

CARDIFF-BY-THE-SEA

SAN ELIJO CORRIDOR CONCEPTUAL MASTER PLAN



FINAL REPORT
December 23, 2014

LdG
LANDSCAPE
ARCHITECTS

THE TEAM

LdG Landscape Architects

Rocio Gertler	Head Landscape Architect
Annalis Johnson-Benner	Project Manager
Katherine Li	Designer

Cardiff 101 Board

Brenda Dizon	Cardiff 101 Main Street Vice President
Malte Farnaes	Cardiff 101 Main Street Secretary
Brett Farrow	Cardiff 101 Main Street Board Member, Chair of Cardiff 101 Design Committee
Susan Hays	Cardiff 101 Main Street President
Joshua Lichtman	Cardiff 101 Main Street Board Member
Morgan Mallory	Cardiff 101 Main Street Board Member
Pete Najjar	Cardiff 101 Main Street Board Member
Tess Radmill	Cardiff 101 Main Street Executive Director
Annika Walden	Cardiff 101 Main Street Assistant Director

Design Committee

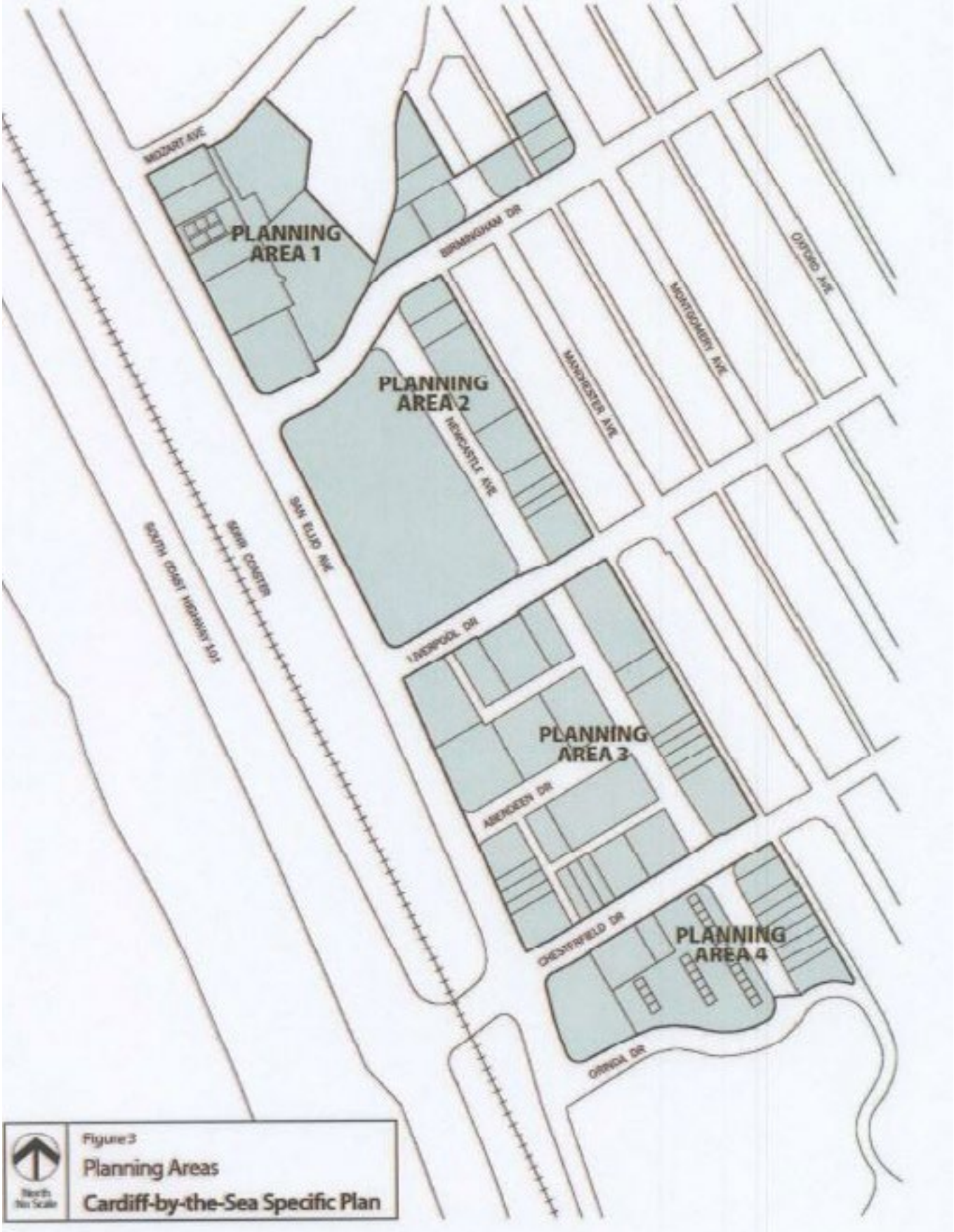
Bruno Buechler	Cardiff 101 Main Street Design Committee Member
Scott Maas	Cardiff 101 Main Street Design Committee Member
Jo Ann Shannon	Cardiff 101 Main Street Design Committe Member

Attendees

Teresa Barth	Encinitas City Council Member
James Cutri	Cardiff Property/Business Owner
Edward Deane	City of Encinitas, Engineering
Stephanie Kellar	City of Encinitas Engineering
Diane Langager	City of Encinitas Planning
Dahvia Lynch	NCTD Chief Planning Officer
Jeff Murphy	City of Encinitas Planning Director
John Najjar	Property & Business Owner of Cardiff Town Center & Seaside Market
Glenn Pruim	City of Encinitas Engineering Director
Lynne Tufts	City of Encinitas Chief Information Officer
Gus Vina	City of Encinitas City Manager
Trace Wilson	Materia LLC Architecture

- + **Greater connection** and **walkability** to surrounding areas in the community including north to the Composer District, west to the Carpentier Parkway & San Elijo State Beach Campgrounds.
- + Improved **circulation** for pedestrians, bicycles and cars into and through the Cardiff Specific Plan Area.
- + Analysis of existing **on-street parking resources** and recommendations for improvements, (parking reconfiguration, minimizing red curbs, limiting driveways, etc.).
- + Identification of areas in need of **pedestrian improvements** such as damaged, inadequate, missing or incomplete sidewalks or pathways.
- + Identification of **circulation points** and intersections that are currently **obstacles** or in need of work in order to better allow **accessibility**, (sidewalk width, wheelchair ramps, etc.).
- + Review of significant **intersections** and **gateways** into the Cardiff Specific Plan Area and recommendations for promoting **traffic calming** while avoiding back-up or congestion.
- + Retain **community character** and build upon existing amenities while identifying **new opportunities**.
- + Propose means for allowing for a “**quiet zone**” to minimize or eliminate the need for train horns.
- + Incorporate **previous studies and designs** into the final conceptual streetscape plan, (Cardiff Parking Study, Rail Trail, and the Cardiff Specific Plan).

OUR SITE



OUR SITE



OUR SITE



OUR SITE



OUR SITE



OUR SITE



CARDIFF-BY-THE-SEA OPPORTUNITIES//IDENTITY



PEDESTRIAN DESIGN



CARDIFF-BY-THE-SEA OPPORTUNITIES//IDENTITY



RAILROAD QUIET ZONE

QUIET ZONE CRITERIA

In order to create a Quiet Zone, one of the following conditions must be met:

- 1. **The Quiet Zone Risk Index (QZRI) is less than or equal to the Nationwide Significant Risk Threshold (NSRT)** with or without additional safety measures such as Supplementary Safety Measures (SSMs) or Alternative Safety Measures (ASMs). The QZRI is the average risk for all public highway-rail crossings in the quiet zone, including the additional risk for absence of train horns and any reduction in risk due to the risk mitigation measures. The NSRT is the risk calculated annually by averaging the risk at all the Nation’s public highway-rail grade crossings equipped with flashing lights and gates where train horns are routinely sounded.
- 2. **The Quiet Zone Risk Index (QZRI) is less than or equal to the Risk Index With Horns (RIWH)** with additional safety measures such as SSMs or ASMs. The RIWH is the average risk for all public highway-rail crossings in the proposed quiet zone when locomotive horns are routinely sounded.
- 3. **Install SSMs at every public highway-rail crossings.** This is the best method to reduce risks in a proposed quiet zone and to enhance safety.

SSMs are pre-approved risk reduction engineering treatments installed at certain public hihway-rail crossings within the quiet zone and can help maximize safety benefits adn minimize risk. SSMs include: medians or channelization devices and four quadrant gates systems.

Source: *Guide to the Quiet Zone Establishment Process*, www.fra.dot.gov

FROM OUR ASSESSMENT:

Using the Federal Railroad Administration’s “Quiet Zone Calculator”:

Chesterfield Dr. Crossing

RISK INDEX WITH HORNS (**RIWH**) = 92033.22
QUIET ZONE RISK INDEX (**QZRI**) = 153511.42

NATIONWIDE SIGNIFICANT RISK THRESHOLD (**NSRT**) = 14347.00

The screenshot displays the 'Quiet Zone Calculator' web application. At the top, it says 'Federal Railroad Administration QUIET ZONE CALCULATOR'. Below this is a navigation bar with 'Home | Help | Contact | logoff abenner@ldg-land.com'. The main interface has a 'Change Scenario' dropdown set to 'CHESTERFIE_44081'. Below this is a table with the following data:

Crossing	Street	Traffic/Warning Device	Pre-SSM	SSM	Risk	
026849V	CHESTERFIELD DR	4000 Gates	0	0	153,511.42	MODIFY

Below the table, there are links for 'Create New Zone', 'Manage Existing Zones', and 'Log Off'. A 'Step by Step Instructions' section is also visible. To the right of the table, there is a 'Summary' table:

Summary	
Proposed Quiet Zone:	CHESTERFIELD AVE.
Type:	New 24-hour QZ
Scenario:	CHESTERFIE_44081
Estimated Total Cost:	\$0.00
Nationwide Significant Risk Threshold:	14347.00
Risk Index with Horns:	92033.22
Quiet Zone Risk Index:	153511.42

Source: Federal Railroad Administration’s “Quiet Zone Calculator”, <http://safetydata.fra.dot.gov/quiet/>

RAILROAD QUIET ZONE

QUIET ZONE SSMs

Chesterfield Dr. Railroad Crossing RIWH and QZRI are **NOT** below NSRT. Cardiff-By-The-Sea can therefore, implement the following SSMs to qualify to create a Quiet Zone:

SSM CODES other codes
1Temporary Closure of a Public Highway Rail Grade Crossing
2Permanent Closure of a Public Highway Rail Grade Crossing
3Grade Separation of a Public Highway Rail Grade Crossing
4Four-Quadrant Gates Upgrade from Two Quadrant gates, No Vehicle Presence Detection
5Four-Quadrant Gates Upgrade from Two Quadrant Gates, with medians and no Vehicle Presence Detection
6Four-Quadrant Gates Upgrade from Two Quadrant Gates, with Vehicle Presence Detection
7Four-Quadrant Gates Upgrade from Two Quadrant Gates, with medians and Vehicle Presence Detection
8Four-Quadrant Gates New Installation, No Vehicle Presence Detection
9Four-Quadrant Gates New Installation with medians and no Vehicle Presence Detection
10Four-Quadrant Gates New Installation with Vehicle Presence Detection
11Four-Quadrant Gates New Installation with medians and Vehicle Presence Detection
12Mountable medians with Reflective Traffic Channelization Devices
13Non-Traversable Curb Medians with or without Channelization Devices
14One-Way Streets with Gates

Source: Federal Railroad Administration’s “Quiet Zone Calculator”, <http://safetydata.fra.dot.gov/quiet/>

RECOMMENDATION

Chesterfield Dr. currently has a Two-Quadrant Gate System. From our assessment, the most cost effective measures are:

- Mountable medians with reflective traffic channelization devices
- Non-traversable Curb medians with or without channelization devices

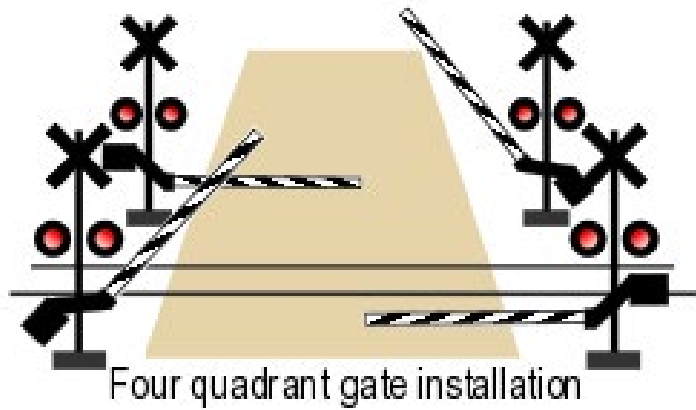
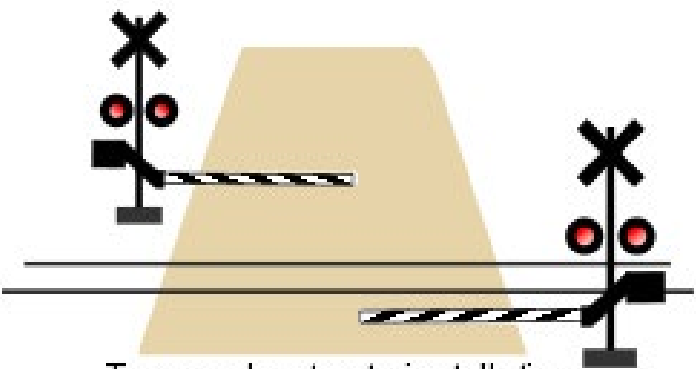
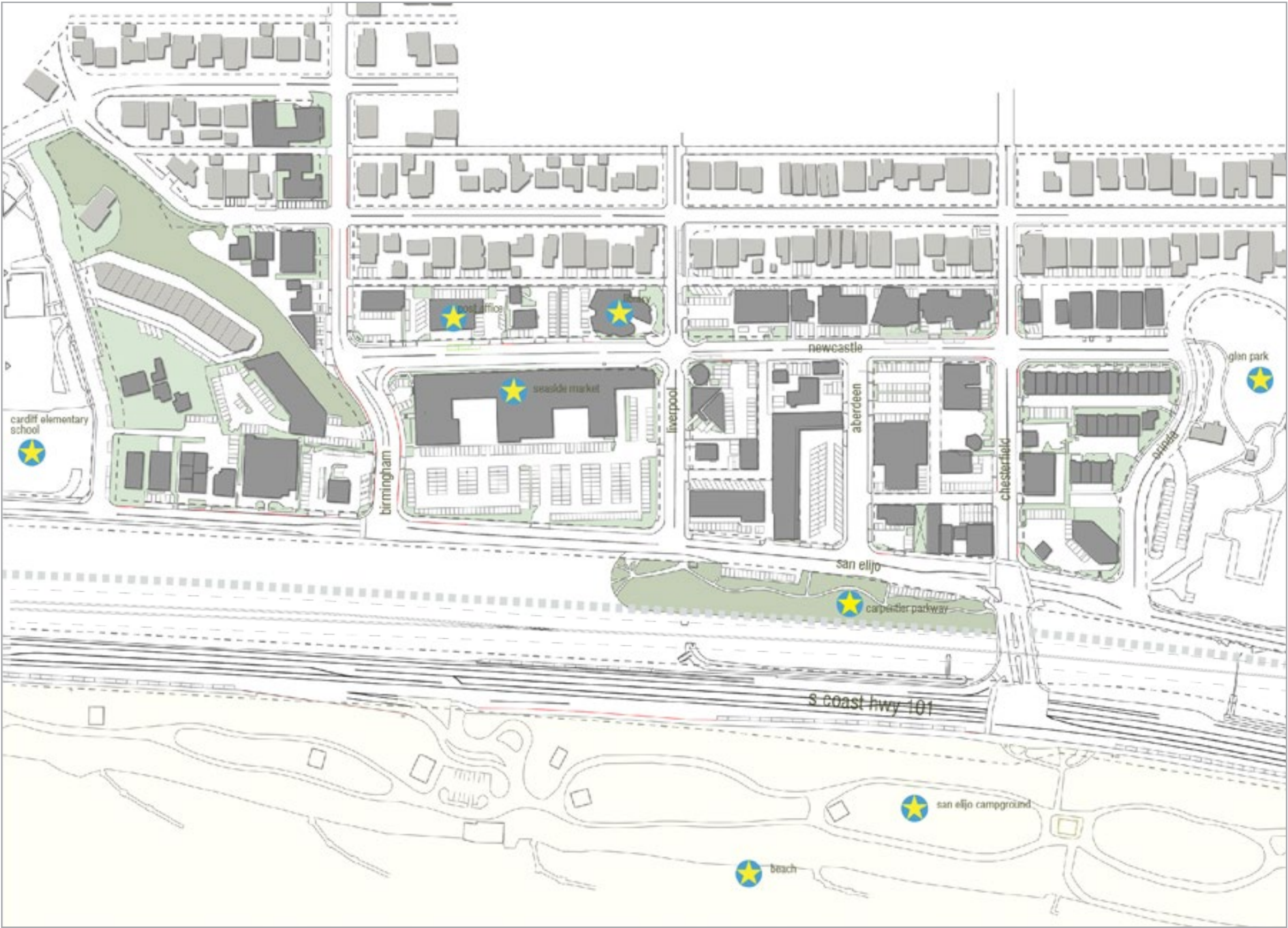
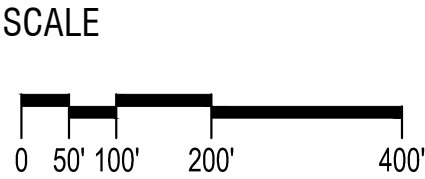


Image Source: azatrax.com

EXISTING SAN ELIJO AVENUE



- LEGEND
- Right of Way
 - ■ ■ ■ rail trail
 - ★ place of interest



PROPOSED SAN ELIJO AVENUE “GATEWAY STREET”



LEGEND

parkway
(East side of San Elijo includes hardscape and landscape)

travel lane
(shown per specific plan, recommended lane width is 12' with difference added to pedestrian space on south side of street)

reversing space

bike lane

landscaped median

parking - permeable paving

A

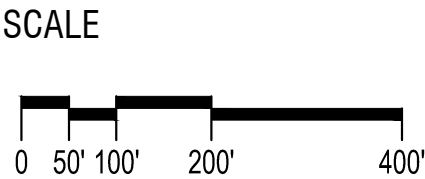
With southbound lane decreased to minimum, full travel lane and majority of required bike lane fit within R.O.W.

B

required travel lanes, 2 bike lanes (if applicable) fit within R.O.W.

example of layout on page 16

*parking on west side of San Elijo is outside of R.O.W and subject to NCTD approval.



PROPOSED SAN ELIJO AVENUE “GATEWAY STREET”



OPTION 1: Parallel parking on East; Perpendicular parking on West; 10' median



OPTION 2: Parallel parking on East; Perpendicular parking on West; 5' bike lane each side, no median



OPTION 3: 45 degree parking on East; Perpendicular parking on West; no bike lane, no median

LEGEND

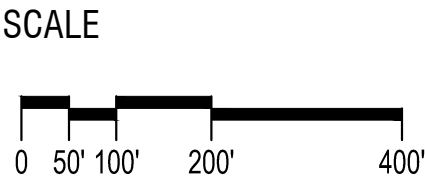
median planting

connection to rail trail

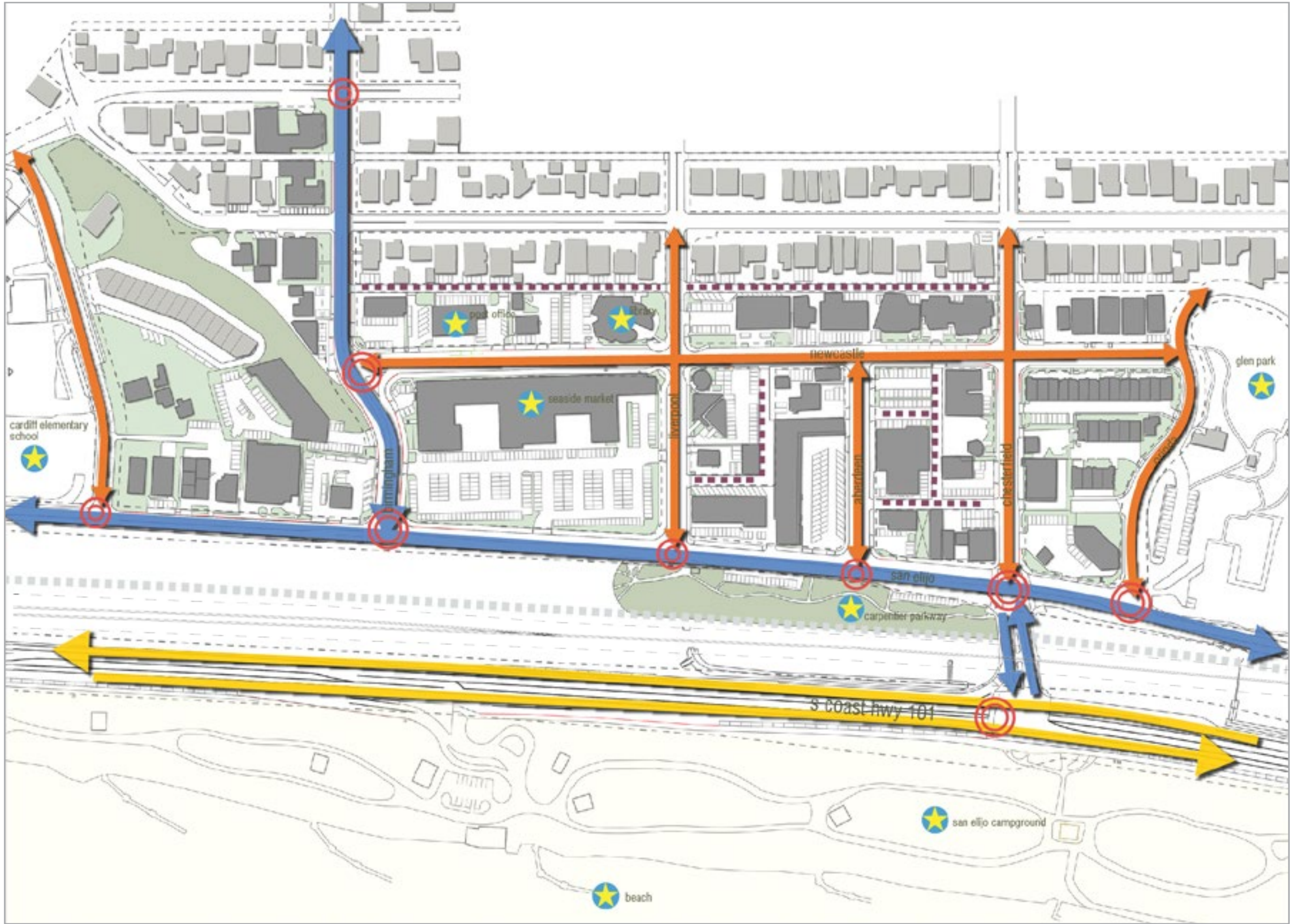
rail trail

Right of Way

place of interest



EXISTING VEHICULAR CIRCULATION + SAFETY CONCERNS



LEGEND

- augmented road *
(sections per specific plan)
- local road **
(sections per specific plan)
- 101 highway
- alley
- rail trail
- Right of Way
- intersection safety concern
- place of interest

* augmented road: these roads provide a means of increasing the capacity of a given type of arterial by maximizing the utilization of the basic lane configuration.

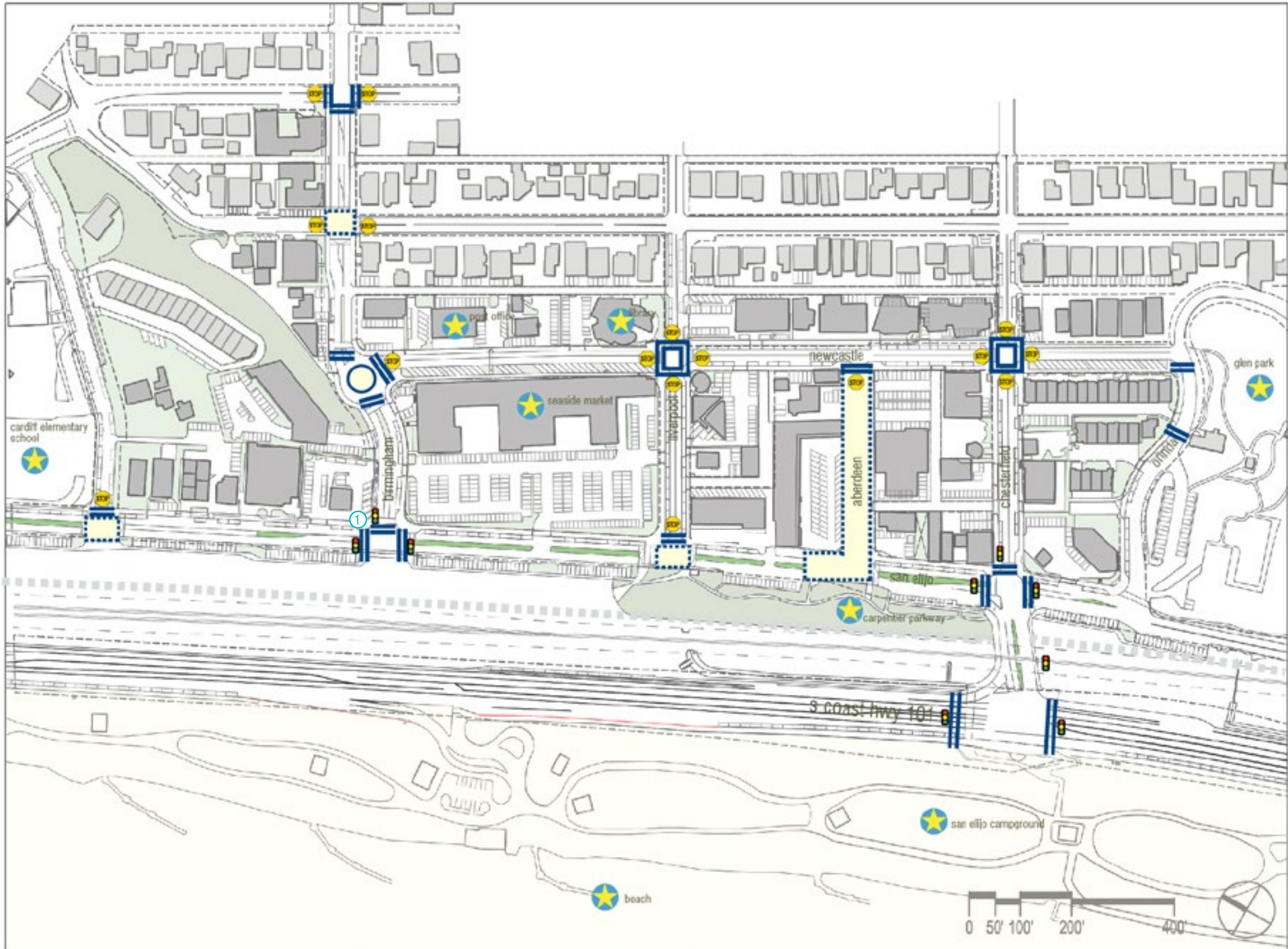
**local road: is a two-lane road whose primary purpose is to provide access to individual parcels in the City.

Source: City of Encinitas Public Road Standards, April, 1991

SCALE



PROPOSED VEHICULAR CIRCULATION IMPROVEMENTS



- LEGEND
- crosswalk treatment
 - roundabout
 - raised crosswalk
 - existing stop sign
 - existing stop light
 - rail trail
 - Right of Way
 - place of interest
 - “no right turn on red light” sign

TRAFFIC CALMING MEASURES IMAGERY

TRAFFIC ROUNDABOUT



La Jolla, CA



La Jolla, CA



River West, OR

RAISED CROSSWALKS



Boston, MA

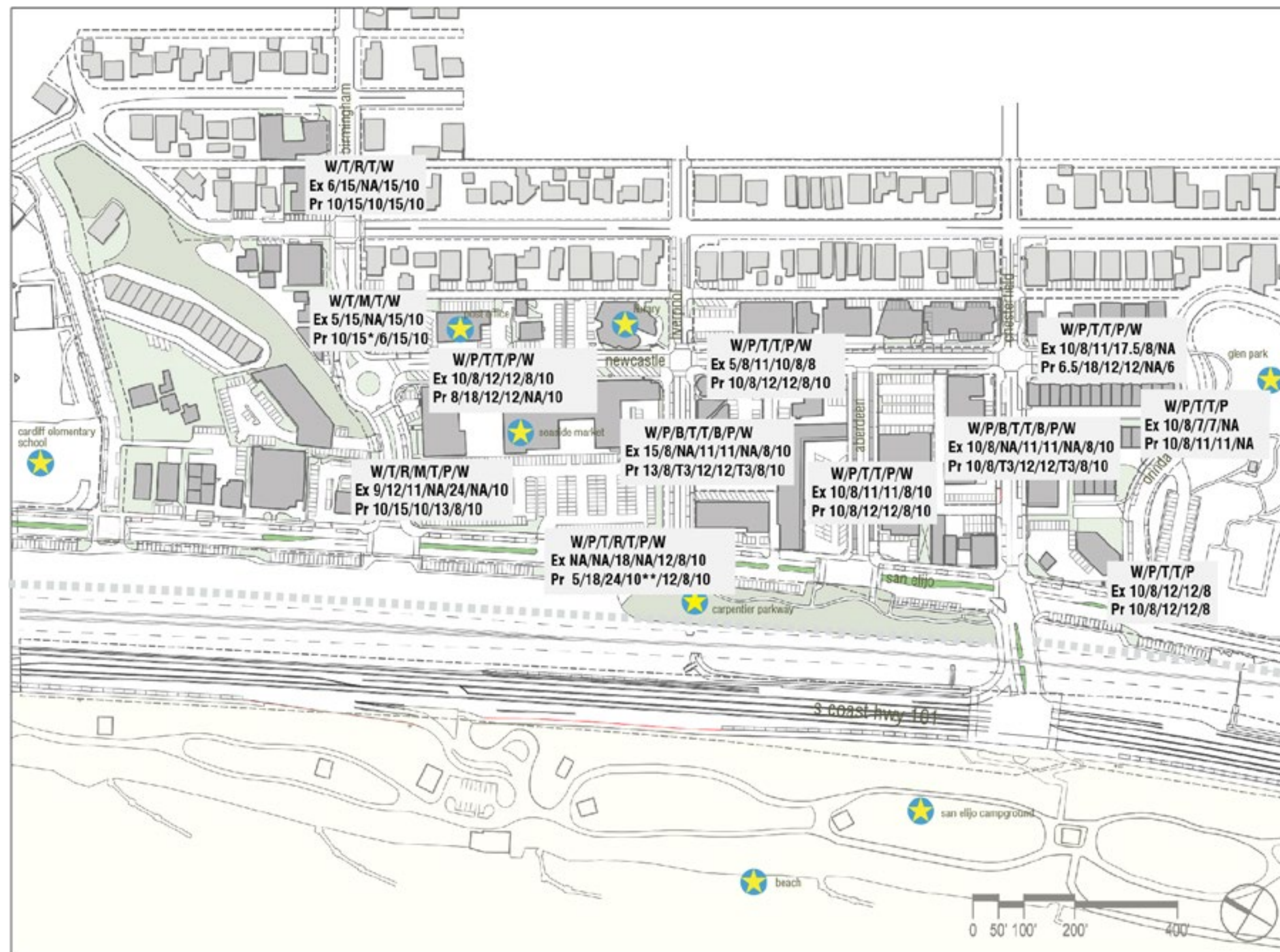


Miami, FL



Hudson River Greenway, NYC

PROPOSED ROAD IMPROVEMENTS+RIGHT OF WAY WIDTHS



LEGEND

Ex existing right of way

Pr proposed right of way

W walkway

P parking

B bike lane

T3 type 3

T travel lane

R turn lane

M median

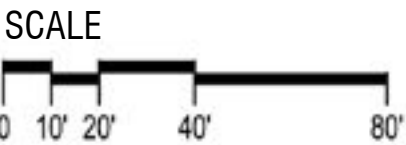
NA not applicable

----- Right of Way

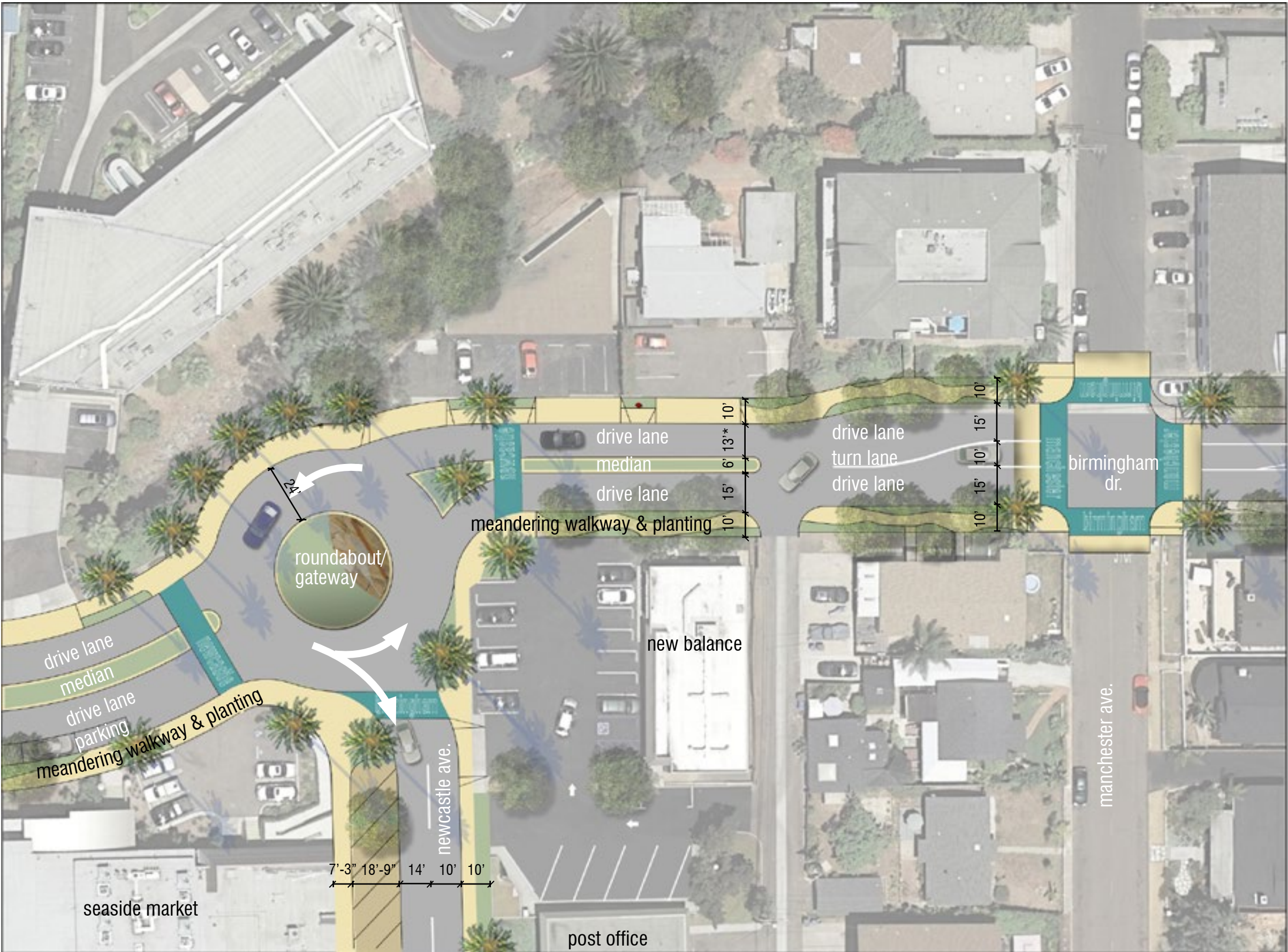
* possibility to retain curb on north side
of street with 13' travel lane

*** turn lane only at Birmingham Dr. and
Chesterfield Dr. intersections*

EXISTING BIRMINGHAM DRIVE+NEWCASTLE AVENUE INTERSECTION



PROPOSED BIRMINGHAM DRIVE+NEWCASTLE AVENUE INTERSECTION IMPROVEMENTS

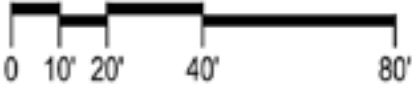


LEGEND

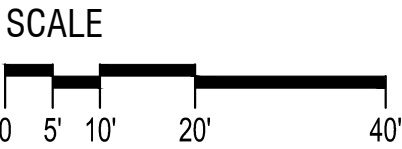
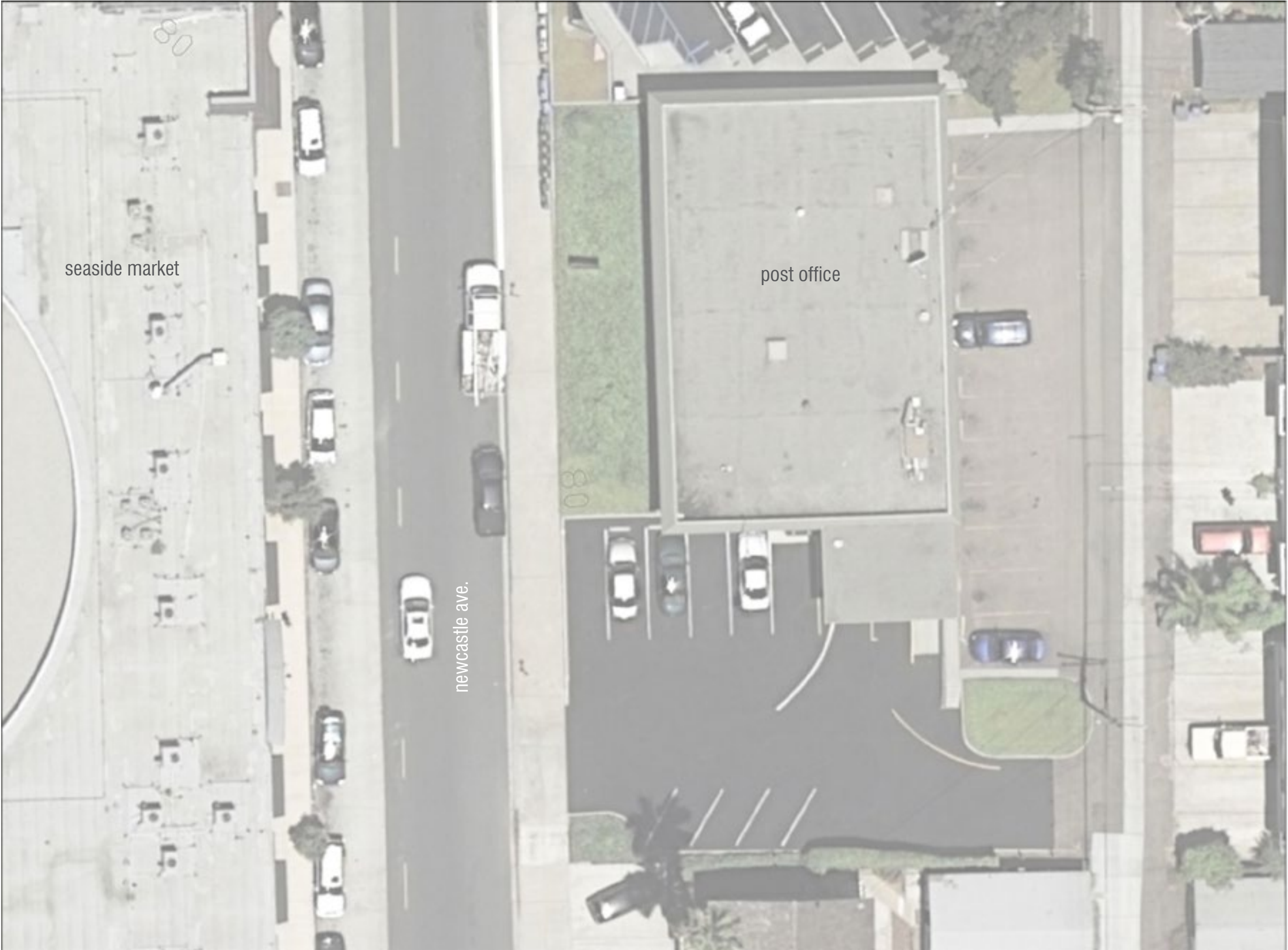
 crosswalk art opportunities

** graphic shown with 13' travel lane to retain curb on north side of street. Refer to page 25 and 26.*

SCALE



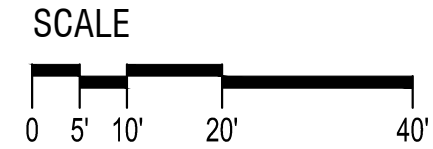
EXISTING NEWCASTLE AVENUE



PROPOSED NEWCASTLE AVENUE IMPROVEMENTS



Note: street section varies from Specific Plan. Refer to page 27.

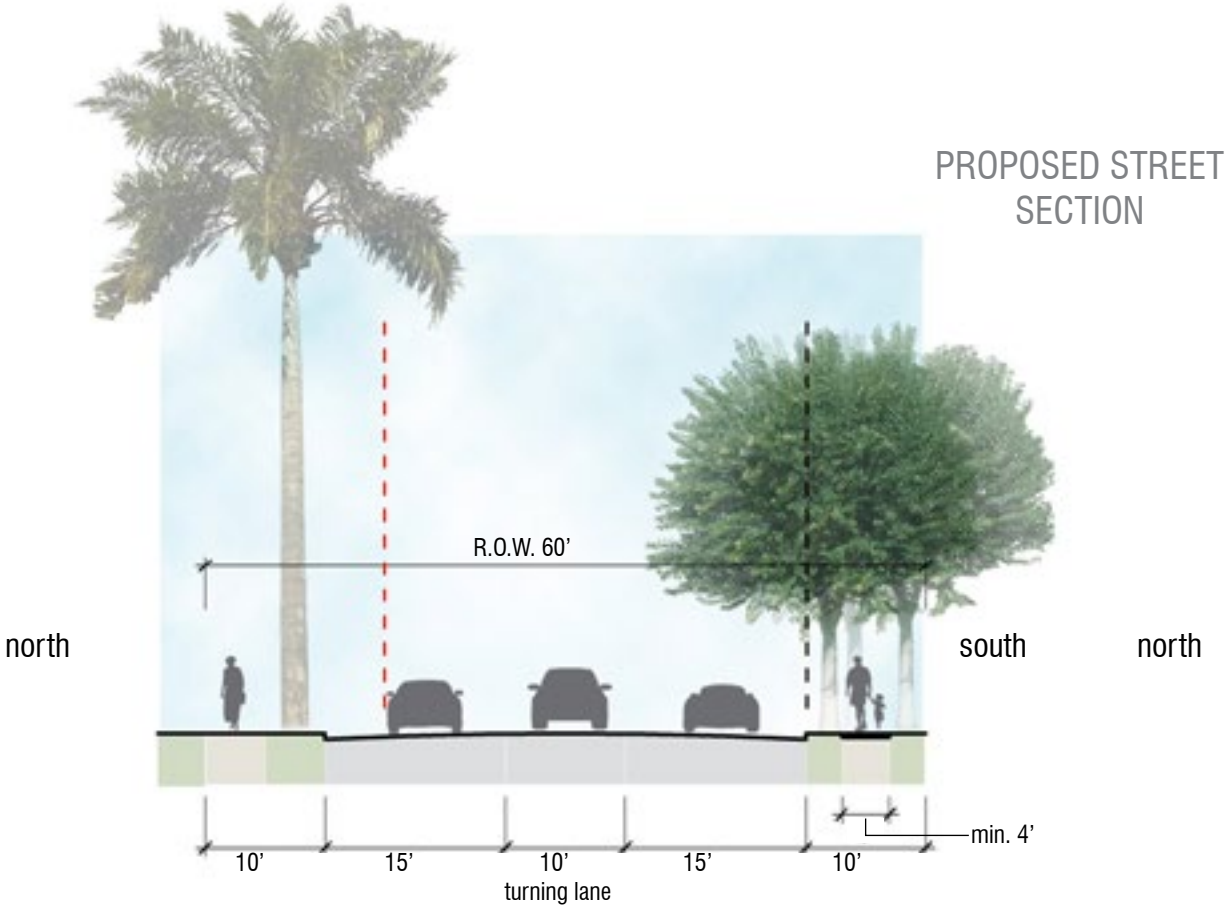
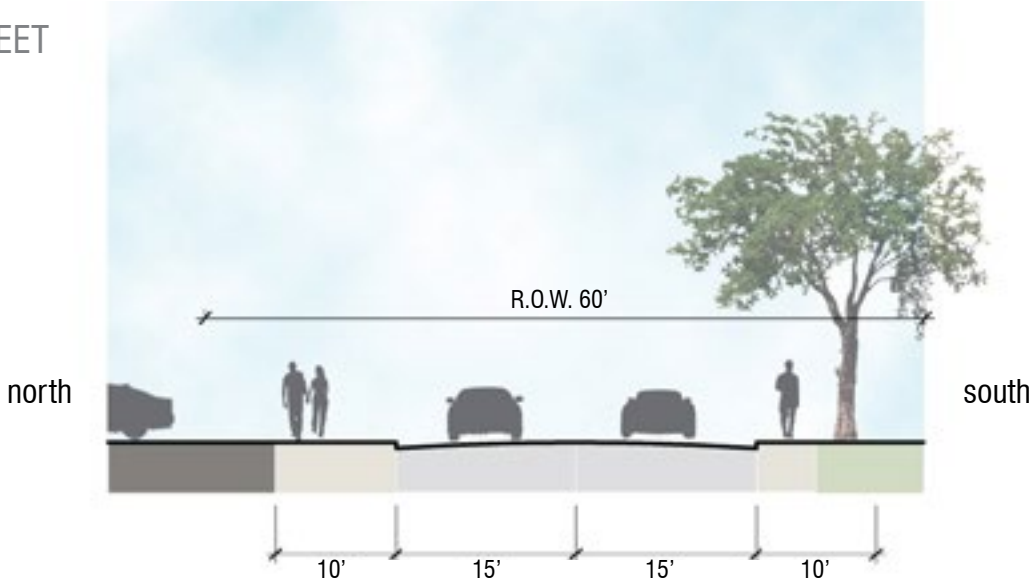
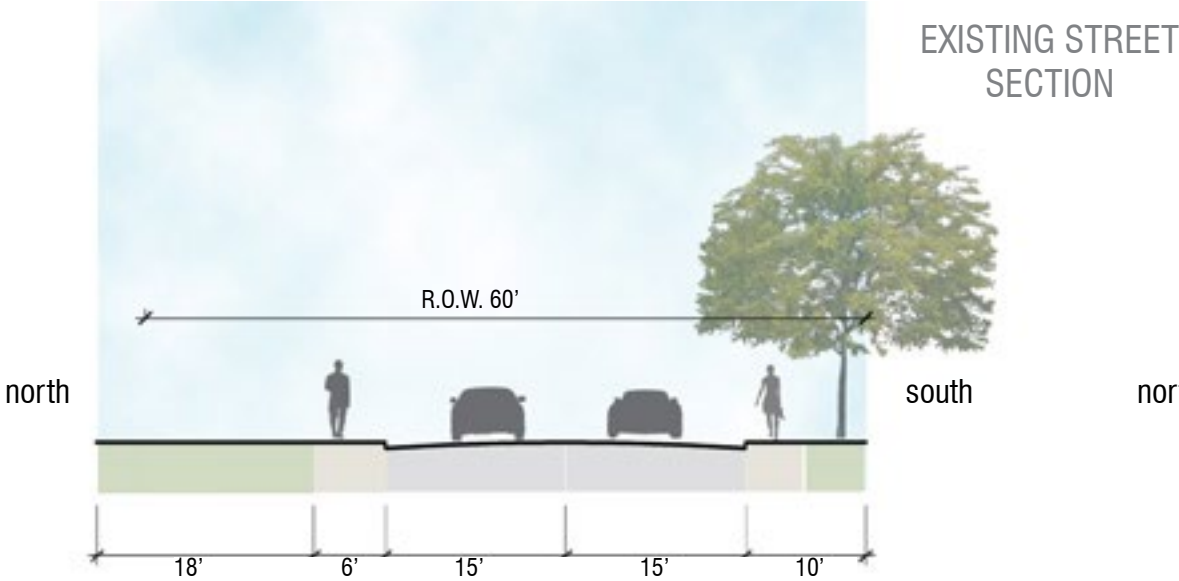
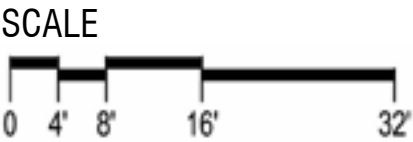


BIRMINGHAM SECTIONS *east of newcastle*

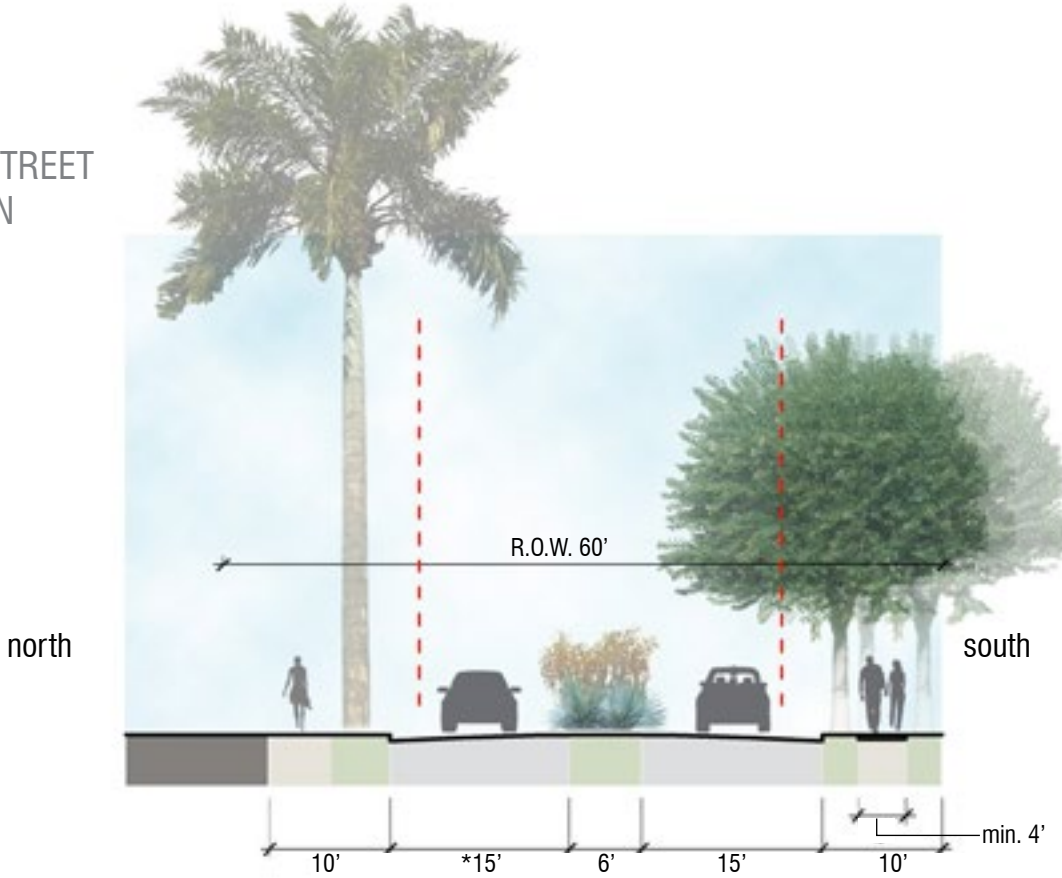


- LEGEND
- sidewalk
 - travel lane
(shown per specific plan, recommended lane width is 12' with difference added to pedestrian space on south side of street)
 - planting
 - parking lot
 - curb relocated
 - curb location to remain

* R.O.W. width is per specific plan. current R.O.W. configuration may differ.



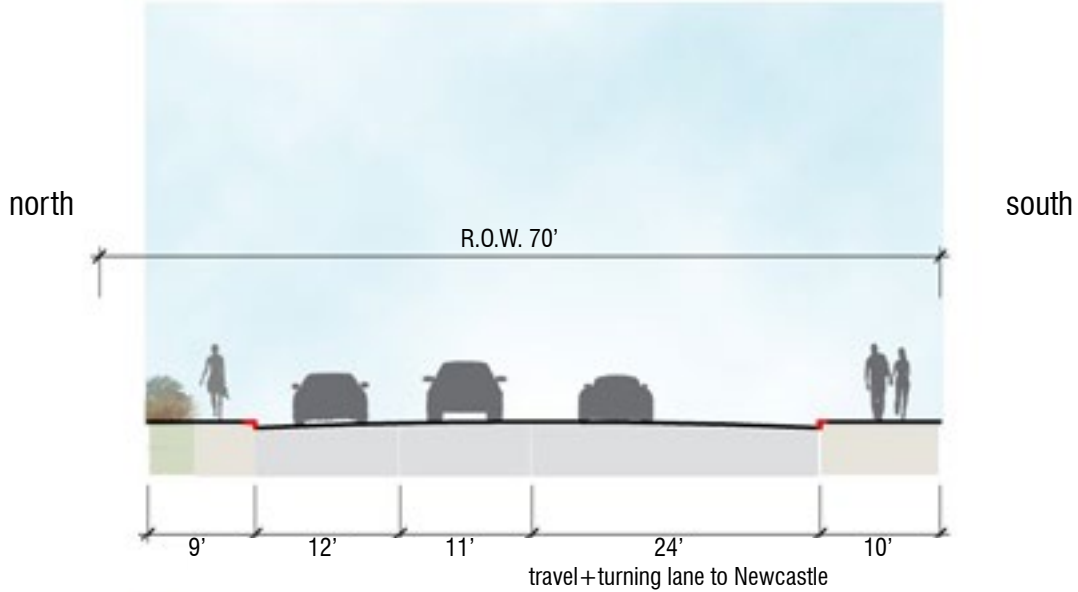
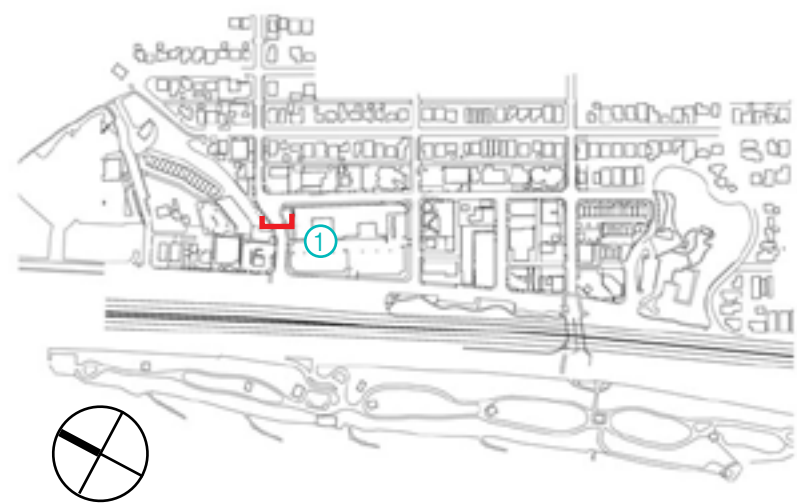
① birmingham dr. between east of alley and west of manchester ave.



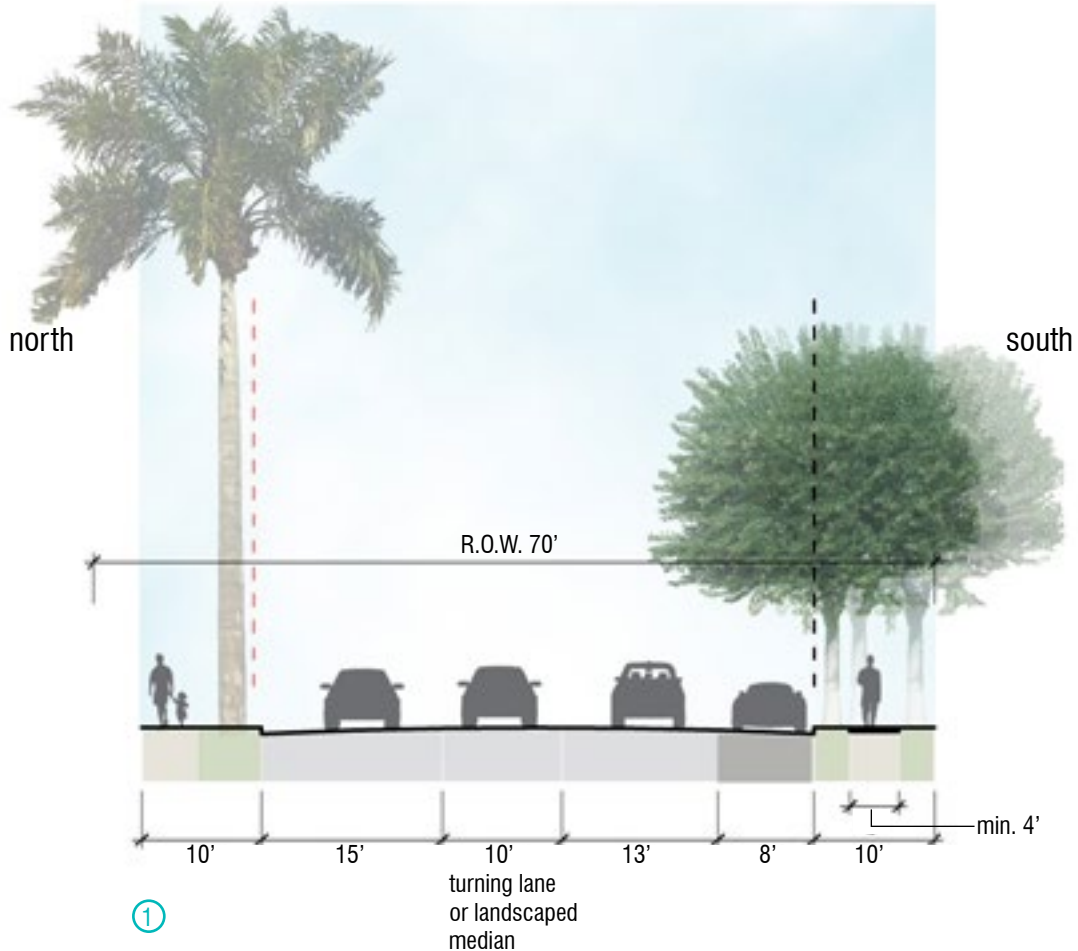
② birmingham dr. between newcastle ave. and alley west of manchester ave.

*possibility to retain curb location if travel lane is decreased to 13'

BIRMINGHAM DR. SECTIONS *west of newcastle avenue*



EXISTING STREET SECTION



PROPOSED STREET SECTION

LEGEND

- sidewalk
- travel lane
(shown per specific plan, recommended lane width is 12' with difference added to pedestrian space on south side of street)
- parking
- planting
- existing curb to be relocated
- existing curb to remain
- red curb (no parking)

* R.O.W. width is per specific plan. current R.O.W. configuration may differ.

SCALE

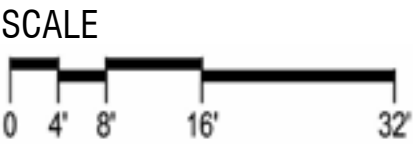


NEWCASTLE DR. SECTIONS *north of liverpool drive*



- LEGEND
- sidewalk
 - travel lane
(varies from specific plan to allow for angled parking)
 - parking
 - planting
 - existing curb to be relocated
 - existing curb to remain

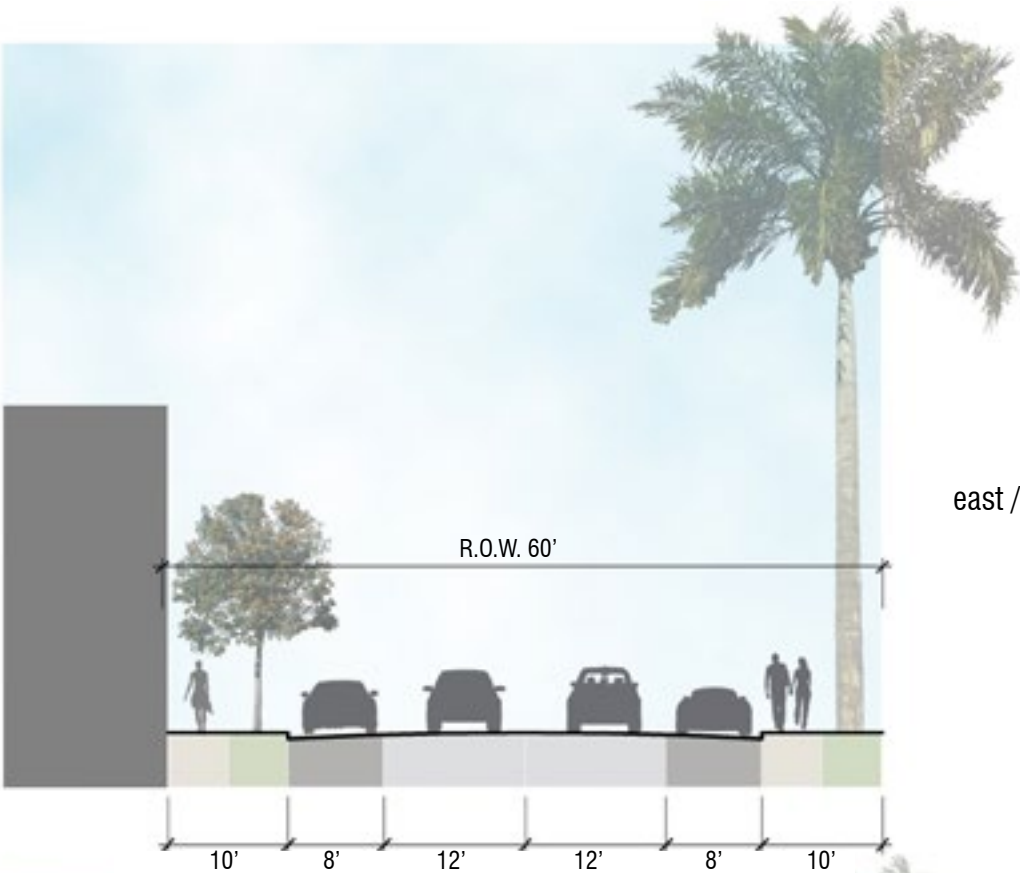
* R.O.W. width is per specific plan. Current R.O.W. configuration may differ.



west / seaside market side

east / library side

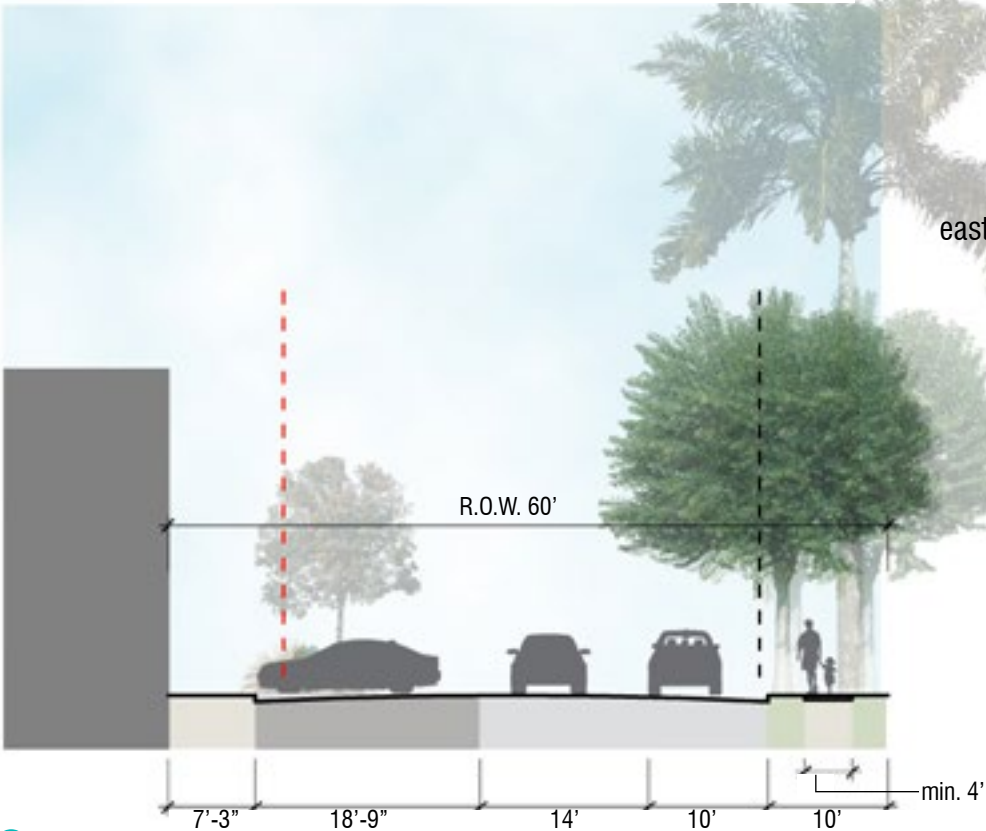
EXISTING STREET SECTION



west / seaside market side

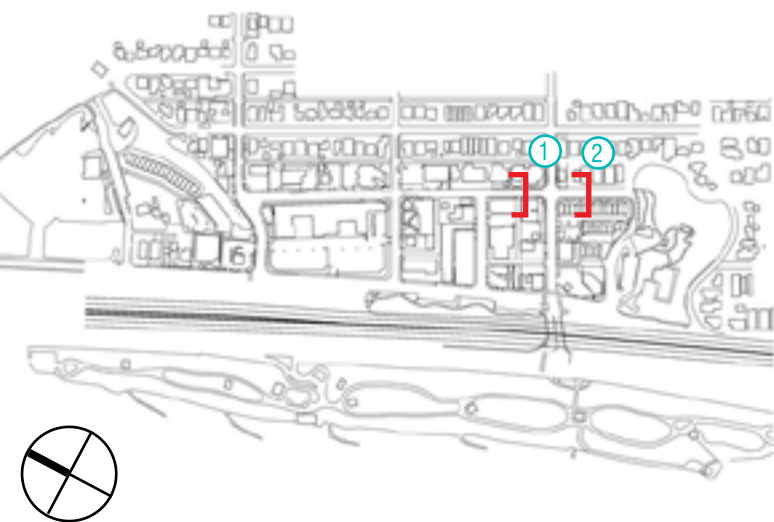
east / library side

PROPOSED STREET SECTION



①

NEWCASTLE DR. SECTIONS *between liverpool drive and orinda dr.*

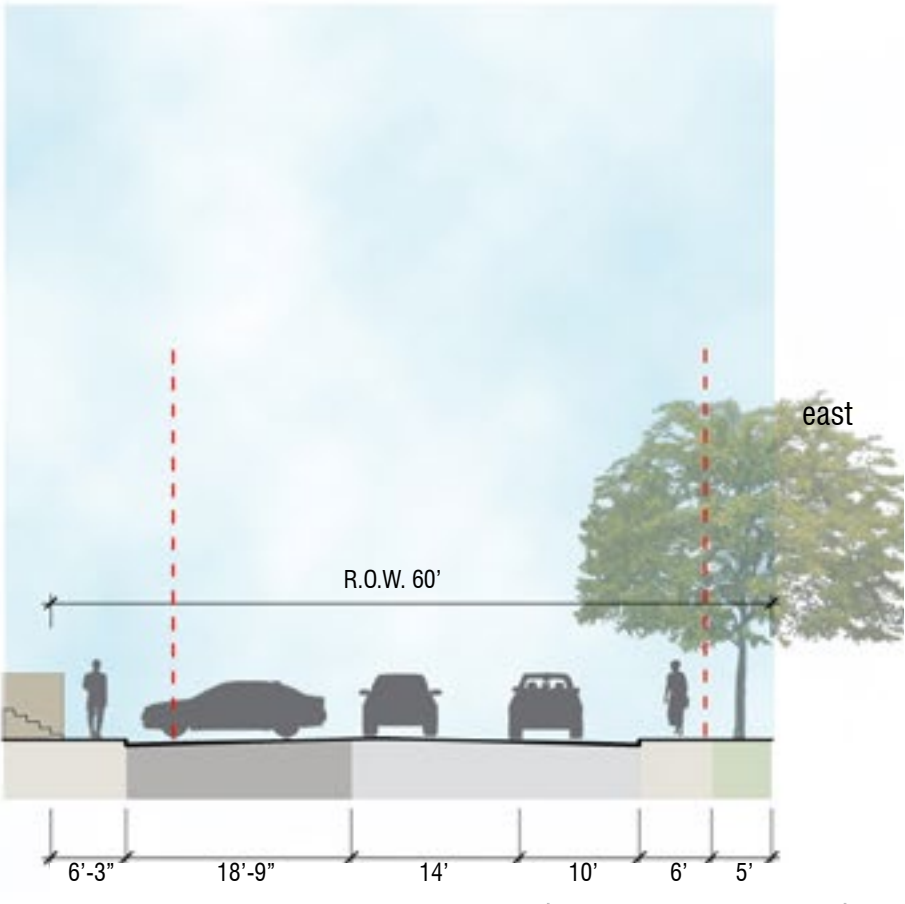
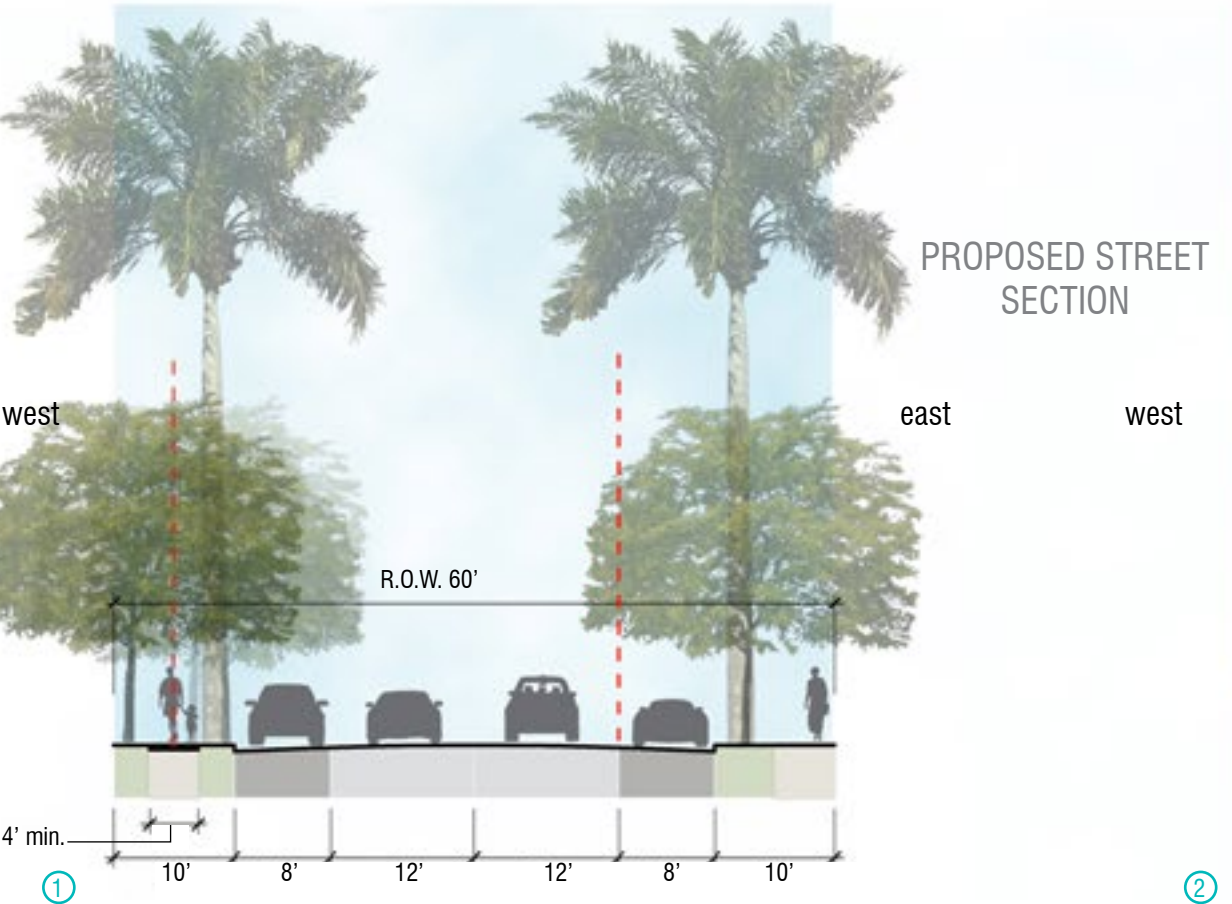
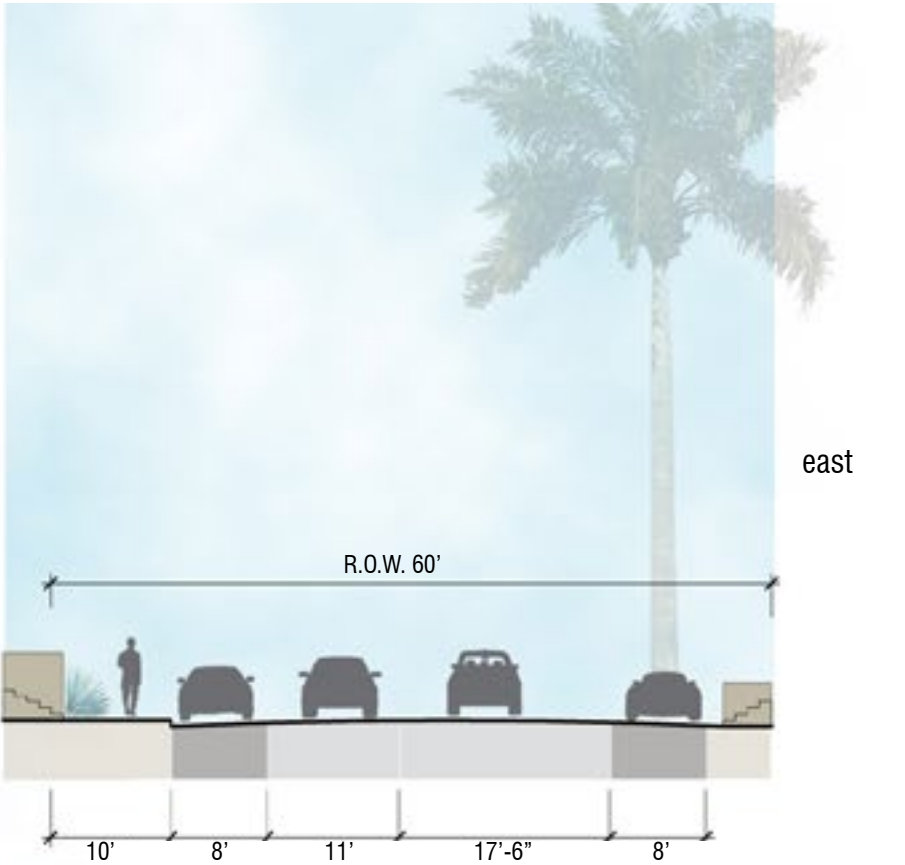
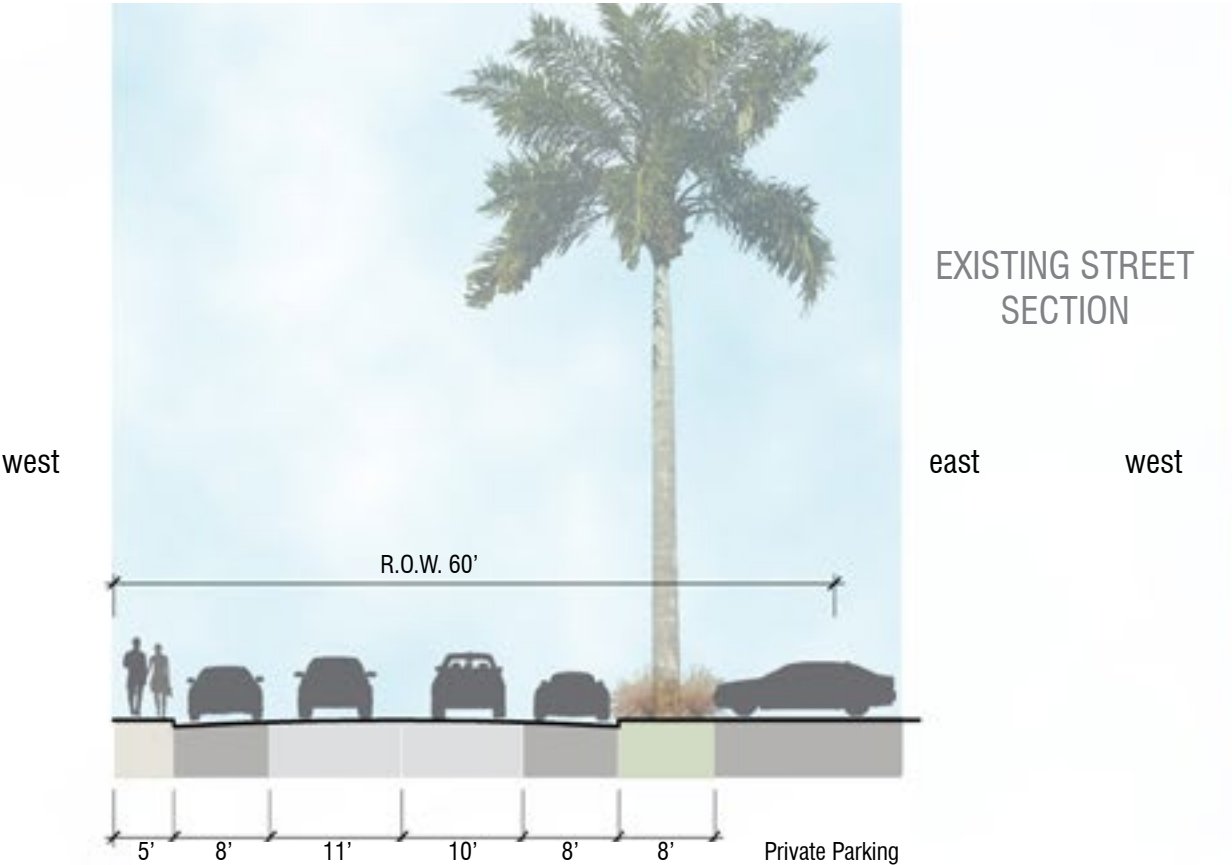
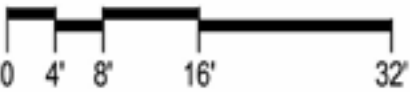


LEGEND

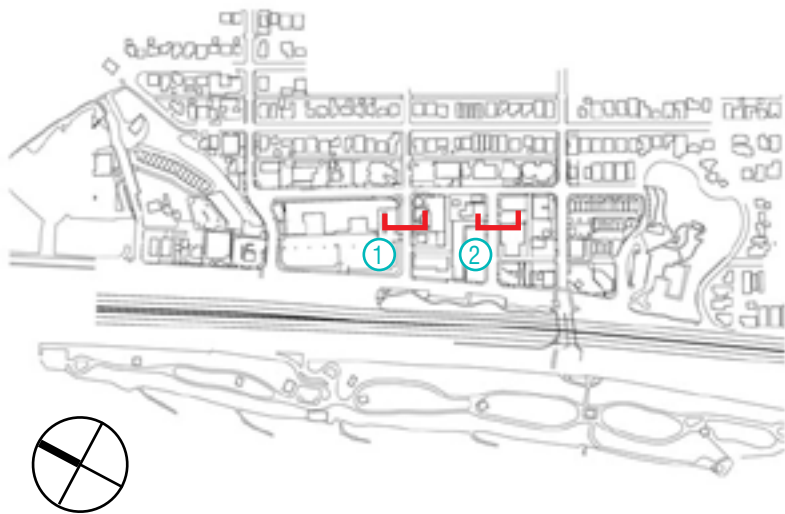
- sidewalk
- travel lane
(varies from specific plan to allow for angled parking)
- parking
- planting
- existing curb to be relocated
- existing curb to remain

* proposed R.O.W. width is per specific plan. Current R.O.W. configuration may differ.

SCALE



LIVERPOOL DRIVE + ABERDEEN DRIVE SECTIONS

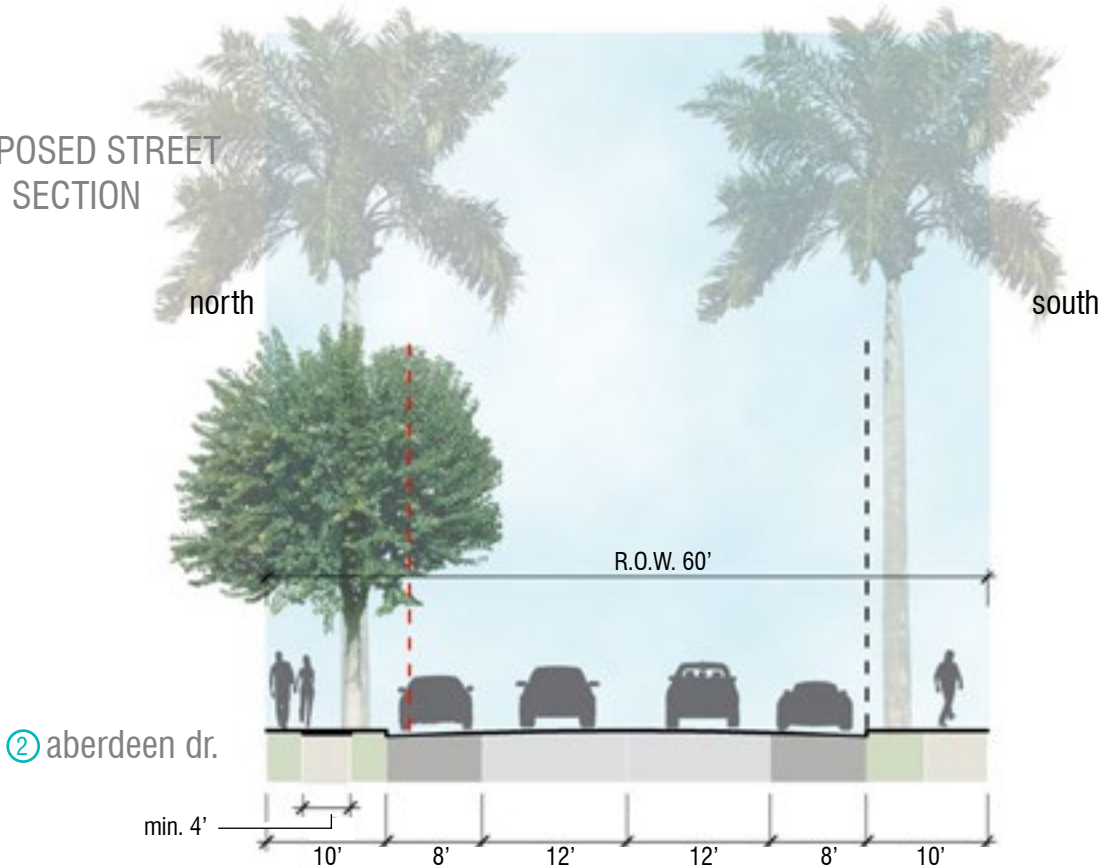
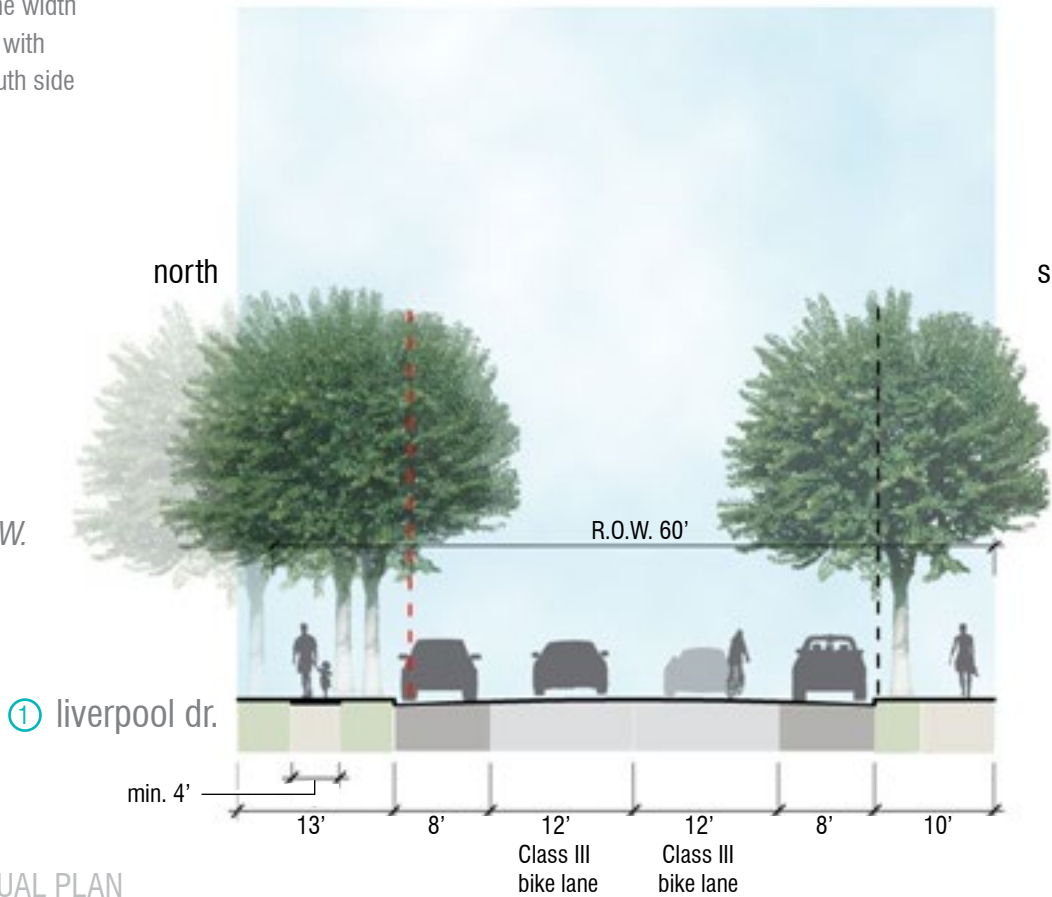
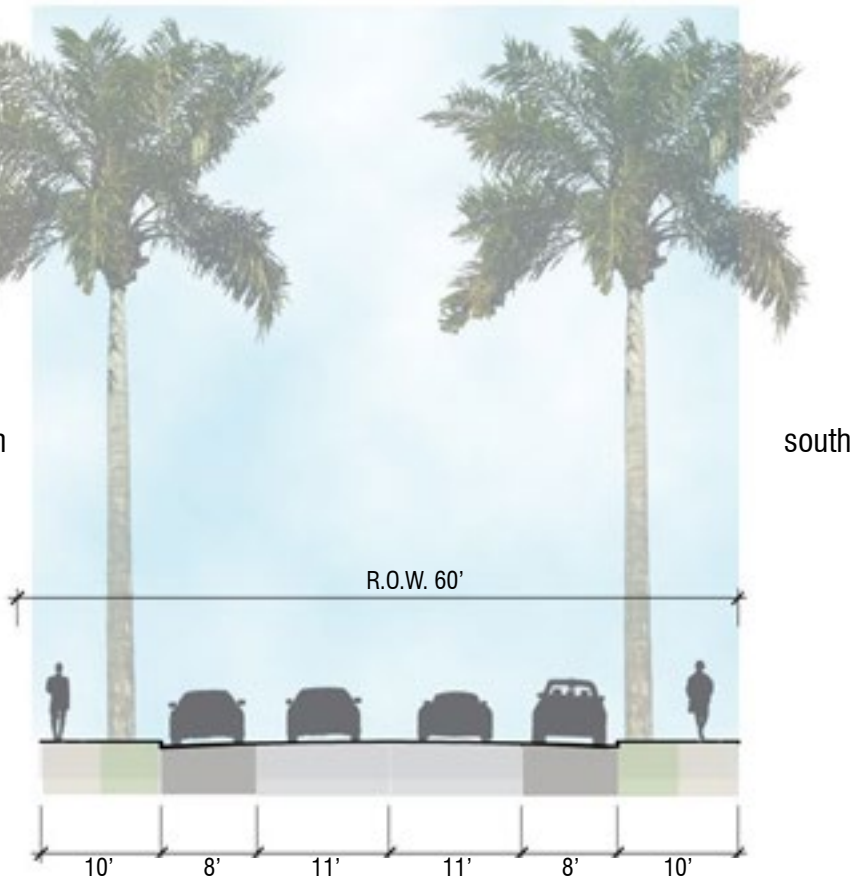
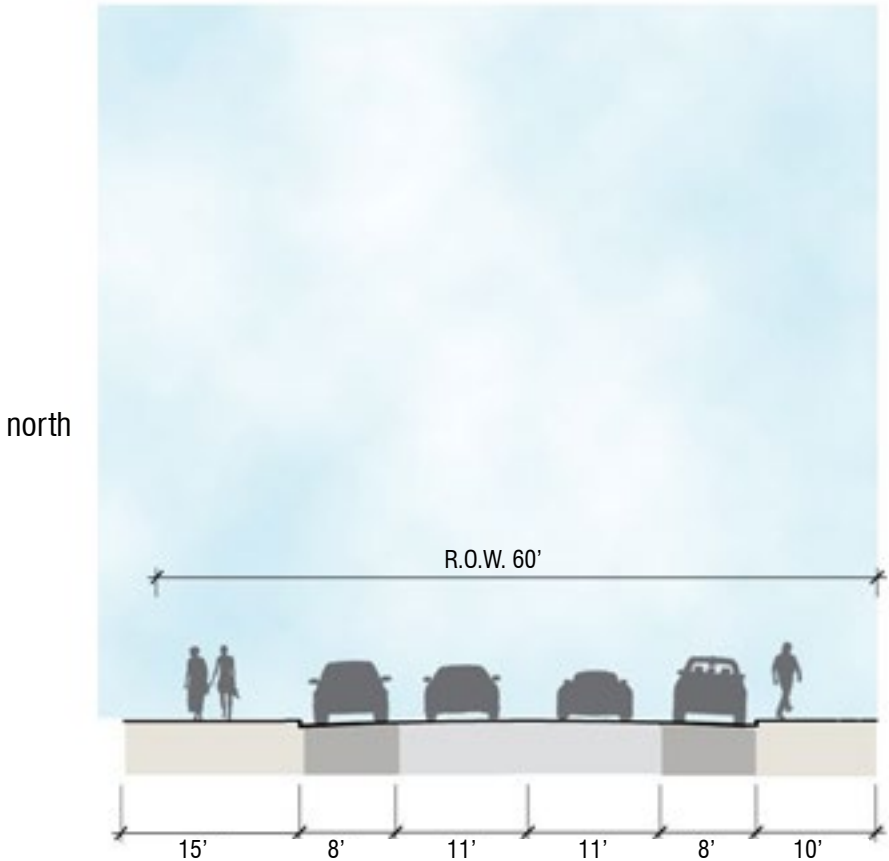
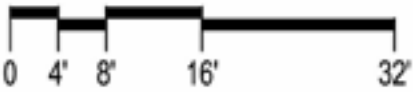


LEGEND

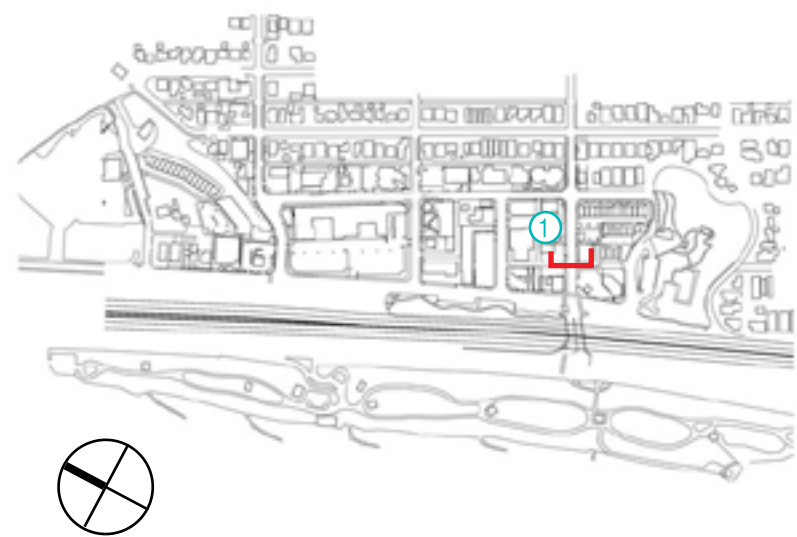
- sidewalk
- travel lane
(shown per specific plan, recommended lane width is 11' on Liverpool Dr., 10' on Aberdeen Dr. with difference added to pedestrian space on south side of street.)
- parking
- planting
- existing curb to be relocated
- existing curb to remain

* R.O.W. width is per specific plan. current R.O.W. configuration may differ.

SCALE

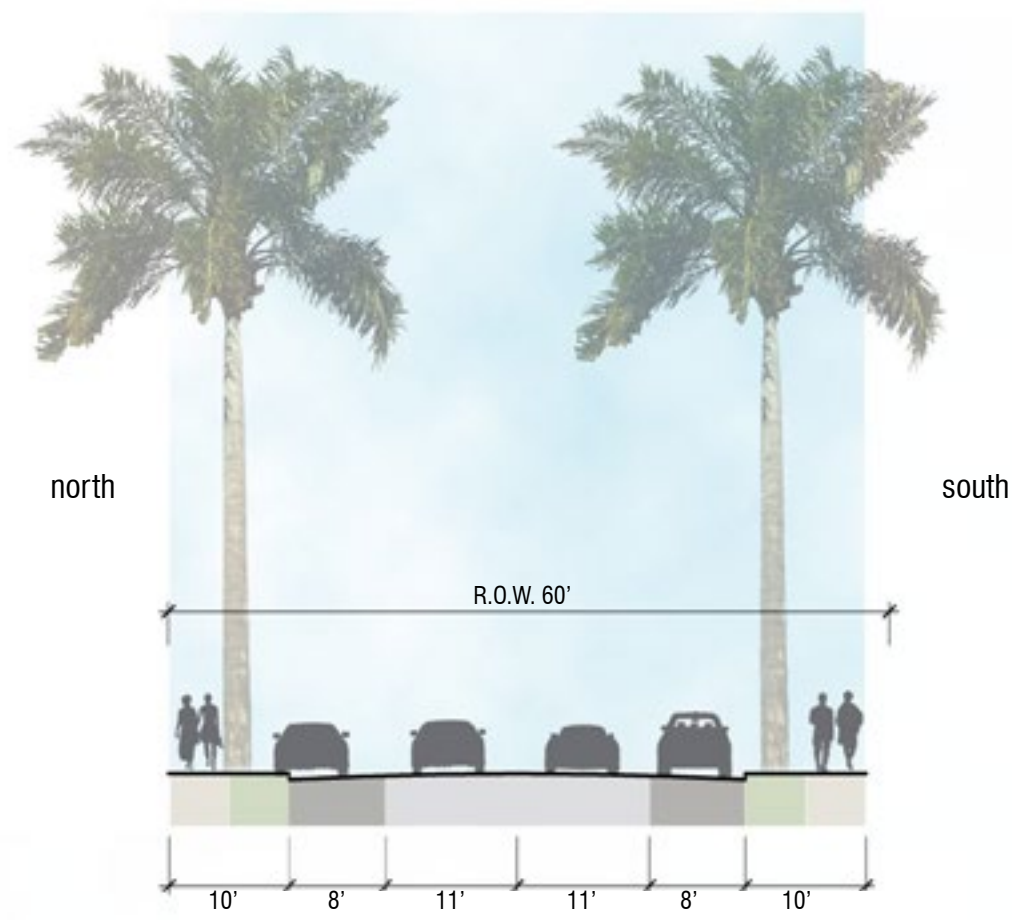


CHESTERFIELD DRIVE SECTIONS

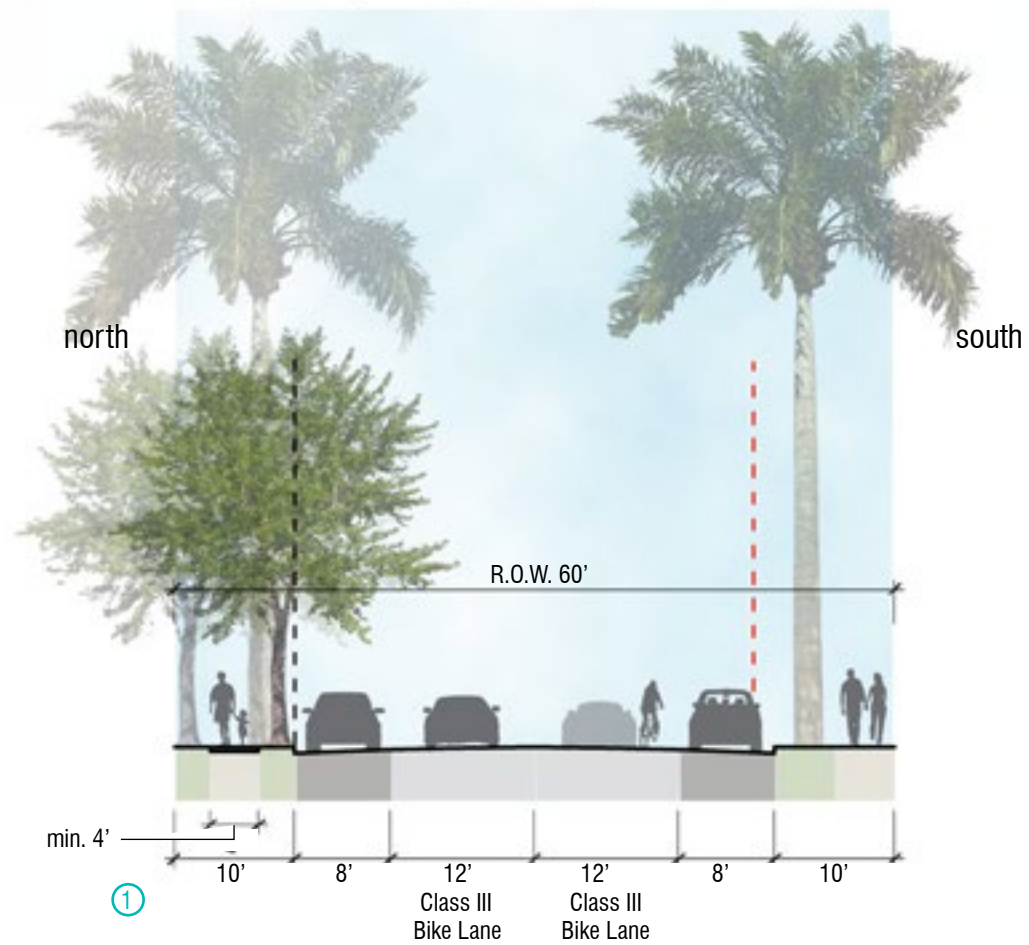


- LEGEND
- sidewalk
 - travel lane
(shown per specific plan, recommended lane width is 11' with difference added to pedestrian space on the north side of street.)
 - parking
 - planting
 - existing curb to be relocated
 - existing curb to remain

* R.O.W. width is per specific plan. current R.O.W. configuration may differ.



EXISTING STREET SECTION



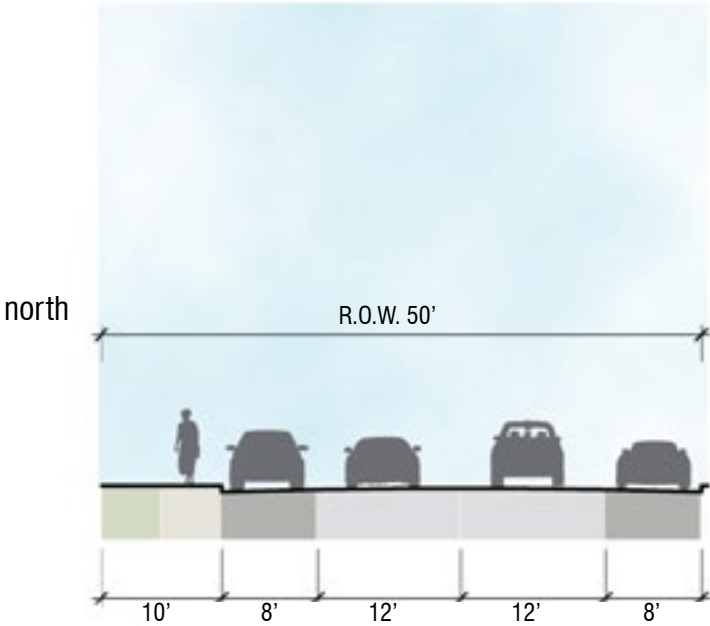
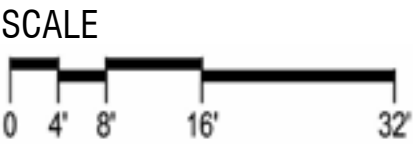
PROPOSED STREET SECTION

ORINDA DRIVE SECTIONS

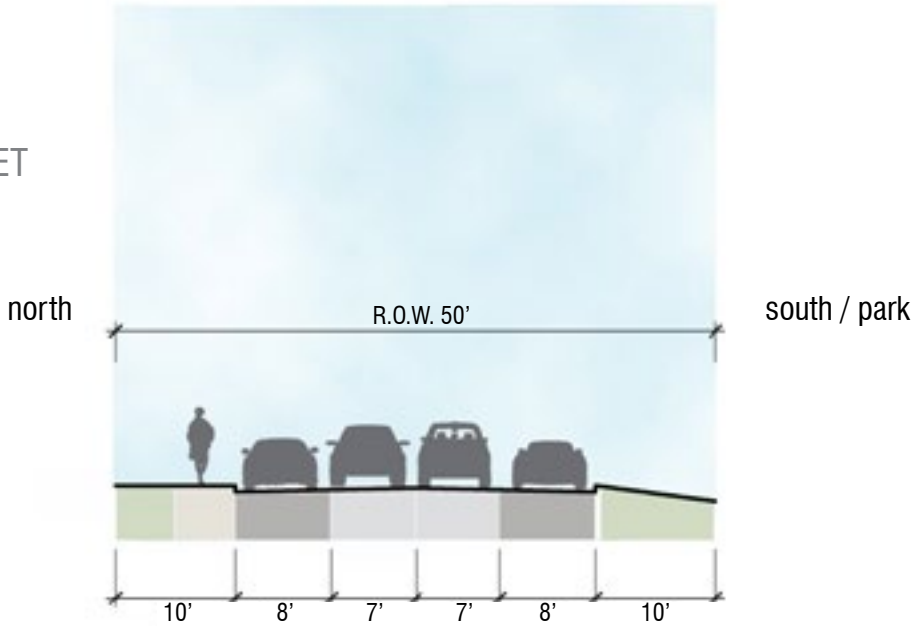


- LEGEND
- sidewalk
 - travel lane
 - parking
 - planting
 - red curb (no parking)

* R.O.W. width is per specific plan. current R.O.W. configuration may differ.

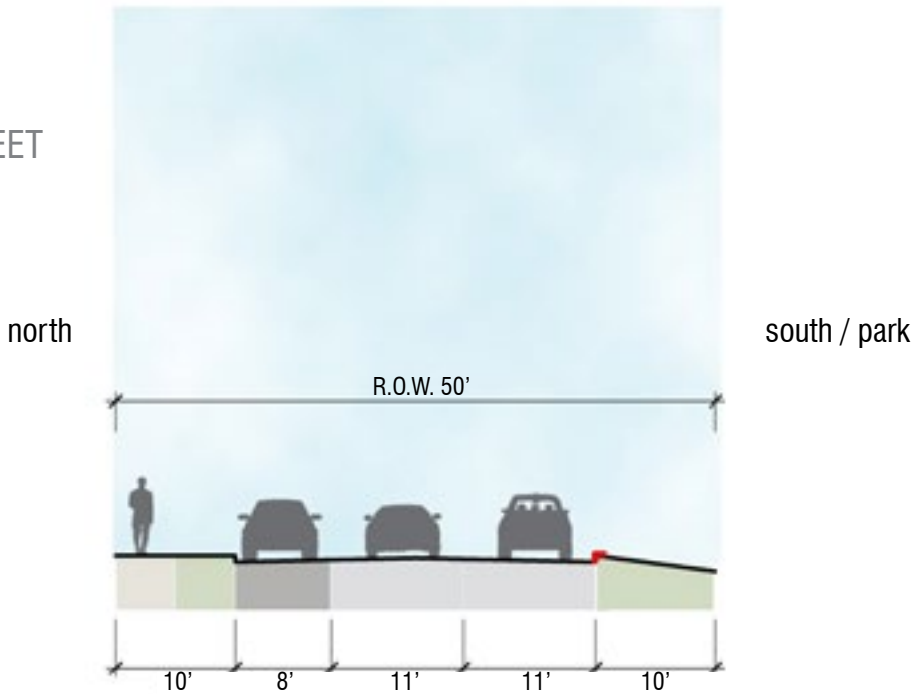


① orinda dr. near san elijo
(existing and proposed street sections are the same)

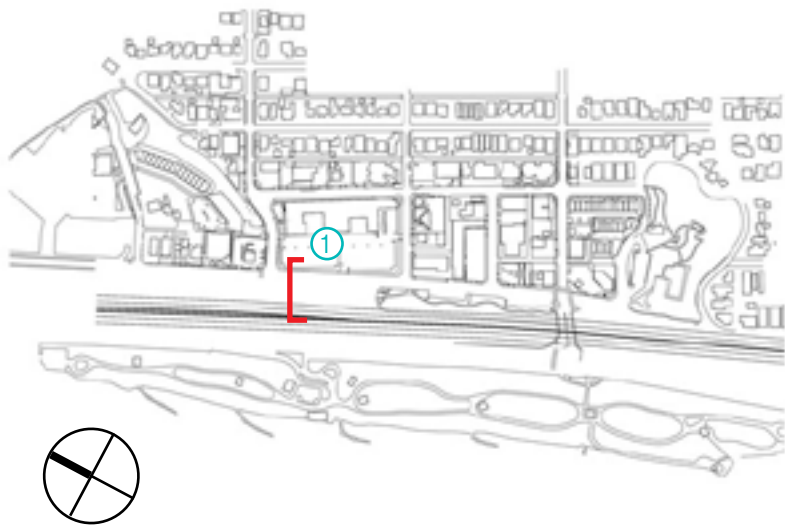


② orinda dr. near newcastle

PROPOSED STREET SECTION



SAN ELIJO DRIVE SECTIONS



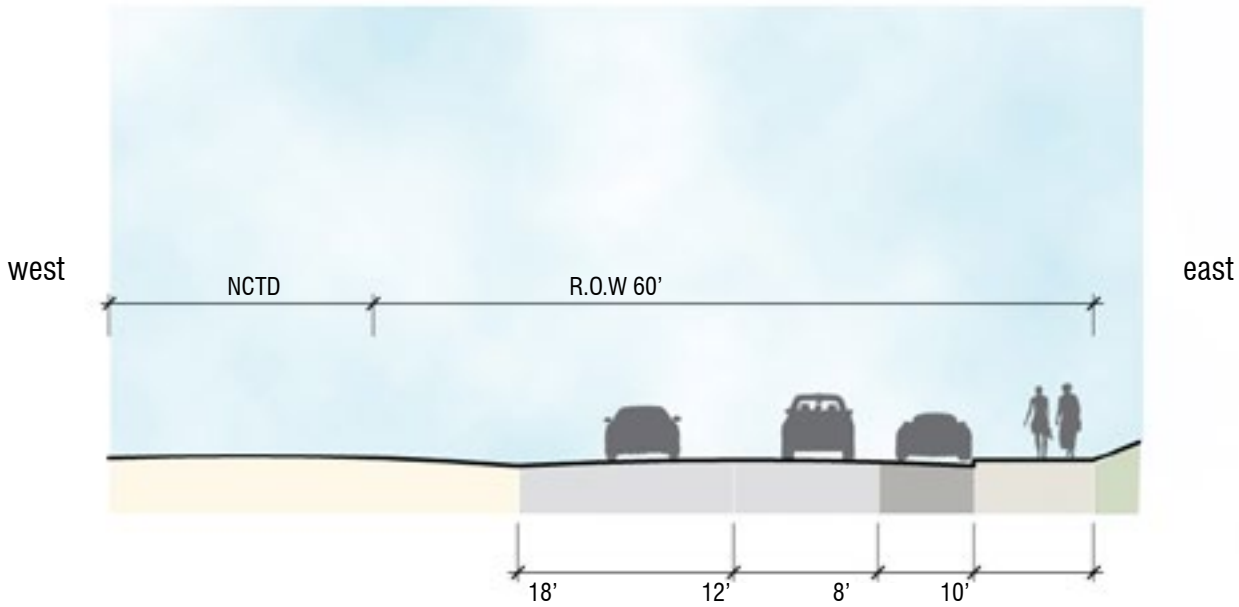
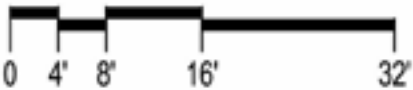
LEGEND

- sidewalk
- travel lane
- parking
- planting
- existing edge of pavement to be relocated
- existing curb to remain

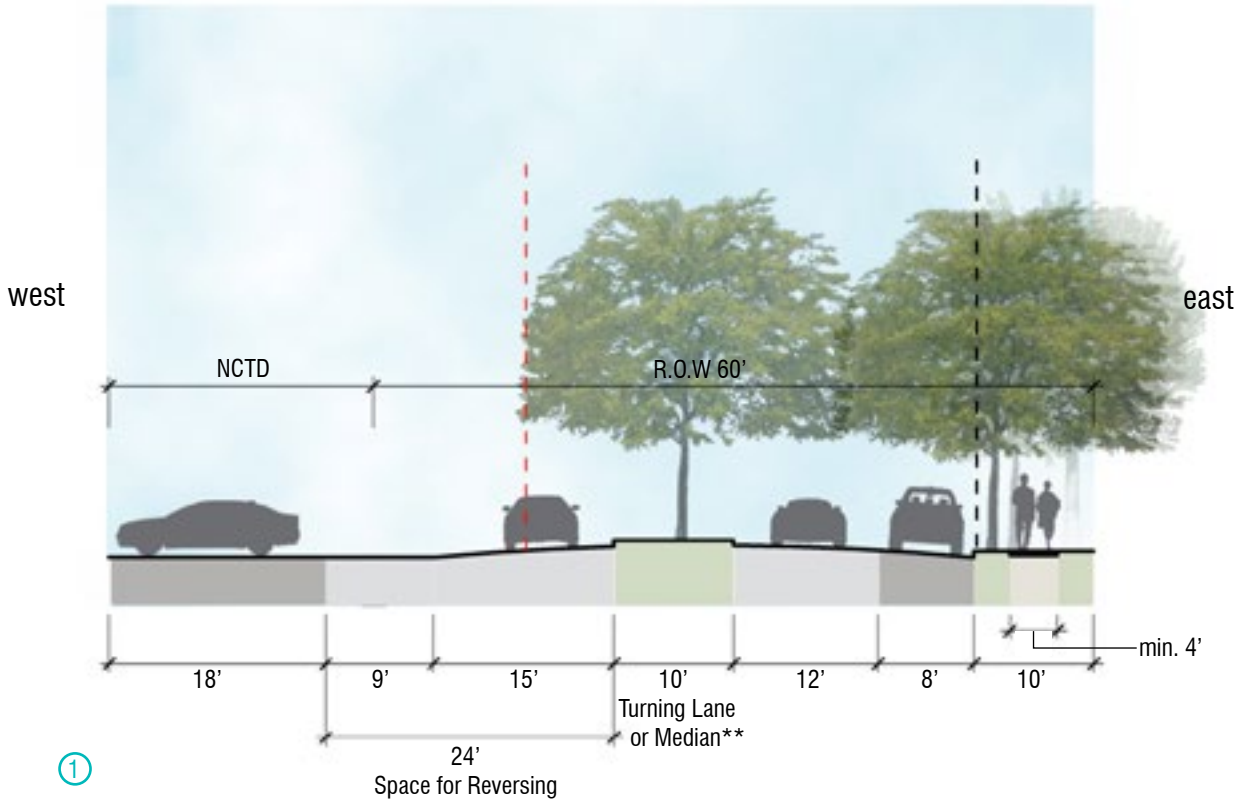
* R.O.W. width is per specific plan. current R.O.W. configuration may differ.

** turning lane exists only at Chesterfield Dr. intersection

SCALE

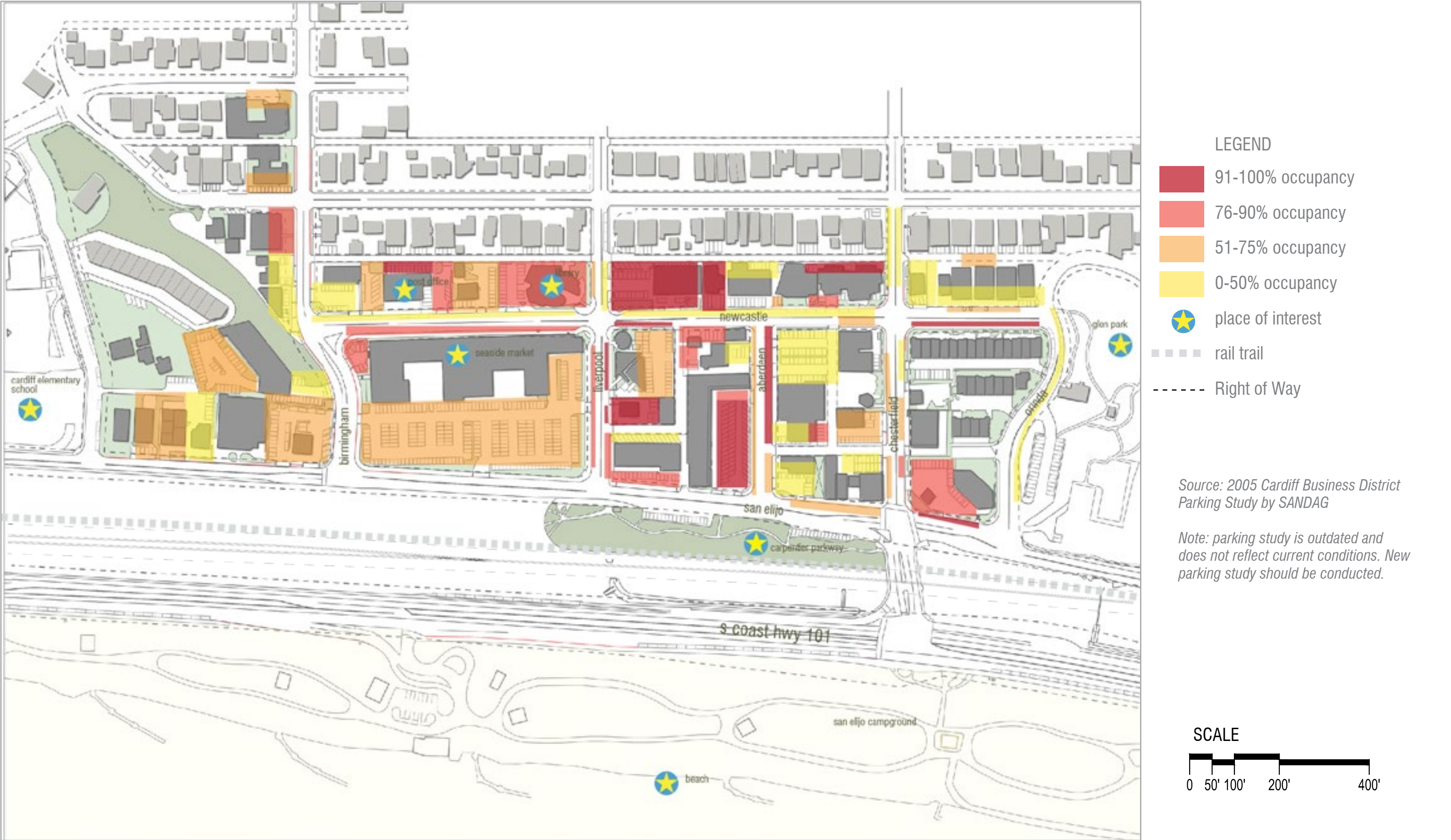


EXISTING STREET SECTION

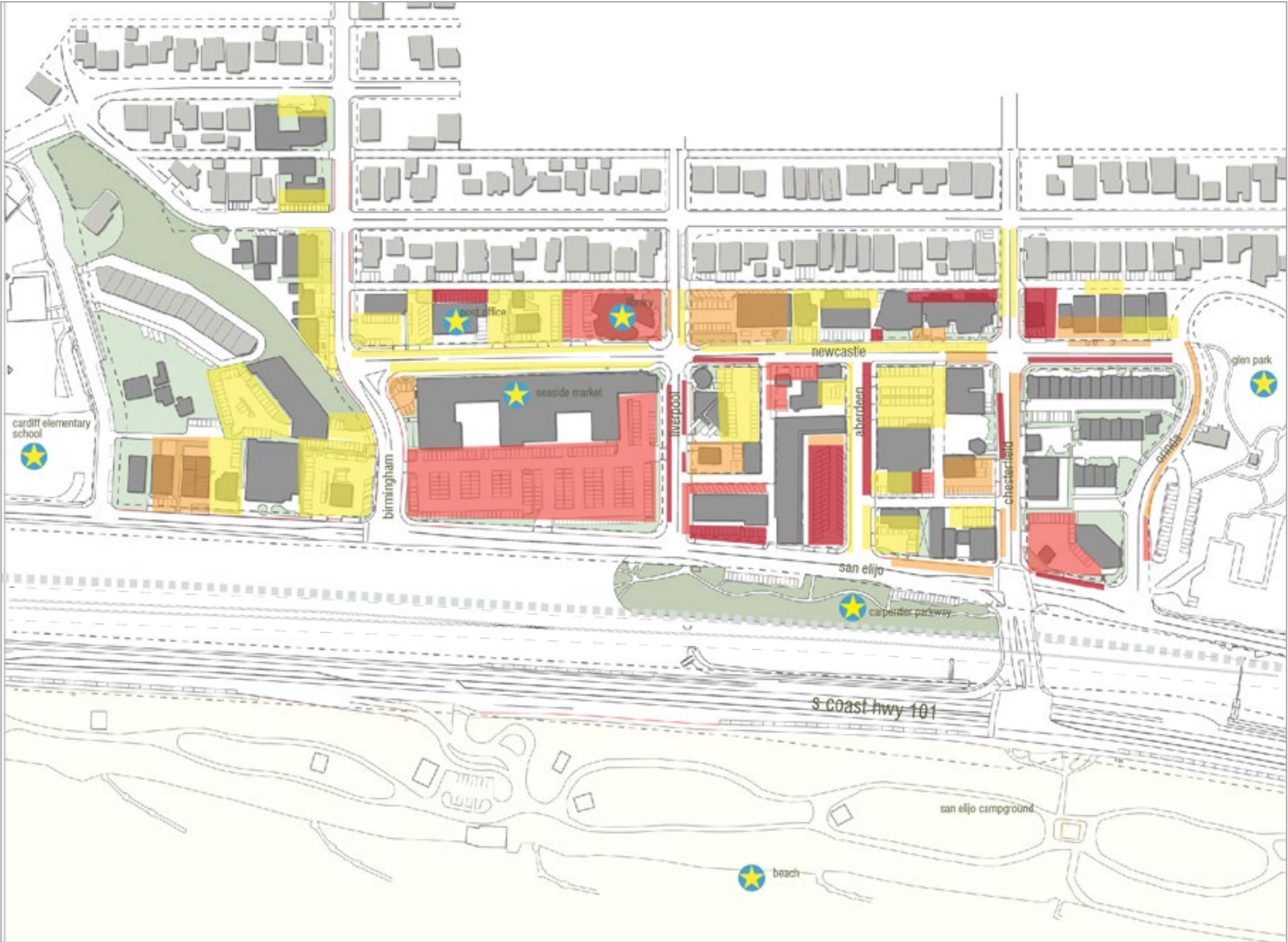


PROPOSED STREET SECTION
(parking option from page 16)

PARKING STUDY//SUMMER WEEKDAY



PARKING STUDY//SUMMER WEEKEND

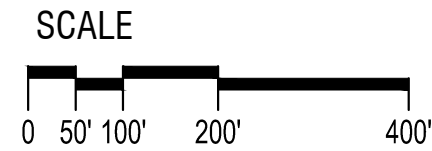


LEGEND

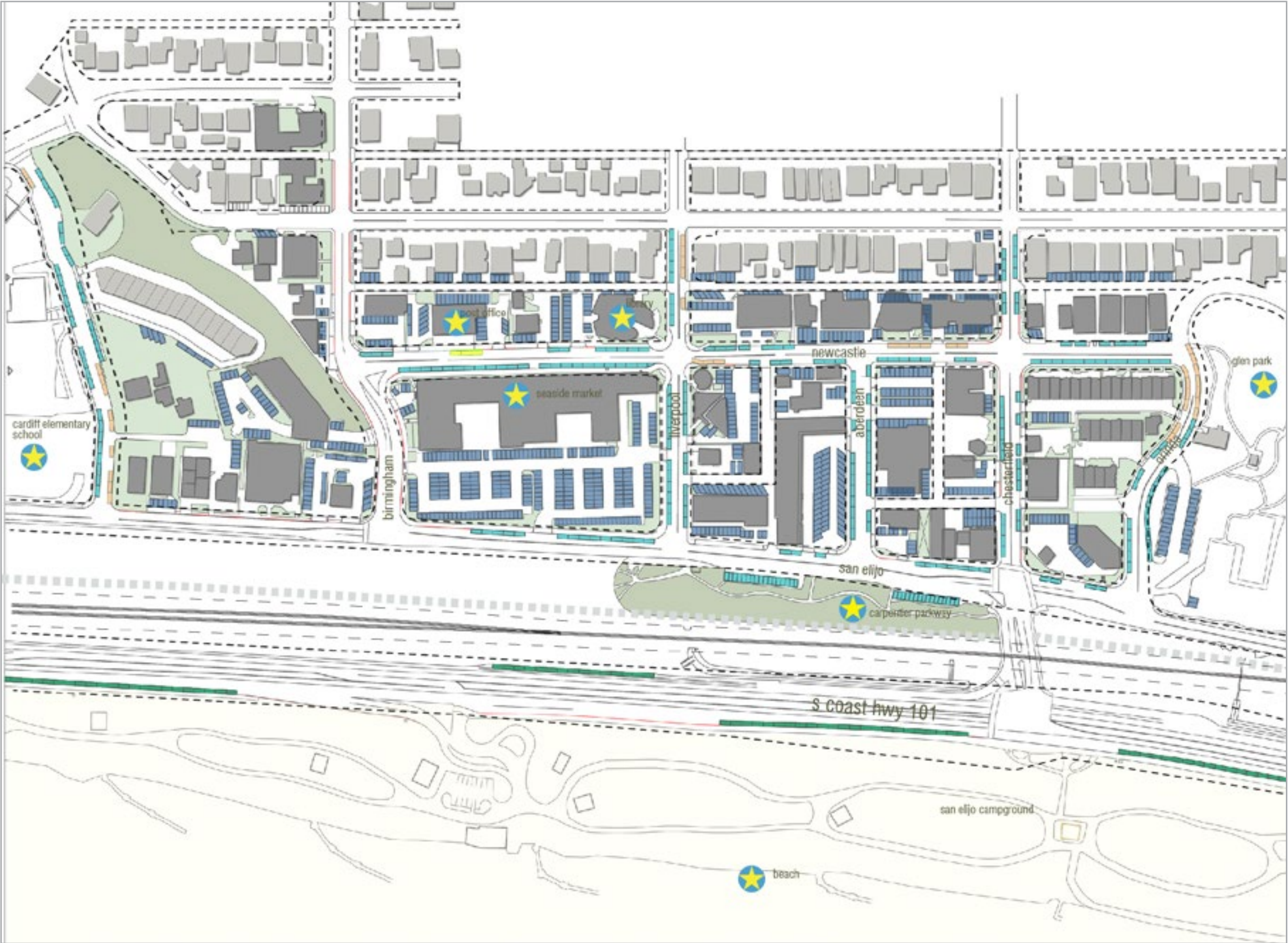
- 91-100% occupancy
- 76-90% occupancy
- 51-75% occupancy
- 0-50% occupancy
- place of interest
- rail trail
- Right of Way

Source: 2005 Cardiff Business District Parking Study by SANDAG

Note: parking study is outdated and does not reflect current conditions. New parking study should be conducted.



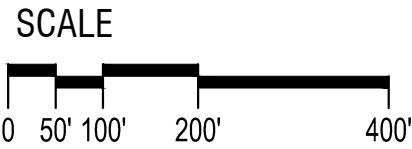
EXISTING PARKING



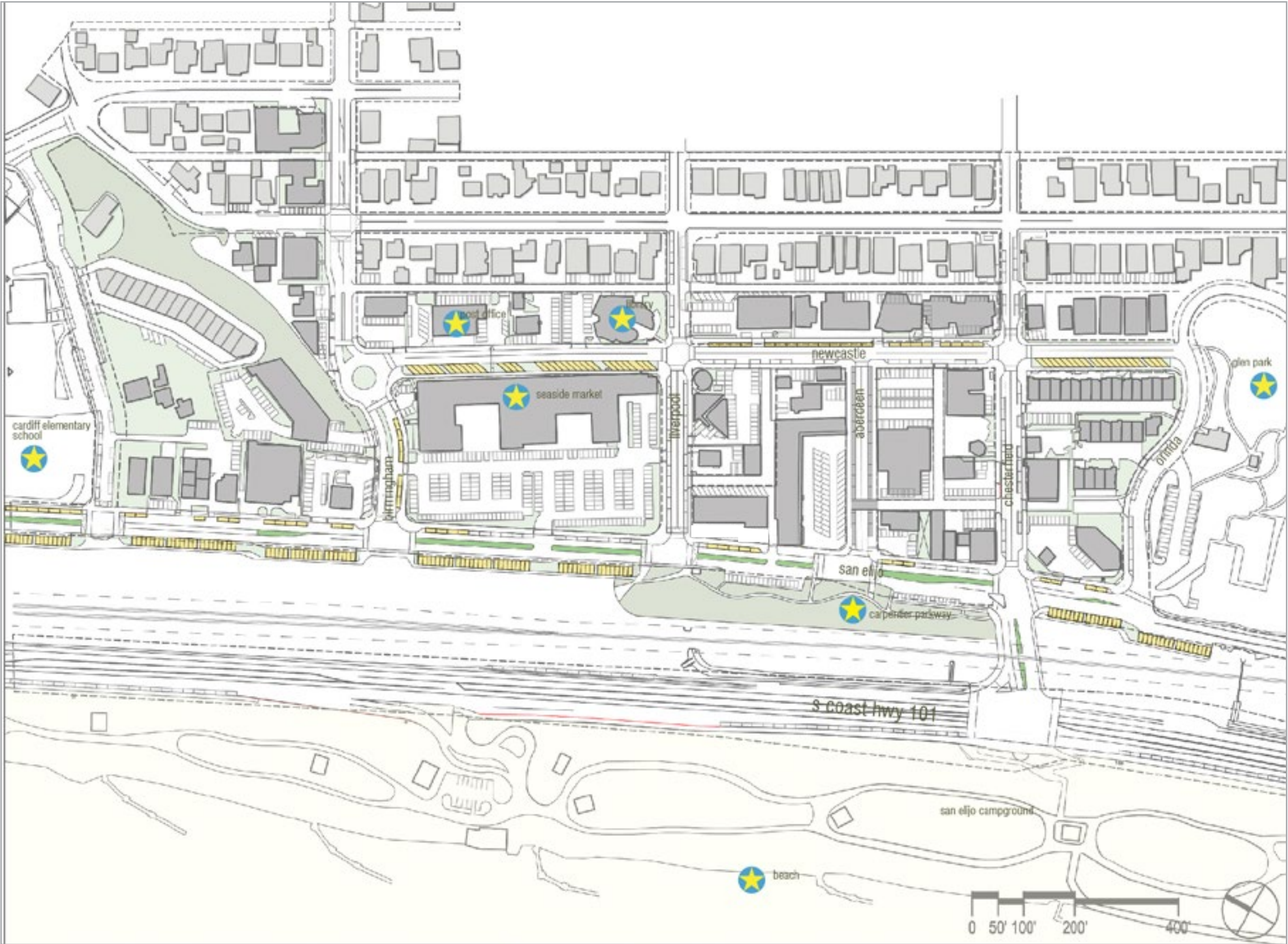
LEGEND

- off street parking
- street parking
- undersized street parking*
- 20 minute parking
- off site street parking
- place of interest
- rail trail
- Right of Way

* undersized street parking: vehicle parking spaces that are below minimum parking size requirements.



PROPOSED PARKING MODIFICATION

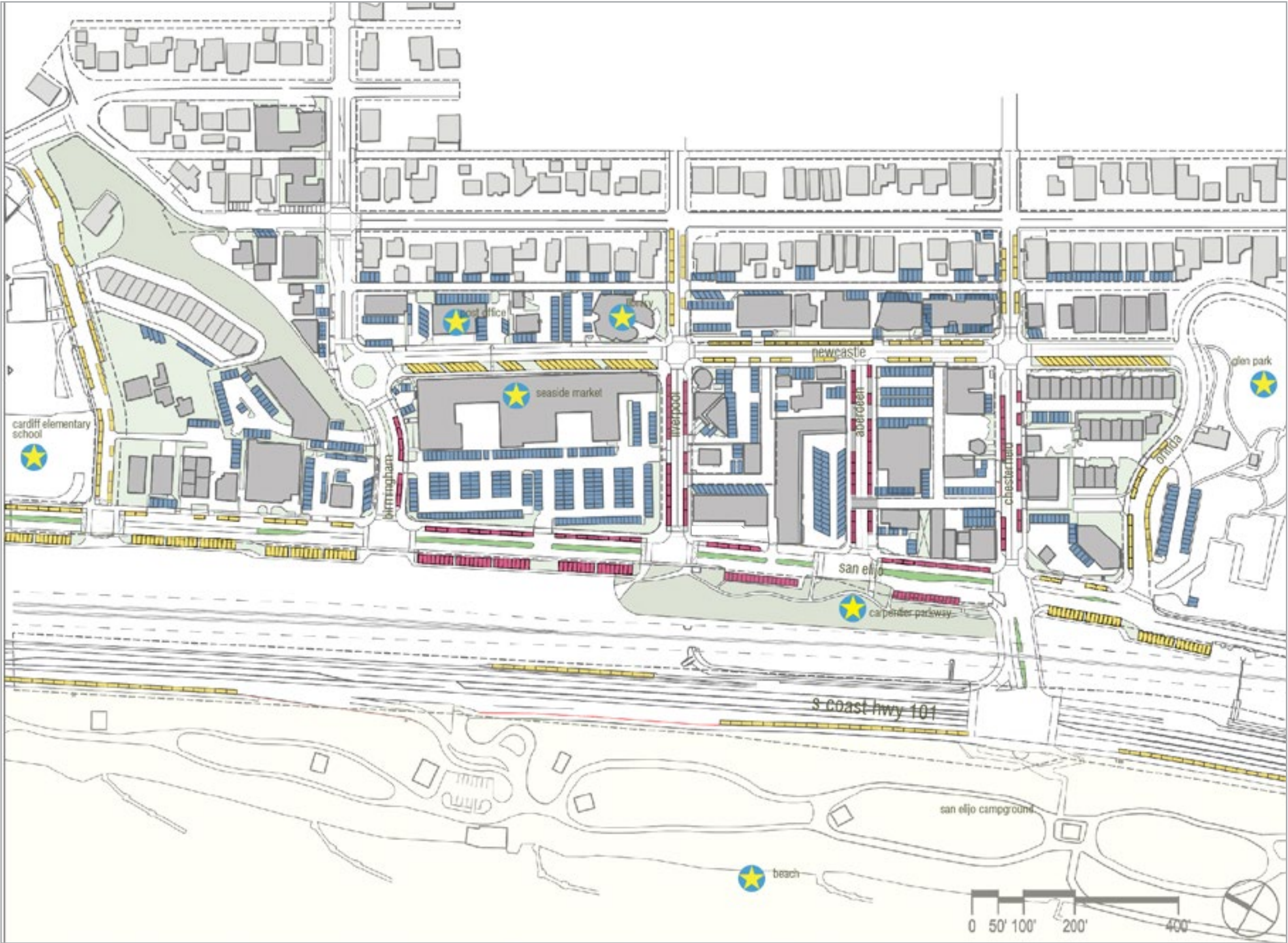


- LEGEND
- proposed parking
 - place of interest
 - rail trail
 - Right of Way

Note: this parking layout represents preferred option 1 from san elijo as shown on page xx

Parking on west side of San Elijo is subject to NCTD approval

PARKING LOCATIONS



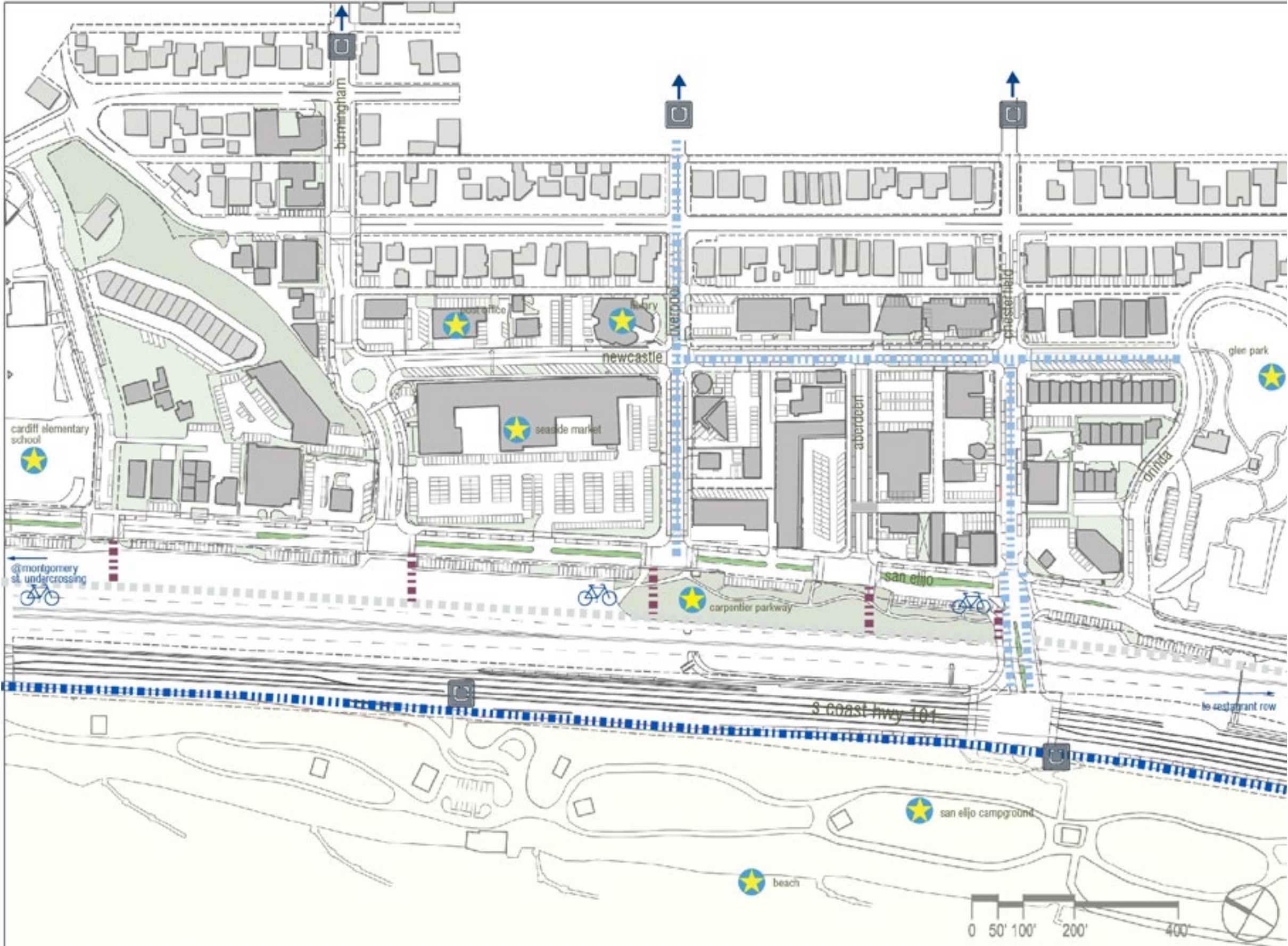
LEGEND

- off street parking
- street parking
- 2-3 hour metered parking with possibility for annual resident/employee permit
- place of interest
- rail trail
- Right of Way

Note: this parking layout represents preferred option 1 from san elijo as shown on page xx

Parking on west side of San Elijo is subject to NCTD approval

PROPOSED BIKE WAYS



LEGEND

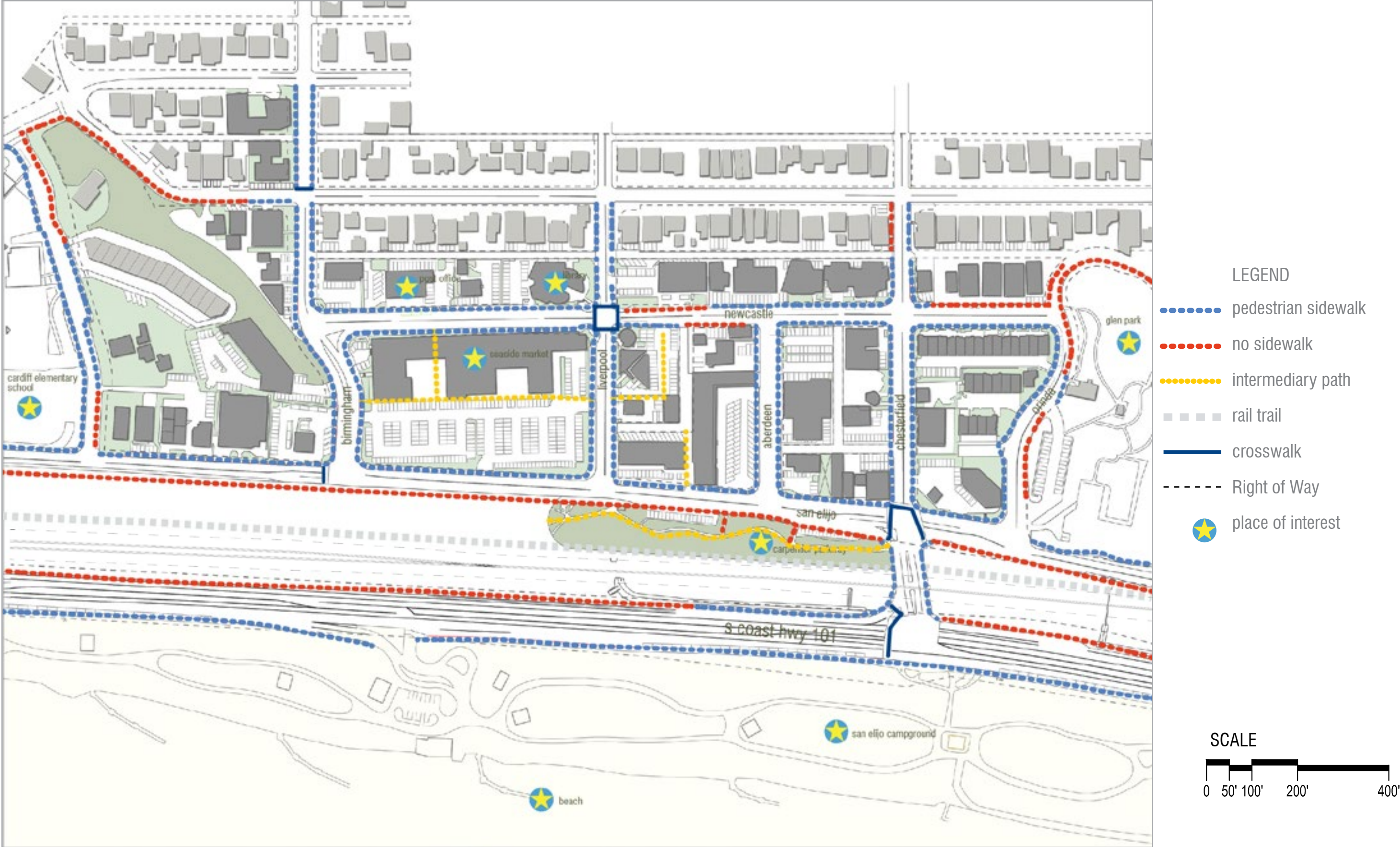
- class I*
- class III *
- connection to rail trail
- rail trail / class I*
(opportunity for non-motorized alternative transportation --bike, etc.)
- Right of Way
- bike share location
- uber destination
- place of interest

* class I: is typically a completely separate right-of-way for the exclusive use of non-motorized vehicles.

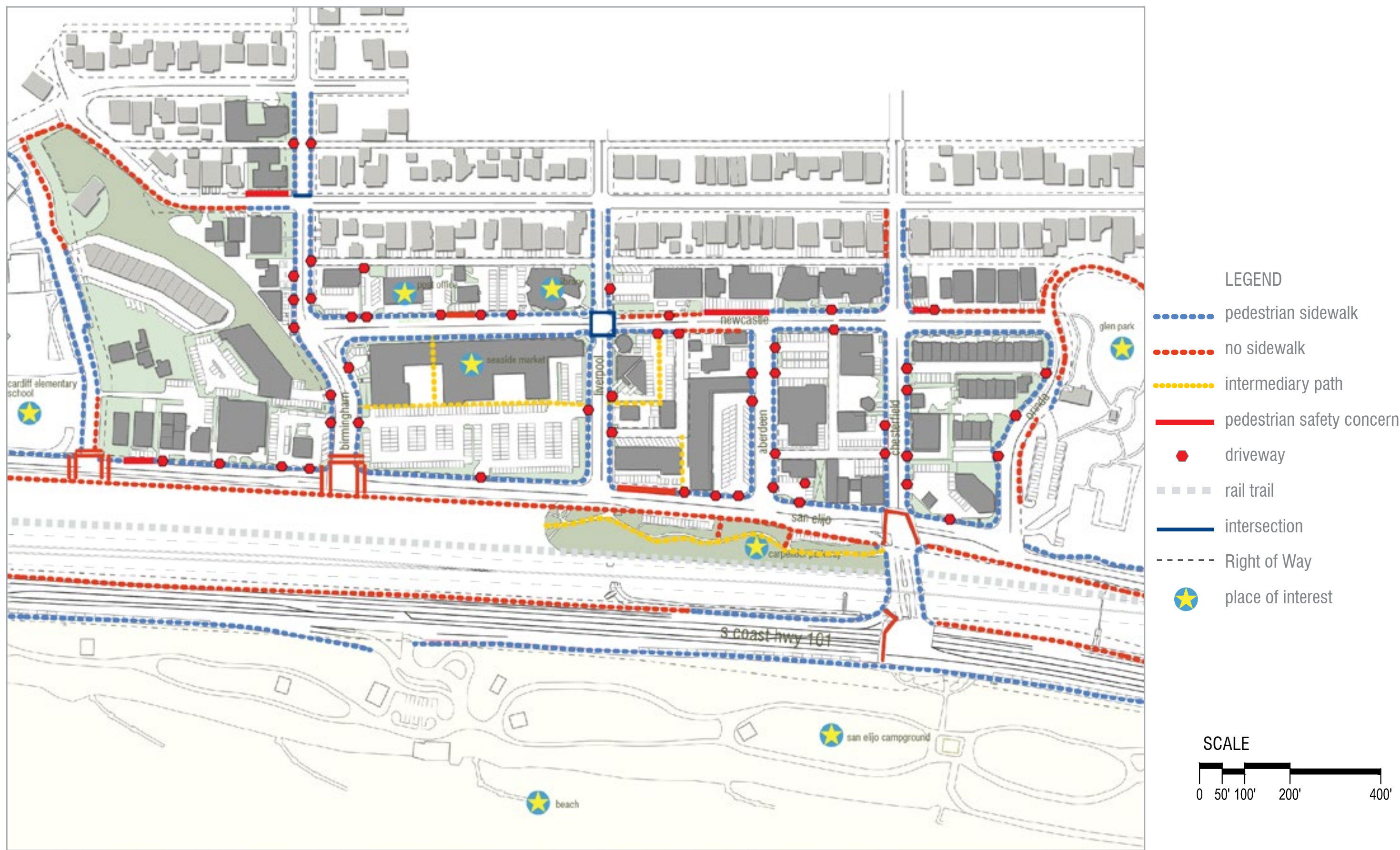
* class III: typically a shared right-of-way designated only by signs. Bicycles share the roadway with motor vehicles.

Source: Cardiff-by-the-Sea Specific Plan

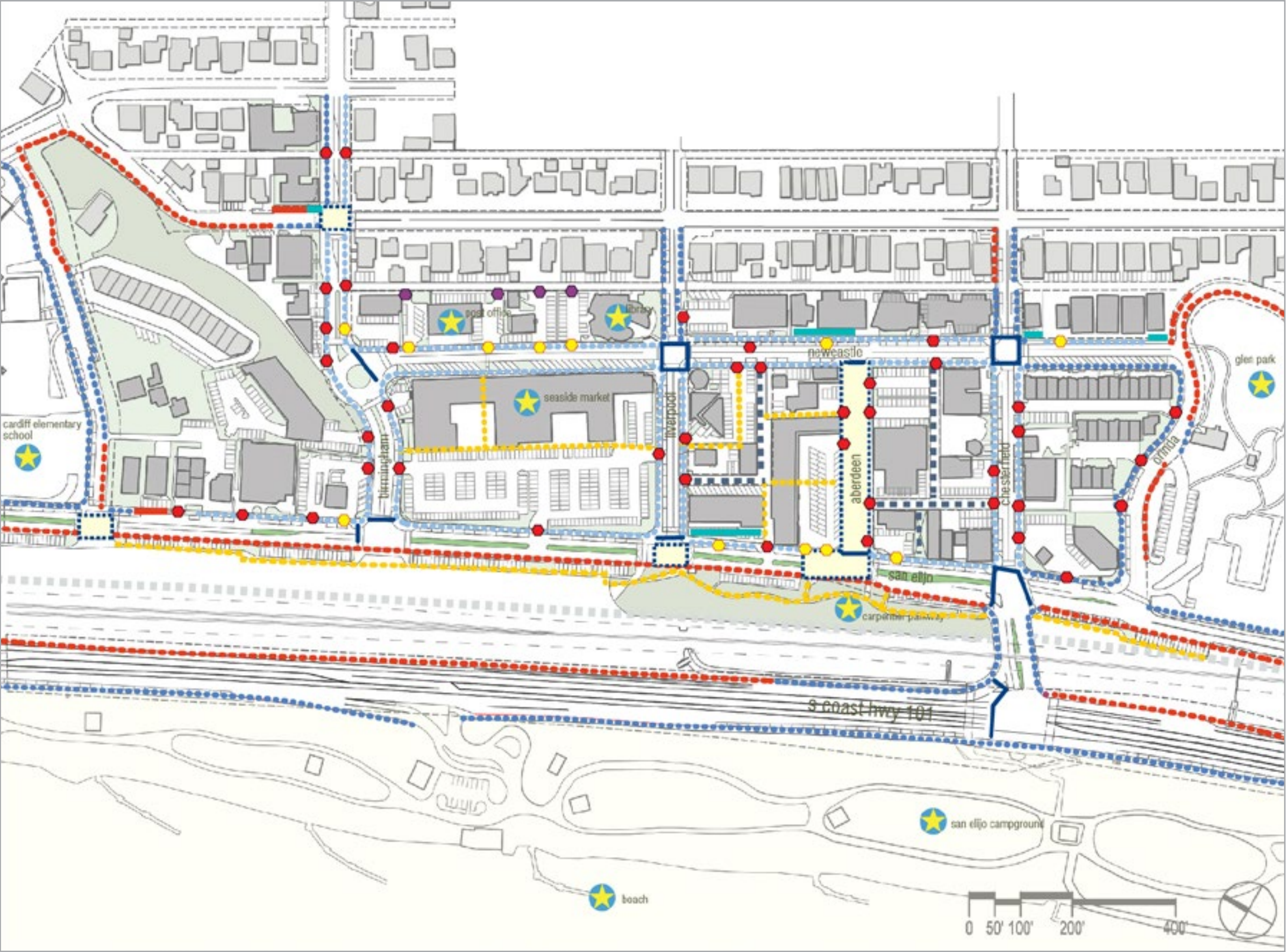
EXISTING PEDESTRIAN CIRCULATION



EXISTING PEDESTRIAN CIRCULATION + SAFETY CONCERNS



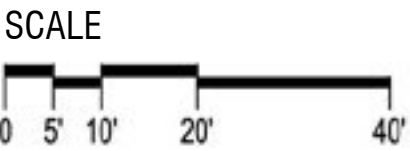
PROPOSED AREAS FOR PEDESTRIAN IMPROVEMENTS



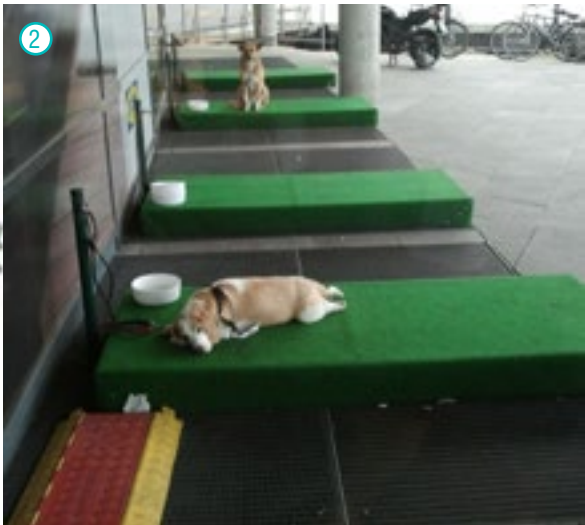
- LEGEND
- improved pedestrian sidewalk
 - pedestrian alleyway
 - pedestrian sidewalk
 - no sidewalk
 - intermediary path
 - pedestrian safety concern
 - proposed removal of on-site parking
 - ◆ driveway
 - ◆ recommended driveway closure
 - ◆ proposed new access
 - rail trail
 - = crosswalk treatment
 - roundabout
 - - - raised crosswalk
 - - - Right of Way
 - ★ place of interest

Note: relocation of entry for the library would require removal of 2-4 parking spaces to accomodate a ramp to the alley.

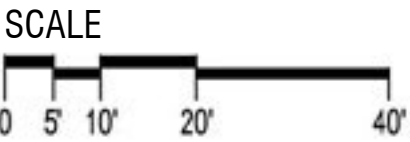
EXISTING CROSSWALK AT LIVERPOOL AND SAN ELIJO DRIVE



PROPOSED CROSSWALK AT LIVERPOOL AND SAN ELIJO DRIVE



Note: proposed improvements as shown necessitate relocation/removal of off street parking on east side of street and may require a variance.



EXISTING ABERDEEN DRIVE



SCALE

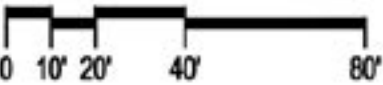


PROPOSED ABERDEEN DRIVE

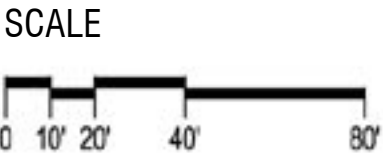


Note: closing of driveways on San Elijo Ave. is preferred but is subject to owner approval.

SCALE



EXISTING CHESTERFIELD DRIVE CROSSING



PROPOSED CHESTERFIELD DRIVE CROSSING



CROSSWALK IMAGERY

CROSSWALK TREATMENT



Williamsbridge Oval, NYC



Hill Center Green Hills, Nashville, TN

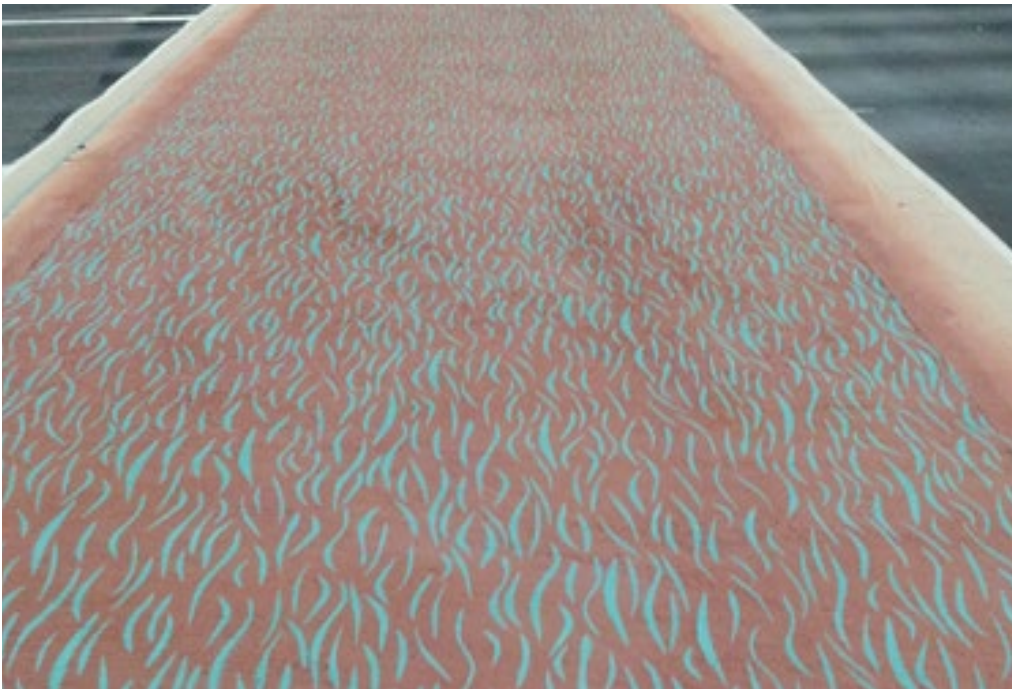


Hermosa Beach, CA



CROSSWALK IMAGERY

CROSSWALK TREATMENT



Scottsdale, AZ



Miami, FL



Hudson River Greenway, NYC

PEDESTRIAN IMPROVEMENTS IMAGERY

STREETSCAPE PAVING



Los Angeles, CA



Meadows Lake, St. Louis



Burlingame, CA

STREETSCAPE PLANTING



Salida, CO



San Francisco, CA



Sacramento, CA

PEDESTRIAN + VEHICULAR PAVING MATERIALS



GraniteCrete--Permeable pedestrian paving



DG Seeded Topcast #50 Concrete--Pedestrian paving



Permeable paving- -Vehicular



Orco Antique Cobble Pavers--Pedestrian + Vehicular



Orco 4x16 Bevel Pavers--Pedestrian + Vehicular



Orco Cascade Permeable Pavers--Pedestrian + Vehicular



Belgard Aqualine Permeable Pavers--Pedestrian + Vehicular

PEDESTRIAN IMPROVEMENTS IMAGERY

STREETSCAPE // LIGHTING



hess city elements light pole



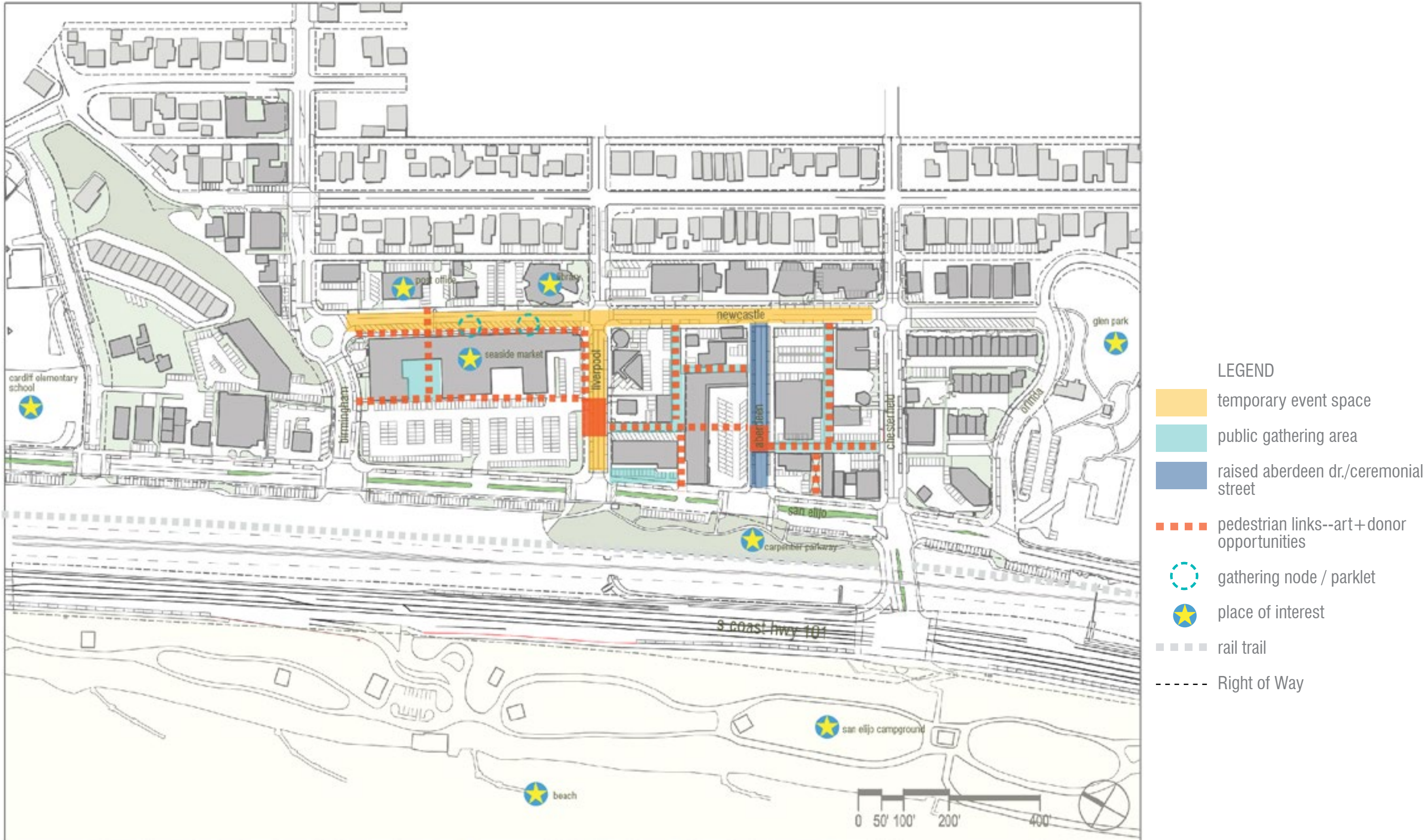
louis poulsen toldbod light pole



structura wood light pole



PROPOSED PUBLIC GATHERING + ACTIVITY AREAS



PUBLIC GATHERING + ACTIVITY AREAS IMAGERY

STREETSCAPE // EVENTS + GATHERING PLACES



Duval St., Key West



Sacramento, CA



San Francisco, CA

STREETSCAPE // PLACES FOR PLAY



San Francisco, CA



Lizzie Fountain Park, CA



Manchester, England

PUBLIC GATHERING + ACTIVITY AREAS IMAGERY

STREETSCAPE // OUTDOOR DINING



Indianapolis, IN



San Francisco, CA



New York City, NY



Madrid, Spain



Pensacola, FL



Madison, WI

PUBLIC GATHERING + ACTIVITY AREAS IMAGERY

STREETSCAPE // ART



New Orleans, LA



Portugal



Ocean Beach, CA (possible artistic display for donor recognition)



San Francisco, CA



Solana Beach, CA



Solana Beach, CA

PUBLIC GATHERING + ACTIVITY AREAS IMAGERY

STREETSCAPE // ART



Angled art



Interactive art



Wheat paste wall art (possible artistic display for donor recognition)

PUBLIC GATHERING + ACTIVITY AREAS IMAGERY

PEDESTRIAN ALLEYS



Glendale, CA



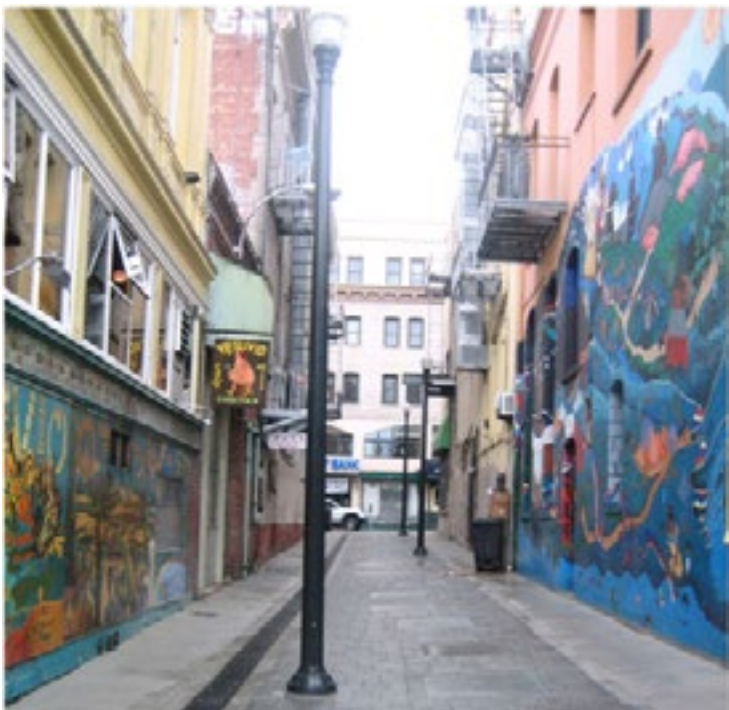
Georgetown, Washington, D.C.



Linden Alley, San Francisco



Austin, TX



San Francisco, CA



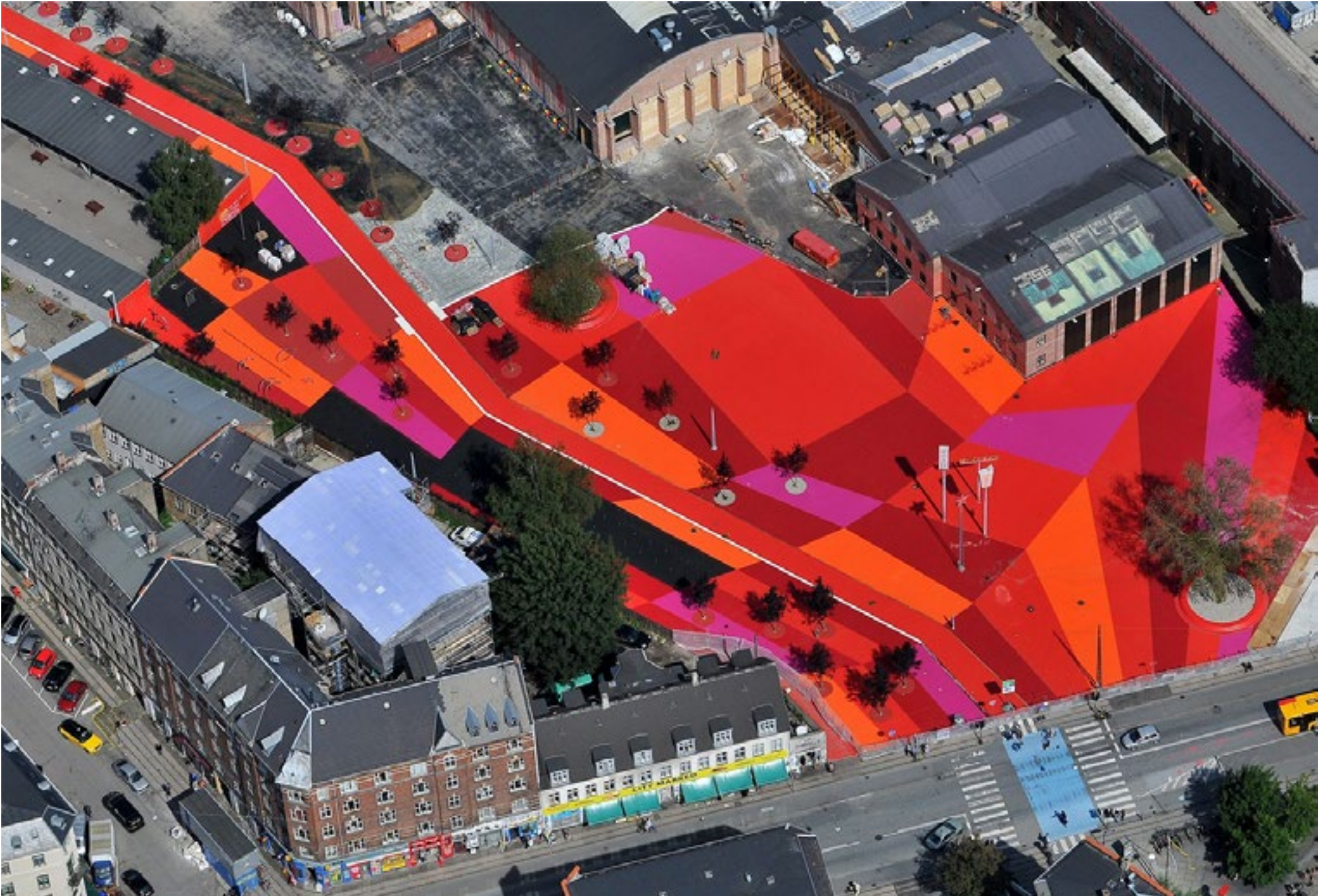
Pasadena, CA



Sydney, Australia

PEDESTRIAN PAVING IMAGERY

EMPHASIZE COLOR!



Copenhagen, Denmark



Copenhagen, Denmark

EXISTING PLANTING



LEGEND

palms

- mexican fan palm
- canary island palm
- king palm
- queen palm

canopy tree

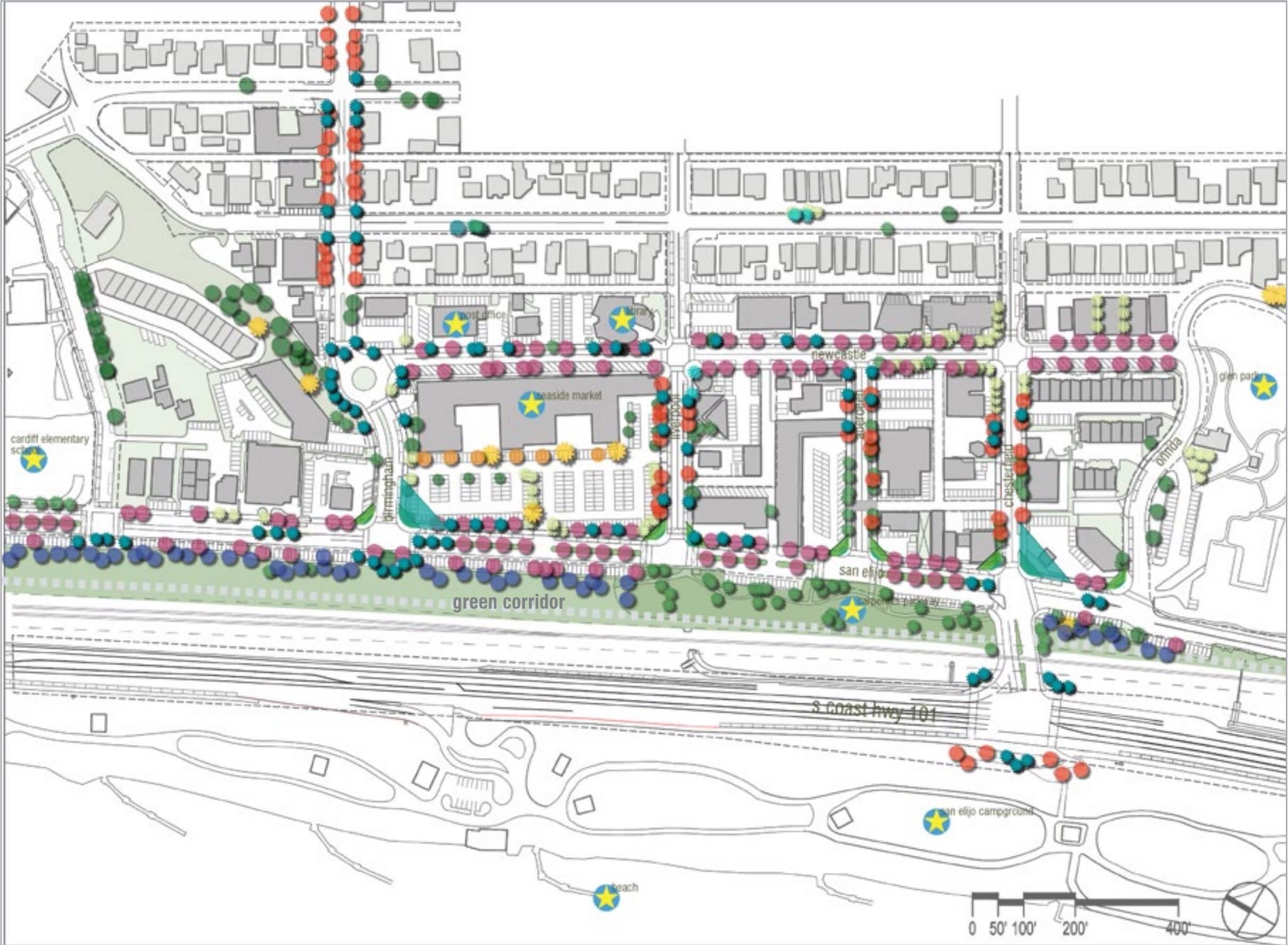
- new zealand christmas tree
- australian blackwood
- carrotwood
- australian willow
- southern magnolia
- boad-leaved paperback
- california pepper tree
- figus tree
- naked coral tree
- eucalyptus
- place of interest

----- Right of Way

SCALE



PROPOSED PLANTING CONCEPT



LEGEND

existing palms

- mexican fan palm
- canary island palm
- king palm
- queen palm

canopy tree

- new zealand christmas tree
- others

proposed identity tree

- identity gateway tree

canopy tree

- new zealand christmas tree
- shade canopy tree
(can vary from street to street to promote variation)

view corridors / corner setbacks

- visibility triangle (specific plan 20' typical, 100' at birmingham & chesterfield dr.)
- 45' visibility triangle - city of encinitas
- place of interest
- Right of Way

RECOMMENDED PLANTING

TREES

Botanical Name	Common Name	Height	Spread	Type
Agonis flexuosa	Peppermint	30'	20'	Evergreen
Arbutus 'Marina'	Marina Madrone	35'	30'	Evergreen/Flowering
Arbutus unedo	Strawberry Tree	35'	35'	Evergreen/Flowering
Brahea armata	Mexican Blue Palm	40'	8'	Evergreen
Cercis canadensis	Eastern Redbud	25'	25'	Evergreen/Flowering
Chitalpa tashkentensis	Chitalpa	30'	30'	Deciduous
Eriobotrya spp.	Loquat	15'	50'	Evergreen/Flowering
Jacaranda mimosifolia	Jacaranda	40' +	40'	Deciduous/Flowering
Lagerstroemia indica	Crape Myrtle	20'	20'	Deciduous/Flowering
Metrosideros excelsus	New Zealand Christmas Tree	30'	15'	Evergreen/Flowering
Pinus torreyana	Torrey Pine	60'	50'	Evergreen
Platanus racemosa	California Sycamore	60' +	40' +	Deciduous
Quercus agrifolia	Coast Live Oak	60'	50'	Evergreen
Tipuana tipu	Tipu Tree	40' +	40' +	Deciduous/Flowering
Tristania conferta	Brisbane Box	60'	40'	Evergreen/Flowering

SHRUBS

Botanical Name	Common Name
Aeonium Arboreum 'Zwartkop'	Large Purple Aeonium
Agave attenuata	Foxtail Agave
Agave desmettiana	Smooth Agave
Aloe vera	Aloe
Anigozanthos flavidus	Kangaroo Paw
Baccharis spp.	Coyote Bush
Callistemon Little John'	Bottlebrush
Carissa macrocarpa 'Boxwood Beauty'	Natal Plum
Cistus ladanifer	Spotted Rockrose
Feijoa sellowiana	Pineapple Guava
Lantana spp.	Lantana
Leptospermum laevigatum	Australian Tea Tree
Leptospermum spp.	Tea Tree
Rosa 'Iceberg'	Iceberg Shrub Rose
Rosmarinus officinalis 'Tuscan Blue'	Tuscan Blue Upright Rosemary
Salvia leucantha	Mexican Bush Sage
Senecio serpens	Blue Chalksticks
Teucrium chamaedrys	Germander

GRASSES / GRASS-LIKE

Chondropetalum tectorum	Small Cape Rush
Dietes grandiflora	Fortnight Lily
Festuca mairei	Atlas Fescue
Festuca ovina glauca	Elijaa Blue
Helictotrichon sempervirens	Blue Oat Grass
Hemerocallis spp.	Daylily
Juncus patens	Spike Rush
Kniphofia Uvaria	Red Hot Poker
Liriope spp.	Creeping Lily Turf
Miscanthus sinensis 'Gracillimus'	Silver Maiden Grass

GRASSES / GRASS-LIKE (continued)

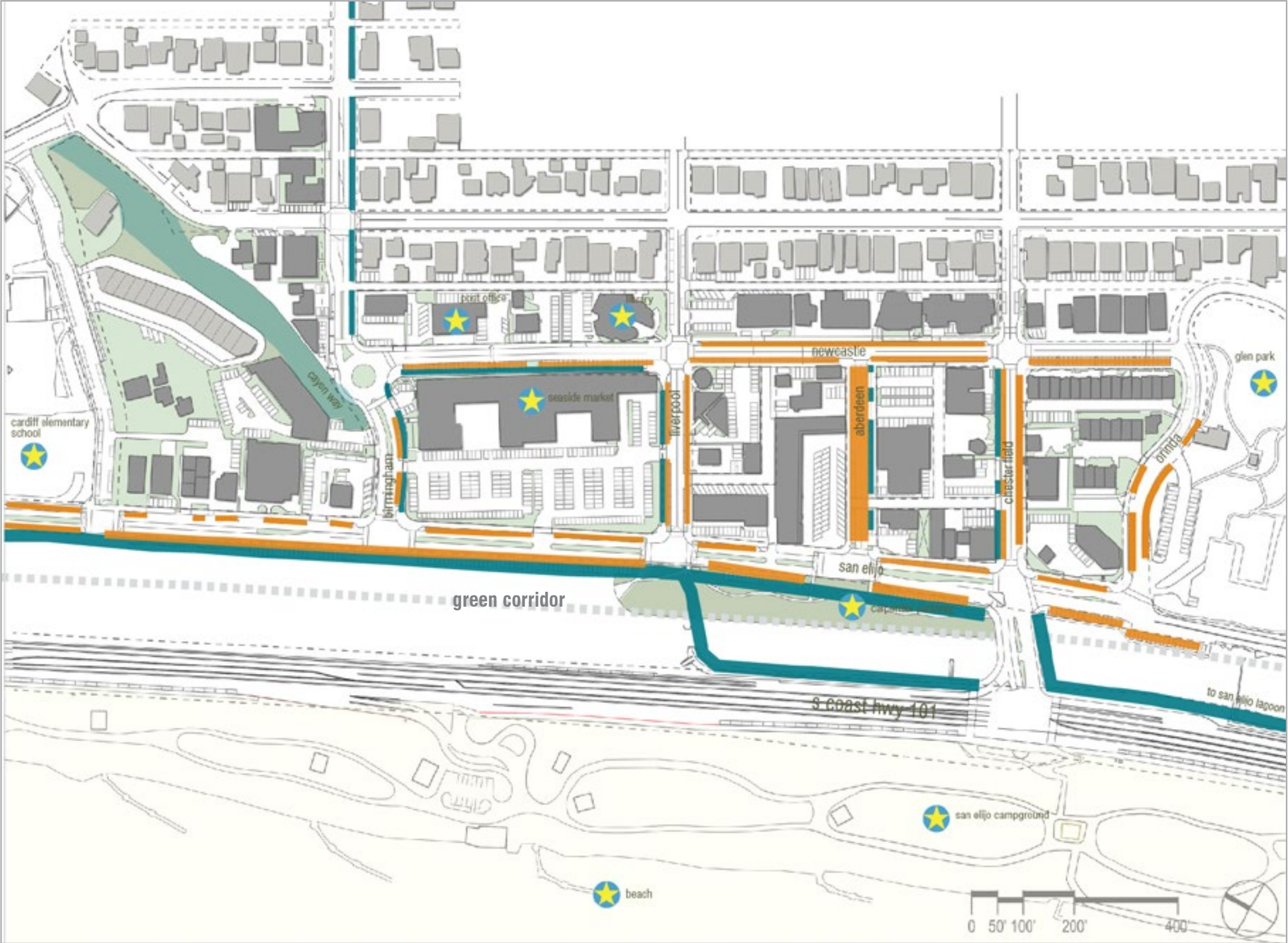
Botanical Name	Common Name
Muhlenbergia rigens	Deer Grass
Phormium tenax	New Zealand Flax
Sesleria autumnalis	Autumn Moor Grass
Stipa tenuissima	Mexican Feather Grass

VINES

Bignonia spp.	Trumpet Vine
Bougainvillea spp.	Bougainvillea
Jasminum spp.	Jasmine
Parthenocissus tricuspidata	Boston Ivy
Tecomaria capensis	Cape Honeysuckle
Trachelospermum jasminoides	Star Jasmine

plant / tree listed in the Specific Plan

PROPOSED SUSTAINABLE STRATEGIES



- LEGEND
- vegetated bioswale
 - permeable paving
 - place of interest
 - Right of Way

STORMWATER TREATMENT IMAGERY



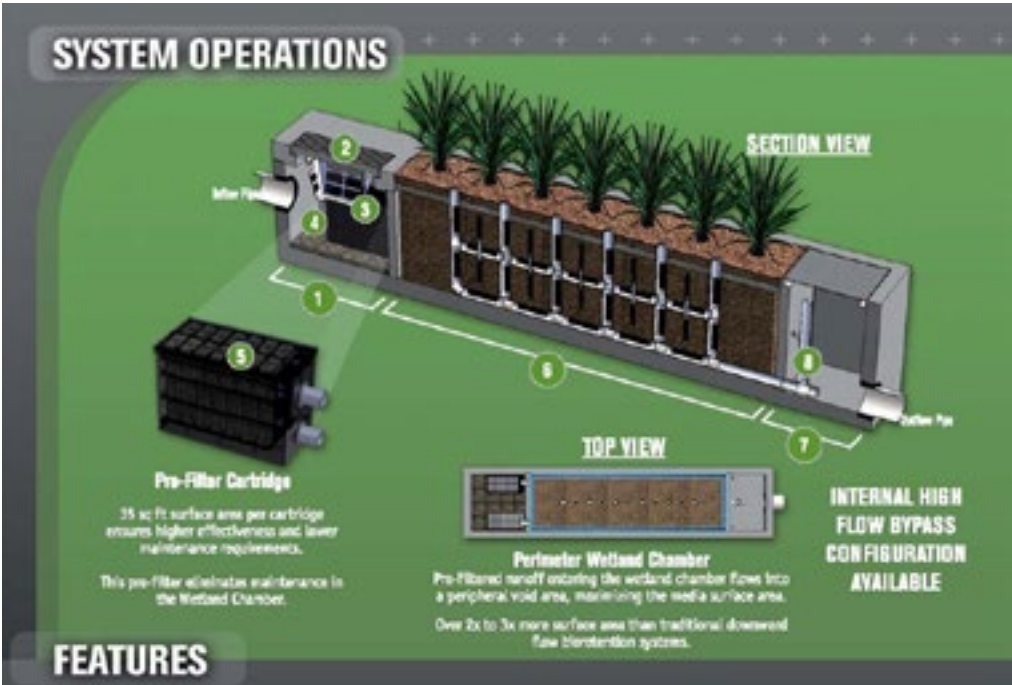
permeable paving + bioswale



permeable paving



bioswale



modular wetland



permeable paving



bioswale

FUTURE TARGETED PROJECTS

1 SAN ELIJO CORRIDOR

Reduce street crossing distance

- relocate bike lane to rail trail
- reduce lane widths as permitted by Encinitas Engineering Department

Enhance pedestrian comfort / safety

- landscape the parkway to provide shade and separation from vehicular space
- enhance the pedestrian environment with meandering pathways using decorative paving materials
- reduce driveways to reduce pedestrian and vehicular conflicts
- provide a landscaped median as an intermediate “safe zone” for pedestrians crossing streets
- implement raised crosswalks at unsignalized intersections
- add crosswalk treatments at signalized intersections
- enforce “no right turn on red” at Birmingham intersection

2 PARKING MANAGEMENT PLAN

Create and enforce guidelines

- prepare an updated parking study
- implement resident / employee all day permitted parking
- create 2-3 hour metered parking zone (except for permitted vehicles)
- create all day “reservoir” parking outside of the central business district
- allow deviations from the Specific Plan when proposed changes facilitate goals of the parking plan
- incentivize the use of alternative transportation

3 ORINDA LOOP

Create and enforce guidelines

- implement red curbs where road width is not sufficient for minimum travel lanes and parking (32’ curb to curb for parking on one side, 40’ curb to curb for parking on both sides)
- consider one-way road as an option

4 BIRMINGHAM ROUNDABOUT

Intersection of Birmingham and Newcastle

5 COHESIVE IDENTITY PLAN

Define Cardiff’s unique style

- create guidelines for signage to allow for variability within defined parameters
- create gateway nodes to announce arrival
- consider removing or relocating existing signage that does not meet the objectives defined

6 CHESTERFIELD CROSSING

Improve safety and connectivity

- create a railroad “quiet zone”
- widen sidewalk and modify existing crossing at north side of Chesterfield at Hwy 101
- create new sidewalk and crossing at south side of Chesterfield at Hwy 101
- improve beach access and connectivity to the campground

thank you



the **LdG** team
LANDSCAPE
ARCHITECTS