

CHARLESTON/ARASTRADERO CORRIDOR PROJECT

ARASTRADERO ROAD AND MIRANDA AVENUE TO CHARLESTON ROAD TO FABIAN AVENUE

INTRODUCTION

The planning of the Charleston-Arastradero project began in 2003 and has 14 years of stakeholder outreach and active engagement to date. The conceptual plan line for the corridor was approved by City Council unanimously in September 2015. At this time, the project design is approaching 65% completion, and it is anticipated that the design will be finalized in August 2017. The project will be scheduled according to two phases due to its significant scope, grant award timelines and other factors.

The 2.3-mile Charleston-Arastradero Corridor is a heavily used, residential, four-lane arterial road, serving as an east-west connector for the southern section of the City of Palo Alto (City). This corridor services 11 schools, several parks, shopping centers, community centers, senior living facilities and a library. The corridor has little to no traffic calming features, lacking protection for bicyclists and pedestrians, which is particularly an issue during peak traffic hours. For years, residents and other stakeholders have expressed their concerns regarding safety for pedestrians, bicyclists, and drivers; lack of integration with the surrounding community; and diminished community value due to minimal vegetation and tree in the right-of-way.

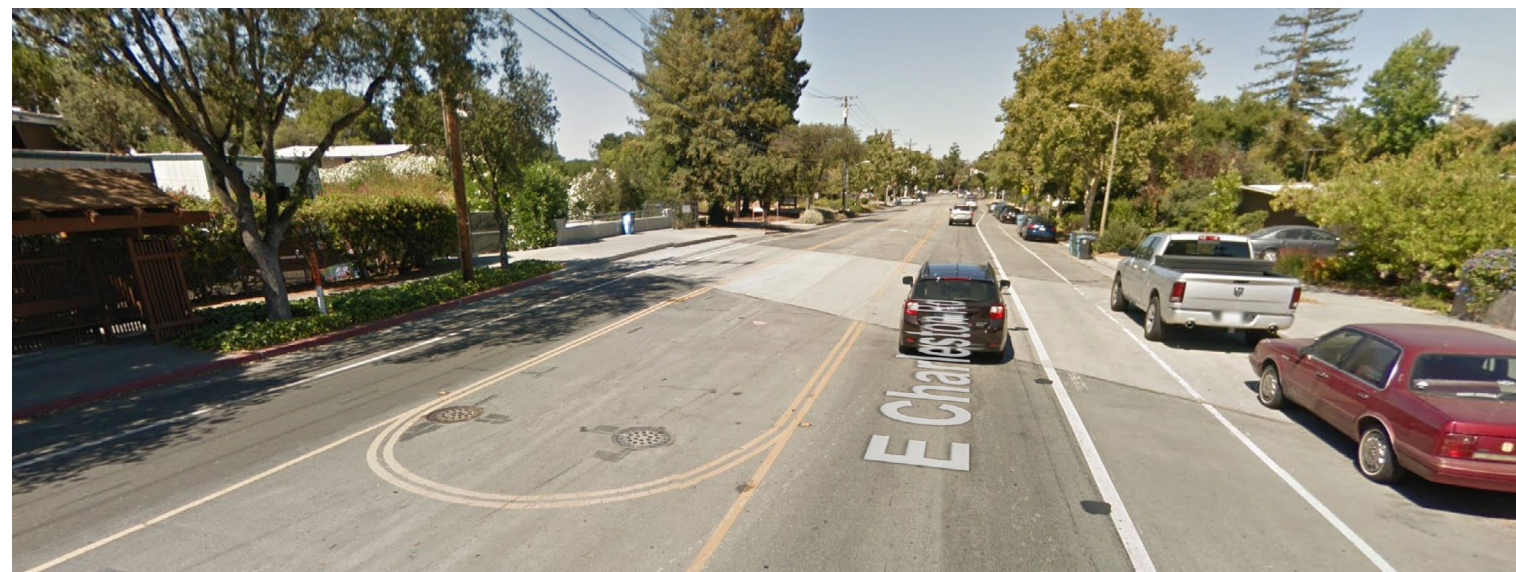
EXISTING CONDITIONS

Prior to the re-striping trials, the corridor's configuration consisted of two lanes in each direction with wide, primarily impervious, roadway and sidewalks. Since the trials were approved by the City Council in 2008 and 2012, the corridor has one lane in each direction and a third lane for left turn movements along the corridor. The "median" areas are currently painted islands. The Charleston-Arastradero Corridor Project serves to turn these painted islands into permanent hardscape or landscaped areas.

The existing corridor has more than 750,000 SF of asphalt with minimal landscaping and no Green Stormwater Infrastructure (GSI) features in the right-of-way. The Arastradero Road portion of the corridor in particular has few existing street trees to define the edge of the corridor and/or shade frontage sidewalks. All project work will be contained within the existing 80-86' right-of-way (which includes the 60-foot curb-to-curb street width plus existing sidewalks, and vegetation and GSI features) along the corridor and the existing rights-of-way at each of the 10 signalized intersections.



El Camino Real looking from Charleston Road. Below: Existing trial pavement parkings at Arastradero Road and Coulombe Drive. Bottom: Charleston Road near Herbert Hoover Elementary School.



SCOPE OF WORK

The City's objective is to address the needs of the nearby residents and surrounding community, who have requested an improved corridor with slower speeds, safer conditions for pedestrians and bicyclists, and various vegetation treatment improvements to improve aesthetic quality of the corridor and improve water quality.

The goals and benefits of the Charleston-Arastradero project are as follows:

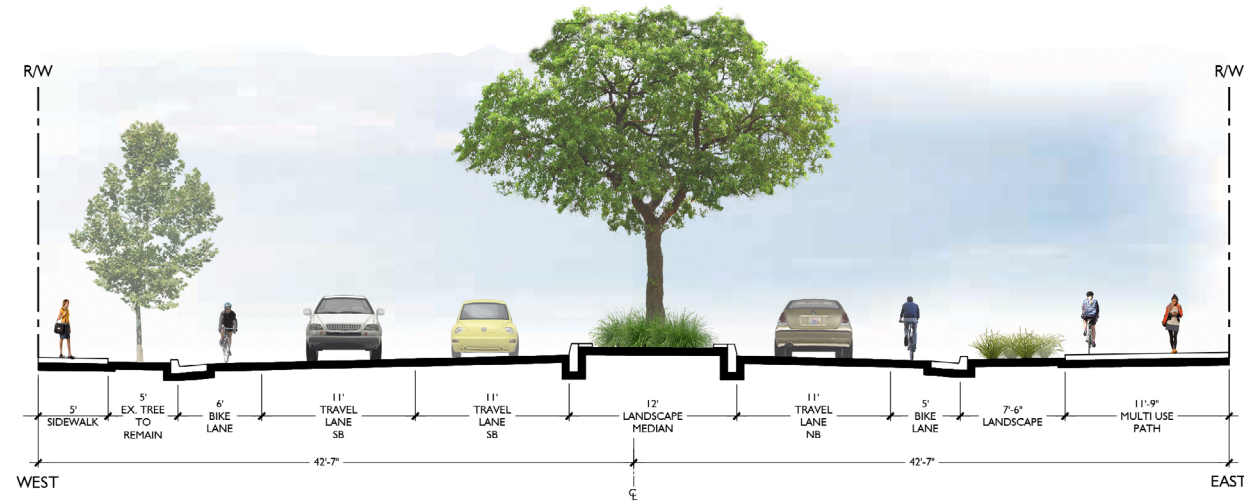
- enhance streetscape and quality of life in the corridor for local residents and surrounding community by incorporating landscaped medians, street trees and other streetscape improvements, and GSI;
- enhance school commute safety for K-12 students, and improve the quality of bike and pedestrian experience through new design features such as bulb-outs, widened sidewalks, additional cross-walks, modifications to intersection geometry, and enhanced bike lanes and facilities; and
- reduce the amount of very high speed vehicles by incorporating the above-mentioned improvements that serve to enhance roadway safety and operational issues.

The project adds approximately 140 trees, 5,800 shrubs, groundcover, and grasses, and 16,000 bio-retentions plants. These plants are scattered through the 42,000 SF of added landscaped medians, bulb-outs, and bio-retention areas. Landscape plantings are a mix of native, low-water use, and low-maintenance species.

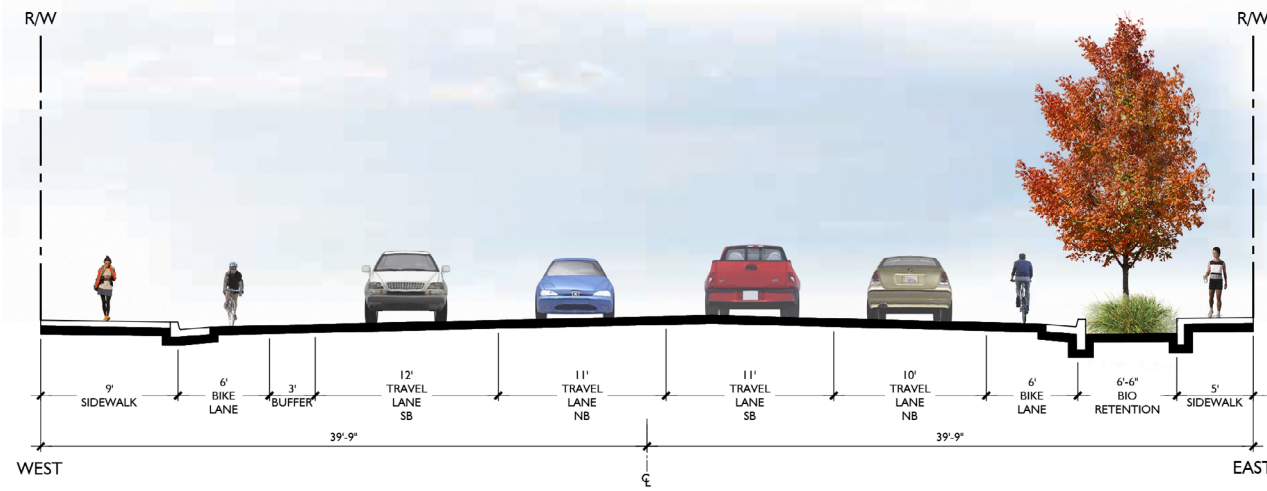
The project serves to replace painted "medians" with landscape or hardscaped areas to prevent cars from taking dangerous turns and also to protect bicyclists and pedestrians. Pavement markings are also being used to highlight pedestrians and bicyclists for drivers. The corridor has a dedicated or buffered bike lanes and green bike lanes. Yellow high-visibility crosswalks are used in areas close to schools.

ARASTRADERO ROAD - MIRANDA AVE TO POMONA AVE

STREET SECTION A-A

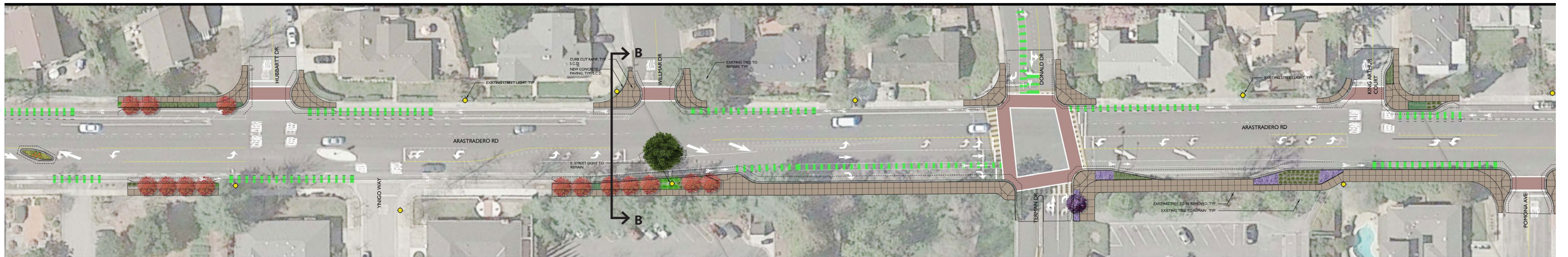
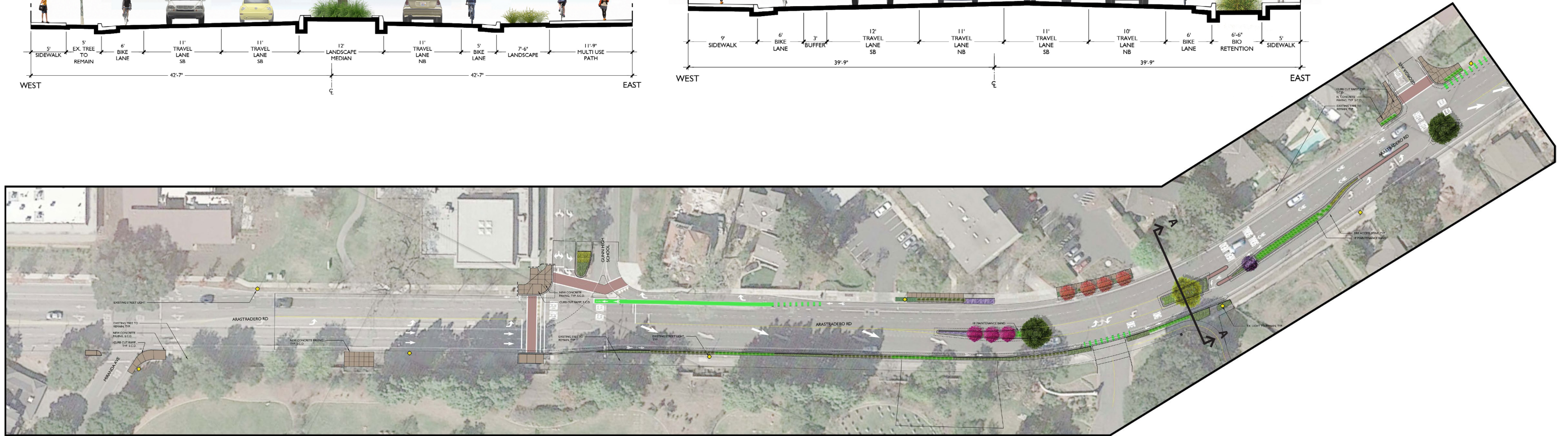


STREET SECTION B-B

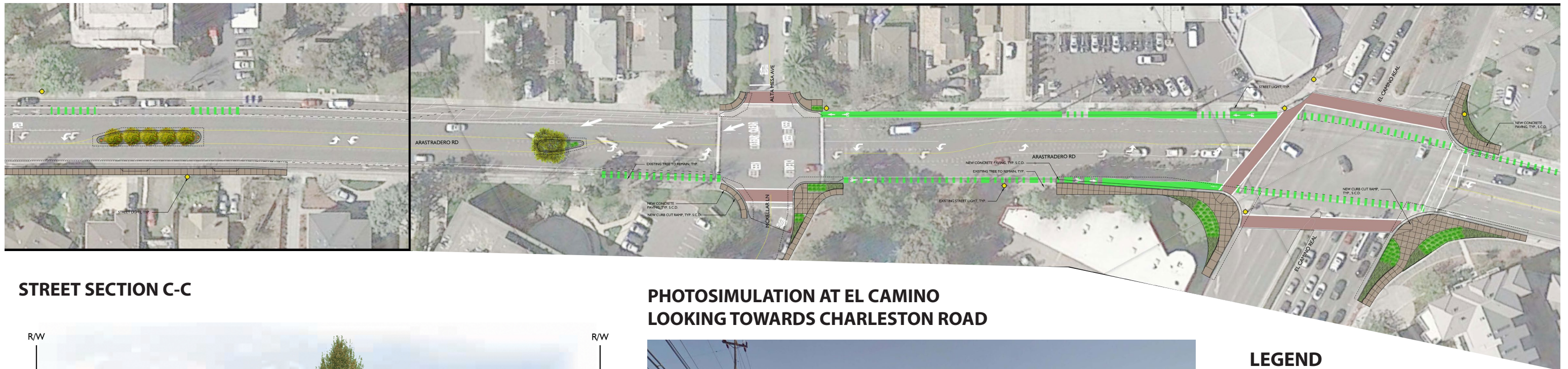
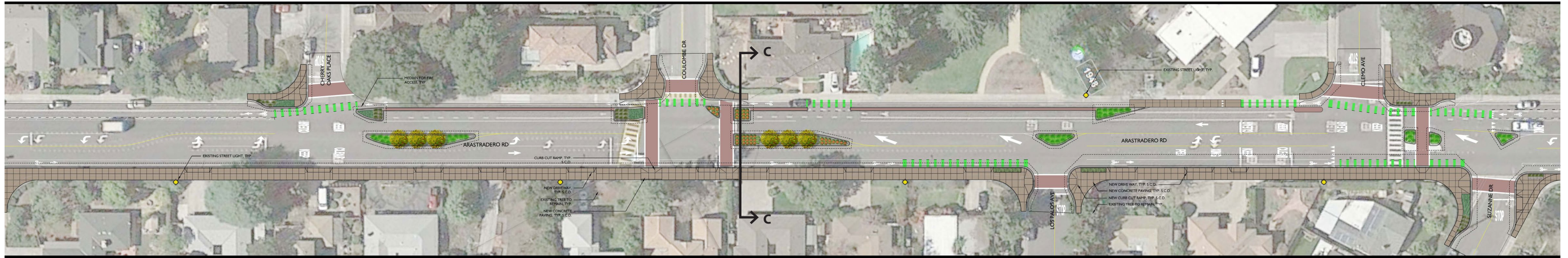


LEGEND

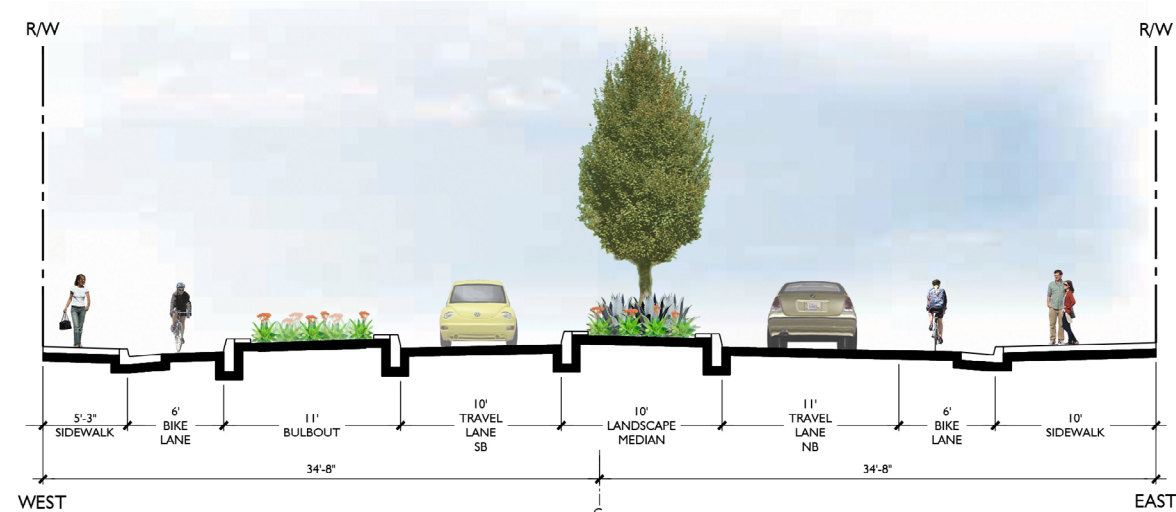
- NEW CONCRETE PAVING
- NEW PLANTING
- BIKE LANE
- EXISTING STREET LIGHT TO REMAIN



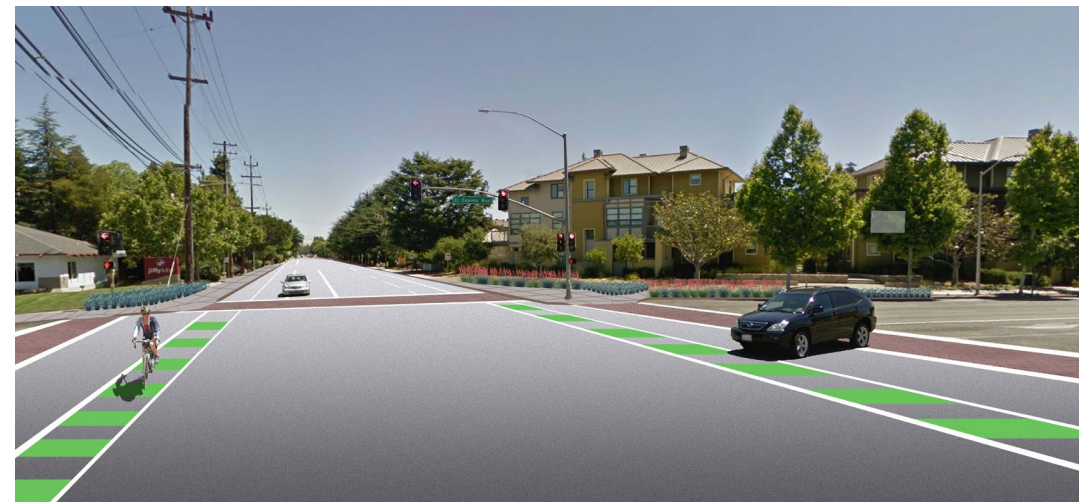
ARASTRADERO ROAD - POMONA AVE TO EL CAMINO REAL





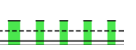

STREET SECTION C-C



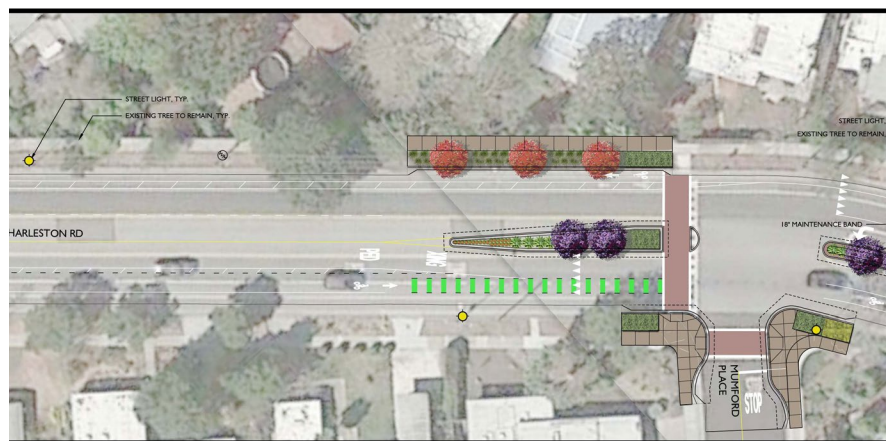
**PHOTOSIMULATION AT EL CAMINO REAL
LOOKING TOWARDS CHARLESTON ROAD**



LEGEND

-  NEW CONCRETE PAVING
-  NEW PLANTING
-  BIKE LANE
-  EXISTING STREET LIGHT TO REMAIN

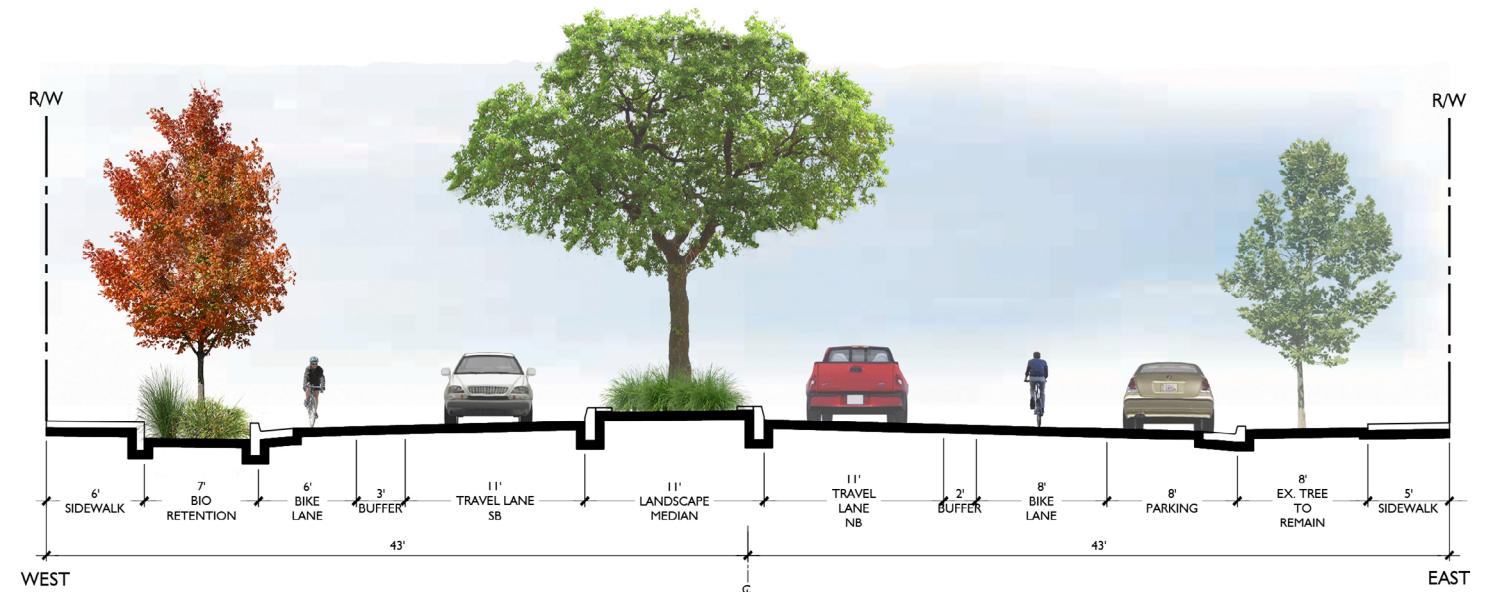
CHARLESTON ROAD - EL CAMINO REAL TO MUMFORD PLACE



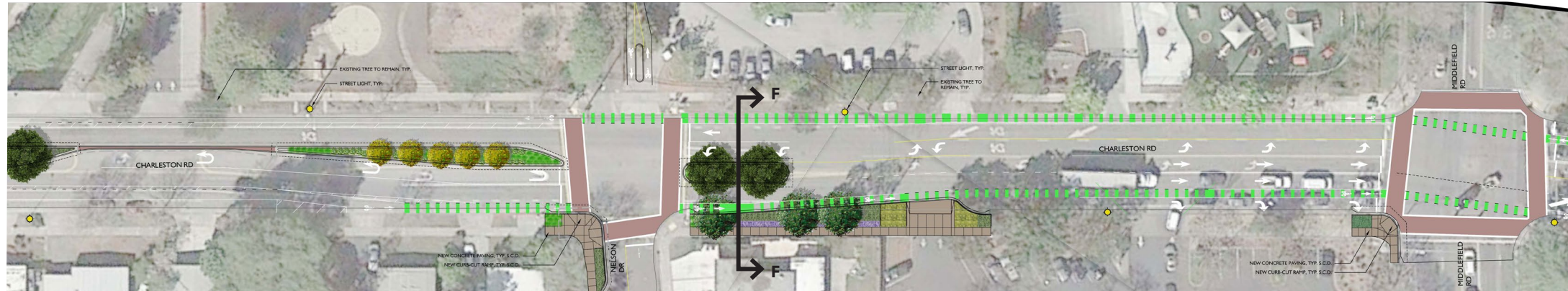
LEGEND

- NEW CONCRETE PAVING
- NEW PLANTING
- BIKE LANE
- EXISTING STREET LIGHT TO REMAIN

STREET SECTION D-D



CHARLESTON ROAD - MUMFORD PLACE TO SUTHERLAND DRIVE



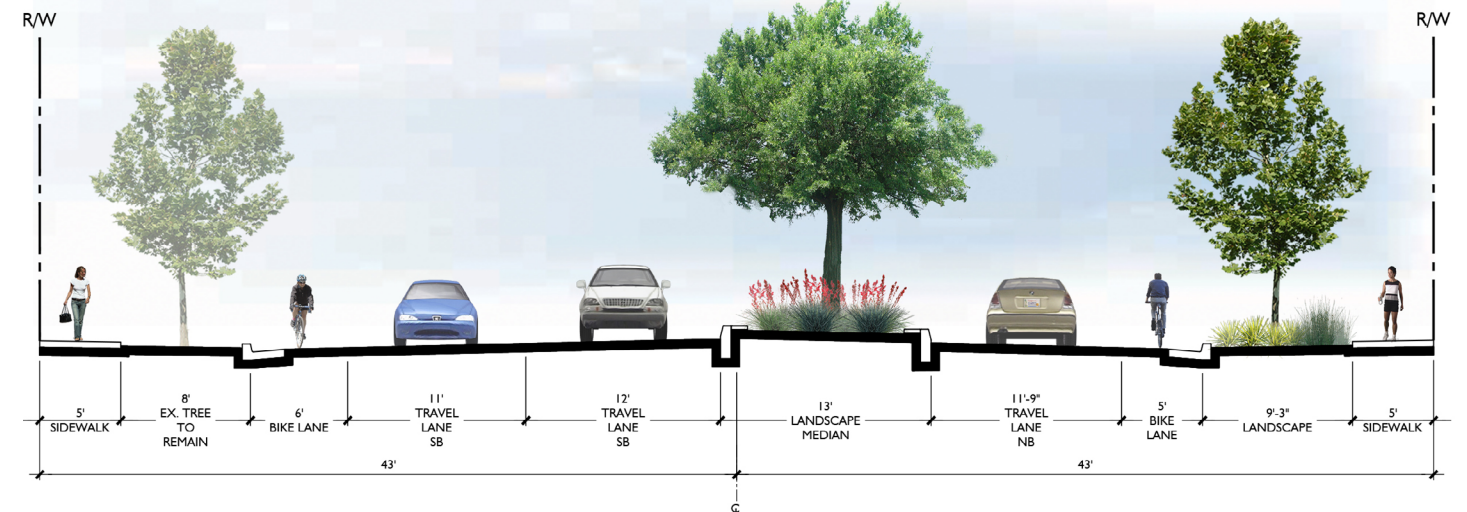
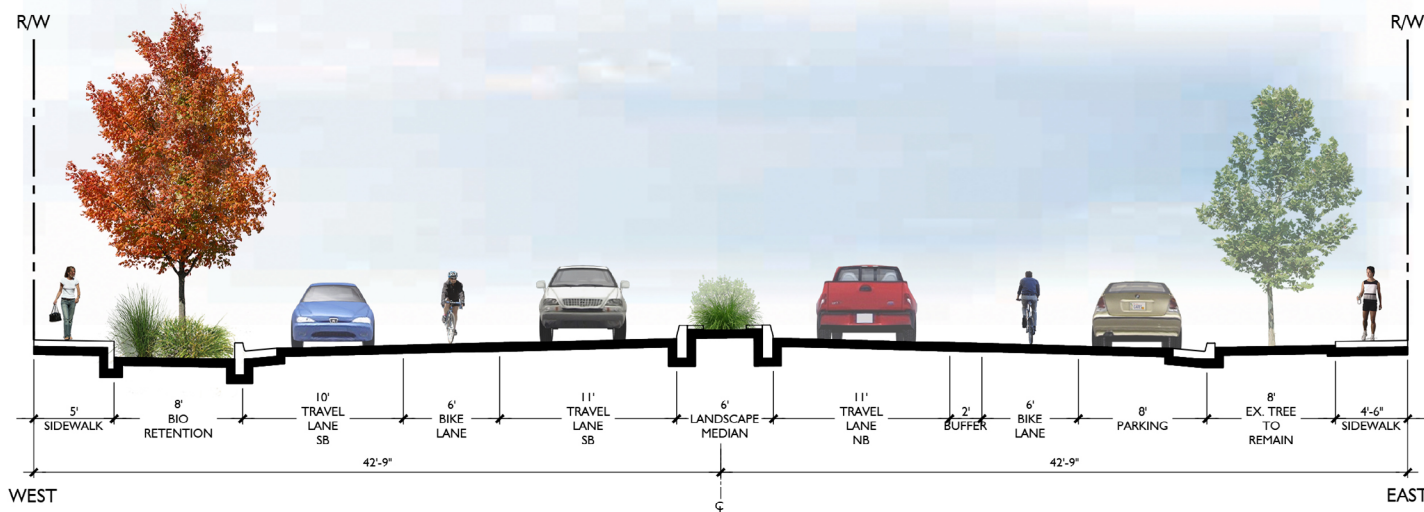
LEGEND

- NEW CONCRETE PAVING
- NEW PLANTING
- BIKE LANE
- EXISTING STREET LIGHT TO REMAIN

STREET SECTION D-D
on previous page

STREET SECTION E-E



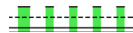

STREET SECTION F-F



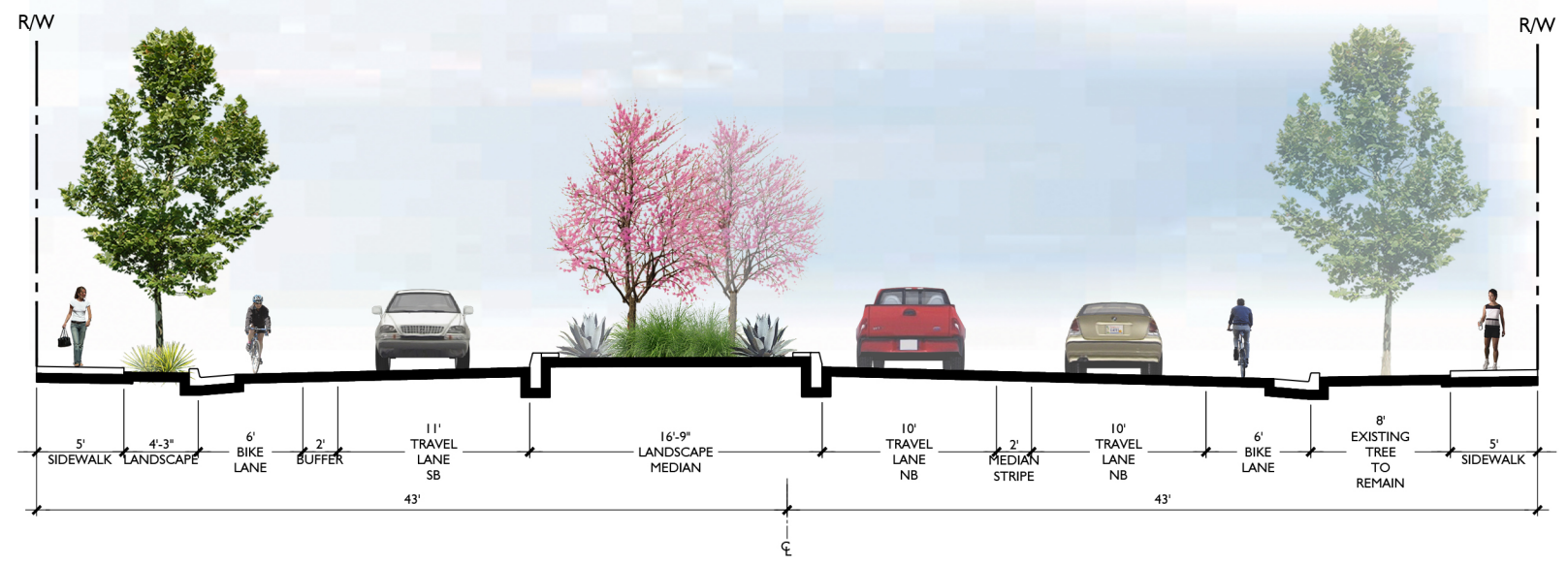
CHARLESTON ROAD - SUTHERLAND DRIVE TO FABIAN WAY



LEGEND

-  NEW CONCRETE PAVING
-  NEW PLANTING
-  BIKE LANE
-  EXISTING STREET LIGHT TO REMAIN

STREET SECTION G-G



PLANT PALETTE

TREES

STREET TREES



Quercus lobata
Valley Oak



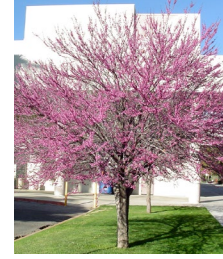
Quercus suber
Cork Oak

COLUMNAR TREE



Carpinus betulus 'Fastigiata'
European Hornbeam

ACCENT TREES



Cercis occidentalis
Western Redbud



Lagerstroemia 'Muskogee'
Crape Myrtle

STORMWATER TREATMENT TREES



Acer rubrum 'Armstrong'
Scarlet Maple



Platanus a. 'Columbia'
Sycamore

SHRUBS AND GROUNDCOVERS

LOW PARKWAY AND MEDIAN PLANTING (3' AND UNDER)



Aloe striata
Aloe



Aloe 'Blue Elf'
Aloe



Cistus x pulverulentus 'Sunset'
Rockrose



Dianella revoluta 'Baby Bliss'
Baby Bliss Flax Lily



Dianella revoluta 'Little Rev'
Flax Lily



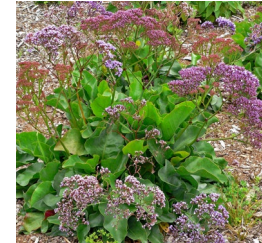
Dianella tasmanica 'Yellow Stripe'
Variegated Flax Lily



Elymus condensatus 'Canyon Prince'
Canyon Prince Wildrye



Iris douglasiana
Pacific Coast Iris



Limonium californicum
Sea Lavender



Lomandra longifolia 'Breeze'
Dwarf Mat Rush



Lomandra longifolia 'Platinum Beauty'
Dwarf Mat Rush



Chondropetalum l. 'El Campo'
Small Cape Rush



Mahonia eurybracteata 'Soft Caress'
Oregon Grape



Mimulus cardinalis
Scarlet Monkey Flower



Salvia clevelandii
Cleveland Sage



Westringia fruticosa 'Morning Light'
Coast Rosemary



Yucca 'Color Guard'
Color Guard Adam's Needle

MEDIAN PLANTING



Agave 'Parry'
Parry's Agave



Agave 'Blue Glow'
Agave



Hesperaloe parviflora
False Yucca

BIORETENTION PLANTINGS



Carex divulsa
Berkeley Sedge



Carex pansa
California Meadow Sedge



Carex praegracilis
California Field Sedge



Muhlenbergia dubia
Pine Muhly

SITE ELEMENTS

MEDIAN MAINTENANCE BAND



RAIN GARDENS

