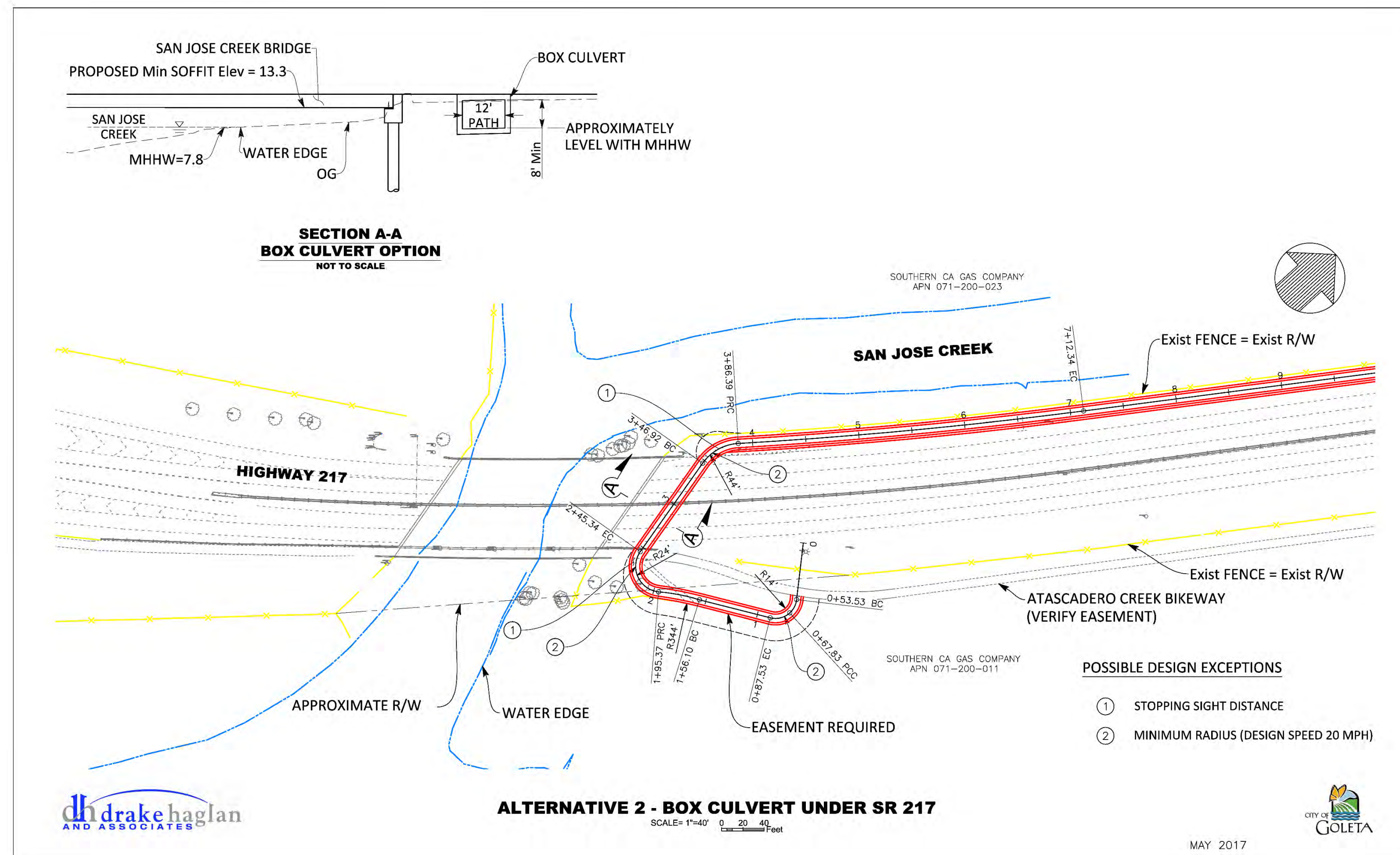




ALTERNATIVE 1 - MOFFETT ROAD TO PROPOSED EKWILL STREET EXTENSION

SCALE= 1"=200' 0 100 200 Feet

MAY 2017



ALTERNATIVE 2 - BOX CULVERT UNDER SR 217

SCALE= 1"=40' 0 20 40 Feet

MAY 2017



Cathedral Oaks Class 1 Bike Path

Cathedral Oaks Road Class 1 Bike Path -
Project Limits Map

Cathedral Oaks Road
Proposed Class 1 Bike Path
Alignment

Existing Class 1 Bike Path -
Cathedral Oaks Road by
Dos Pueblos High School



Cathedral Oaks Class 1 Bike Path

- ▶ Purpose and Need
- ▶ Budget
- ▶ Timeframe





101 Overcrossing

101 Overcrossing

- ▶ Purpose and Need
- ▶ Budget
- ▶ Timeframe





BRANDON
DR

SAN ROSSANO DR

ELLWOOD STATION RD

BAKER LANE

CALLE
REAL

CALLE REAL

HIGHWAY 101

ALT A6

UNION PACIFIC
RAILROAD

ALT A4

ALT A7

HOLLISTER AVE

ENTRANCE
RD

ELLWOOD
STATION RD

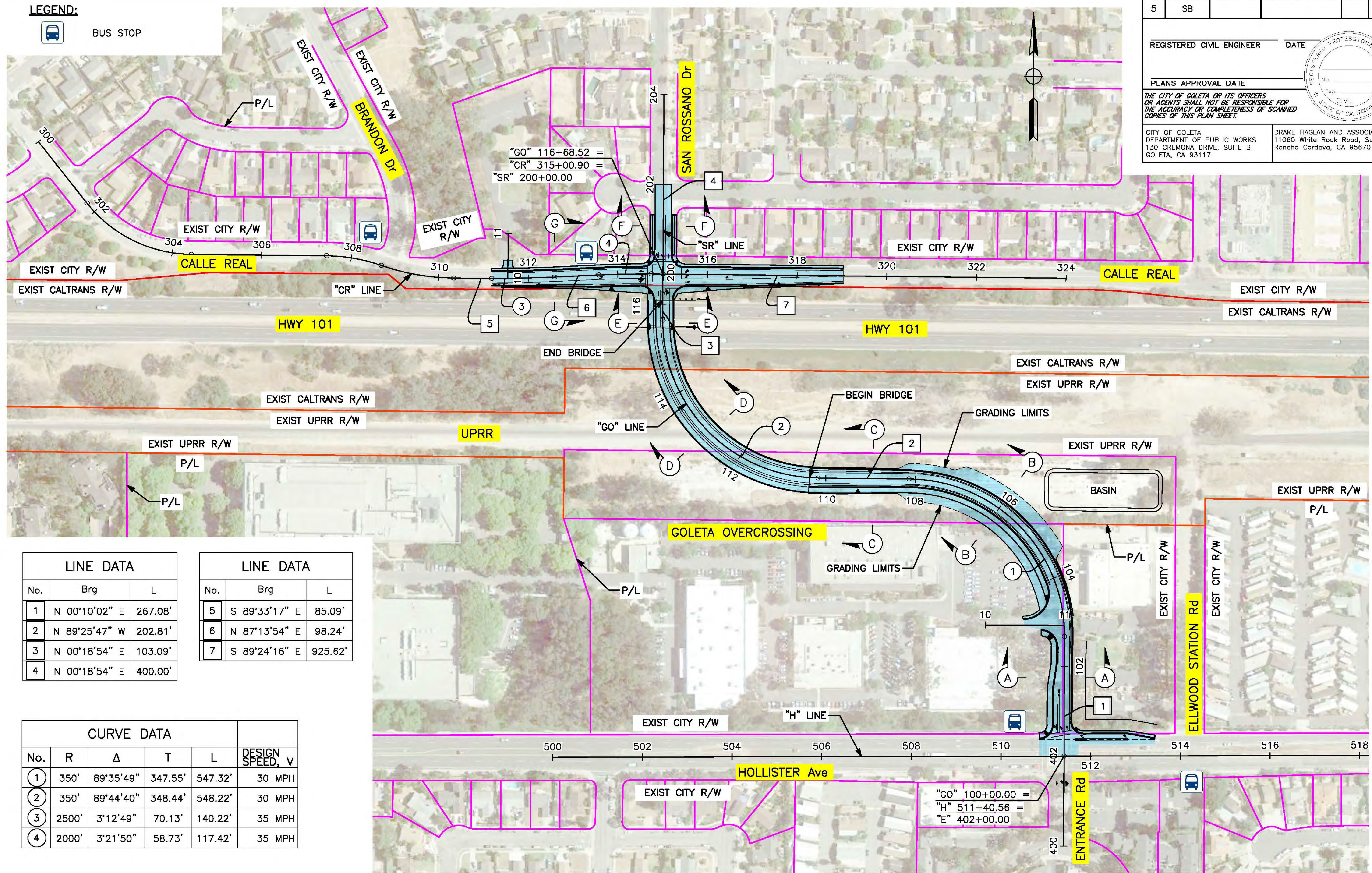


U:\7026 - Goleta 101 Overcrossing\400 Project Design Files\20 Roadway & Civil\Plans\Alt A6\GO-R-LA6.dwg, 10/31/2017 5:30 PM, C. SALILICAN III, JOSE SILVA, CITY OF GOLETA - DEPARTMENT OF PUBLIC WORKS

LEGEND:
BUS STOP

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
5	SB				

REGISTERED CIVIL ENGINEER
DATE
PLANS APPROVAL DATE
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130 CREMONA DRIVE, SUITE B
GOLETA, CA 93117
DRAKE HAGLAN AND ASSOCIATES
11060 White Rock Road, Suite 200
Rancho Cordova, CA 95670



LINE DATA		
No.	Brg	L
1	N 00°10'02" E	267.08'
2	N 89°25'47" W	202.81'
3	N 00°18'54" E	103.09'
4	N 00°18'54" E	400.00'

LINE DATA		
No.	Brg	L
5	S 89°33'17" E	85.09'
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7	S 89°24'16" E	925.62'

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No.	R	Δ	T	L	DESIGN SPEED, V
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4	2000'	3°21'50"	58.73'	117.42'	35 MPH

NEW GOLETA 101 OVERCROSSING
ALTERNATIVE A6

LAYOUT
SCALE: 1"=100'

Fairview Overcrossing Class 1 Bike Path

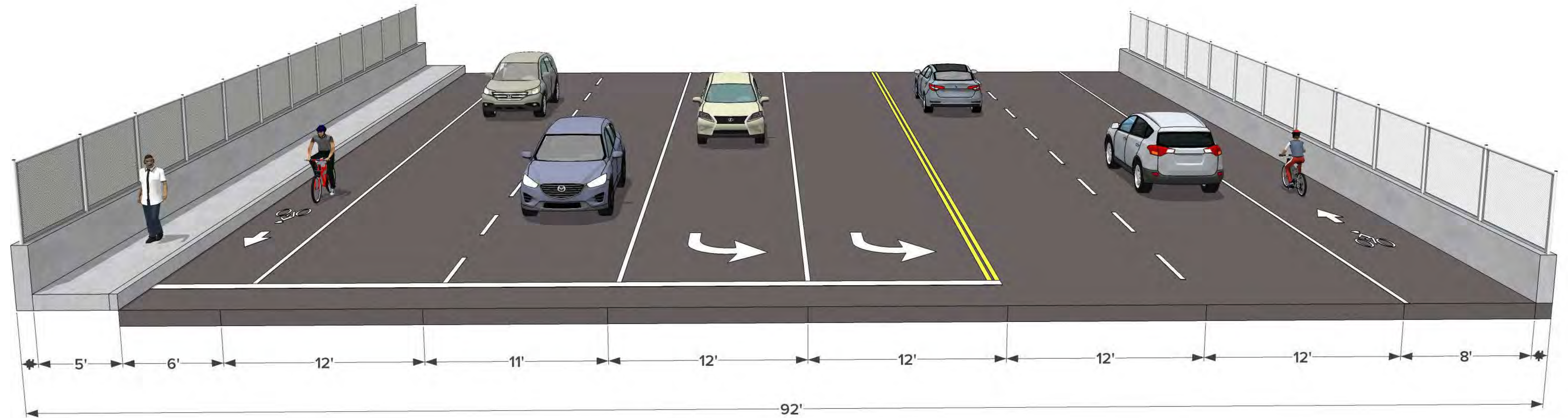
Fairview Class 1

- ▶ Purpose and Need
- ▶ Budget
- ▶ Timeframe

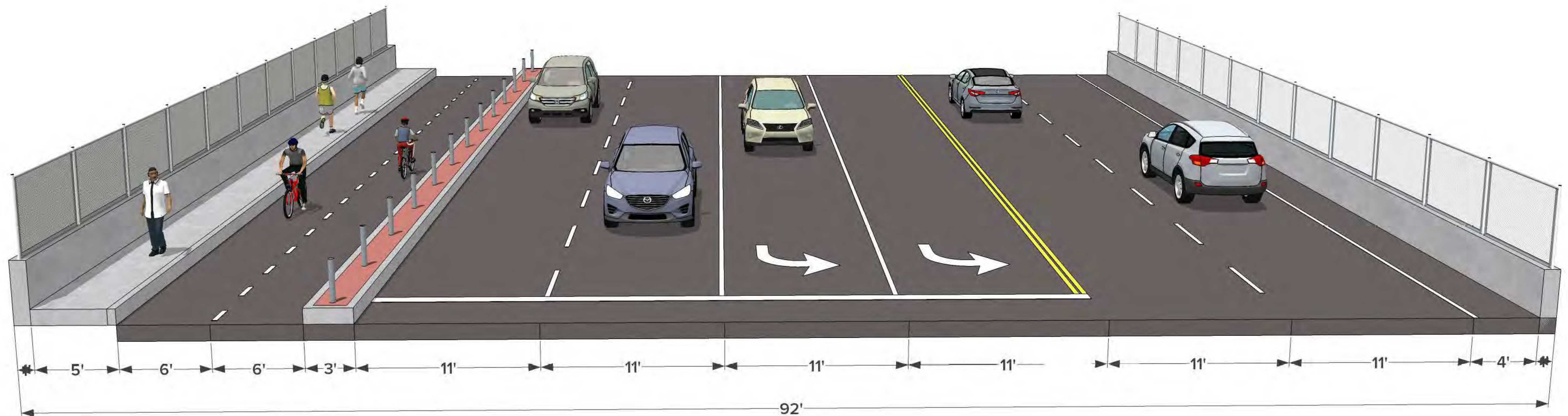


FAIRVIEW AVE / 101 OVERPASS POTENTIAL IMPROVEMENTS CONCEPT
Entire Corridor Concept





Existing Conditions



Proposed Layout

Recommendations and Next Steps

- ▶ Planning Commission (65401)
- ▶ New project & budget
- ▶ Submit joint ATP grant application

Coordination



Storke Road Evaluation

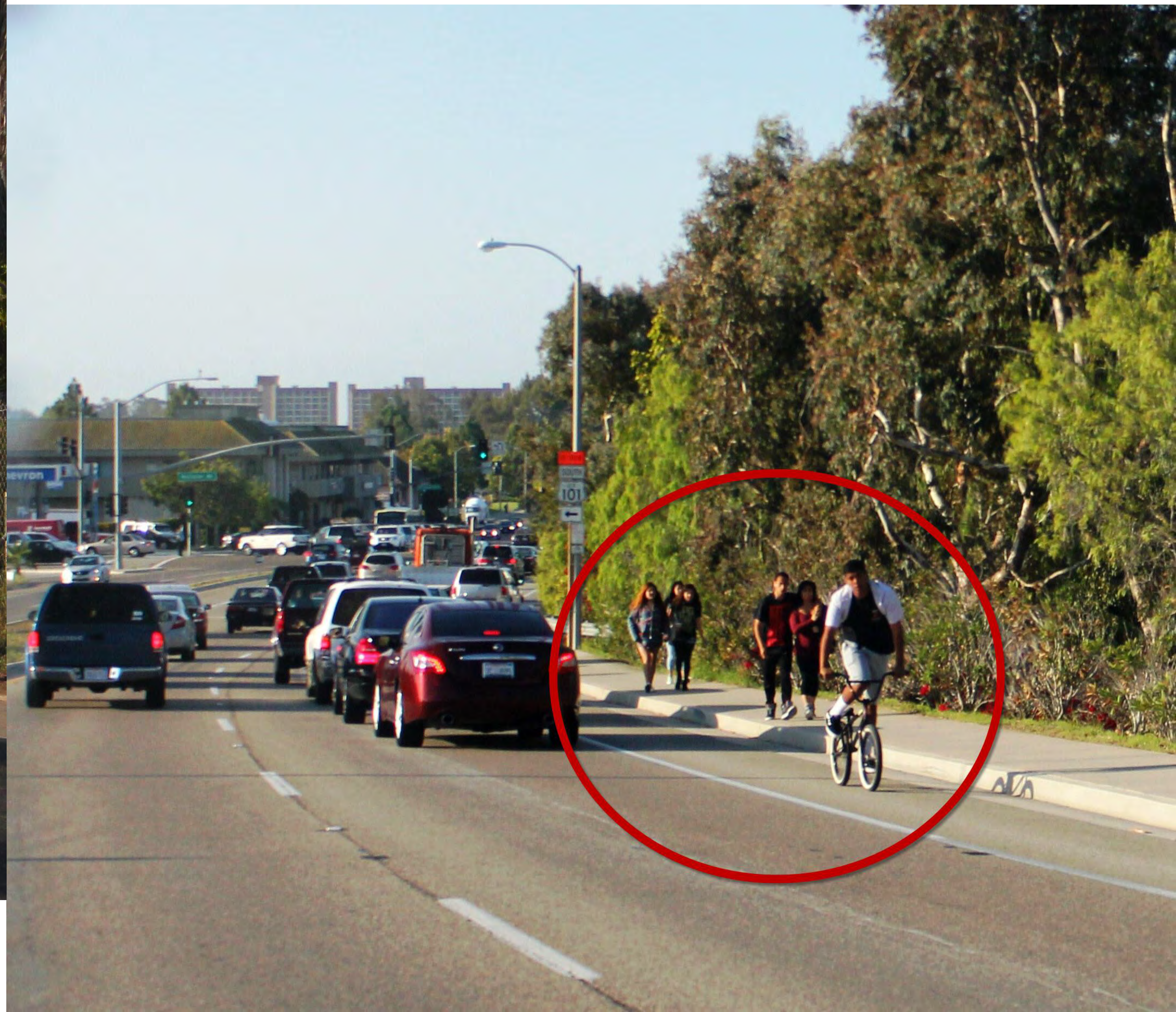
Storke Road Bicycle and
Pedestrian Feasibility
Study Area



Storke Road Evaluation

- ▶ Purpose and Need
- ▶ Budget
- ▶ Timeframe









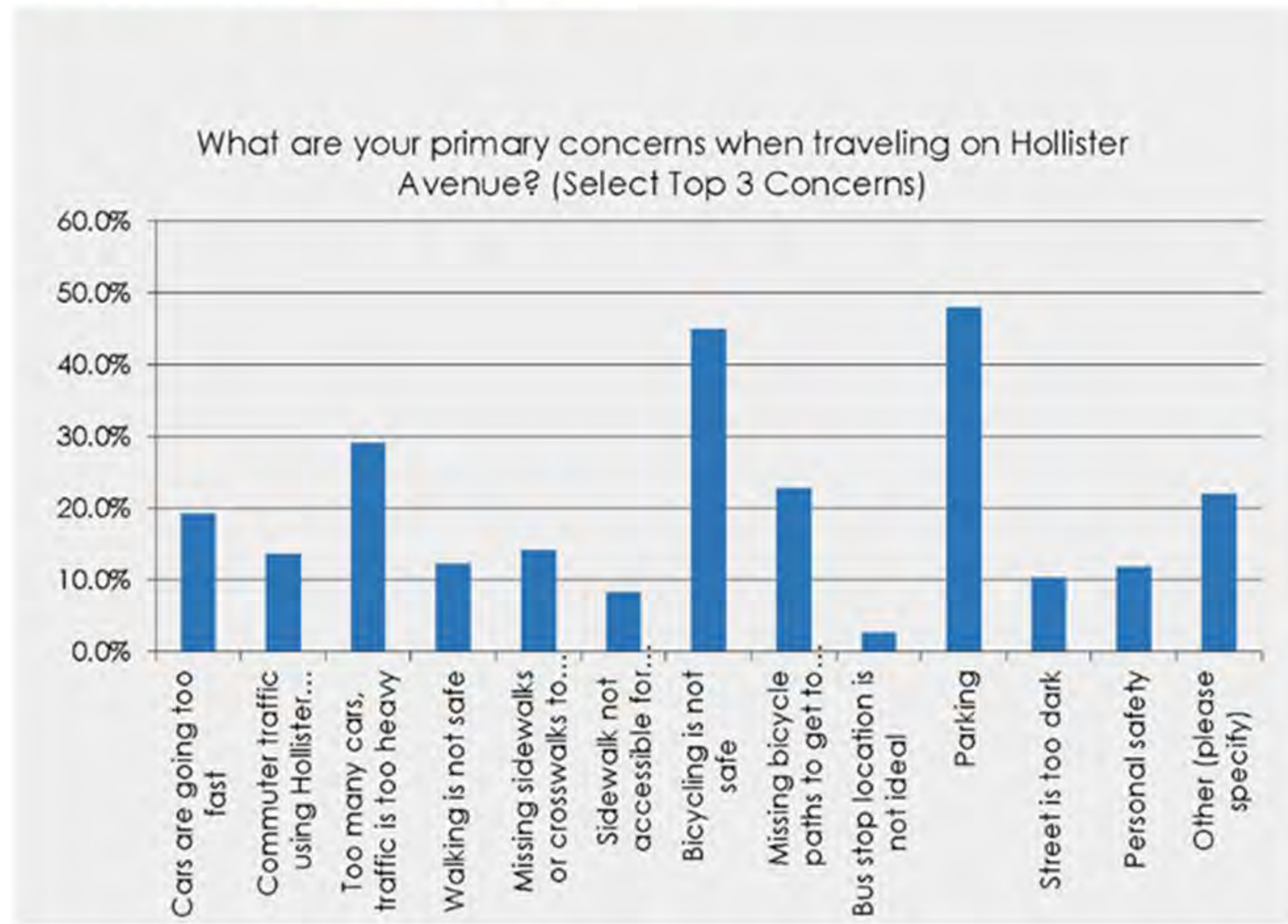
HOLLISTER COMPLETE STREETS

Hollister Complete Streets Corridor Plan

Hollister Complete Streets Corridor Plan

- ▶ Purpose and Need
- ▶ Budget
- ▶ Timeframe

Figure 5.3 Online Survey Question 5 – Areas of Concerns



Goals and Objectives

- ▶ Make Hollister Ave through Old Town Safer for all travel modes and for all users
- ▶ Provide safe and convenient multi-modal connections to residents, employees and visitors
- ▶ Improve the quality of life in Old Town by making Hollister Avenue appealing to walk, bike, drive, shop and dine.
- ▶ Maximize Community Engagement
- ▶ Community preferred alternative to achieve vision of the project

Challenges and Issues

- ▶ Balancing Needed/Desired Improvements in a Constrained Corridor
- ▶ Address potential impacts of the plan to adjacent arterials and Hwy 101
- ▶ Coordination and Consistency with other ongoing projects in the Old Town area

Past and Current Phase of the Project

- ▶ Inventory Existing Facilities, Programs and Conditions – Complete
- ▶ Outreach to date:
 - Community Workshop – April 13, 2017
 - Walking and Biking Tour of Old Town – May 6, 2017
 - Stakeholder Meeting No. 1 – July 27, 2017
 - Consultant Coordination Meeting – August 2017
 - Stakeholder Meeting No. 2 – October 25, 2017
 - City Open House – November 2, 2017
- ▶ Identify Issues – Complete
- ▶ Needs and Demand Analysis – Complete
- ▶ **Develop Alternatives – CURRENT PHASE**

Next Steps

- ▶ Presence at Old Town Christmas Parade December 9th
- ▶ Public Outreach Workshop/Design – January 2018
- ▶ Business Owners and Property Owners– January 2018
- ▶ Stakeholder Meeting No. 3 – February/March 2018
- ▶ Council Workshop – Present alternatives along with feedback from public outreach March 2018.
- ▶ Finalize Alternatives March 2018
- ▶ Draft Complete Streets Plan April 2018

Complete Street Hollister Ave for the Future



REVERSE DIAGONAL PARKING



2-Lane Hollister Ave of the Past





WALKBIKEGOLETA

Bicycle and Pedestrian Master Plan



Bicycle and Pedestrian Master Plan

- ▶ Purpose and Need
- ▶ Budget
- ▶ Timeframe



Project Specific Goals

- ▶ Identify Gaps and Barriers (both perceived and actual)
- ▶ Developing Metric and Methodology to Prioritize Projects
- ▶ Incorporating Design Guidelines
- ▶ Encouraging Walking and Biking

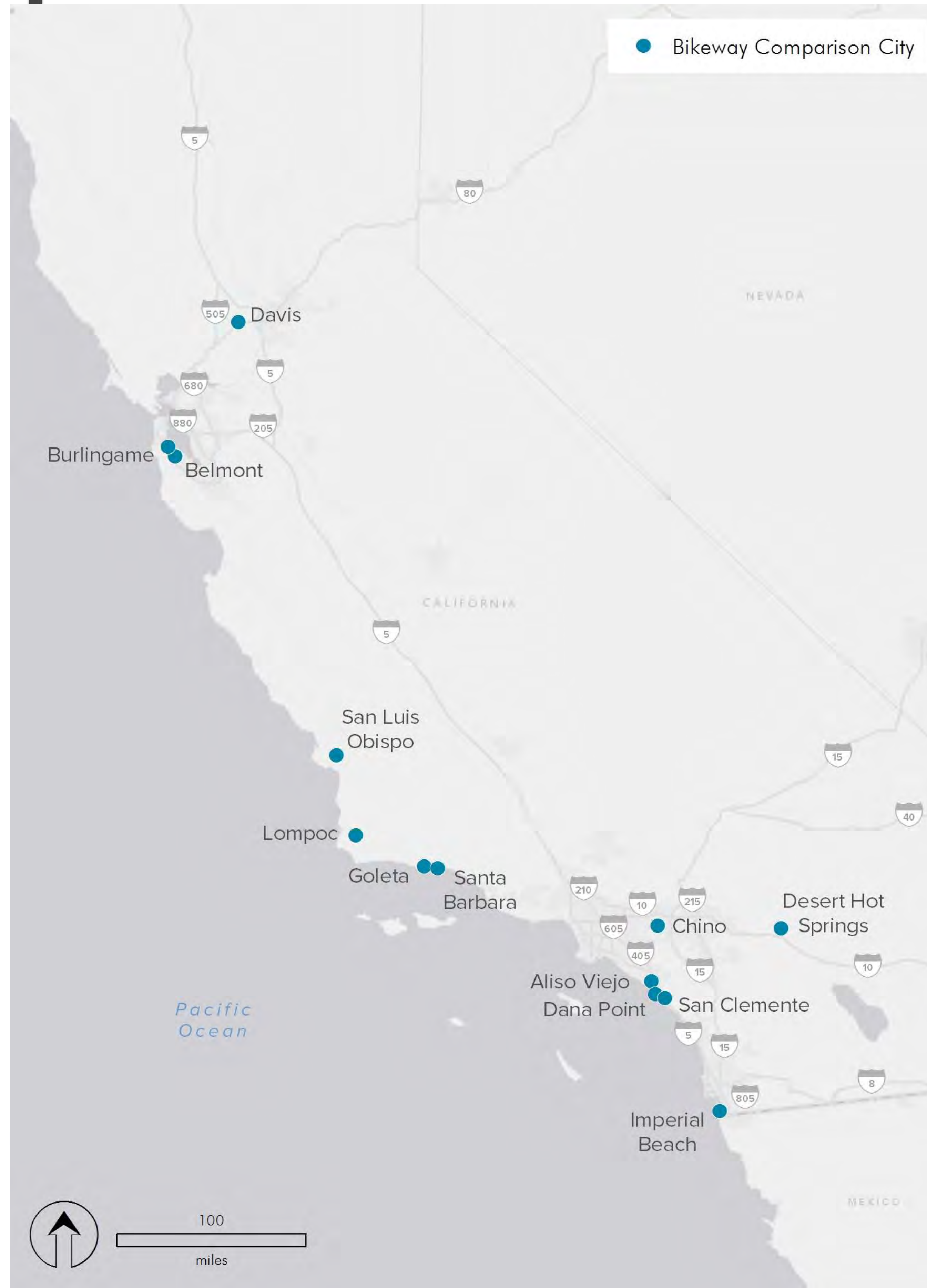
Grant Primary Objectives

- ▶ Promote Public Health,
- ▶ Reduce Automobile Usage and Fuel Consumption, and
- ▶ Promote Equity.

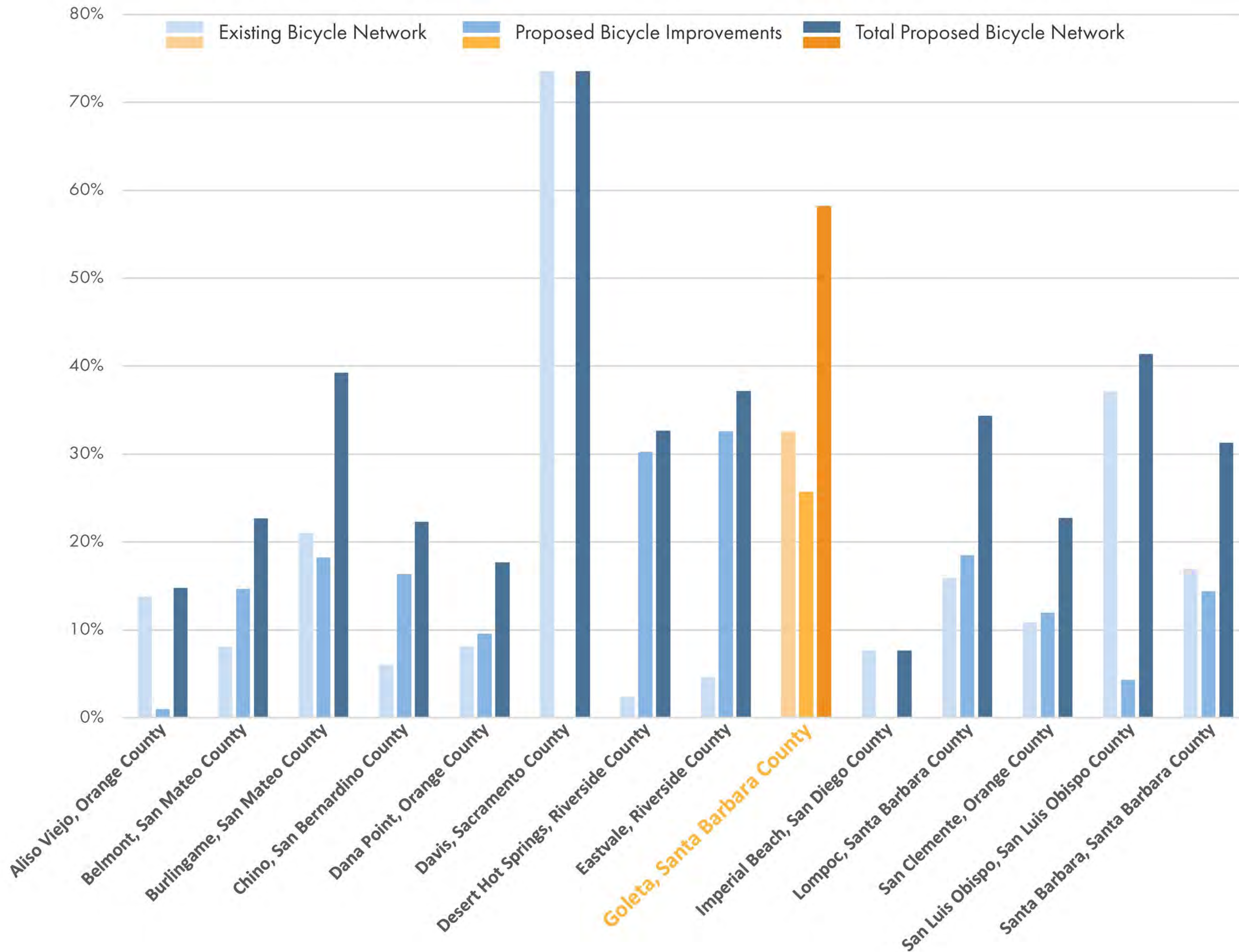
Challenges and Opportunities

- ▶ Prioritizing Projects
 - Short-term, intermediate, longer-term
- ▶ Filling in Gaps
- ▶ Removing Barriers
- ▶ Balancing travel lanes, parking, sidewalks, and cycling
- ▶ Limited Right-of-Way
- ▶ Crosswalk Improvements
- ▶ Jurisdictional coordination – signal timing

Bike Comparisons – California



Bikeway Network Comparisons



Next Steps

- ▶ Draft Recommendations – Completed
- ▶ List of Potential Projects – Under Review
- ▶ **Draft Document – Current Task**
- ▶ TAC meetings – Ongoing
- ▶ Council Workshop – January
- ▶ CEQA – Winter/Spring 2018
- ▶ Public Workshops/PC – Spring 2018
- ▶ Council Adoption – April/May 2018
- ▶ Update street design standards – Phase II

QUESTIONS?

ADDITIONAL SLIDES

Other Class I Paths with similar striping configurations



Central Coast Trail Class I Bike
Path – San Clemente

RAISED CROSSINGS



Netherlands – Speed Table



Netherlands – Exit Construction



- Used commonly in the Netherlands for cycle track crossings
- Rise can vary from 6 inches (curb height) to 0 inches – grades vary 15% and higher
- Only at unsignalized intersection crossings

Safety benefit:

- ❖ Raising the crossing leads to reduced vehicle speeds as cars must slow to cross speed table
- ❖ Raises awareness/expectation of the possible presence of bicyclists and pedestrians

Cons:

- ❖ Can create drainage problems
- ❖ Use of a curve - Issue for turning bicycles or motorcycles
- ❖ Noise
- ❖ Location of driveways

INTERSECTION TREATMENTS AND PAVEMENT MARKINGS



- Bicycle Symbols
- Elephant tracking
- Colored Paint
- Ladder Crosswalk



INTERSECTION TREATMENTS AND PAVEMENT MARKINGS



- Bicycle Symbols
- Elephant tracking
- Colored Paint
- Pavement Treatments
- Ladder Crosswalk

INTERSECTION TREATMENTS AND PAVEMENT MARKINGS



Mode Share Component

- ▶ Consultant Proposal
- ▶ Potential Mode Shift
- ▶ Meaningful numbers to set goals

Sharing

- ▶ Comments shared with other Agencies
- ▶ Coordinating on Regional Connectivity
- ▶ Coordinating with Caltrans on future signal timing
- ▶ Joint CIP Consultant Meetings – August 30
 - Bicycle and Pedestrian Master Plan
 - Hollister Avenue Complete Streets
 - Old Town Sidewalk Improvements Project

General Plan

- ▶ Potential Recommendations Require GP Amendment
- ▶ Policy Discussions
- ▶ Council Approved GPA Initiation –
 - Removing Streets from Federal Aid Urban Category
 - Allows City to Reduce Speeds

Draft Plan Outline



City of Goleta • Bicycle and Pedestrian Master Plan

Draft Document Outline – Revised 10 August 2017

1. INTRODUCTION

Scope

Study Area

Vision, Goals and Objectives

Potential Performance Measures

Planning Context

Bicycle/Pedestrian Network History

Regional Planning and Previous Master Plans

Relationship to GP and Other City Planning

Integrating Hollister Avenue Complete Streets

Bicycle and Pedestrian State of Practice

Overview

Primary Guidance (*Caltrans HDM Chapter 1000, AASHTO Bikeway Guide, NACTO Bikeway, Street and Stormwater Guides*)

Applicable Legislation (*SB 1, 375, 672, 743 and AB-902, 1096, 1358, 1581, 1371, 1193, 1218*)

Complete Streets and Routine Accommodation

Bicycling and Walking Benefits

Environmental Benefits (*Community/regional emissions reductions, air quality improvements*)

Health Benefits (*Individual and community health improvements, active lifestyle, social interaction*)

Economic Benefits (*Individual and community cost savings, property values, tourism*)

Social Justice (*Disadvantaged communities, expanded mobility choice*)

2. EXISTING CONDITIONS AND ANALYSIS

Existing Conditions

Land Use (*Existing and planned*)

Roadway Conditions (*Roadway types, ADTs, speed limits*)

Activity Centers (*Typical and specific to Goleta*)

Mobility Barriers (*Bicycle and pedestrian travel barriers*)

Bicycling Mode Share (*Most recent bike mode share: US Census, Strava®, other sources*)

Walking Mode Share (*Most recent walking mode share: US Census*)

Public Transit Mode Share (*MTD routes and boarding/alighting data*)

Personal Vehicle Availability (*Personal vehicle ownership: US Census*)

School Zone Infrastructure (*Existing bike/pedestrian treatments around schools*)

Population and Employment (*Population density, employment density: US Census*)

Income (*Household income: US Census*)

Age Stratification (*Age density patterns: US Census*)



Draft Plan Outline



Analysis

Bicycle and Pedestrian Propensity (*GIS modeling/analysis*)
Bicycle and Pedestrian Collisions (*Collision mapping/analysis (SWITRS, TIMS, Sheriff)*)
Demographic Trends and Characteristics (*Population, ethnicity, age trends: US Census*)
Level of Traffic Stress (*Analysis employing existing street type, width, traffic volume, speed, etc.*)
Gap Analysis (*Barriers to bicycle and pedestrian travel analysis*)

3. PUBLIC OUTREACH

Outreach Plan
Technical Advisory Committee (*Role, member list: Various City of Goleta departments, City of Santa Barbara, County of Santa Barbara, UCSB, SBCAG, MTD, Goleta Chamber of Commerce, County Health, SBBike, COAST, Community Environmental Council, Community Associations*)
Public Workshops and Pop-up Events (*Locations and outcomes*)
Online Survey and Comment Map (*Methodology and outcomes*)
Outreach Summary (*Outreach results compilation and analysis*)

4. RECOMMENDATIONS

Bicycle and Pedestrian Treatments

Bicycle Treatments (*Class I, II, III, IV, Buffered Class II lanes, sharrows, bike boxes, bicycle boulevards, protected intersections, signage and wayfinding*)
Pedestrian Treatments (*PHBs, RRFBs, pedestrian refuges, mid-block crossings, curb extensions, senior zones*)
Traffic Calming (*Roundabouts, speed tables/raised crosswalks, diverters, signals/warning devices*)

Recommended Physical Improvements

Bicycle and Pedestrian Improvement Prioritization (*Based on analysis, City and public input, best practices, demographic trends, etc.*)
Updated Street Design Standards (*Current best practices supporting Complete Streets*)
Wayfinding Signage Improvements
Integration with Other Transportation Modes

Recommended Programs and Policies

Pedestrian and Bicycle Policies (*Recommended new policies and revisions*)
Walking/Biking Education/Promotion Programs (*Example programs*)
Inter-Agency Communication (*City, County, SBCAG, UCSB, MTD, Sheriff, Fire*)
Tracking and Monitoring Pedestrian and Bicycle Travel (*Recommended protocols*)
Policy Integration (*Vision Zero, GHG, Complete Streets, Routine Accommodation, Safe Routes to School, Social Justice, Disadvantaged Communities*)

Future Opportunities (*Long-term vision, comprehensive low-stress network*)

5. FUNDING

Typical Costs
Preliminary Cost Estimates
Funding Source Recommendations and Strategies

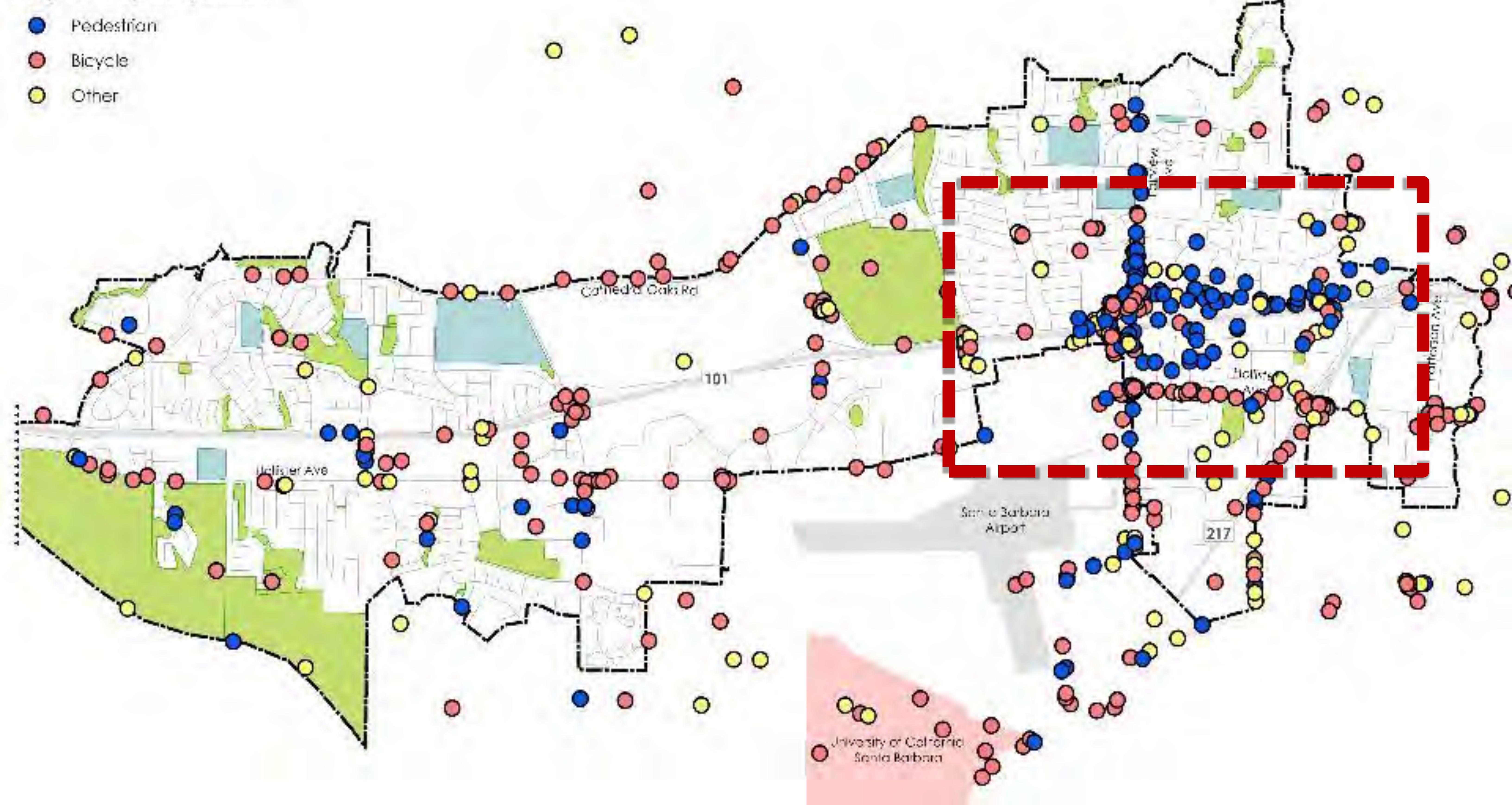


Analysis and Assessment

- ▶ Inventory bicycle and pedestrian networks
- ▶ Analyze bicycle and pedestrian facility gaps
- ▶ Collision Data
- ▶ Public Input
- ▶ Schools
- ▶ Review demographic trends
- ▶ Review current street design standards (phase II)

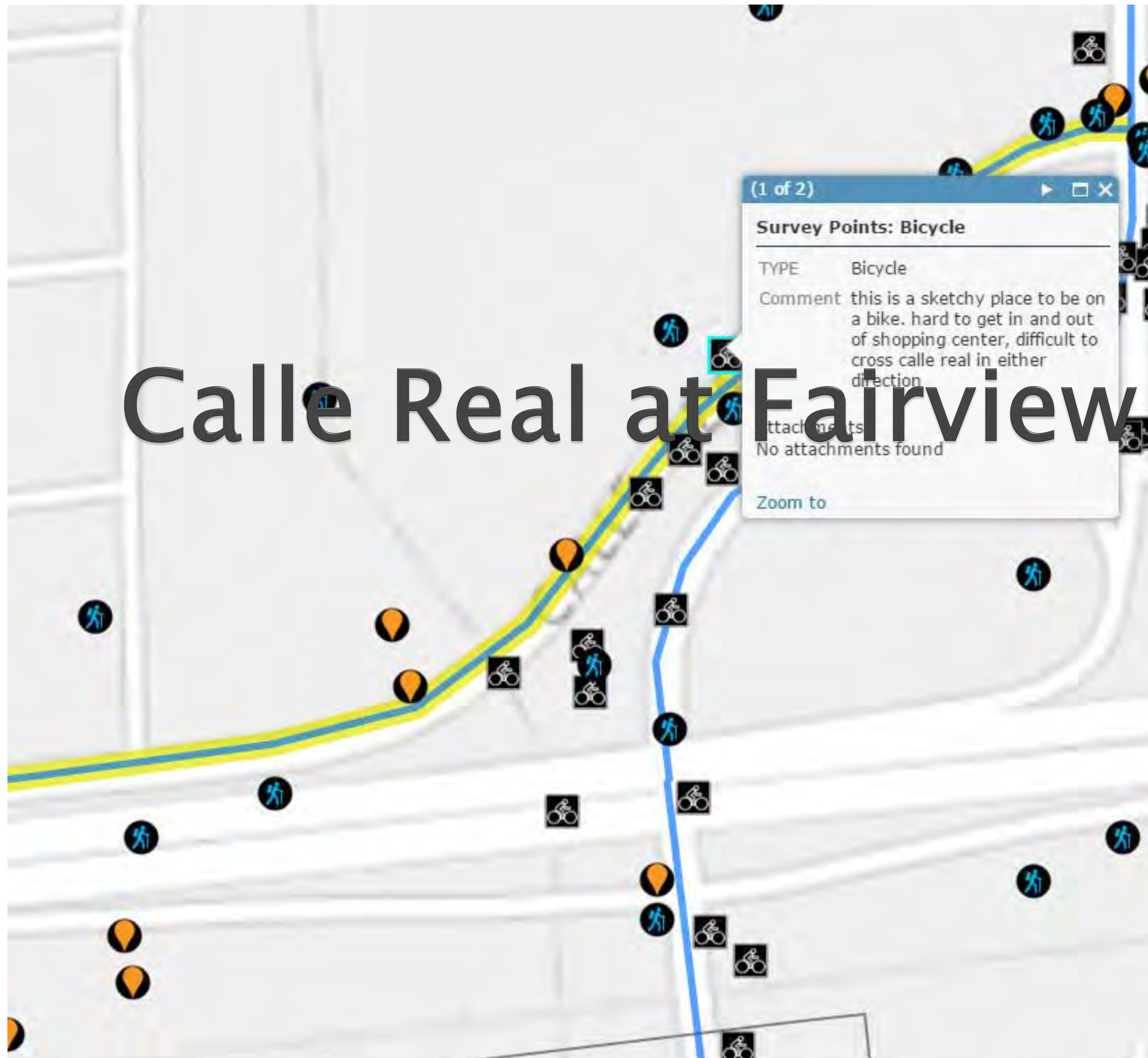
Map Survey Responses

- Pedestrian
- Bicycle
- Other

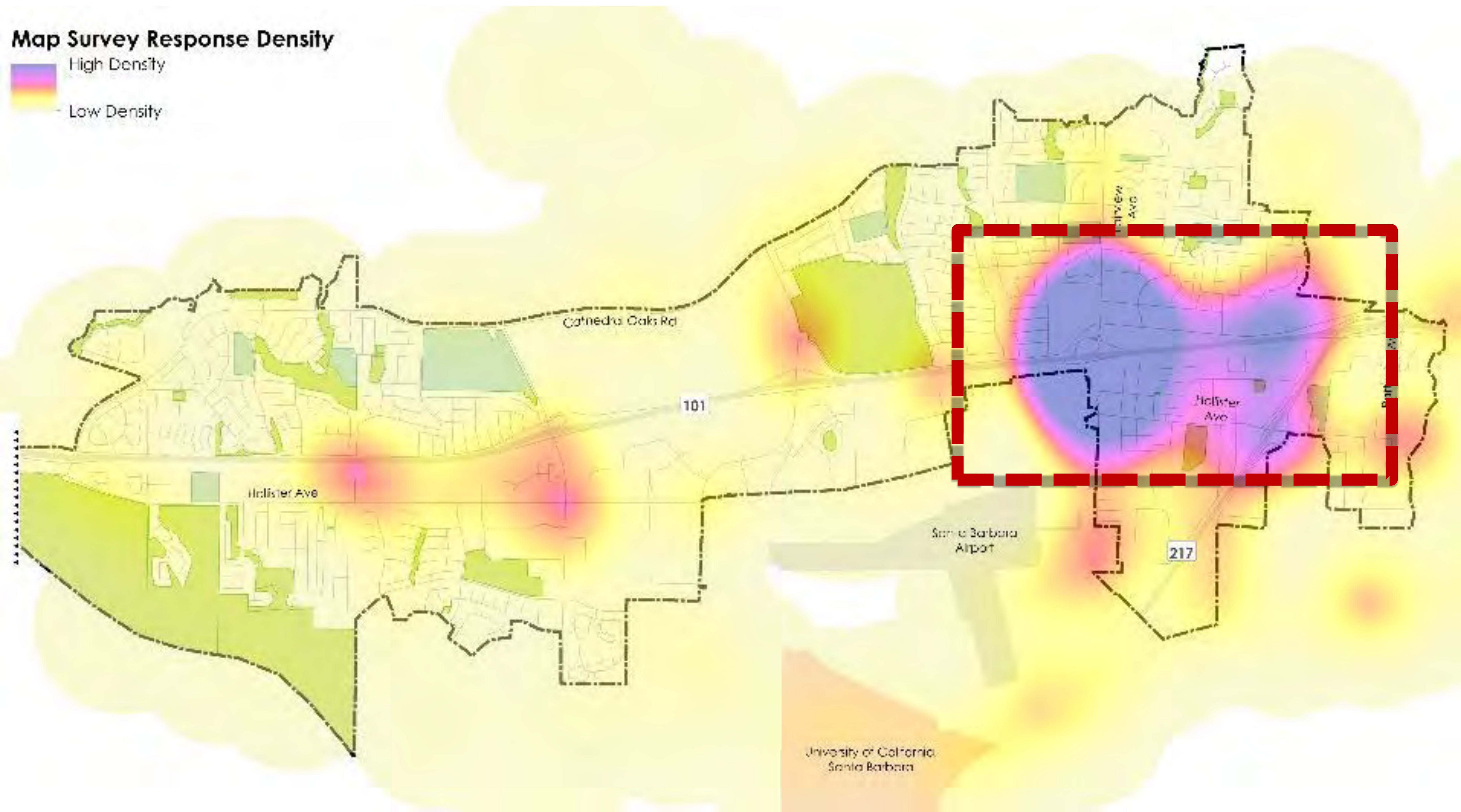


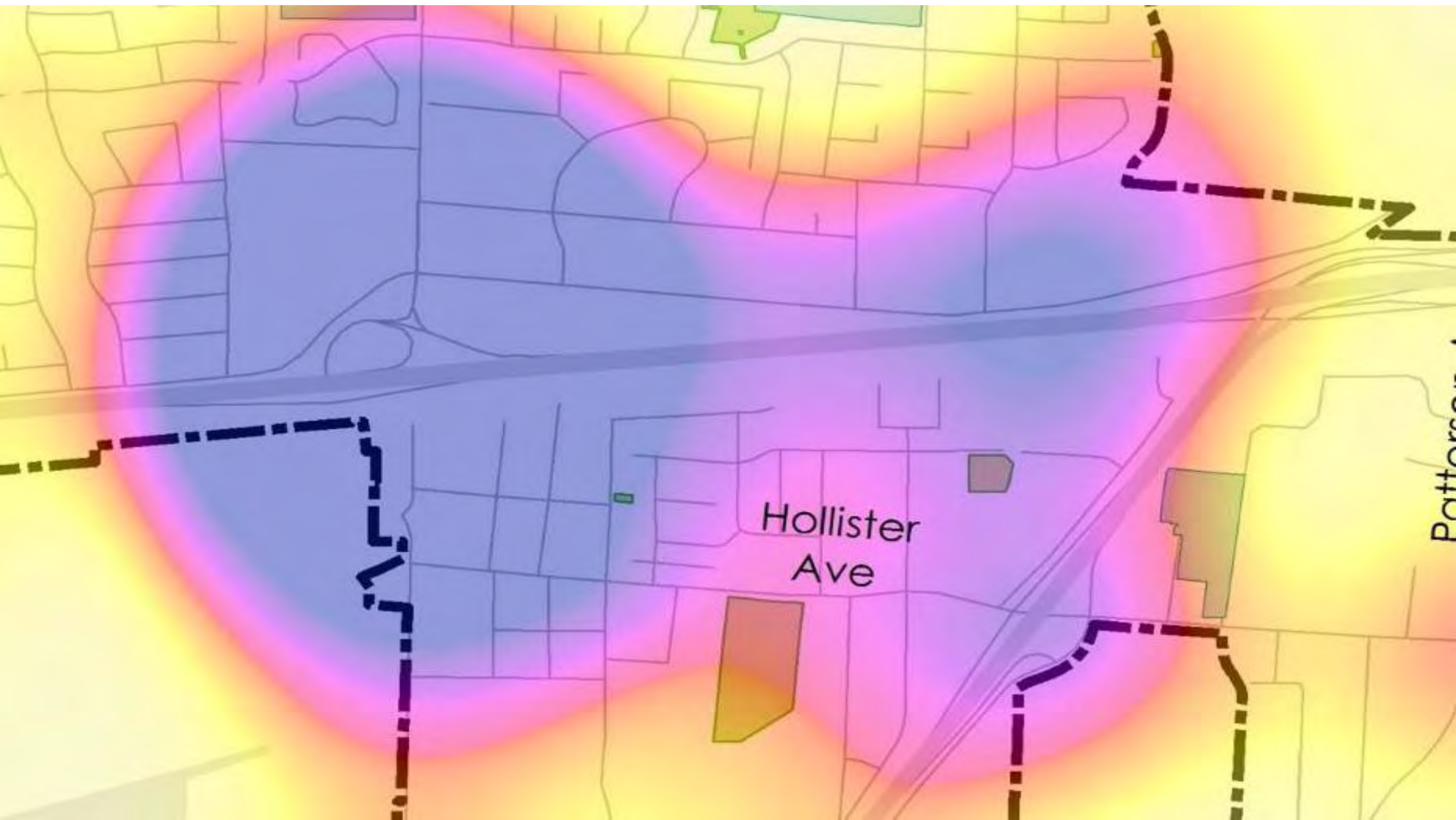


Calle Real at Fairview



Map Survey Response Density

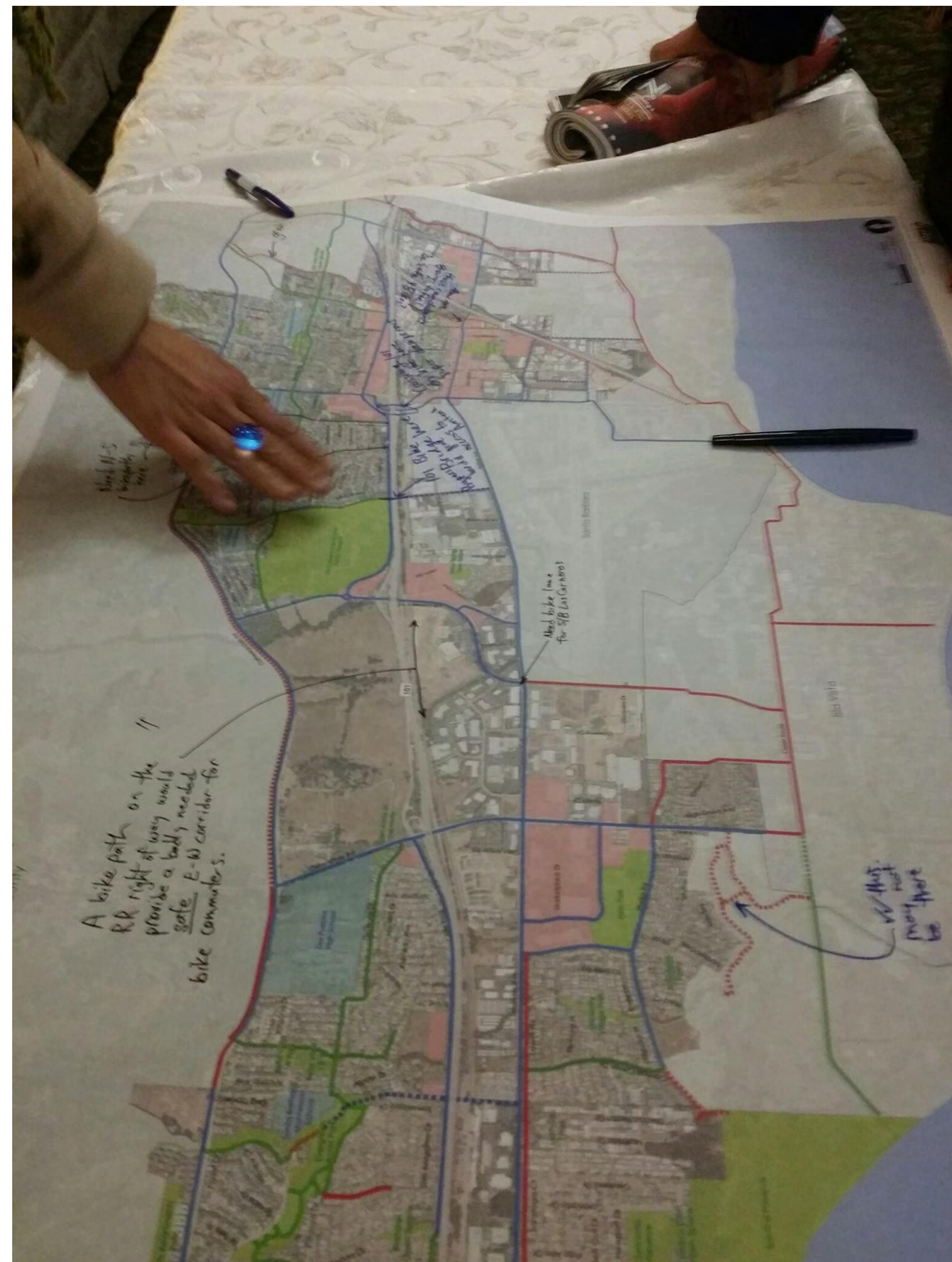
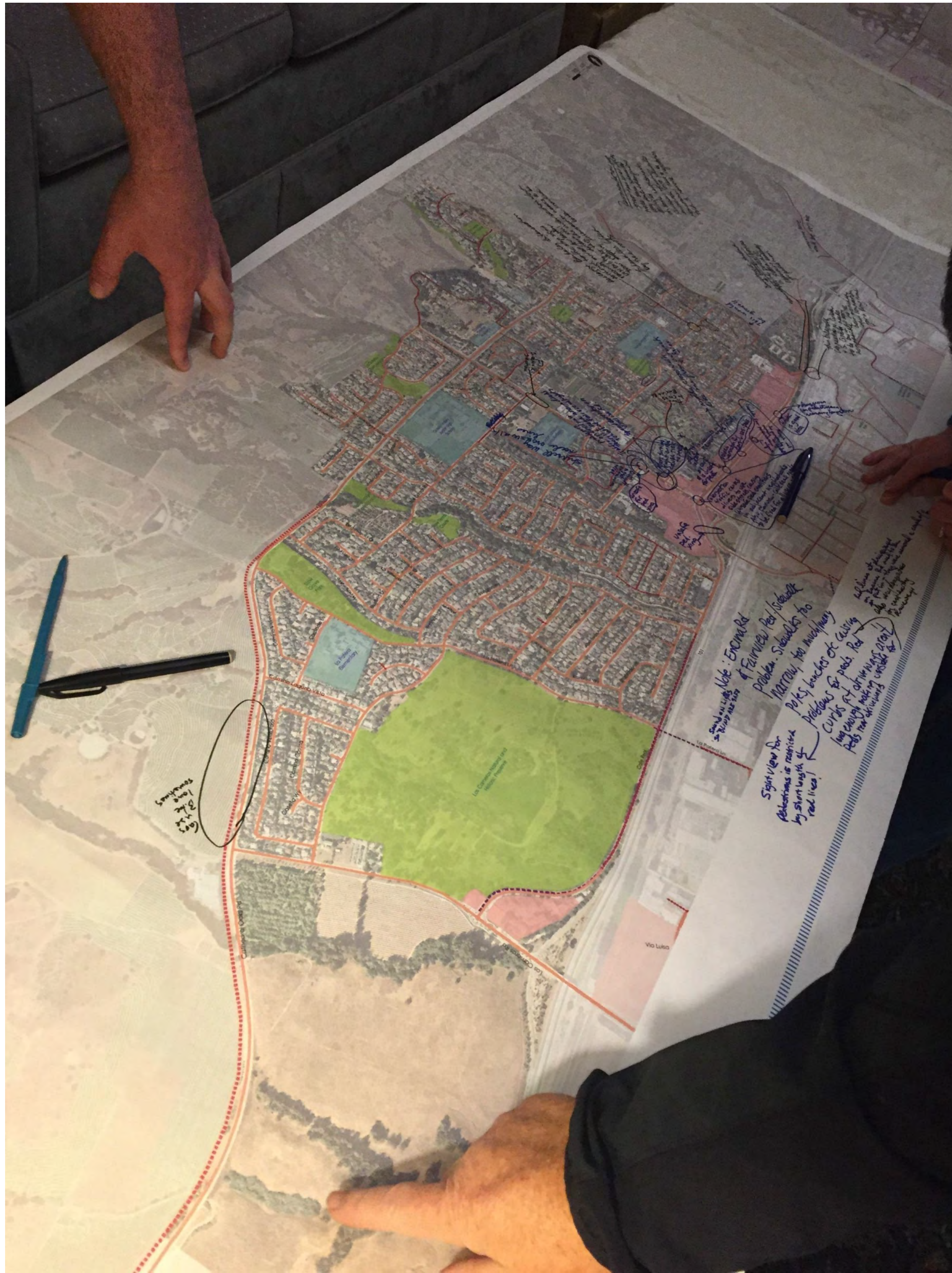




Hollister
Ave

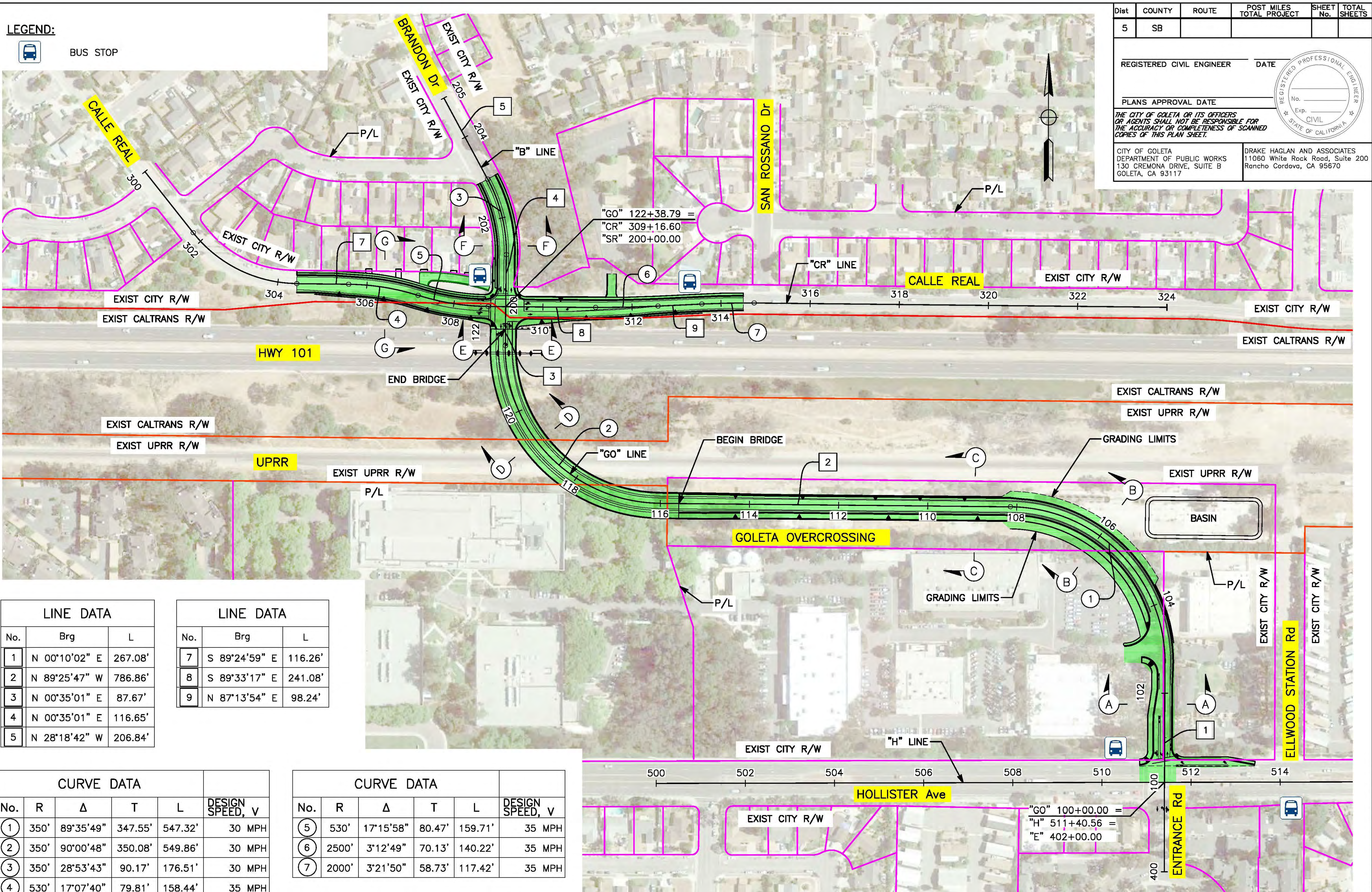
Patterson

Workshops



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LEGEND:
BUS STOP



LINE DATA		
No.	Brg	L
1	N 00°10'02" E	267.08'
2	N 89°25'47" W	786.86'
3	N 00°35'01" E	87.67'
4	N 00°35'01" E	116.65'
5	N 28°18'42" W	206.84'

LINE DATA		
No.	Brg	L
7	S 89°24'59" E	116.26'
8	S 89°33'17" E	241.08'
9	N 87°13'54" E	98.24'

CURVE DATA					
No.	R	Δ	T	L	DESIGN SPEED, V
1	350'	89°35'49"	347.55'	547.32'	30 MPH
2	350'	90°00'48"	350.08'	549.86'	30 MPH
3	350'	28°53'43"	90.17'	176.51'	30 MPH
4	530'	17°07'40"	79.81'	158.44'	35 MPH

CURVE DATA					
No.	R	Δ	T	L	DESIGN SPEED, V
5	530'	17°15'58"	80.47'	159.71'	35 MPH
6	2500'	3°12'49"	70.13'	140.22'	35 MPH
7	2000'	3°21'50"	58.73'	117.42'	35 MPH

NEW GOLETA 101 OVERCROSSING
ALTERNATIVE A4

LAYOUT
SCALE: 1"=100'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
5	SB				

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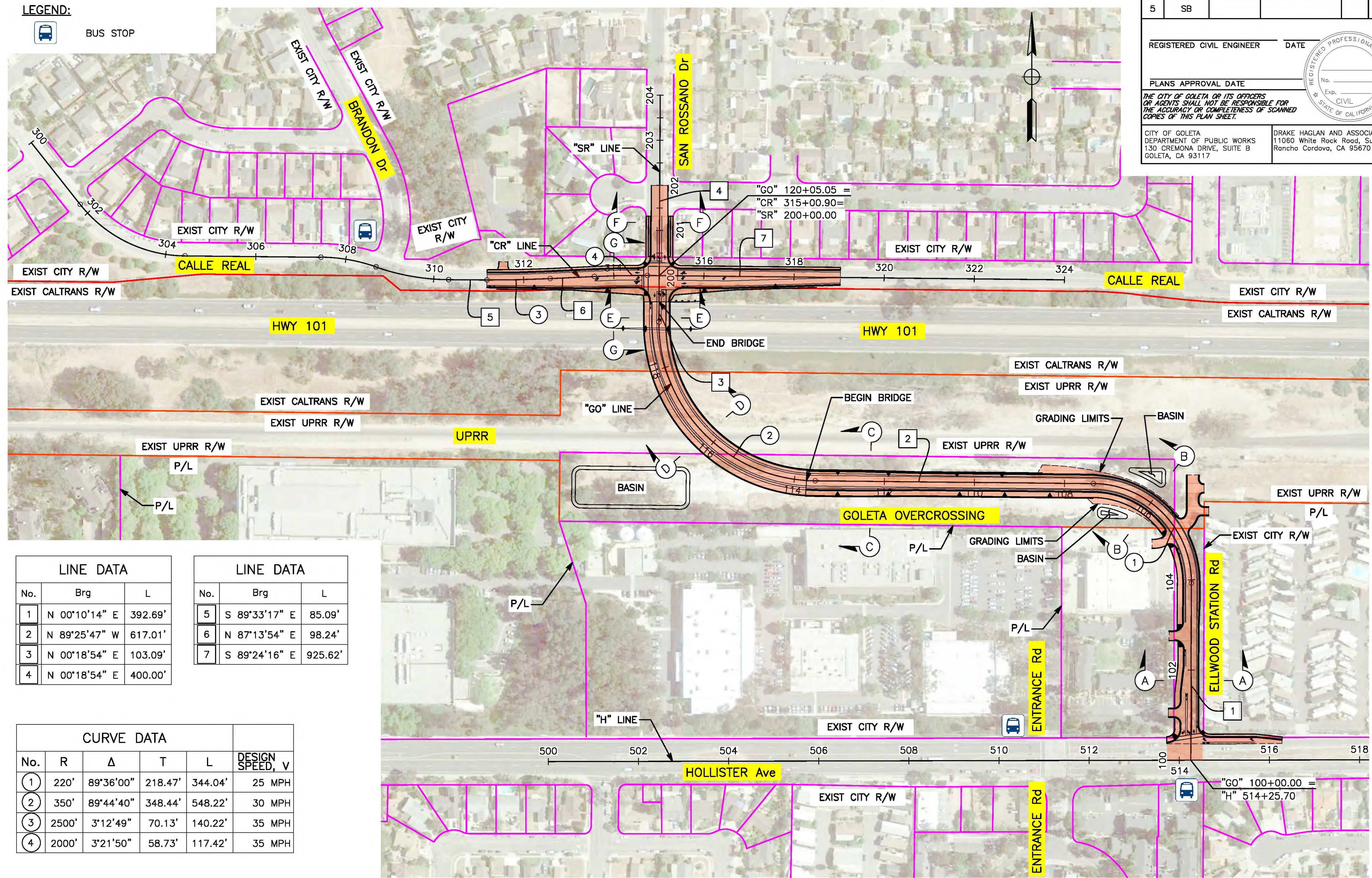
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LINE DATA		
No.	Brg	L
1	N 00°10'14" E	392.69'
2	N 89°25'47" W	617.01'
3	N 00°18'54" E	103.09'
4	N 00°18'54" E	400.00'

LINE DATA		
No.	Brg	L
5	S 89°33'17" E	85.09'
6	N 87°13'54" E	98.24'
7	S 89°24'16" E	925.62'

CURVE DATA					
No.	R	Δ	T	L	DESIGN SPEED, v
1	220'	89°36'00"	218.47'	344.04'	25 MPH
2	350'	89°44'40"	348.44'	548.22'	30 MPH
3	2500'	3°12'49"	70.13'	140.22'	35 MPH
4	2000'	3°21'50"	58.73'	117.42'	35 MPH

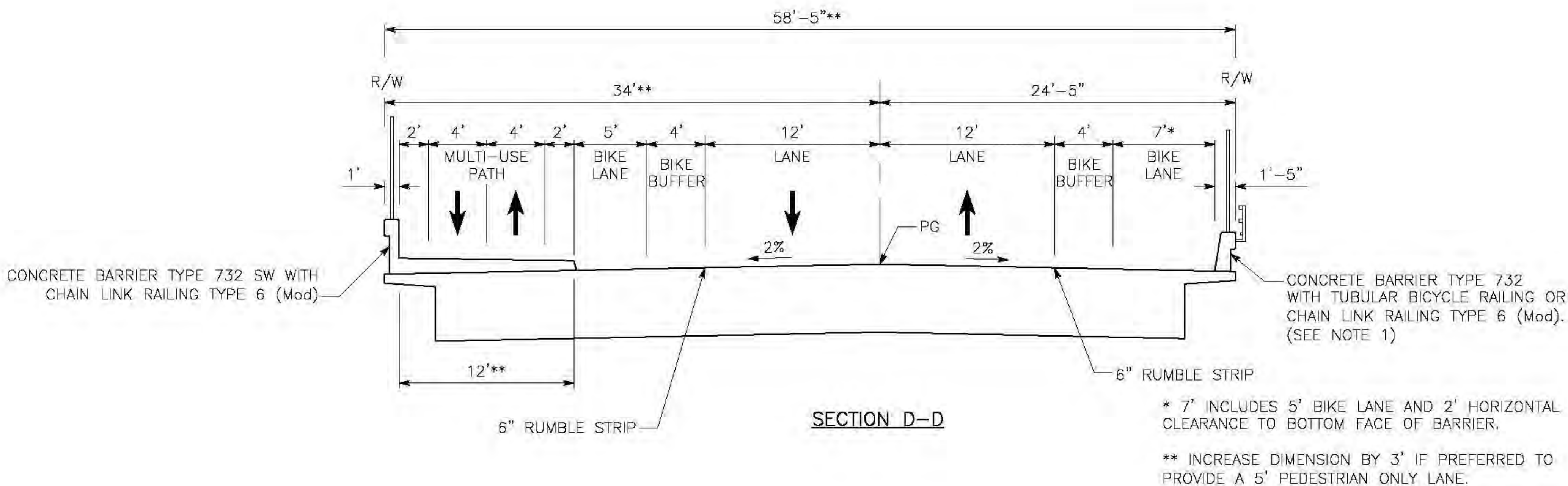
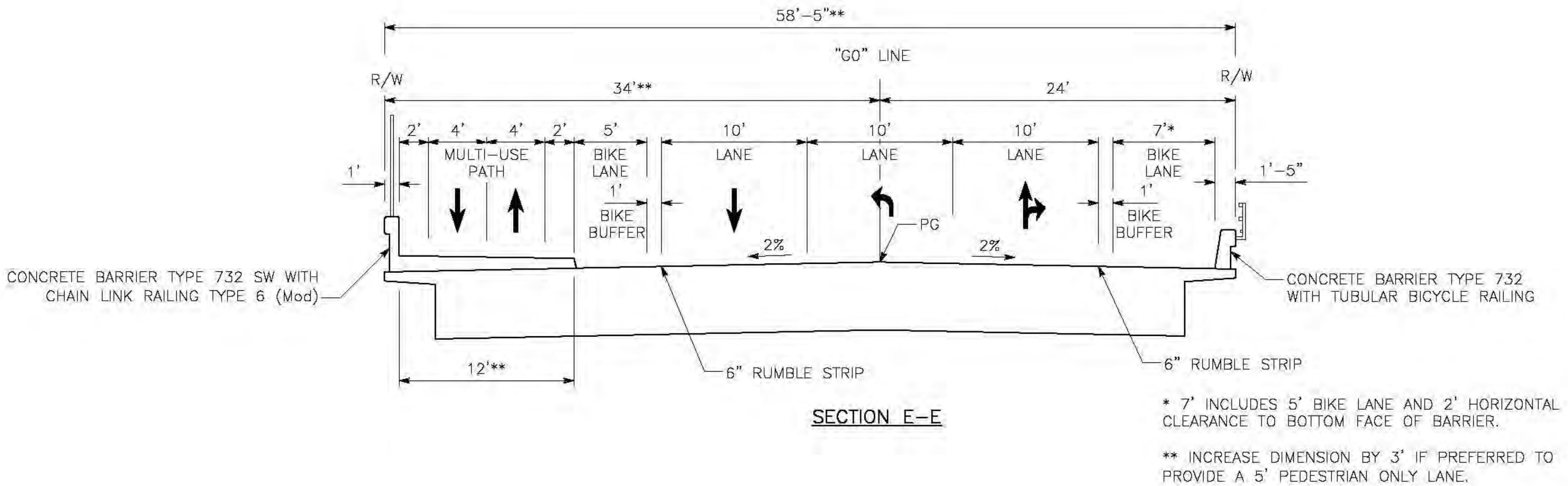
NEW GOLETA 101 OVERCROSSING
ALTERNATIVE A7

LAYOUT
SCALE: 1"=100'
L-1

LAST REVISION
DATE PLOTTED => Oct 31, 2017
TIME PLOTTED => 5:30 pm

NOTE:

1. PROVIDE TUBULAR BICYCLE RAILING OVER THE CALTRANS RIGHT OF WAY AND CHAIN LINK RAILING TYPE 6 (Mod) OVER THE UPRR RIGHT OF WAY.



NEW GOLETA 101 OVERCROSSING
ALTERNATIVE A6

TYPICAL CROSS SECTIONS
NO SCALE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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REGISTERED PROFESSIONAL ENGINEER
No. _____
Exp. _____
CIVIL
STATE OF CALIFORNIA



tunnel under here?

path

slope

User activated signal

