



14TH AND VILLANOVA

Corridor Improvement Project



Project Introduction



14th AND VILLANOVA CORRIDOR IMPROVEMENTS PROJECT

14th & Villanova Project Scope

Design improvements to address:

- Safety measures
- Enhanced bicycle facilities
- Beautification
- Roadway repaving, repair, and drainage improvements

BASELINE PROJECT:

- Striping and signage
- Buffered bike lanes
- Traffic calming features
- Isolated roadway rehabilitation
- Full repaving

ENHANCED DESIGN CONCEPT:

- Median separated bicycle lanes
- Crosswalk improvements
- Bulbouts
- Pedestrian refuge islands
- Traffic calming features
- Lighting
- Landscaping enhancements



Project Timeline

2014

Walk Bike Audit for North Davis Elementary School

2015

Awarded SACOG Regional \$ 1) Road Rehabilitation
Estimated Baseline = \$1.1m 2) Minor 'Complete Streets' Enhancements

2017

JULY - Discussed with BTSSC
FALL - The City Agrees to 2 Concepts: Cost Constrained and "Enhanced"

2018

APRIL/MAY: Stakeholder Interviews
JUNE 26th: Design Concepts Open House
JULY 26th: Design Concepts to BTSSC
SUMMER/FALL/WINTER: Final Design

2019

SUMMER - Construction



Existing Conditions



Fourteenth Street / Villanova Drive from F Street to Sycamore Lane

1.2 Mile Corridor

East/West Davis Bike Loop Connector

Mix of Housing and Institutional Uses



View of Villanova Drive from intersection with Sycamore Lane



Villanova Drive looking west towards Reed Street



Tamarack Pathway Connector



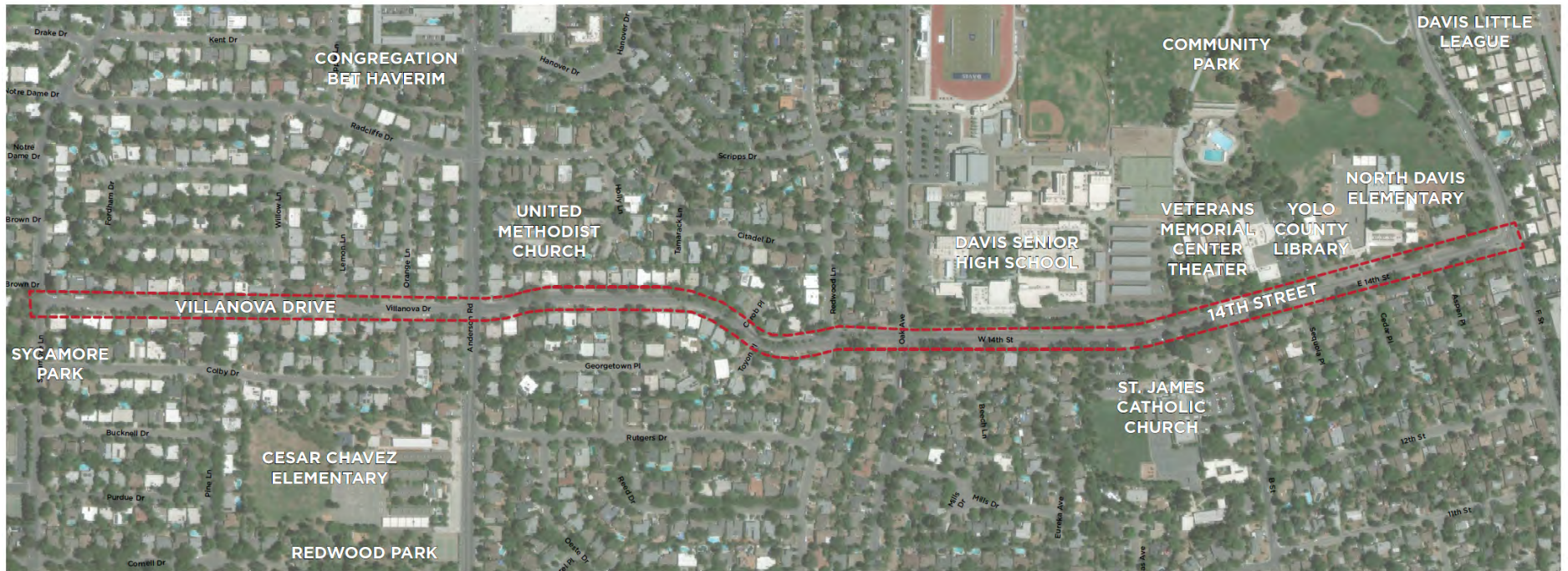
Villanova Drive looking east at the curving roadway section



Off-street pathway adjacent to the high school looking west



Crossing the Library/Veterans Memorial Center Driveway



Sycamore Lane approaching Villanova Drive where the Davis Bike Loop pathway exits from Sycamore Park



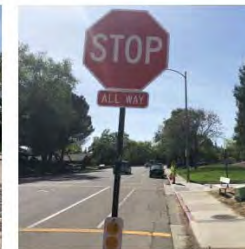
Villanova Drive looking west in the residential zone west of Anderson Road



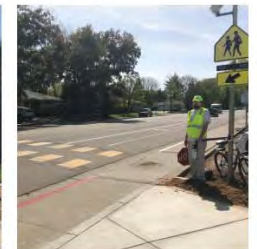
14th Street approaching Oak Avenue, Stop Controlled



14th Street looking east adjacent to the High School Parking Lot



14th Street looking west adjacent to the Veterans Memorial Center



Elementary School Crossing

Stakeholder Feedback

SPEEDING - Cars speeding through the corridor

CONGESTION - Heavy traffic during school start and end times

CARS IN BIKE LANES - Pick-up/drop-off occurring in the bike lanes

INTERSECTION SAFETY - Additional controls and direction to improve safety

DRIVEWAY CONFLICTS - Multiple driveways are difficult to navigate safely

BUS STOP VISIBILITY - Buses block visibility of peds/bikes crossing

TREES AND SHADE - Desire for more shade to improve comfort

PARKING NEEDS - Desire for more school and institution parking

RE-PURPOSE CENTER LANE - This space could be used for other purposes



Corridor Segments

VILLANOVA

Sycamore Ln to Anderson Rd



- Residential
- One travel lane each way
- Bike lanes each way
- Parking both sides
- Multiple driveways provide access to homes

VILLANOVA/FOURTEENTH

Anderson Rd to Oak Ave



- Residential
- Similar to western segment
- S curve portion narrows with median and eliminates parking on north side
- Multiple driveways per block provide access to homes

FOURTEENTH

Oak Ave to F St



- Institutional
- Residential housing on south side accessed from side streets
- Center turn lane



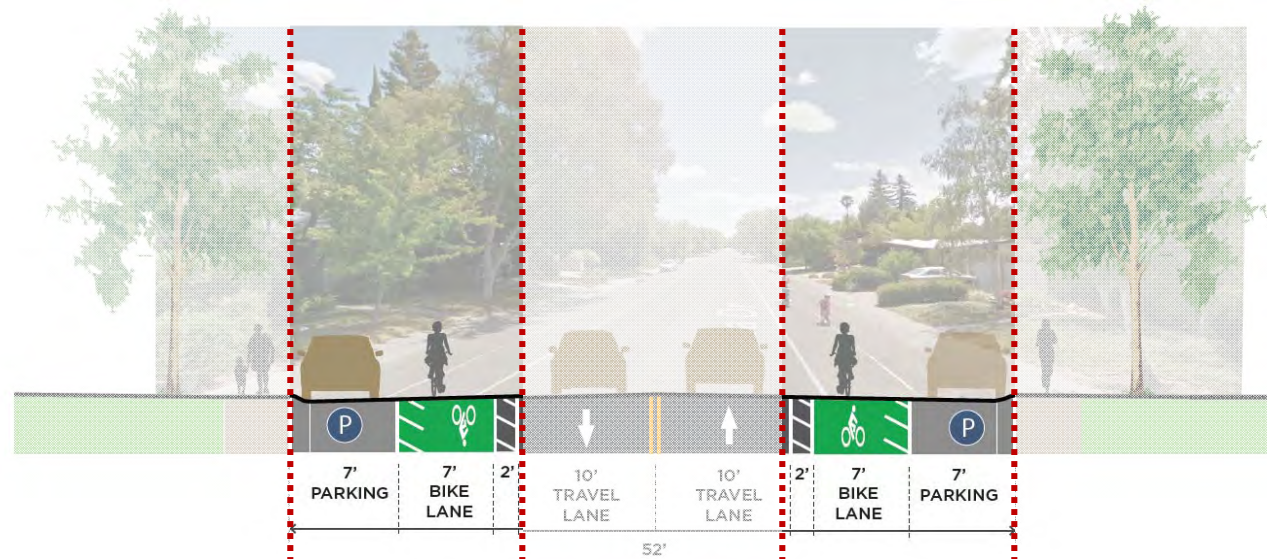
Sycamore Lane to Anderson Road



Typical Sections Looking East

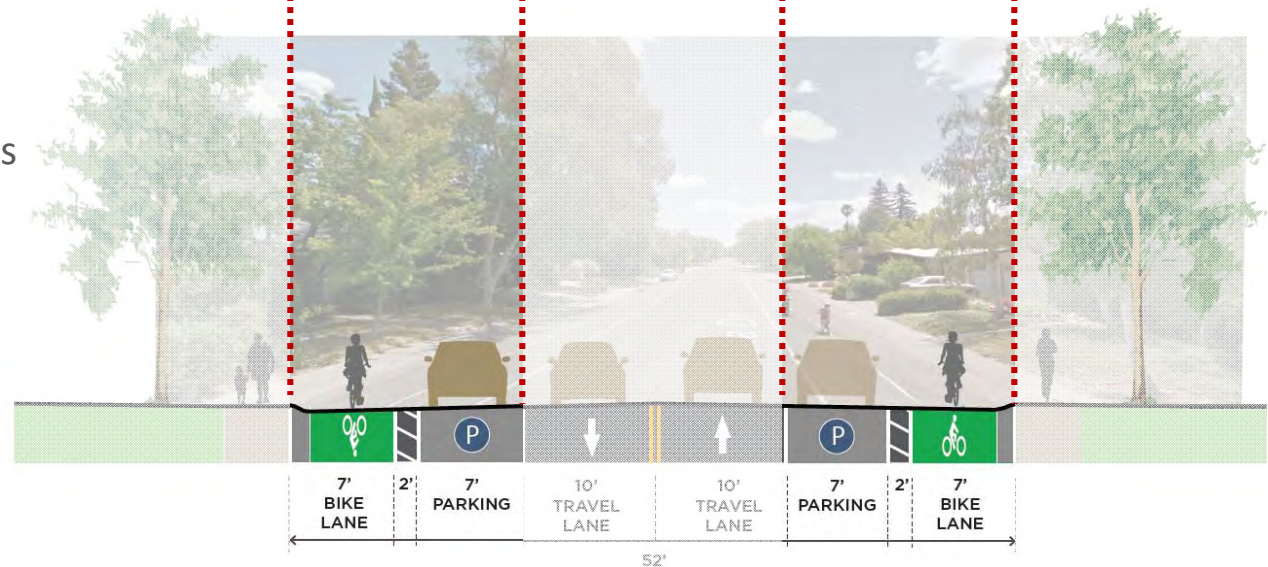
BASELINE

- Buffered Bike Lanes
- Asphalt Raised Pedestrian Crossings near Willow and Orange
- Green Conflict Markings



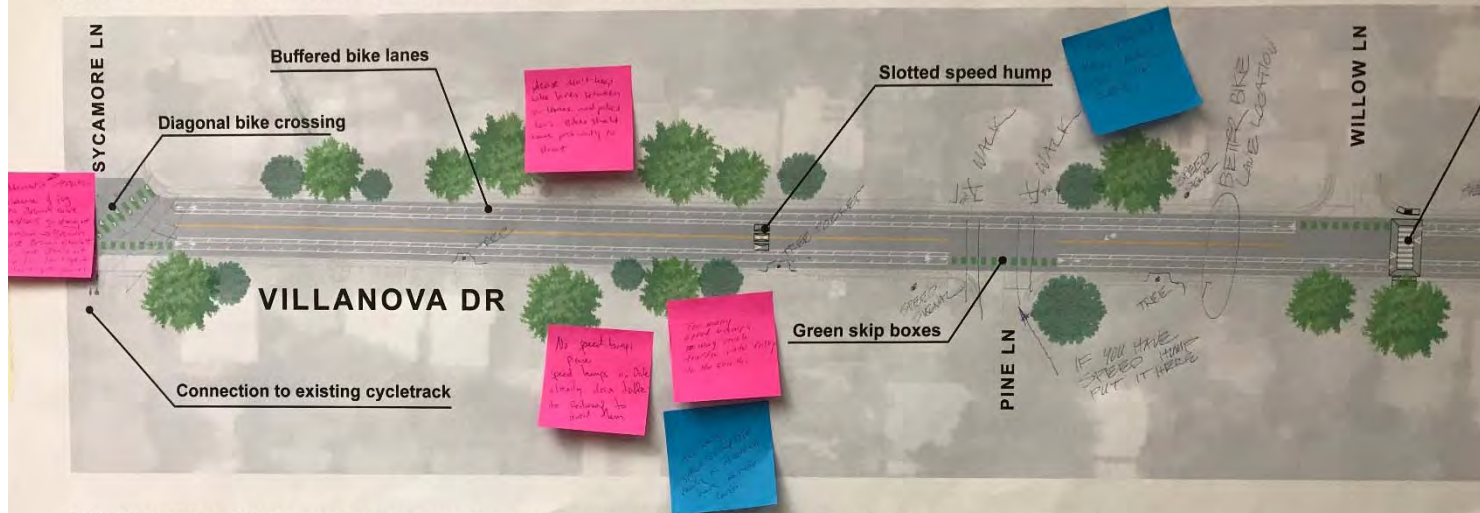
ENHANCED

- Parking Protected Bike Lanes
- Concrete Raised Pedestrian Crossings/Speed Table near Willow and Orange
- Bulbouts across from Pine and Lemon

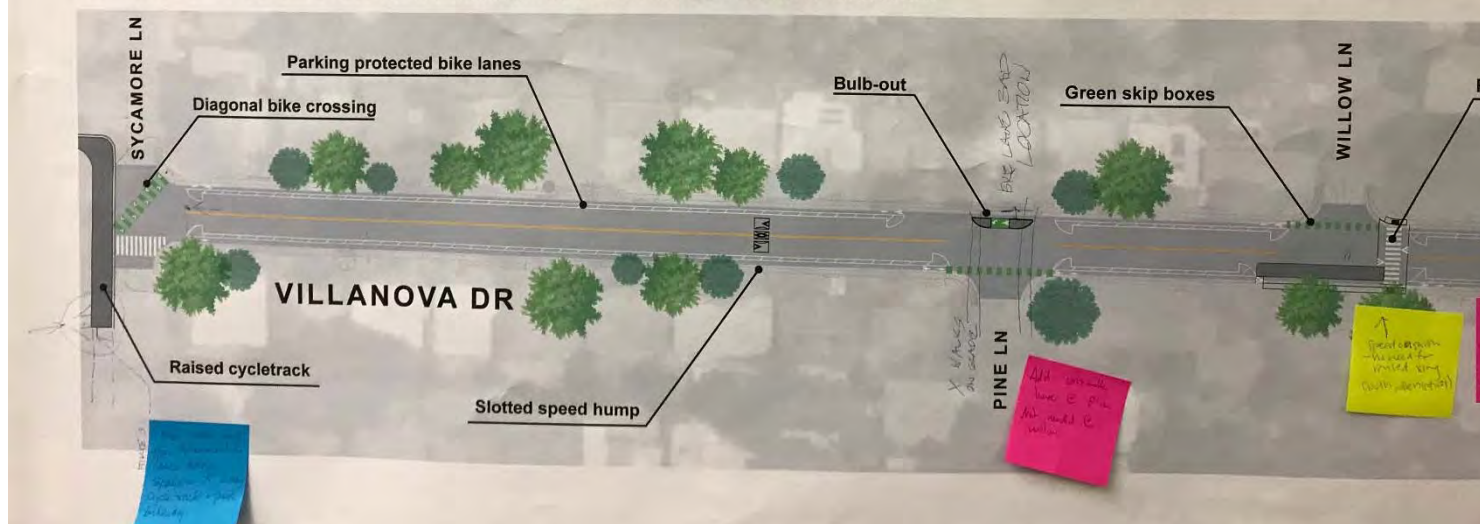


Public Feedback

BASELINE DESIGN CONCEPT: Buffered Bike Lanes and Raised Pedestrian Crossings

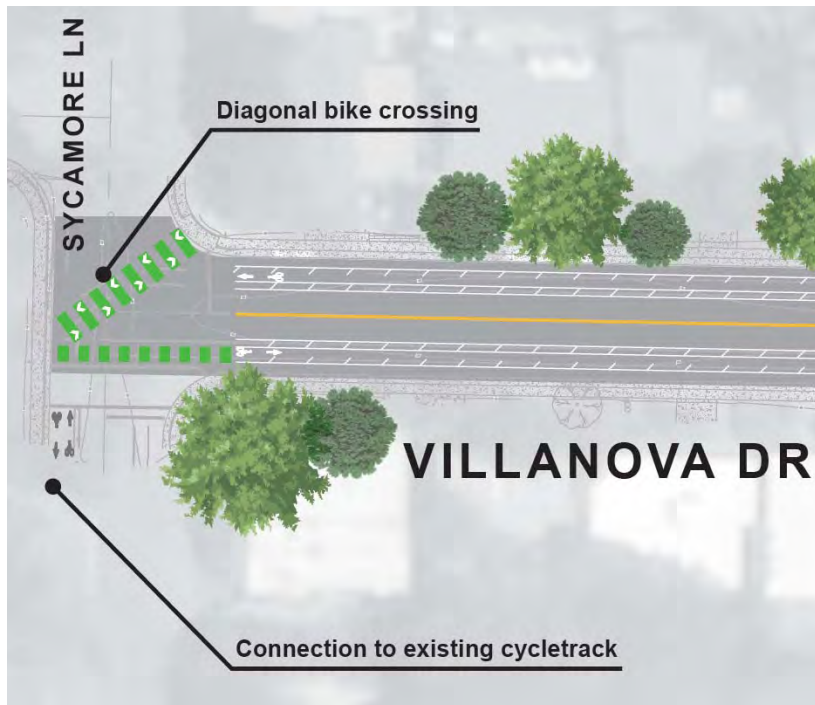


ENHANCED DESIGN CONCEPT: Parking Protected Bike Lanes and Bulbouts

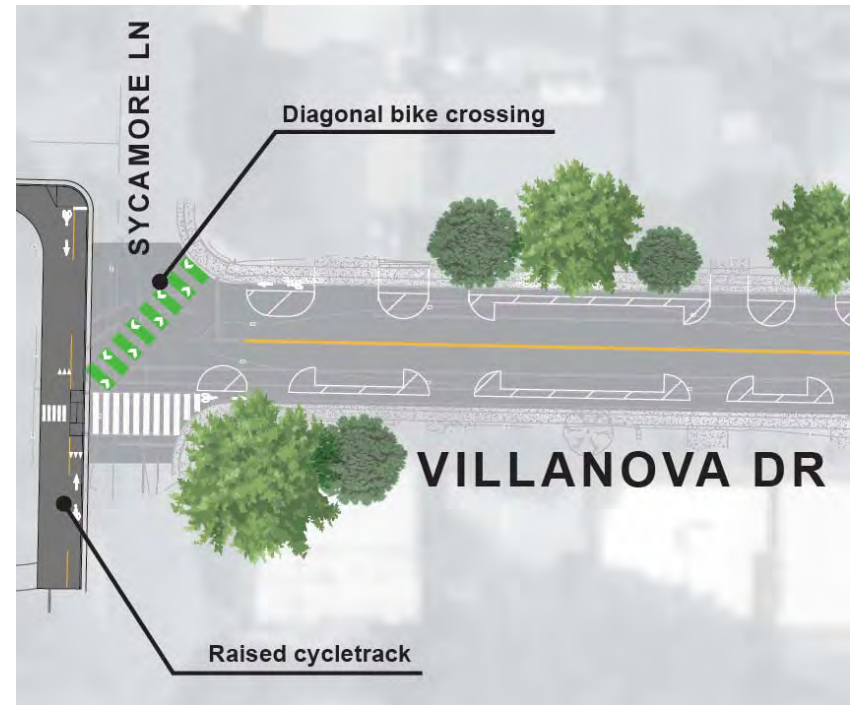


Sycamore and Villanova

BASELINE



ENHANCED



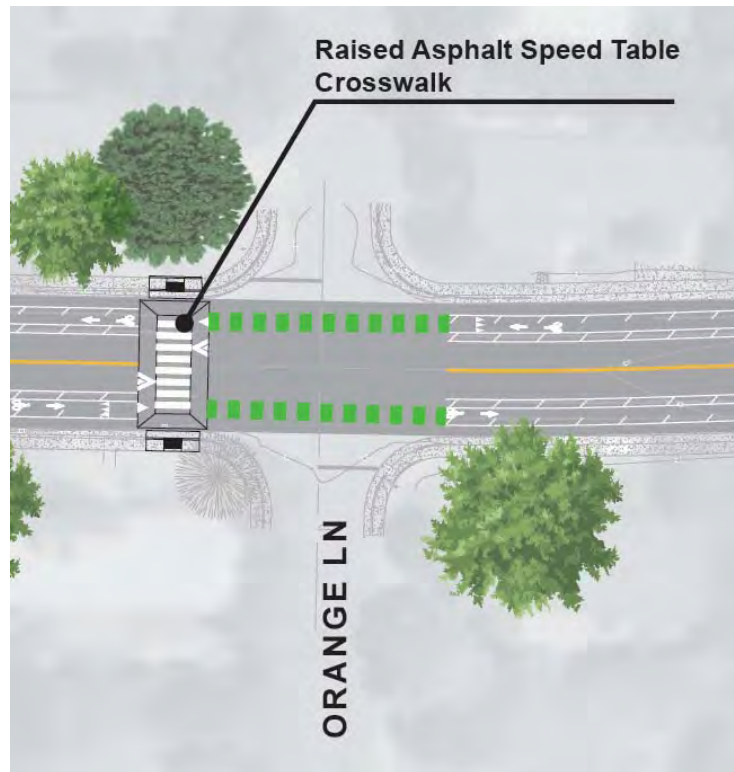
CONSIDERATIONS:

- Offset intersection with Brown to north
- Approach NB on Sycamore towards Sycamore Park and Villanova
- Use of green paint

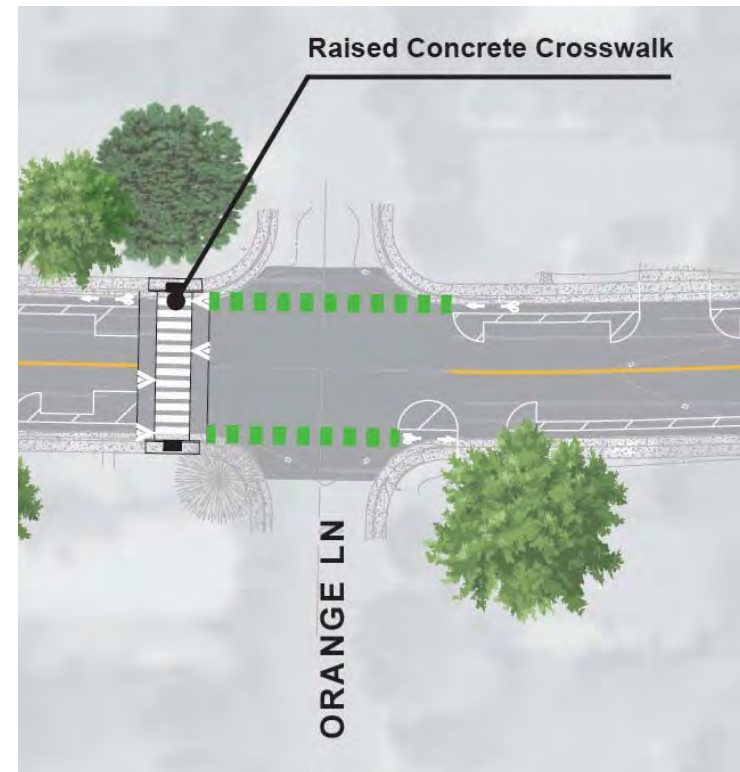


Raised Crosswalks

BASELINE



ENHANCED

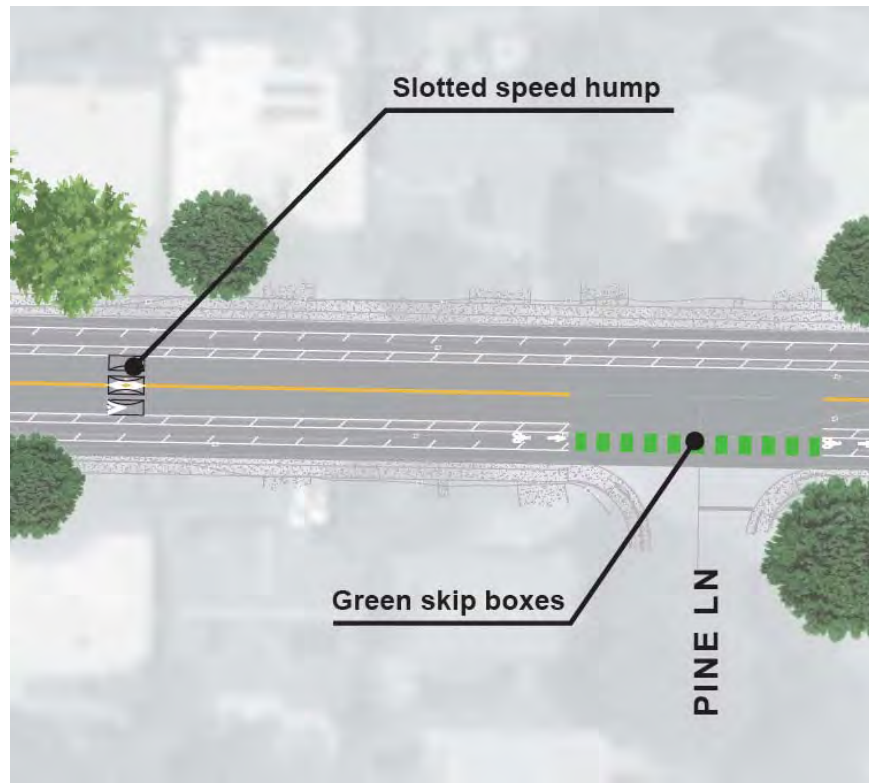


CONSIDERATIONS:

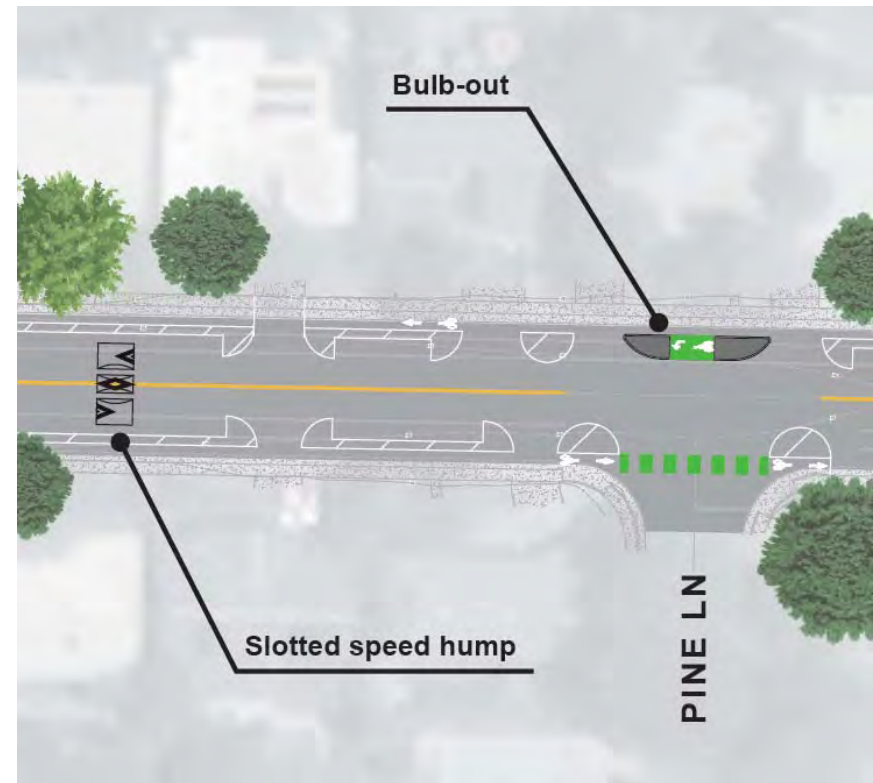
- Crossing at Pine requested
- Mixed feedback on speed tables

Speed Humps and Bulbouts

BASELINE



ENHANCED



CONSIDERATIONS:

- Biking next to lane
- Access to driveways



Anderson Road to Oak Avenue

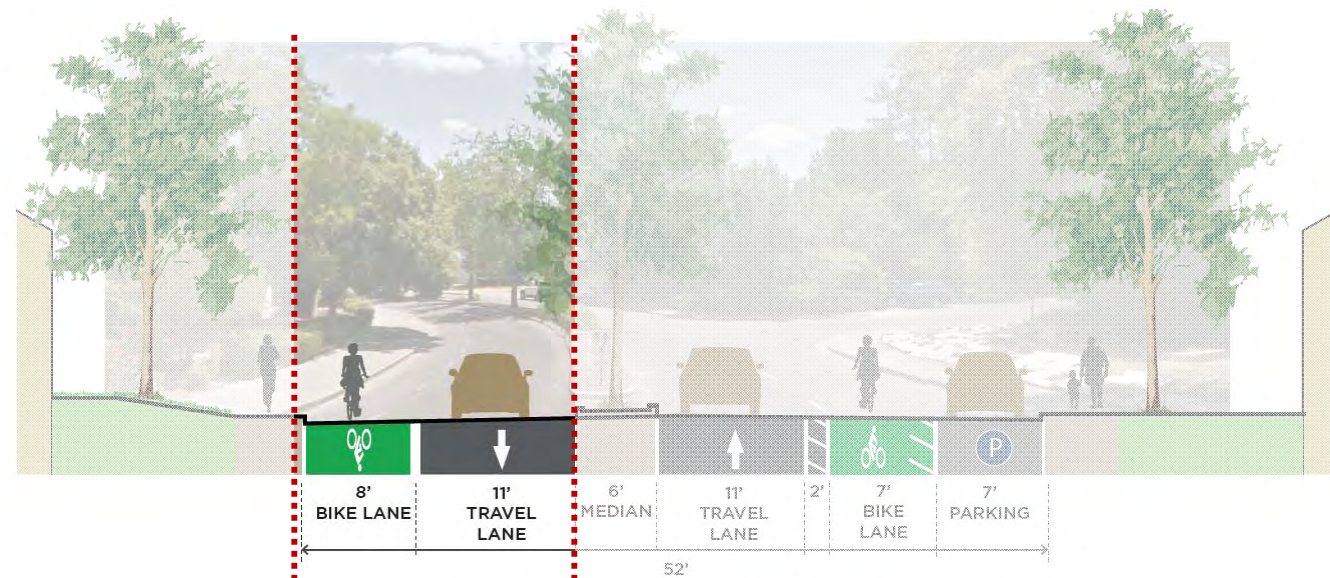


14th AND VILLANOVA CORRIDOR IMPROVEMENTS PROJECT

Typical Sections Looking East

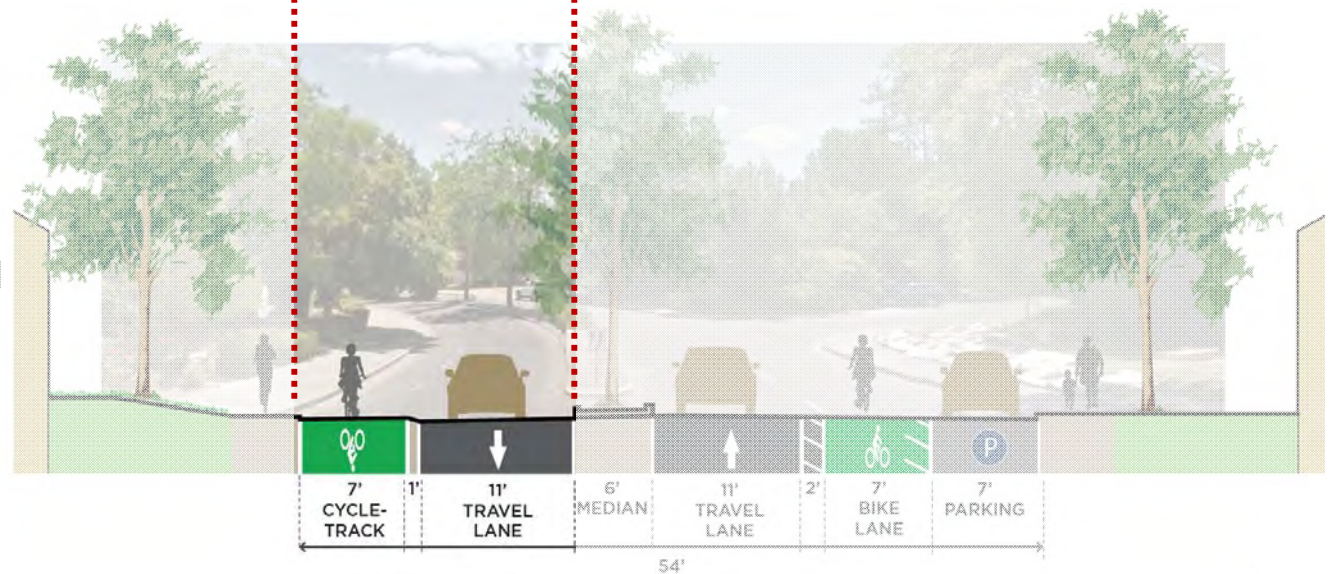
BASELINE

- Widened WB Bike Lane
- Buffered EB Bike Lane
- Connection to Tamarack Lane Path
- Flexible Delineators to Close Gap in Median
- Carob and Toyon Post and Paint Median



ENHANCED

- Raised WB Bike Lane
- Concrete Median to Close Gap
- Curb Extensions at Reed and Redwood



Public Feedback



14th and Oak

BASELINE



ENHANCED



CONSIDERATIONS:

- Right Turn Lanes on 14th
- Clarity of Vehicle and Bicycle Movements
- Safe connection from bike lanes to two way cycletrack on north 14th



14th and Redwood

BASELINE



ENHANCED

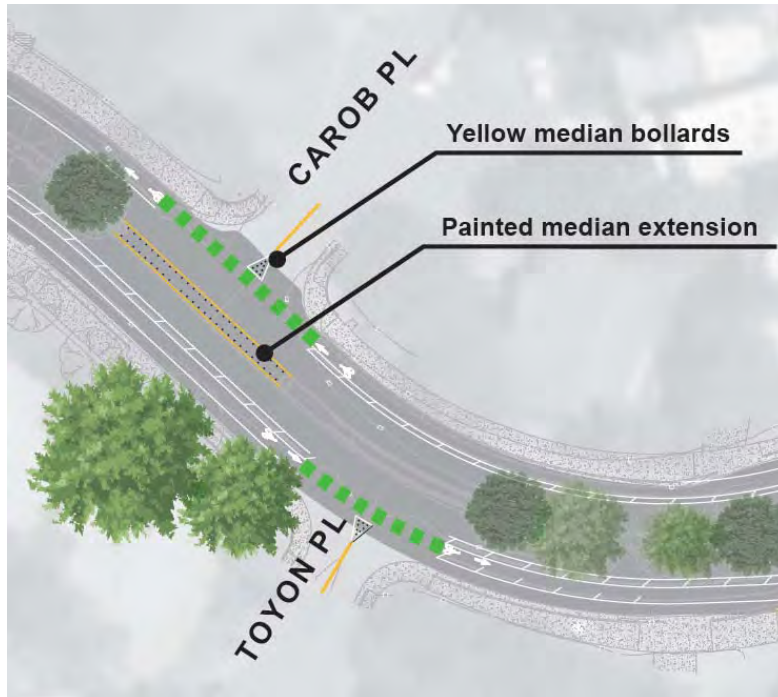


CONSIDERATIONS:

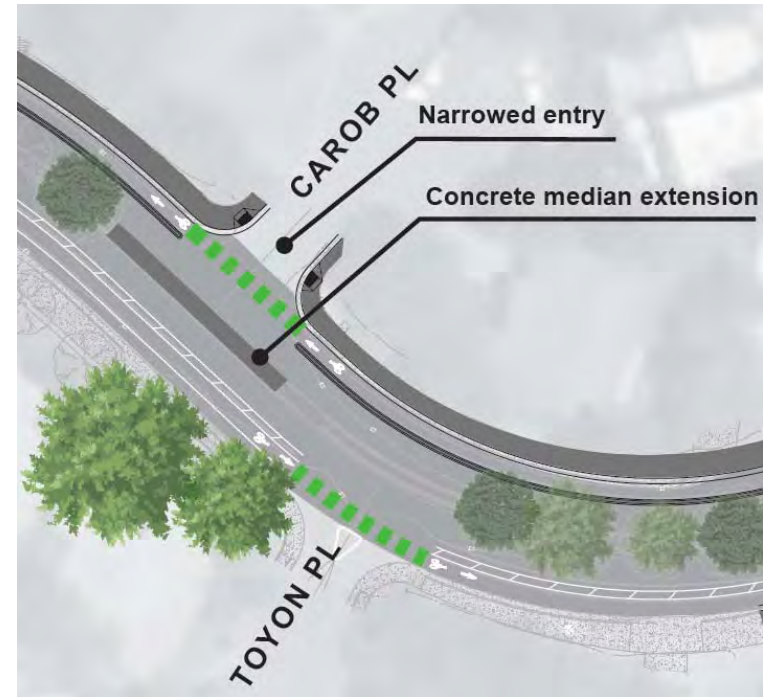
- Key crossing location for kids heading to schools
- Uncontrolled intersection

Carob and Toyon

BASELINE



ENHANCED



CONSIDERATIONS:

- Tools for addressing speeding
- Deterring cut throughs and U-turns

Oak Avenue to F Street

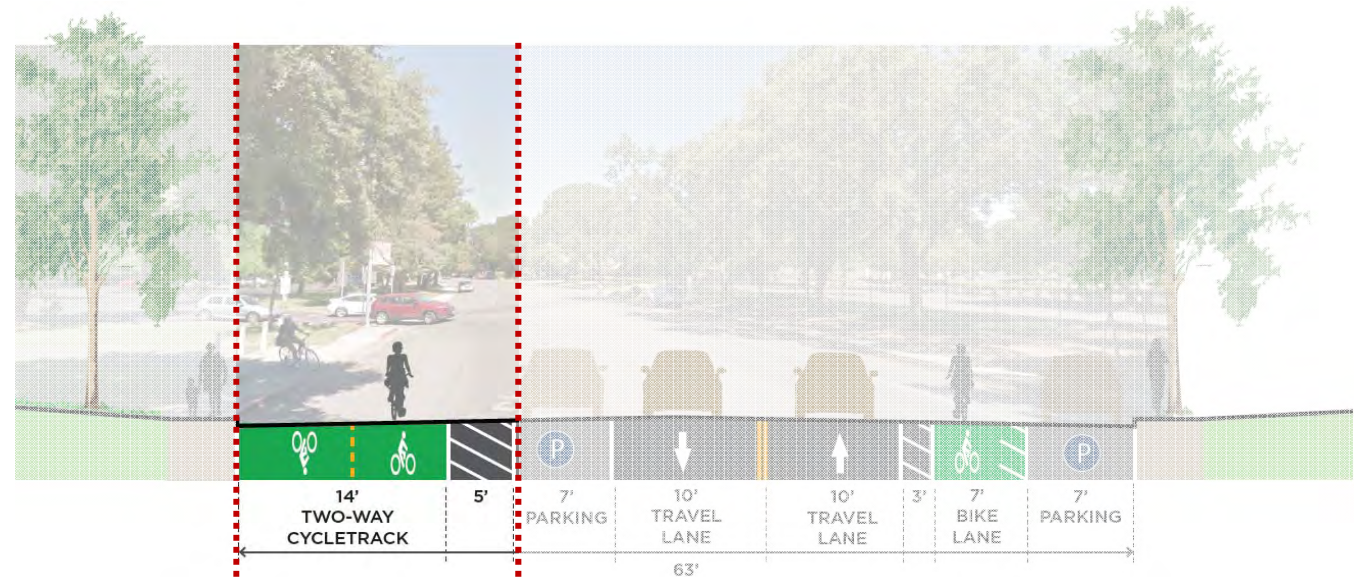


14th AND VILLANOVA CORRIDOR IMPROVEMENTS PROJECT

Typical Sections Looking East

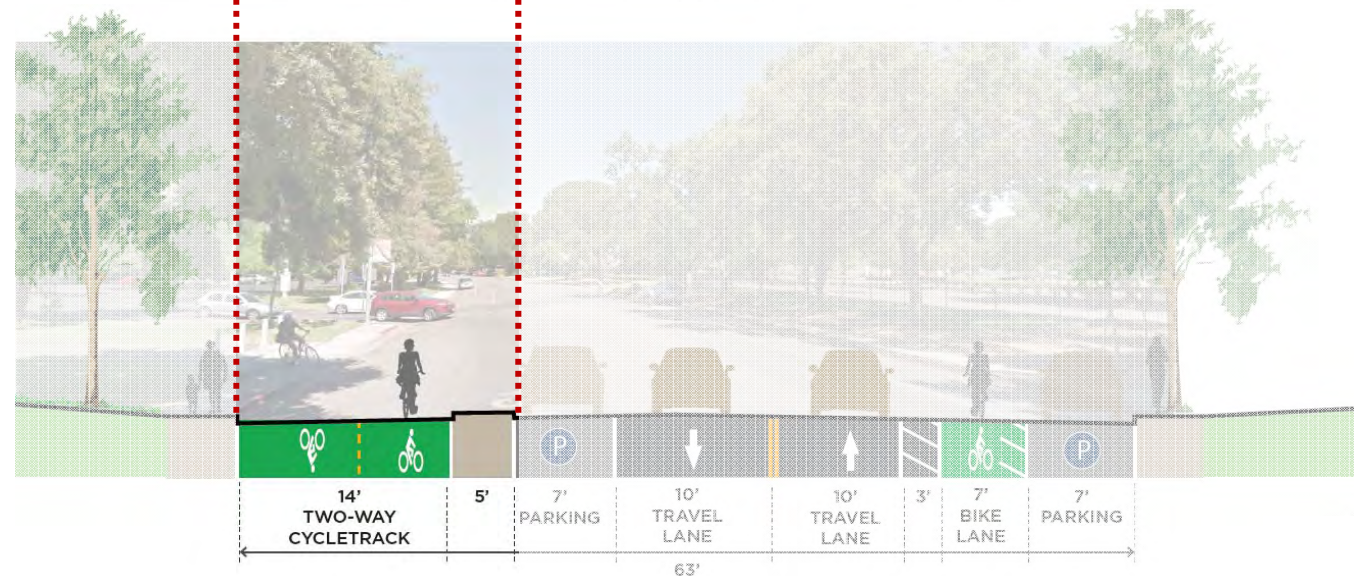
BASELINE

- Two-Way Cycletrack with Painted Buffer
- Buffered Bike Lane
- Relocate F Street Bus Stop



ENHANCED

- Two-Way Cycletrack with Median
- Relocated High School Parking Lot Entrance
- Raised Crossing at HS Entry

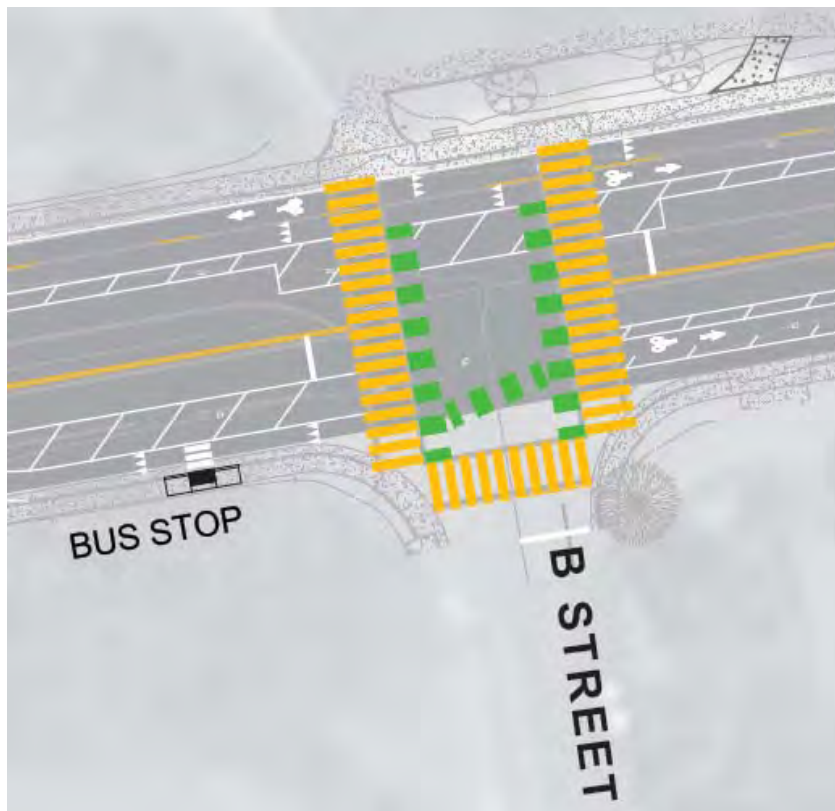


Public Feedback

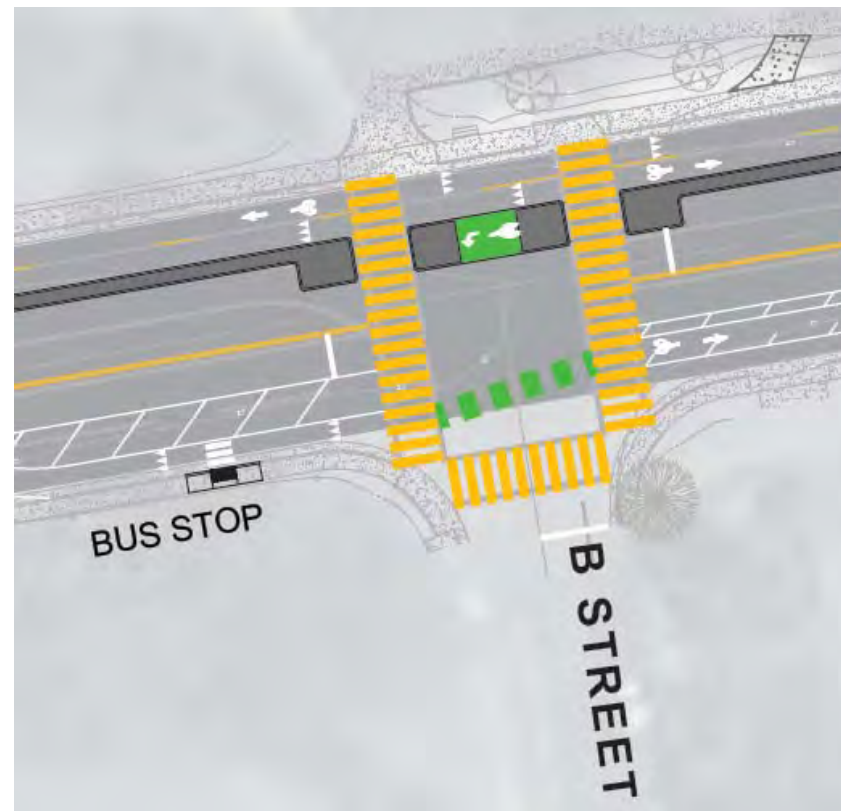


14th and B

BASELINE



ENHANCED

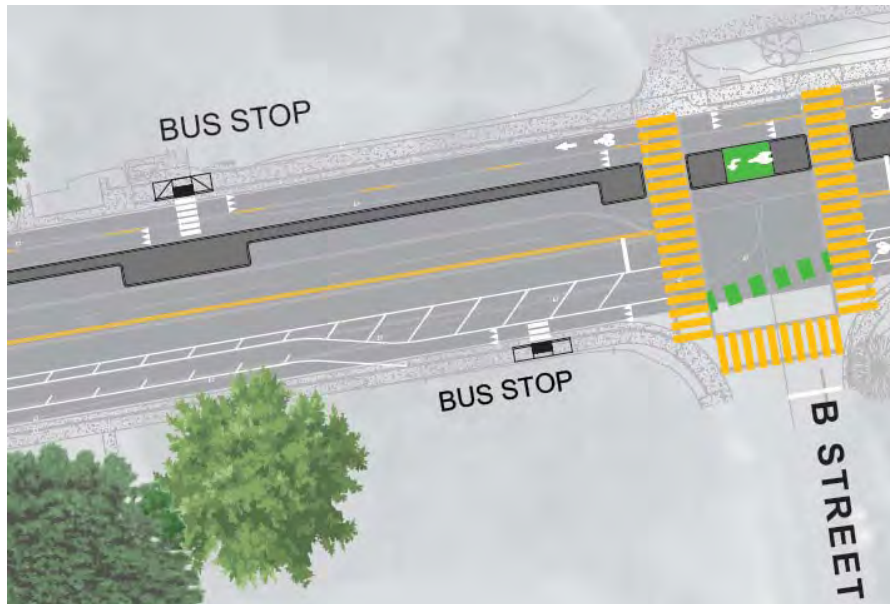


- High Visibility Striping
- Bike movement from two way cycletrack

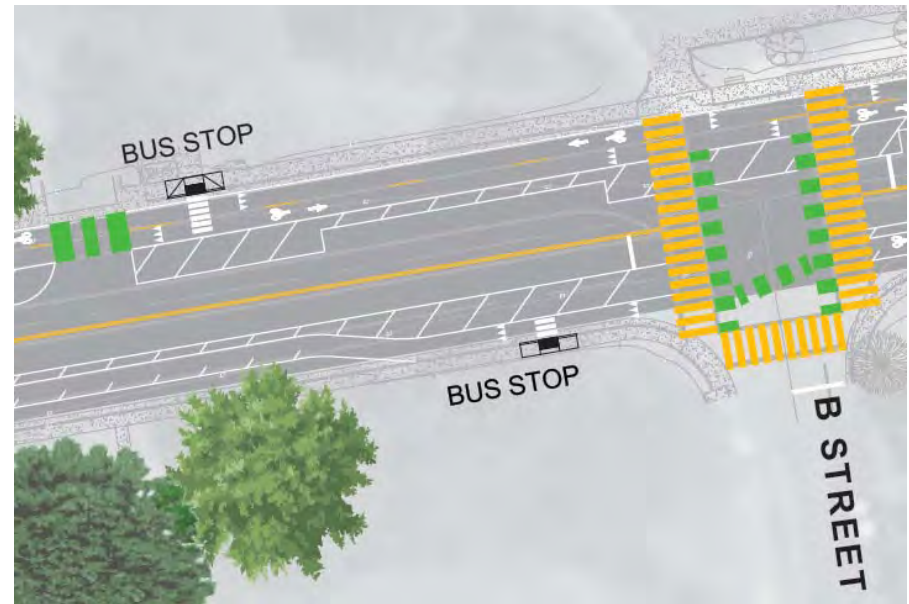


Floating Bus Stops

BASELINE



ENHANCED



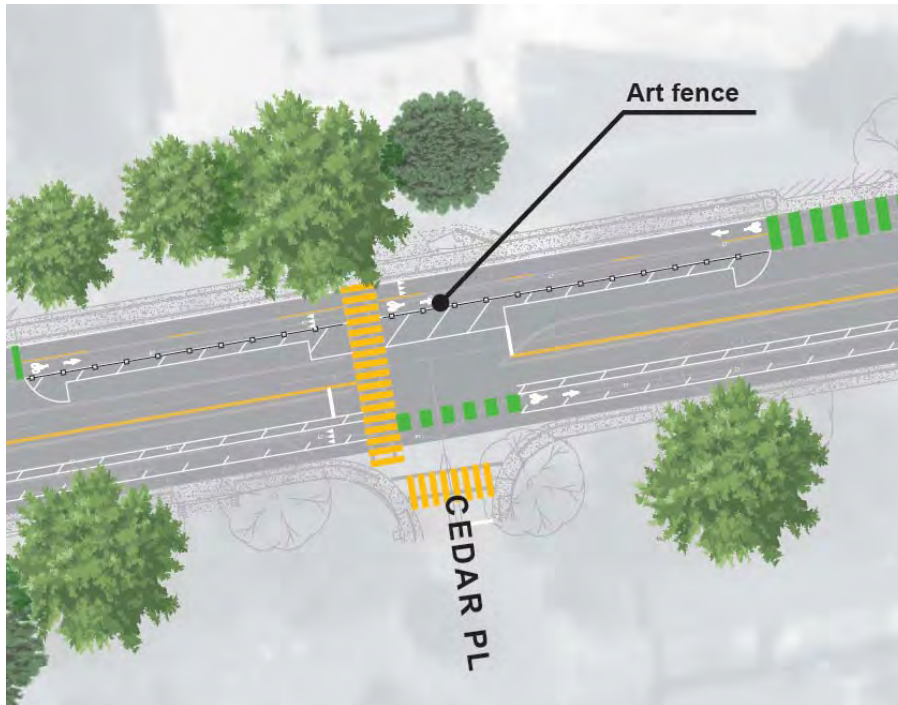
CONSIDERATIONS:

- Bus Stop remains on curb
- Loading in Street
- Bus stops in the travel lane

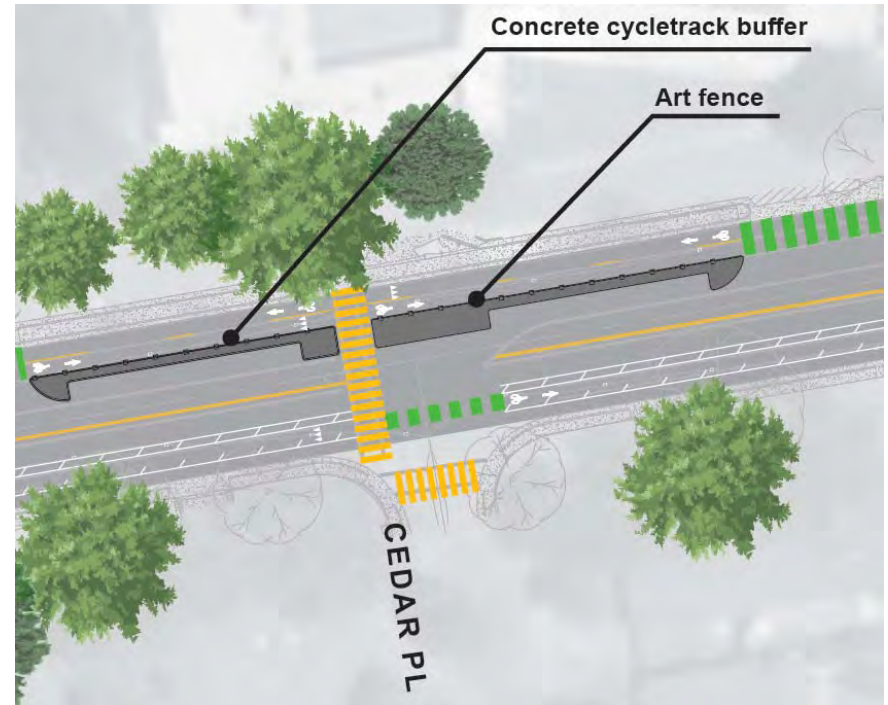


North Davis ES Drop Off

BASELINE



ENHANCED

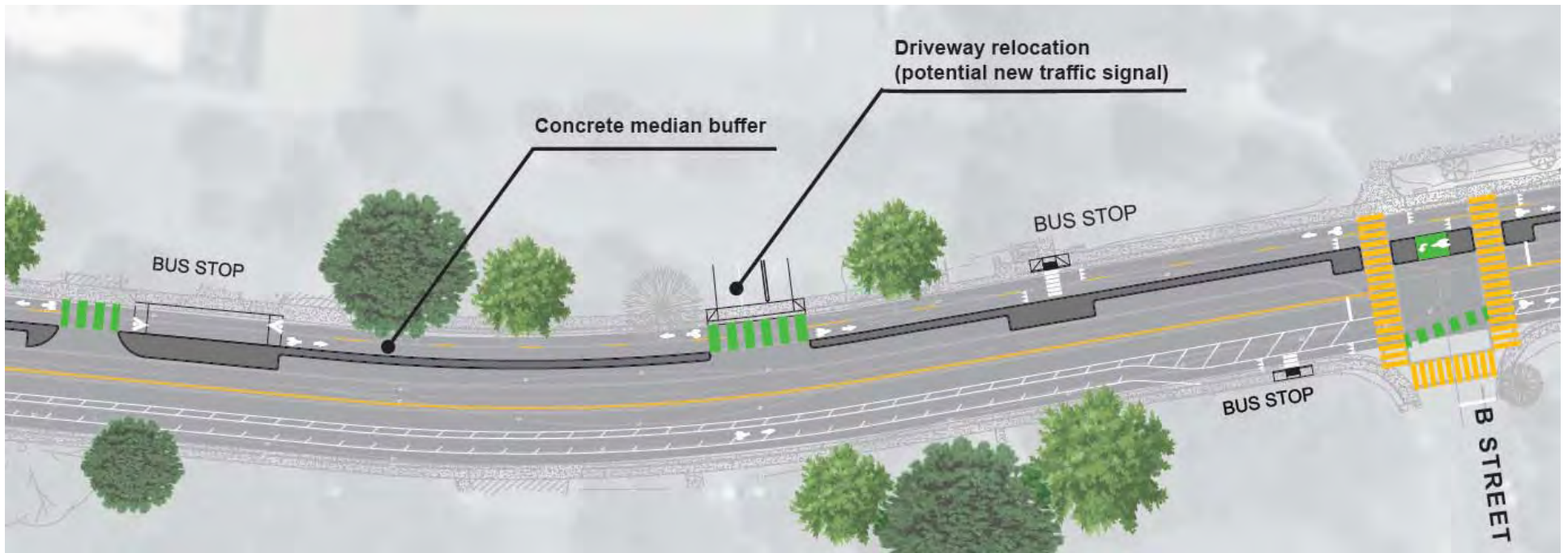


CONSIDERATIONS:

- Drop off area
- Single crossing at existing crosswalk
- Fence to ensure crossing at designated location

HS Parking Lot Driveway

ENHANCED



CONSIDERATIONS:

- Reducing the number of conflicts in and out of driveways
- Consider signal to improve safety for all users
- Better visibility at middle of curve



Planning Level Costs



Planning Level Construction Costs

BASELINE

Sycamore to Anderson	\$0.32m
Anderson to Oak	\$0.40m
Oak to F	\$0.57m
TOTAL	\$1.29 m

ENHANCED

Sycamore to Anderson	\$0.62m
Anderson to Oak	\$1.10m
Oak to F	\$1.40m
TOTAL	\$3.12 m



Phasing and Funding



POTENTIAL PHASING STRATEGIES

Build the Baseline with Current Funding

Phase 1: Baseline(\$1.2 m)

Phase 2: Build Additional Enhancements when Funding Available

Build Enhanced with Additional Funds

Phase 1: Oak to F Enhanced (\$1.4 m)

Phase 2: Sycamore to Anderson

Phase 3: Anderson to Oak



Next Steps



Project Schedule



2018

JULY 30% Designs

AUGUST Select One Concept for Final Design

AUGUST Environmental Studies

NOVEMBER Start Final Design

2019

APRIL Complete Final Design

JUNE Construction





14TH AND VILLANOVA

Corridor Improvement Project



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Partially Raised Cycletrack

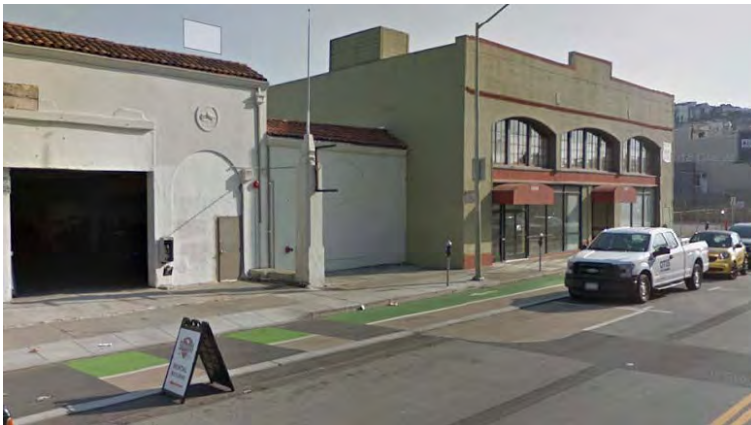
Bend, OR



Hillsboro, OR



San Francisco, CA



Vancouver, BC



Parking Protected Bicycle Facilities

Rosemead Boulevard
Temple City, CA



Telegraph Avenue
Oakland, CA



Bus Stops and Floating Islands

First Street (demo) - Los Angeles, CA



Howard Street - San Francisco, CA



Hearst Avenue - Berkeley, CA



Los Angeles Street - Los Angeles, CA



College Avenue – Modesto Modesto Junior College

