04

MOBILITY

4.1 — INTRODUCTION

The Southwest Village Specific Plan area will have a mobility network accessible to people who walk, bike, take transit, and use a car. The network of streets, bike paths, sidewalks, trails, and paseos envisioned for Southwest Village will provide connections between proposed residential neighborhoods and commercial, retail, and public uses in the Village Core, including the future school, parks, and transit facilities. The mobility network is designed to service future development in Southwest Village while responding to natural changes in elevation and respecting the neighborhood's open space areas.

This Specific Plan describes a mobility network that ensures a connected network of public streets to serve development. A network of smaller public streets and private drives will provide access to and within neighborhoods.

The mobility network in Southwest Village integrates the planned regional transportation network, as described in both the General Plan and Otay Mesa Community Plan, and SANDAG's 2021 Regional Plan. The mobility network complements Southwest Village's urban core, pedestrian-focused grid, and planned land use pattern to encourage walking, biking, and transit use within the Village Core and maximize opportunities for taking transit. This strategy is intended to result in limiting the amount of vehicle trips and reducing vehicle miles traveled and greenhouse gas emissions per capita, satisfying the City's sustainability goals and policies within the General Plan and Climate Action Plan.

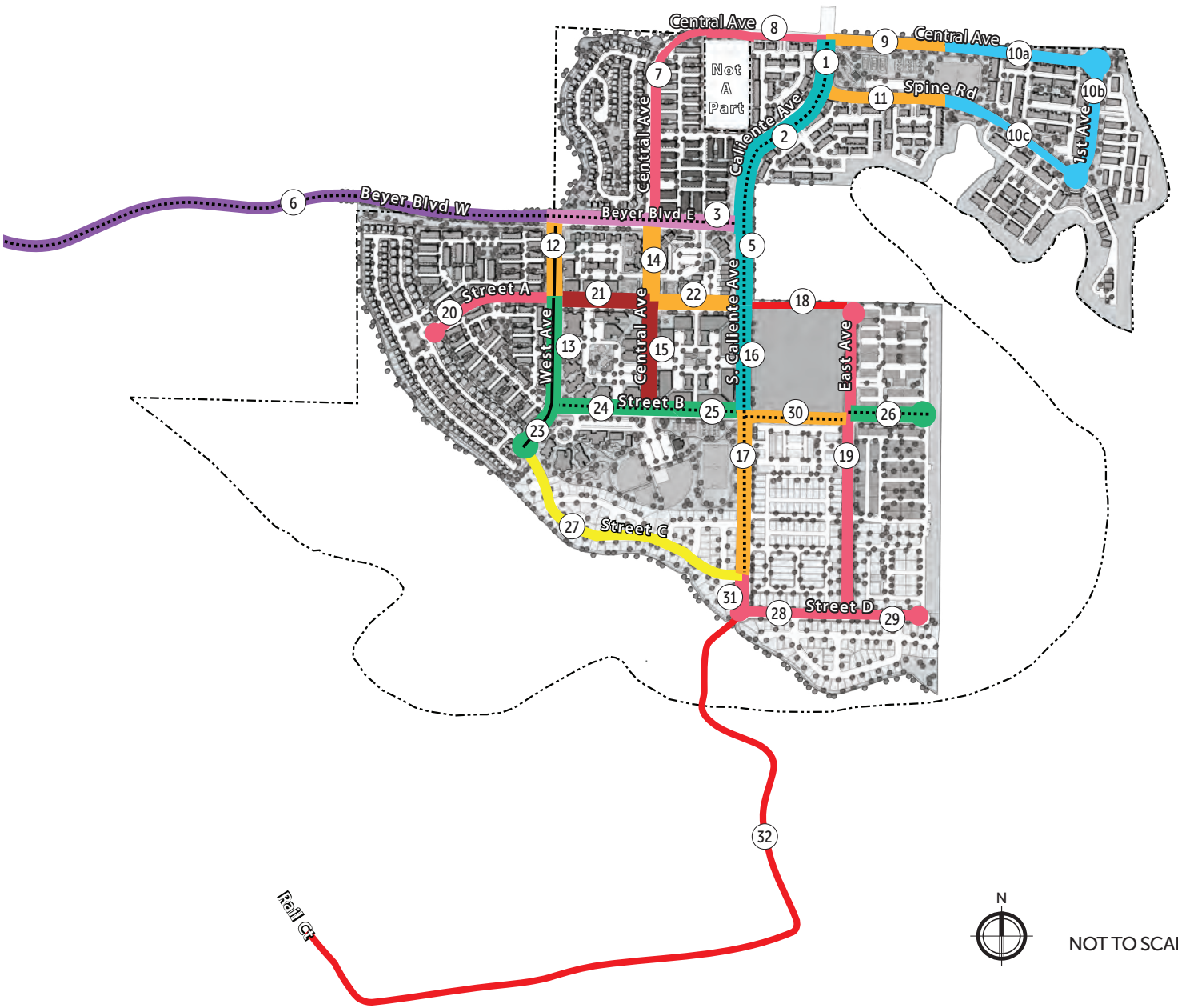
4.2 — STREET CLASSIFICATIONS

The mobility network described in this Specific Plan serves as the foundation for future development; provides key connections to support walking, biking, transit, and vehicular transportation throughout the Specific Plan area; and ensures that streets are designed to accommodate projected traffic volumes. The mobility network includes a system of roadway types that provide access throughout the Specific Plan area and connect the mixed-use Village Core, neighborhood school, neighborhood park, and are designed to ensure that high volumes of pedestrians and bicyclists can move efficiently, encouraging residents to walk and bike to village destinations. A description of street classifications for Southwest Village is shown in ***Figure 4.1, Street Classifications***, and summarized in ***Table 4.1, Street Classification by Segment***. Street design standards for each classification are based on the City's Street Design Manual (March 2017), with specific modifications from these standards noted where applicable.

The mobility network in Southwest Village is organized around two key arterials that access the center of the community, with Caliente Avenue offering north-south access and Beyer Boulevard offering east-west access. These streets provide facilities for pedestrians, bicyclists, public transit, and drivers, ensuring that all modes are accommodated. They were designed with respect for the topography and the location of conserved open space within the Specific Plan and provide linkages to the larger Otay Mesa Community. Central Avenue will act as the main street for commercial, mixed-use, and medium-high-density residential uses. Central Avenue will include wide sidewalks, on-street parking, and street furniture to encourage strolling between shops.

A grid network of streets connects to the arterial streets, allowing for maximum use of the land, with consideration of ownership and lot configuration. The grid network provides blocks that do not exceed a 1,800-foot perimeter, which is consistent with the General Plan. These streets contain parkways, sidewalks, on-street and off-street bike facilities.

Figure 4.1 — Street Classifications



LEGEND

- **Specific Plan Boundary**
- **4-Lane Urban Collector Street** with Class I Bike Paths and Class II Bike Lanes
- **Beyer Blvd West** Modified 4-Lane Urban Collector (Built with 2-Lanes Due to Environmental Constraints) with Class II Bike Lanes with Buffer
- **Beyer Blvd East** Modified 4-Lane Urban Major Street with Class I Bike Path and Class II Bike Lanes
- **2-Lane Collector Street** with Two-Way Center Left Turn Lane and Class II Bike Lanes
- **2-Lane Collector Street** with Two-Way Center Left Turn Lane and Class I Bike Path
- **2-Lane Collector Street** with Two-Way Center Left Turn Lane, Class II Bike Lane on the West Side, and Class I Bike Path on the East Side
- **2-Lane Collector** with Class II Bike Lanes
- **2-Lane Sub-Collector** with Class II Bike Lanes
- **Commercial Collector Street** with Class II Bike Lanes
- **2-Lane Collector** with Class I Bike Path
- **2-Lane Collector** with Class I Bike Path on the East Side and Class II Bike Lane on the West Side
- **2-Lane Collector** with Class I Multi-use Path on One-Side
- **Emergency Vehicle Access Road**

Table 4.1 — Street Classification by Segment

I.D.	Name	Classification	Estimated Ultimate ADT	Design ADT	ROW Width
1	Caliente Ave	Modified[1] 4-Lane Urban Collector with Class I Bike Path and Class II Bike Lanes with Buffer	29,200	25,000 (LOS D)	122 ft
2	Caliente Ave	Modified[1] 4-Lane Urban Collector with Class I Bike Path and Class II Bike Lanes with Buffer	29,200	25,000 (LOS D)	122 ft
3	Beyer Blvd East	Modified[1] 4-Lane Urban Major with Class I Bike Path and Class II Bike Lanes with Buffer	28,100	35,000 (LOS D)	116 ft
4		Not Used[2]			
5	S. Caliente Ave	Modified[1] 4-Lane Urban Collector with Class I Bike Path and Class II Bike Lanes with Buffer	17,200	25,000 (LOS D)	122 ft
6	Beyer Blvd West	Beyer Blvd West (Modified1 4-Lane Urban Collector (Built with 2 Lanes Due to Environmental Constraints)) with Class II Bike Lanes with Buffer	28,100	25,000 (LOS D)	53 ft
7	Central Ave	2-Lane Collector with Class II Bike Lanes with Buffer	4,500	6,500 (LOS D)	69 ft
8	Central Ave	2-Lane Collector with Class II Bike Lanes with Buffer	3,900	6,500 (LOS D)	62 ft
9	Central Ave	2-Lane Collector with Two-Way Center Left Turn Lane with Class II Bike Lanes with Buffer	7,200	13,000 (LOS D)	88 ft
10a	Central Ave	2-Lane Collector with Class I Multi-Use Path on One-Side (North Side)	6,000	6,500 (LOS D)	Min. 60 ft
10b	1st Ave	2-Lane Collector with Class I Multi-Use Path on One-Side (East Side)	4,100	6,500 (LOS D)	Min. 60 ft
10c	Spine Road	2-Lane Collector with Class I Multi-Use Path on One-Side (South Side)	3,200	6,500 (LOS D)	Min. 60 ft
11	Spine Road	2-Lane Collector with Two-Way Center Left Turn Lane with Class II Bike Lanes with Buffer	8,200	13,000 (LOS D)	88 ft
12	West Ave	2-Lane Collector with Two-Way Center Left Turn Lane and Class II Bike Lane with Buffer on West Side and Class I Bike Path on the East Side	7,800	13,000 (LOS D)	87 ft
13	West Ave	2-Lane Collector with Class I Bike Path on East Side and Class II Bike Lane with Buffer on West Side	4,100	6,500 (LOS D)	75 ft
14	Central Ave	2-Lane Collector with Two-Way Center Left Turn Lane and Class II Bike Lanes with Buffer	7,700	13,000 (LOS D)	88 ft
15	Central Ave	2-Lane Commercial Collector with Class II Bike Lanes with Buffer	5,500	6,500 (LOS D)	80 ft
16	S. Caliente Ave	Modified[1] 4-Lane Urban Collector with Class I Bike Path and Class II Bike Lanes with Buffer	13,900	25,000 (LOS D)	122 ft
17	S. Caliente Ave	Modified[1] 2-Lane Collector with Two-Way Center Left Turn Lane and Class I Bike Path	6,600	13,000 (LOS D)	86 ft
18	Street A	Emergency Vehicle Access Road	N/A	N/A	24 ft
19	East Ave	2-Lane Collector with Class II Bike Lanes with Buffer	4,700	6,500 (LOS D)	76 ft
20	Street A	2-Lane Collector with Class II Bike Lanes with Buffer	5,800	6,500 (LOS D)	76 ft
21	Street A	2-Lane Commercial Collector with Class II Bike Lanes with Buffer	6,300	13,000 (LOS D)	80 ft
22	Street A	2-Lane Collector with Two-Way Center Left Turn Lane and Class II Bike Lanes with Buffer	6,600	13,000 (LOS D)	88 ft
23	West Ave	2-Lane Collector with Class I Bike Path on East Side and Class II Bike Lanes with Buffer on West Side	3,700	6,500 (LOS D)	75 ft
24	Street B	2-Lane Collector with Class I Bike Path	2,600	6,500 (LOS D)	74 ft
25	Street B	2-Lane Collector with Class I Bike Path	3,500	6,500 (LOS D)	74 ft
26	Street B	2-Lane Collector with Class I Bike Path	2,300	6,500 (LOS D)	74 ft
27	Street C	2-Lane Sub-Collector with Class II Bike Lanes with Buffer	4,000	2,200 (LOS C)	76 ft
28	Street D	2-Lane Collector with Class II Bike Lanes with Buffer	2,900	6,500 (LOS D)	76 ft
29	Street D	2-Lane Collector with Class II Bike Lanes with Buffer	1,300	6,500 (LOS D)	76 ft
30	Street B	2-Lane Collector with Two-Way Center Left Turn Lane and Class I Bike Path	8,700	13,000 (LOS D)	86 ft
31	S. Caliente Ave	2-Lane Collector with Class II Bike Lanes with Buffer	3,000	6,500 (LOS D)	76 ft
32	N/A	Emergency Vehicle Access Road	N/A	N/A	20 ft

1. See specifications tables in Section 4.5.1 through 4.5.13 for the modifications to the Street Design Manual incorporated into the street classifications.
2. Segment 4 is not used because it was identified as redundant and therefore integrated with Segment 3.

4.3 — BICYCLE NETWORK

The proposed bicycle network for the Southwest Village Specific Plan, illustrated in ***Figure 4.2, Bicycle Facility Network***, and summarized in ***Table 4.2, Bicycle Facility Type by Street Segment***, consists of an extensive network of dedicated facilities that are connected to activity centers and provide access to public transit. The bicycle network includes Class I bike paths and Class II bike lanes with a buffer. Bicycle facility classifications are in accordance with the Otay Mesa Community Plan and the Bicycle Master Plan. See Sections 4.3.1 Class I Bike Paths and 4.3.2 Class II Bike Lanes with Buffer for further detail on these types of bicycle facilities.

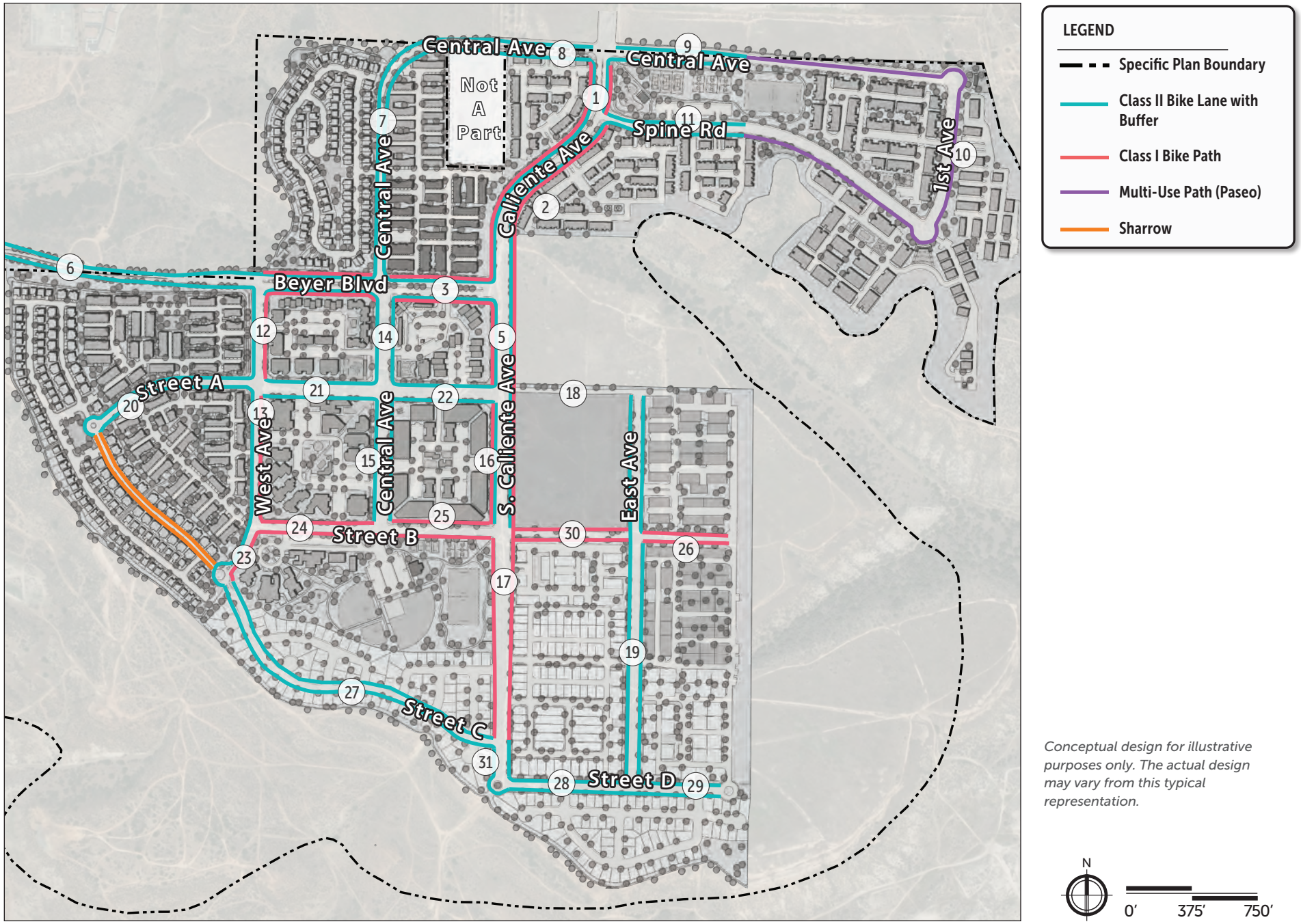
A shared multi-use path will be located on Caliente Avenue and Beyer Boulevard, and other areas in and around the Village Core to provide continuity and enhanced connectivity for both north-south and east-west travel across Southwest Village. The Class I bike paths will connect from the Southwest Village to Airway Road.

To ensure the network effectively connects residential neighborhoods to destinations within the Southwest Village, including commercial uses, schools, and a mobility hub, all public streets will contain some form of bicycle facility. Class II bicycle lanes on public streets will provide connections to recreational opportunities and schools.

Table 4.2 — Bicycle Facility Type by Street Segment

I.D.	Name	Type
1	Caliente Ave	Class I Bike Path and Class II Bike Lanes with Buffer
2	Caliente Ave	Class I Bike Path and Class II Bike Lanes with Buffer
3	Beyer Blvd East	Class I Bike Path and Class II Bike Lanes with Buffer
4		Not Used
5	S. Caliente Ave	Class I Bike Path and Class II Bike Lanes with Buffer
6	Beyer Blvd West	Class II Bike Lanes with Buffer
7	Central Ave	Class II Bike Lanes with Buffer
8	Central Ave	Class II Bike Lanes with Buffer
9	Central Ave	Class II Bike Lanes with Buffer
10	1st Ave, Spine Road east of Segment 11, Central Ave east of Segment 9	Class I Multi-Use Path on One Side (Exterior Side)
11	Spine Road	Class II Bike Lanes with Buffer
12	West Ave	Class II Bike Lane with Buffer on West Side and Class I Bike Path on East Side
13	West Ave	Class II Bike Lane with Buffer on West Side and Class I Bike Path on East Side
14	Central Ave	Class II Bike Lanes with Buffer
15	Central Ave	Class II Bike Lanes with Buffer
16	S. Caliente Ave	Class I Bike Path and Class II Bike Lanes with Buffer
17	S. Caliente Ave	Class I Bike Path
18	Street A (fire access road only)	N/A
19	East Ave	Class II Bike Lanes with Buffer
20	Street A	Class II Bike Lanes with Buffer
21	Street A	Class II Bike Lanes with Buffer
22	Street A	Class II Bike Lanes with Buffer
23	West Ave	Class I Bike Path on the East Side and Class II Bike Lane with Buffer on the West Side
24	Street B	Class I Bike Path
25	Street B	Class I Bike Path
26	Street B	Class I Bike Path
27	Street C	Class II Bike Lanes with Buffer
28	Street D	Class II Bike Lanes with Buffer
29	Street D	Class II Bike Lane with Buffer
30	Street B	Class I Bike Path
31	S. Caliente Ave	Class II Bike Lanes with Buffer
32	N/A	N/A

Figure 4.2 — Bicycle Facility Network



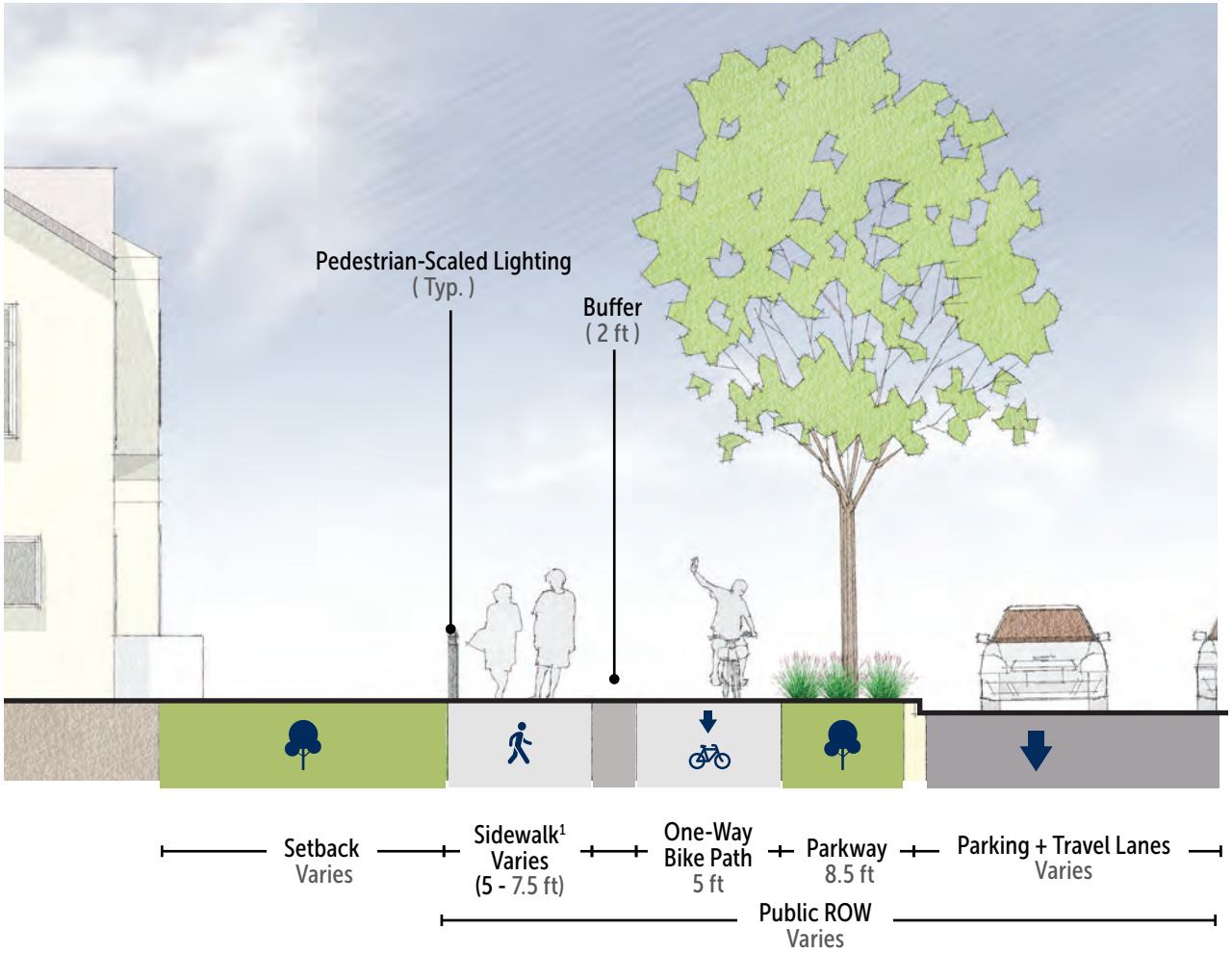
Conceptual design for illustrative purposes only. The actual design may vary from this typical representation.

4.3.1 — Class I Bike Paths

- Class I bike paths provide single-directional bicycle facilities that are associated with transportation corridors and are incorporated into new development.
- Class I bike paths are adjacent to high automobile traffic areas and will be separated from traffic flow by street trees and landscaping in the parkway landscaping area.
- Class I bike paths include a minimum 5-foot travel lane for bicycles and separate sidewalks for pedestrians.
- Sidewalk widths will be determined by the street design standards in the Specific Plan.
- A minimum 2-foot striped buffer should be provided to separate the bicycle lane from the pedestrian area.
- The components of a one-way Class I bike path are illustrated in *Figure 4.3, One-Way Class I Bike Path Cross-Section*.
- The buffer should incorporate paint or other treatments to visually demarcate the buffer area.
- Grades on these bike paths should generally be gentle; however, bike paths adjacent to roads may exceed typical bike path standards.
- Class I bike paths have improved surfacing, typically through asphalt, concrete, pavers, and other hard surfaces.
- At intersections, the Class I bike path can be dropped and merged onto the street, or it can be maintained at sidewalk level, where bicyclists cross with pedestrians, possibly with a dedicated bicycle signal.

One-way Class I Bike Paths

Figure 4.3 — One-Way Class I Bike Path Cross-Section



Notes:

1. Includes a 6-inch buffer for curb and a 6-inch buffer for proposed pedestrian scale lighting within the public right-of-way (ROW).

4.3.2 — Class II Bike Lanes with Buffer

- Class II bike lanes with a buffer will be included as part of the public streets identified in ***Table 4.2, Bicycle Facility Type by Street Segment***.
- Class II bike lanes allocate a portion of the street for bicyclists by using pavement striping and signage.
- Class II bike lanes will be a minimum of 6 feet and include a buffer with a minimum width of 2 feet between the bike lane and the vehicle travel lane.
- The buffer will be defined by painted markings in the street.
- Class II bike lanes with a buffer should be designed based on the City's Bicycle Facilities Design Guidelines.

Example photos of Class II bike lanes with buffer.

4.4 — PEDESTRIAN NETWORK

Southwest Village will include a network of sidewalks, paseos, and trails organized around the grid network of public streets. A non-contiguous sidewalk will be included on both sides of all public streets except Beyer Boulevard West, and the community will be surrounded by a perimeter trail to provide access along the edge of the development and open spaces. Paseos may be located where opportunities exist to enhance connectivity in Southwest Village. The proposed pedestrian network for the Southwest Village Specific Plan is shown in ***Figure 4.5, Pedestrian Facility Network***. For Pedestrian System Policies, see Section 3.5.2, Pedestrian System Policies.

4.4.1 — Class I Multi-Use Paths

- Class I multi-use paths are part of the public right-of-way, intended for exclusive use by bicyclists, pedestrians, and those using non-motorized modes of travel.
- Class I multi-use paths are physically separated from vehicular traffic in an exclusive right-of-way.
- Class I multi-use paths are used in areas of light vehicular travel for a more neighborhood feel.

4.4.2 — Paseos

- Paseos are multipurpose pathways within, adjacent to, or through developments.
- Although paseos are not associated with a street or within the public right-of-way, paseos may be adjacent or parallel with easements that allow public access.
- Paseos serve as connector trails by improving access and facilitating connections between and through development.
- As shown in ***Figure 4.4, Typical Paseo Cross-Section***, paseos should have a hard surface or a soft surface that is suitable for use by bicycles and pedestrians.
- Lighting, wayfinding signage, and landscaping should be provided as part of paseos while considering the location near adjacent development.
- Paseos should have an active frontage and allow for pedestrian and bicycle travel.
- Paseos provide an opportunity to locate recreational amenities to activate the space and provide additional opportunities for recreation.

4.4.3 — Mid-Block Crossings

- Consider providing mid-block crossings in locations where there is a significant pedestrian desire to cross a street such as schools or parks.
- Ensure that mid-block pedestrian crossings comply with City Council Policy 200-07, Comprehensive Pedestrian Crossing Policy.

Figure 4.4 — Typical Paseo Cross-Section

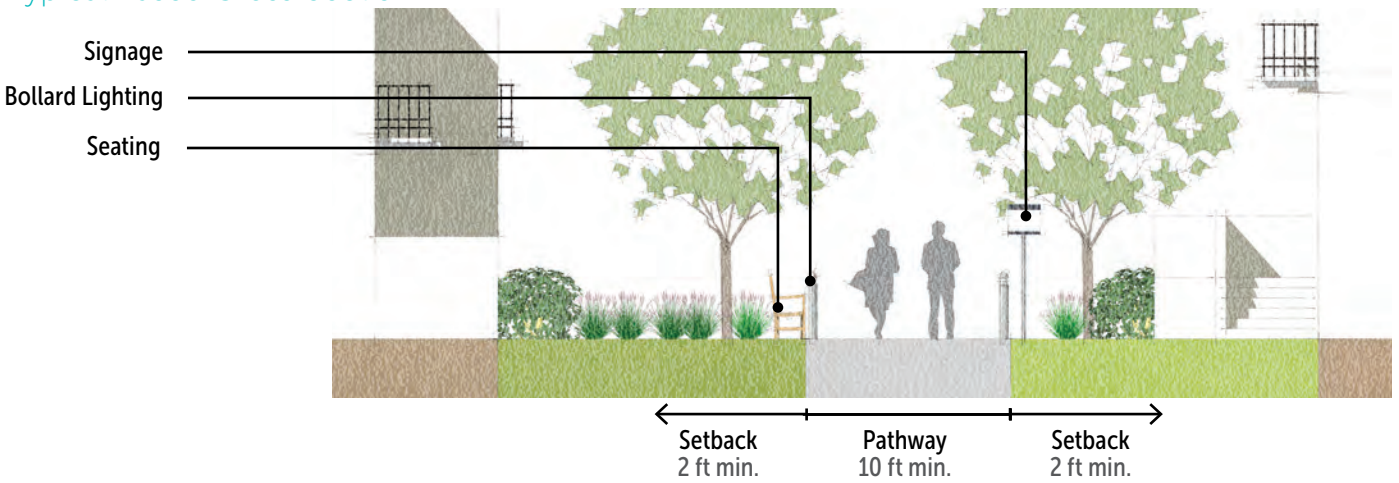
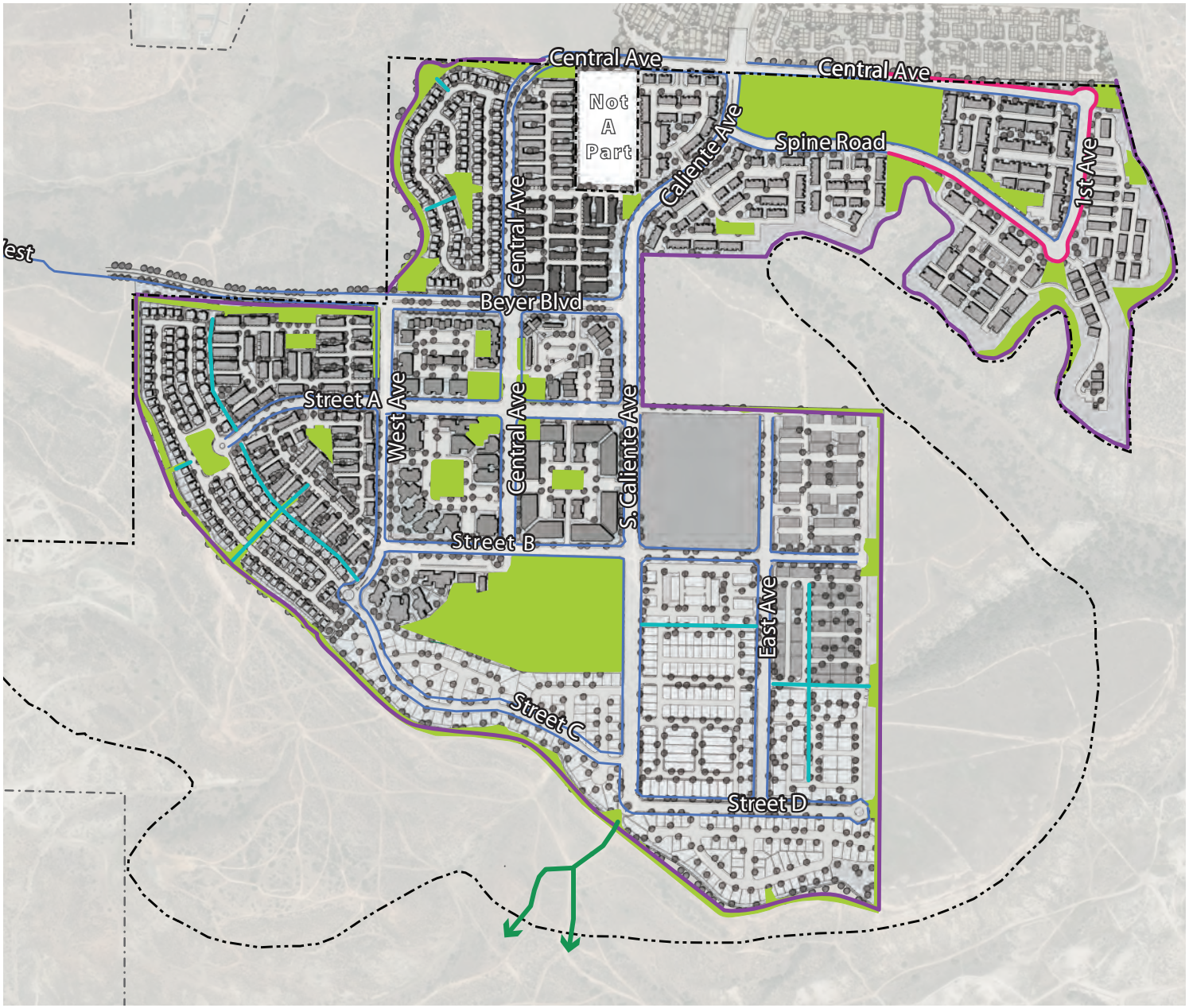


Figure 4.5 — Pedestrian Facility Network



LEGEND

- Specific Plan Boundary
- Proposed Public Sidewalk
- Perimeter Trail
- Trails
- Paseo
- Multi-Use Path
- Parks

Conceptual design for illustrative purposes only. The actual design may vary from this typical representation.

N

0' 375' 750'

4.5 — STREET DESIGN STANDARDS

Street design standards for each classification shown in *Figure 4.1, Street Classifications*, and summarized in *Table 4.1, Street Classification by Segment*, are further described on the following pages. The following street design standards shall supersede the applicable standards within the Street Design Manual as they pertain to the Southwest Village. The following sections include specification tables that include the modifications to the Street Design Manual as they apply to the Specific Plan area. Refer to *Section 7.9, Supplemental Development Regulations*.

4.5.1 — Modified 4-Lane Urban Collector with Class I Bike Paths and Class II Bike Lanes

- Caliente Avenue, north of Street B, is planned as a Modified 4-Lane Urban Collector, designed to accommodate high traffic volumes and provide the primary access in and out of Southwest Village.
- The Modified 4-Lane Urban Collector provides two travel lanes and a buffered Class II bike lane in each direction, divided by a raised median.
- Modifications have been made to the cross-section in the City's Street Design Manual to include a Class I bike facility as part of the parkway and to remove on-street parking.
- Non-contiguous sidewalks and landscaping strips are also included on both sides.
- *Figure 4.6* shows a cross-section of a Modified 4-Lane Urban Collector with Class I Bike Paths and Class II Bike Lanes.

Key Map

SPECIFICATIONS Based on the City of San Diego Street Design Manual (March 2017 Edition) Four-Lane Urban Collector Specifications	
Applicable Streets	Caliente Avenue (north of Street B)
Urban Parkway	22-Foot Wide Parkway with Non-Contiguous Sidewalk
Street Tree	Parkway: Podocarpus gracilior (Fern Pine) Raised Median: Cercis occidentalis (Western Redbud)
Modifications to Street Design Manual (Refer to Section 7.9)	1. A one-way Class I bike path shall be included on each side of the street, in addition to the Class II buffered bike lane. 2. Design speed shall be reduced. 3. On-street parking shall not be included. 4. The right-of-way shall be widen an additional 10 feet at approaches to intersecting four- or six-lane streets to provide a minimum of 250 feet of two-lane left-turn storage, exclusive of transitions. 5. A mid-block pedestrian crossing shall be included on Segment 2 to intercept with the perimeter trail 6. Receiving lanes for dual lefts shall be 12 feet wide.

Figure 4.6 — Modified Cross-Section for 4-Lane Urban Collector with Class I Bike Paths and Class II Bike Lanes

Notes:

1. See Section 4.3.1 for Class I Bike Paths.
2. The outside travel lane has a width of 12 feet to provide additional buffer from bike lanes.
3. Includes 6-inch curb.
** Section represents a typical condition.*

4.5.2 — Beyer Boulevard West (Modified 4-Lane Urban Collector (Built with 2 Lanes Due to Environmental Constraints)) with Class II Bike Lanes with Buffer

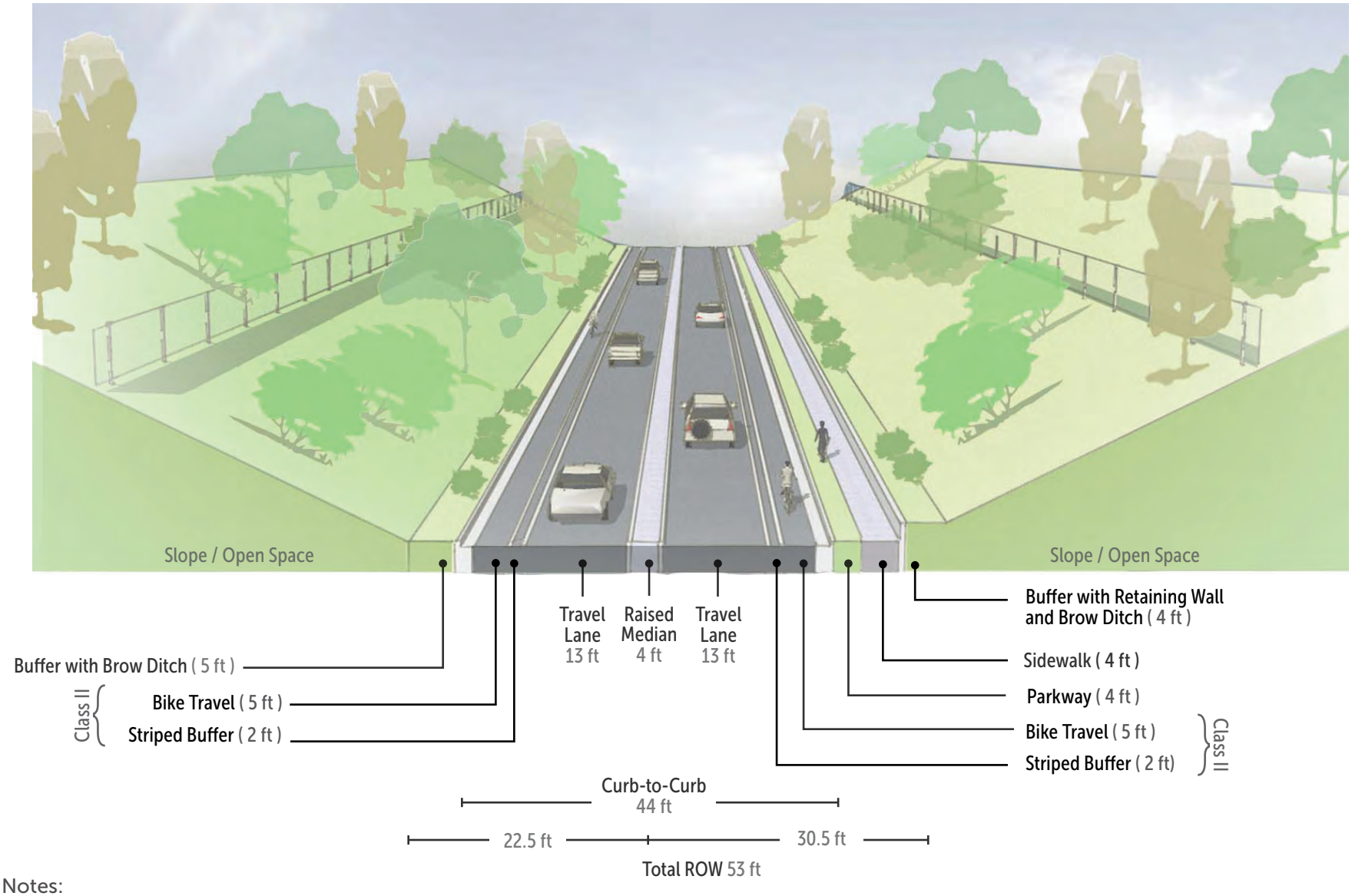
- The western section of Beyer Boulevard beginning at the intersection with West Avenue and extending to the San Ysidro community will have a modified 4-Lane Urban Collector configuration with the right-of-way width reduced due to environmental constraints – biological resources and geological hazards – to the maximum extent possible.
- The point of connection of Beyer Boulevard West will meet at the existing intersection of Beyer Boulevard and Enright Drive, as shown in *Figure 1.1*.
- This modified version of the 4-Lane Urban Collector includes one lane of travel in each direction, a sidewalk on the south side, and buffered Class II bike lanes on each side.
- *Figure 4.7* shows a cross-section for the Beyer Boulevard West, Modified 4-Lane Urban Collector.

SPECIFICATIONS
Based on the City of San Diego Street Design Manual (March 2017 Edition)
Four-Lane Urban Collector Street Specifications

Applicable Streets	**Beyer Boulevard West (west of West Avenue)**
Street Tree	**Trees shall not be planted within the right-of-way due to environmental constraints**
Modifications to Street Design Manual (Refer to Section 7.9)	1. The curb-to-curb width shall be reduced, including one lane of travel in each direction, a sidewalk on the south side, reduced sidewalk width, reduced median width, reduced parkway width, and eliminating on-street parking to minimize the total right-of-way width due to environmental constraints. 2. Transition from 4 lanes to 2 lanes shall occur west of West Avenue.

Key Map

Figure 4.7 — Modified Cross-Section for 4-Lane Urban Collector (Built with 2 Lanes Due to Environmental Constraints)



Notes:

1. Includes 6-inch curb.

** Section represents a typical condition.*

4.5.3 — Beyer Boulevard East (Modified 4-Lane Urban Major with Class I Bike Path and Class II Bike Lanes With Buffer)

- Beyer Boulevard East is planned as a modified 4-Lane Urban Major with Class I Bike Path and Class II Bike Lanes.
- The modified version of the 4-Lane Urban Major has a raised median and parkways, but includes the same number of travel lanes in each direction and a Class I bike path and buffered Class II bike lanes on each side.
- *Figure 4.8* shows a modified cross-section for Beyer Boulevard East, Modified 4-Lane Urban Collector.

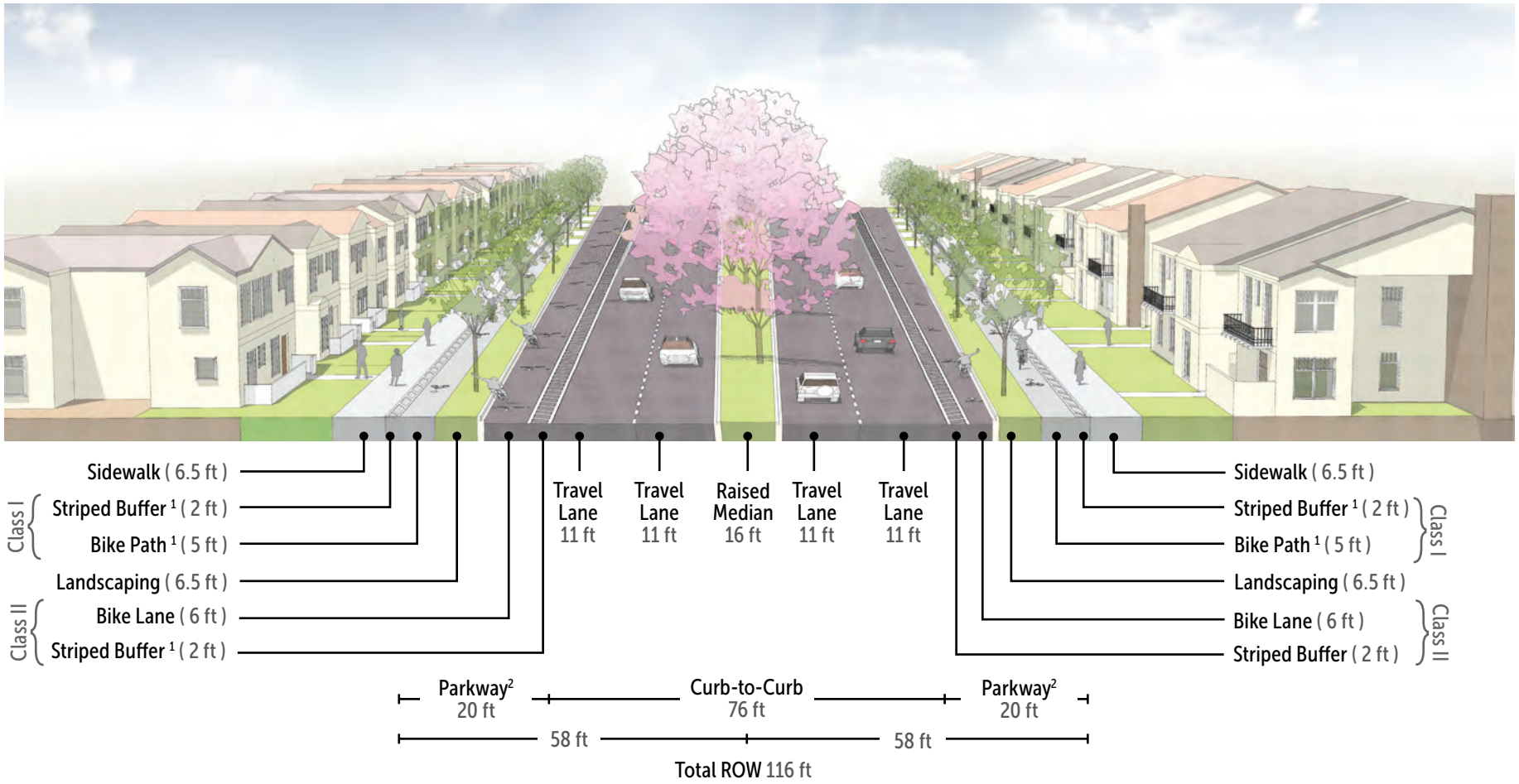
Key Map

SPECIFICATIONS

Based on the City of San Diego Street Design Manual (March 2017 Edition)
Four-Lane Urban Major Specifications

Applicable Streets	**Beyer Boulevard East (east of West Avenue)**
Street Tree	**Parkway: Podocarpus gracilior (Fern Pine) Median: Cercis occidentalis (Western Redbud)**
Modifications to Street Design Manual (Refer to Section 7.9)	1. The width of the landscaped parkway shall be reduced. 2. Class I bike paths shall be included within the parkway 3. The curb-to-curb width shall be reduced by eliminating on-street parking.

Figure 4.8 – Modified Cross-Section for 4-Lane Urban Major with Class I Bike Path and Class II Bike Lanes With Buffer



Notes:

1. See Section 4.3.1 for Class I Bike Paths.

2. Includes 6-inch curb.

** Section represents a typical condition.*

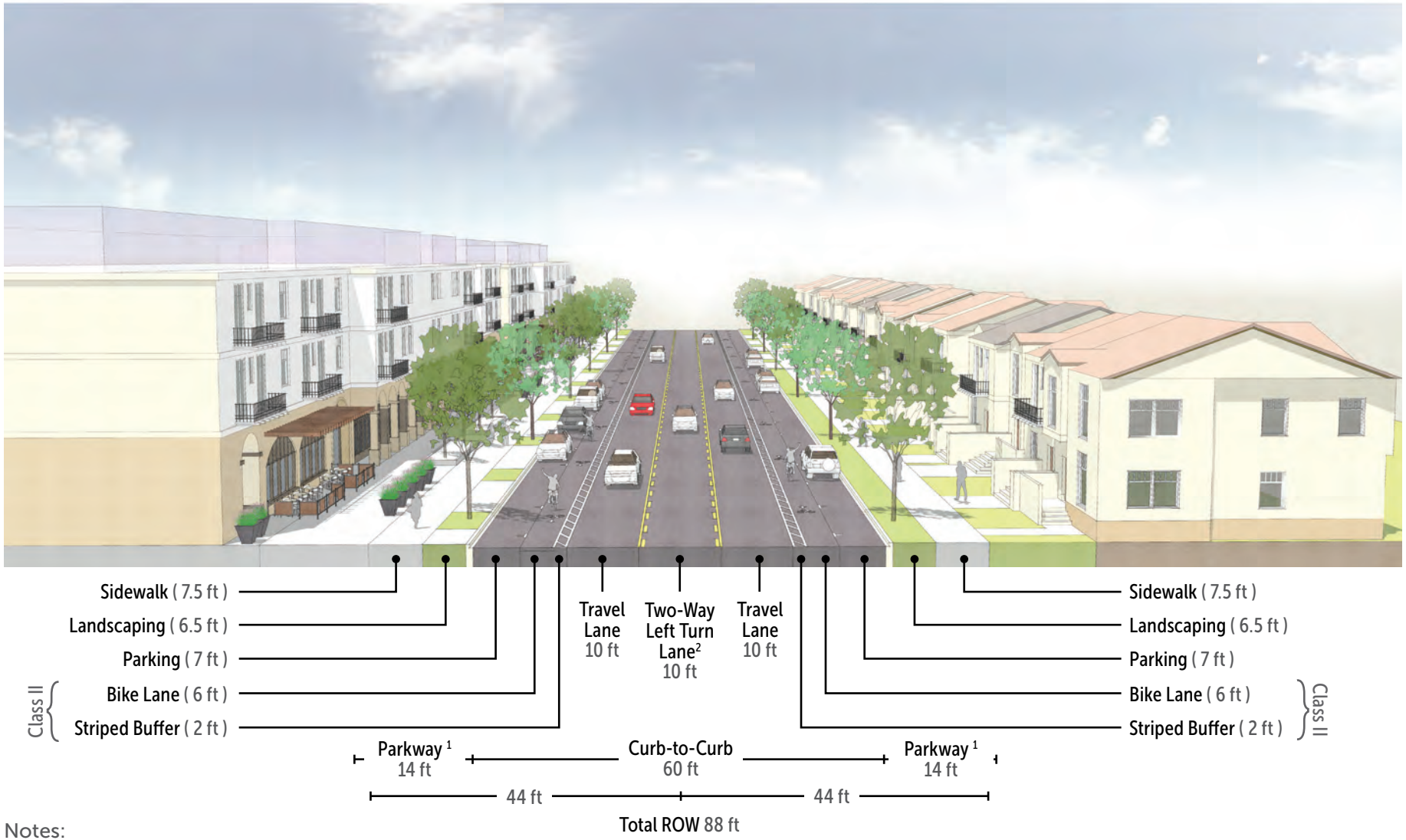
4.5.4 — 2-Lane Collector with Two-Way Center Left Turn Lane with Class II Bike Lanes with Buffer

- Central Avenue (east of Caliente Avenue, and between Beyer Boulevard East and Street A), Street A (between Central Avenue and South Caliente Avenue), and Spine Road (west) are planned as a 2-Lane Collector Street with Two-Way Center Left Turn Lane.
- The cross-section includes one travel lane in each direction, separated by a two-way center left turn lane.
- Each side includes a Class II buffered bike lane, on-street parallel parking, and a landscaped area with an adjacent non-contiguous sidewalk.
- *Figure 4.9* shows the roadway section of a Modified 2-Lane Collector Street with Two-Way Center Left Turn Lane with Class II Bike Lanes with Buffer.

Key Map

SPECIFICATIONS Based on the City of San Diego Street Design Manual (March 2017 Edition) Two-Lane Collector with Two Way Left Turn Lane Specifications	
Applicable Streets	Central Avenue (east of Caliente Avenue, and between Beyer Boulevard East and Street A), Street A (between Central Avenue and South Caliente Avenue), Spine Road (west)
Urban Parkway	14-foot Parkway with Tree Grates
Street Tree	Segments 9 and 11: Platanus racemosa (California Sycamore) Segments 14 and 22: Tipuana tipu (Tipu Tree)
Modifications to Street Design Manual (Refer to Section 7.9)	1. 6-foot Class II bike lanes with a buffer shall be included. 2. Two-way left-turn lane shall be considered only for streets of limited length where intersections are closely spaced or where there is extensive driveway access.

Figure 4.9 — Modified Cross-Section for 2-Lane Collector with Two-Way Center Left Turn Lane with Class II Bike Lanes with Buffer



Notes:

1. Includes 6-inch curb.

2. Where the Two-Way Left Center Turn Lane is not needed, a raised center median should be considered to address access management

** Section represents a typical condition.*

4.5.5 — Modified 2-Lane Collector with Two-Way Center Left Turn Lane and Class I Bike Path

- South Caliente Avenue (between Street B and Street C) and Street B between South Caliente Avenue and East Avenue are planned as a modified version of the 2-Lane Collector with Two-Way Left Turn Lane and Class I Bike Path.
- The street cross-section is modified to include a separated, Class I bike path to extend the facility through Southwest Village and connect to Caliente Avenue and Beyer Boulevard East. The modification removes the on-street bike lane to provide a separated, Class I bike path as part of the parkway area.
- *Figure 4.10* shows the cross-section of the Modified 2-Lane Collector with Two-Way Left Turn Lane and Class I Bike Path.

SPECIFICATIONS

Based on the City of San Diego Street Design Manual (March 2017 Edition)
Two-Way Left Turn Lane Specifications

Applicable Streets	**South Caliente Avenue (between Street B and Street C) and Street B (between South Caliente Avenue and East Avenue)**
Street Tree	**Podocarpus gracilior (Fern Pine)**
Modifications to Street Design Manual (Refer to Section 7.9)	1. Modified to include a one-way Class I bike path shall be included on each side of the street.

Key Map

Figure 4.10 — Modified Cross-Section for 2-Lane Collector with Two-Way Left Turn Lane and Class I Bike Path

Notes:

1. See Section 4.3.1 for Class I Bike Paths.

2. Includes 6-inch curb.

** Section represents a typical condition.*

4.5.6 — 2-Lane Collector with Two-Way Center Left Turn Lane, Class II Bike Lane with Buffer on West Side, and Class I Bike Path on East Side

- The northernmost segment of West Avenue (north of Street A) is planned as a modified version of the 2-Lane Collector with Two-Way Center Left Turn Lane.
- The street cross-section is modified to include a Class I bike path on the east side of the street near the Village Core and to extend the facility through Southwest Village and connect to Beyer Boulevard.
- The modification removes the on-street bike lane to provide a Class I bike path as part of the parkway area on the east side of the street. A buffered Class II bike lane will also be provided on the west side of the street.
- *Figure 4.11* shows the cross-section of the Modified 2-Lane Collector with Two-Way Center Left Turn Lane, Class I bike path on the east side, and a buffered Class II bike lane on the west side of the street.

SPECIFICATIONS

Based on the City of San Diego Street Design Manual (March 2017 Edition)
Two-Way Left Turn Lane Specifications

Applicable Streets	**West Avenue (north of Street A)**
Street Tree	**Rhus lancea (African Sumac)**
Modifications to Street Design Manual (Refer to Section 7.9)	1. The east side of the street shall replace the Class II on-street bike lane with a one-way Class I bike path. 2. Parking on one side of the street may be provided as an interim condition until full width improvements can be provided for West Avenue.

Key Map

Figure 4.11 — Modified Cross-Section for 2-Lane Collector with Two-Way Center Left Turn Lane, Class II Bike Lane with Buffer on West Side, and Class I Bike Path on East Side

Notes:

1. See Section 4.3.1 for Class I Bike Paths.

2. Some areas may not include parking on one side in an interim condition (see page 96).

3. Includes 6-inch curb.

** Section represents a typical condition.*

4.5.7 — 2-Lane Collector with Class II Bike Lanes

- Central Avenue (north of Beyer Boulevard East), Street A (west of West Avenue), East Avenue, Street D, and South Caliente Avenue (south of Street C) are planned as a 2-Lane Collector Street with Class II Bike Lanes, which provide access from key streets within Southwest Village to individual planning areas.
- 2-Lane Collector Streets provide for one lane of travel in each direction and parking, an on-street Class II buffered bike lane, landscaping, and a sidewalk on each side of the street.
- *Figure 4.12* shows a modified 2-Lane Collector with Class II Bike Lanes.

SPECIFICATIONS Based on the City of San Diego Street Design Manual (March 2017 Edition) Two-Lane Collector Specifications	
Applicable Streets	Central Avenue (north of Beyer Boulevard East); Street A (west of West Avenue); East Avenue, Street D; South Caliente Avenue (south of Street C)
Minimum Curve Radius	500 feet above 6 percent grade (maximum) superelevation 450 feet at or below 6 percent grade (maximum) superelevation
Street Tree	Segments 7, 8, 20: Lagerstroemia indica (Crape Myrtle) Segments 19, 28, 29, and 31: Jacaranda mimosifolia (Jacaranda)
Modifications to Street Design Manual (Refer to Section 7.9)	1. A Class II buffered bike lane shall be included on each side of the street. 2. Segments 7 and 8 shall include a minimum curve radius of 348 feet on Central Avenue. 3. Segment 7 shall allow parking on only the east side of the street to provide buffered Class II bike lanes on both sides of the street

Figure 4.12 — Modified Cross-Section for 2-Lane Collector with Class II Bike Lanes

Notes:

1. Some areas may not include parking.

2. Includes 6-inch curb.

** Section represents a typical condition.*

4.5.8 — 2-Lane Sub-Collector with Class II Bike Lanes

- Sreet C is planned as a 2-Lane Sub-Collector Street, which provides access from streets within Southwest Village to individual planning areas.
- 2-Lane Sub-Collector Streets provide for one lane of travel in each direction, on-street parking, and Class II buffered bike lane, landscaping, and a sidewalk on each side of the street.
- A Sub-Collector classification allows for fronting driveways.
- *Figure 4.13* shows a modified 2-Lane Sub-Collector with Class II Bike Lanes.

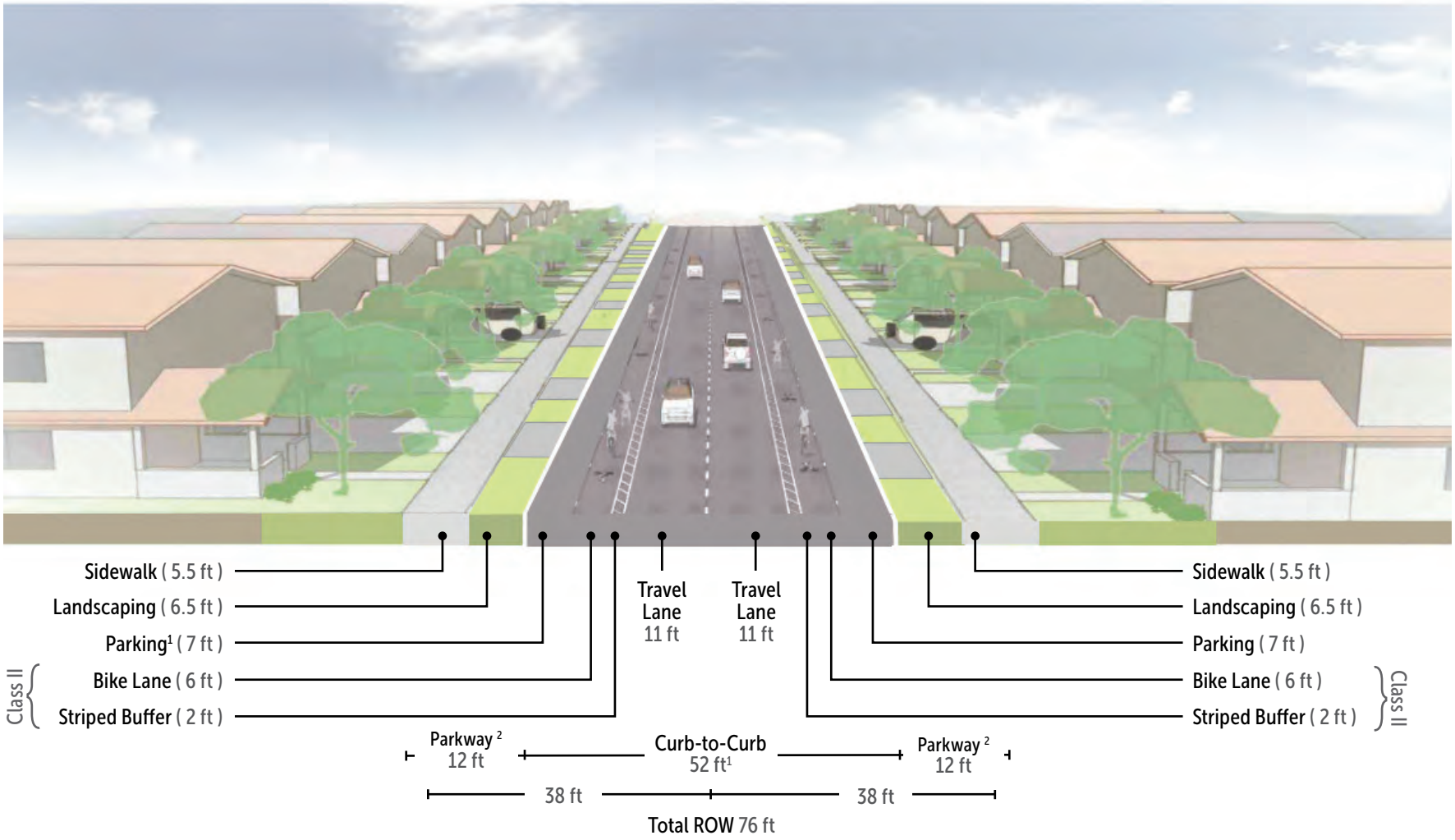
Key Map

SPECIFICATIONS

Based on the City of San Diego Street Design Manual (March 2017 Edition)
Two-Lane Sub-Collector Specifications

Applicable Streets	**Street C**
Minimum Curve Radius	**500 feet above 6 percent grade (maximum) superelevation** **450 feet at or below 6 percent grade (maximum) superelevation**
Street Tree	**Segment 27: Jacaranda mimosifolia (Jacaranda)**
Modifications to Street Design Manual (Refer to Section 7.9)	1. A Class II buffered bike lane shall be included on each side of the street.

Figure 4.13 — Modified Cross-Section for 2-Lane Sub-Collector with Class II Bike Lanes



Notes:

1. Some areas may not include parking.
2. Includes 6-inch curb.
** Section represents a typical condition.*

4.5.9 — 2-Lane Commercial Collector with Class II Bike Lanes

- Street A (east of West Avenue and west of Central Avenue) and Central Avenue (south of Street A) are planned as a 2-Lane Commercial Collector with Class II Bike Lanes.
- 2-Lane Commercial Collector streets are intended to provide an urban feel with a 14-foot wide parkway with tree grates and include on-street parking and Class II buffered bike lanes.
- *Figure 4.14* represents a standard 2-Lane Commercial Collector with Class II buffered Bike Lanes.

Key Map

SPECIFICATIONS Based on the City of San Diego Street Design Manual (March 2017 Edition) Two-Lane Collector Specifications	
Applicable Streets	**Street A (east of West Avenue, west of Central Avenue); Central Avenue (south of Street A)**
Street Tree	**Tipuana tipu (Tipu tree)**
Modifications to Street Design Manual (Refer to Section 7.9)	1. A Class II buffered bike lane shall be included on each side of the street. 2. A 14-foot wide Parkway with Tree Grates shall be included.

Figure 4.14 — Typical Cross-Section for 2-Lane Commercial Collector with Class II Bike Lanes

Notes:

1. Some areas may not include parking.

2. Includes 6-inch curb.

** Section represents a typical condition.*

4.5.10 — Modified 2-Lane Collector with Class I Bike Path

- Street B (west of South Caliente Avenue and east of East Avenue) is planned as a modified version of the 2-Lane Collector with Class I Bike Path.
- The street cross-section is modified to provide a Class I bike path on both sides of the street to provide an east-west pedestrian and bicycle connection throughout Southwest Village and increase access to the school and park in the Village Core.
- An example cross-section for the modified 2-Lane Local Collector is included in ***Figure 4.15, Modified Cross-Section for 2-Lane Collector with Class I Bike Path***.

SPECIFICATIONS Based on the City of San Diego Street Design Manual (March 2017 Edition) Two-Lane Collector Specifications	
Applicable Streets	**Street B (west of South Caliente Avenue and east of East Avenue)**
Street Tree	**Olea europaea fruitless (Olive "fruitless" Tree)**
Modifications to Street Design Manual (Refer to Section 7.9)	1. A one-way Class I bike path shall be included on each side of the street.

Key Map

Figure 4.15 — Modified Cross-Section for 2-Lane Collector with Class I Bike Path

Notes:

1. See Section 4.3.1 for Class I Bike Paths .

2. Includes 6-inch curb.

** Section represents a typical condition.*

4.5.11 — 2-Lane Collector with Class II Bike Lane with Buffer on West Side and Class I Bike Path on East Side

- West Avenue (south of Street A) is planned as a 2-Lane Collector with Class II bike lane with a buffer on the west side and a Class I bike path on the east side.
- The street cross-section is modified to provide a Class I bike path on the east side of West Avenue near the Village Core to provide a north-south pedestrian and bicycle connection throughout Southwest Village and increase access to the school and park in the Village Core.
- An example cross-section for the modified 2-lane local collector with a Class II buffered bike lane buffer on the west side and a Class I bike path on the east side is included in ***Figure 4.16, Modified Cross-Section for 2-Lane Collector with Class II Bike Lane with Buffer on West Side and Class I Bike Path on East Side***.

SPECIFICATIONS

Based on the City of San Diego Street Design Manual (March 2017 Edition)
Two-Lane Collector Specifications

Applicable Streets	**West Avenue (south of Street A)**
Street Tree	**Rhus lancea (African Sumac)**
Modifications to Street Design Manual (Refer to Section 7.9)	1. A one-way Class I bike path shall be included on the east side of the street and a Class II bike lane on the west side.

Key Map

Figure 4.16 — Modified Cross-Section for 2-Lane Collector with Class II Bike Lane with Buffer on West Side and Class I Bike Path on East Side

Notes:

1. See Section 4.3.1 for Class I Bike Paths.

2. Includes 6-inch curb.

** Section represents a typical condition.*

4.5.12 — 2-Lane Collector with Multi-Use Path on One Side (Exterior Side)

- Central Avenue (east), 1st Avenue, and Spine Road (east) are planned as a modified version of the 2-Lane Collector with a multi-use path on one side.
- The street cross-section maintains the configuration of the travel lanes of the 2-Lane Collector.
- Modifications include eliminating parking on one side and adding space for a meandering paseo on the other side of the street.
- An example cross-section for the modified 2-Lane Collector with Multi-Use Path on One Side is included in *Figure 4.17*.
- The exterior side of the multi-use path will be on the northern, eastern, and southern sides of 1st Avenue.

Key Map

SPECIFICATIONS Based on the City of San Diego Street Design Manual (March 2017 Edition) Two-Lane Collector Specifications	
Applicable Streets	Central Avenue (east); Spine Road (east); 1st Avenue
Street Tree	Platanus racemosa (California Sycamore)
Modifications to Street Design Manual (Refer to Section 7.9)	1. Parking on one side of the street shall be eliminated. 2. A meandering variable width landscaped paseo between 16 feet and 34 feet wide shall be included.

Figure 4.17 — Modified Cross-Section for 2-Lane Collector Street with Multi-Use on One Side (Exterior Side)

Notes:

1. Includes 6-inch curb.

** Section represents a typical condition.*

4.5.13 — Private Drives

- The Specific Plan area includes privately-owned land with planned private drives.
- Private drives are held to different standards than the public roadways per the Street Design Manual.
- Private drives will provide a network of connections to disperse traffic and give people a choice of routes to neighborhood destinations such as schools, parks, and the Village Core.
- Private drive sidewalks will provide direct access to the rest of the Southwest Village.
- Private drives should incorporate non-contiguous sidewalks on private drives, where possible.
- Class III shared lanes with sharrows along private drives will offer connectivity to Class I and Class II bike facilities.
- An example cross-section for a typical Private Drive is included in *Figure 4.18, Typical Cross-Section for Private Drive or Alley*.

SPECIFICATIONS
Based on the City of San Diego Street Design Manual (March 2017 Edition)
Private Drives Specifications

Minimum Width	**24 feet**
Design Speed	**25 miles per hour**
Modifications to Street Design Manual (Refer to Section 7.9)	1. Minimum 4-foot contiguous sidewalk shall be included on at least one side. 2. Class III shared lane bicycle facilities shall provide connectivity to Class II bike lanes or Class I bike paths.

4.5.14 — Alleys

- An alley is a public right-of-way for secondary means of access, usually lying along the rear of a property.
- Alley-loaded residential prototypes can be used to improve the pedestrian experience along street frontages.
- By moving garage access to alleys, the street-facing facade of homes is more visually engaging.
- Alleys shall comply with standards included in the City of San Diego Street Design Manual and the Municipal Code. An example cross-section for a typical Alley is included in *Figure 4.18, Typical Cross-Section for Private Drive or Alley*.

SPECIFICATIONS
Based on the City of San Diego Street Design Manual (March 2017 Edition)
Alleys Specifications

Minimum Width	**20 feet**
Design Speed	**15 miles per hour**

4.5.15 — Emergency Vehicle Access Roads

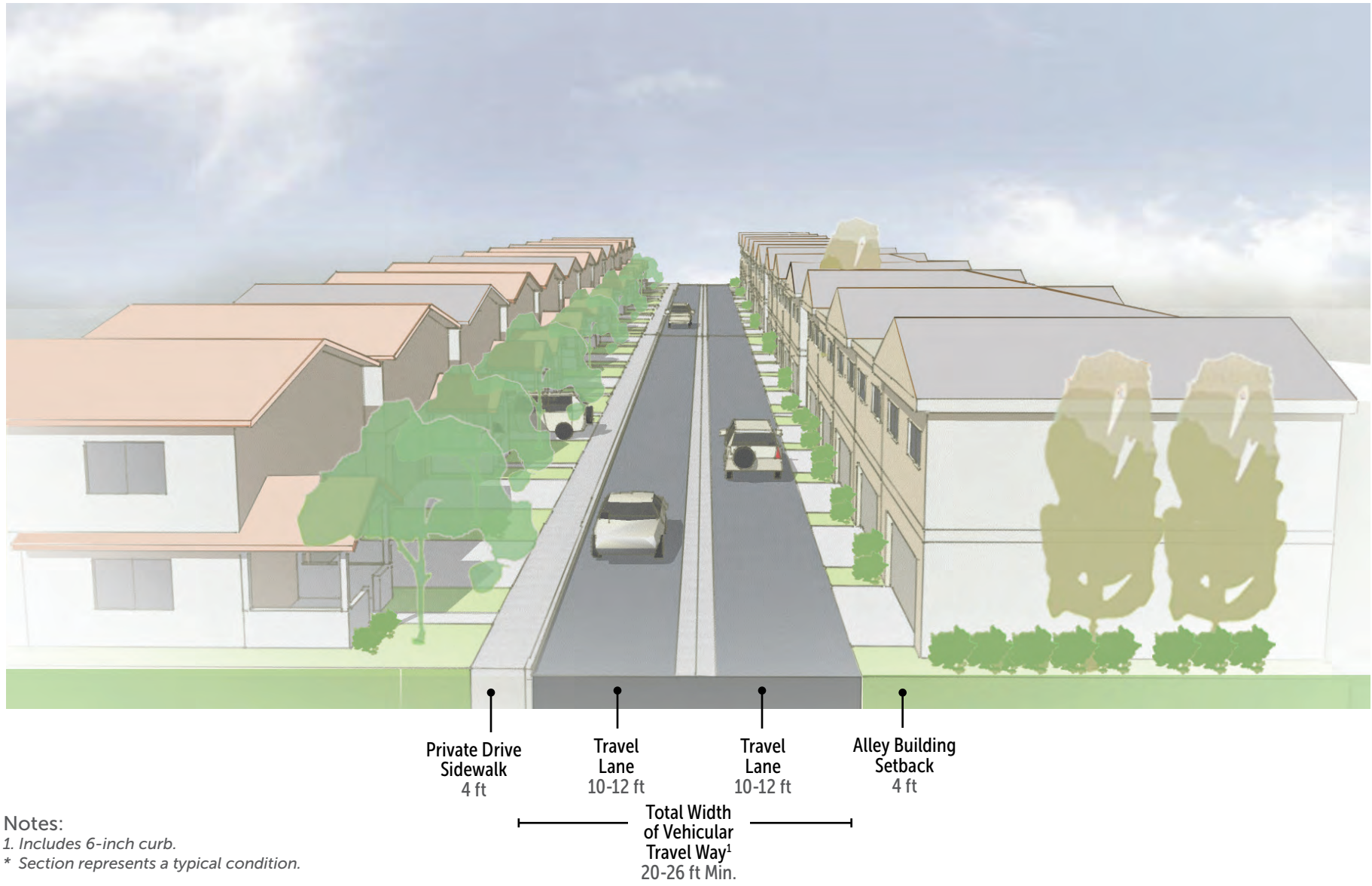
- An emergency vehicle access road is a designated route designed to facilitate the swift response of fire department vehicles to emergencies.
- This road can either be a public street or a private roadway.
- The primary emergency vehicle access road for the Specific Plan area will be private, shown as Segment 18 in ***Figure 4.1, Street Classifications***, but it includes easements allowing for utilities, emergency access, and pedestrian access.
- In times of emergency, this route can serve as an exit pathway for Planning Areas 19, 21, and 22.
- A gate and Knox Box will be in place to prevent unauthorized vehicle usage.
- The pedestrian access will be to the perimeter trail as described in Section 5.7.2, Perimeter Trail.
- Landscaping and/or installation of irrigation is prohibited immediately adjacent to any proposed emergency vehicle access roads to ensure habitat continuity.
- The emergency vehicle access road will adhere to the standards outlined in the City of San Diego Fire-Rescue Department's Policy on Fire Access Roadways. Refer to ***Section 7.9, Supplemental Development Regulations***.

SPECIFICATIONS **Based on the City of San Diego Fire-Rescue Department's Policy on Fire Access Roadways**	
Minimum Width	**20 feet**
Design Speed	**15 miles per hour**

4.5.16 — Secondary Emergency Vehicle Access Road

- A secondary emergency vehicle access road, shown as Segment 32, will be required before the 201st dwelling unit. Refer to ***Section 7.9, Supplemental Development Regulations***.
- A secondary emergency vehicle access road is included with VTM-1 as part of Phase 1. The portion of the road within the Specific Plan area will be constructed from the eastern terminus of East Beyer Boulevard (at the intersection of Beyer Boulevard and Caliente Avenue), extending south along the future alignment of South Caliente Avenue. The road will then continue outside of the Specific Plan area to the southwest along an existing utility road, connecting to Rail Court, as shown in ***Figure 4.1, Street Classifications***.
- A gate and Knox Box will be located at the entrance of the secondary emergency vehicle access road and relocated as needed during development of the subsequent phases.

Figure 4.18 — Typical Cross-Section for Private Drive or Alley



Notes:
1. Includes 6-inch curb.
** Section represents a typical condition.*

05

PARKS, TRAILS & OPEN SPACE

5.1 — OVERVIEW

Southwest Village is envisioned with a mixed-use Village Core with neighborhoods that are interwoven via a series of parks, open space, trails, and paseos. Southwest Village will also be linked to the surrounding areas in Otay Mesa via connections to the regional trail network. Creation of a recreational, healthy, and active lifestyle-focused community is a fundamental component of Southwest Village. A comprehensive framework for proposed parks, connections to regional open space, and provision of trails and sidewalks is shown in ***Figure 5.1, Parks and Trails***. Development will be subject to the park requirements in place at permitting.

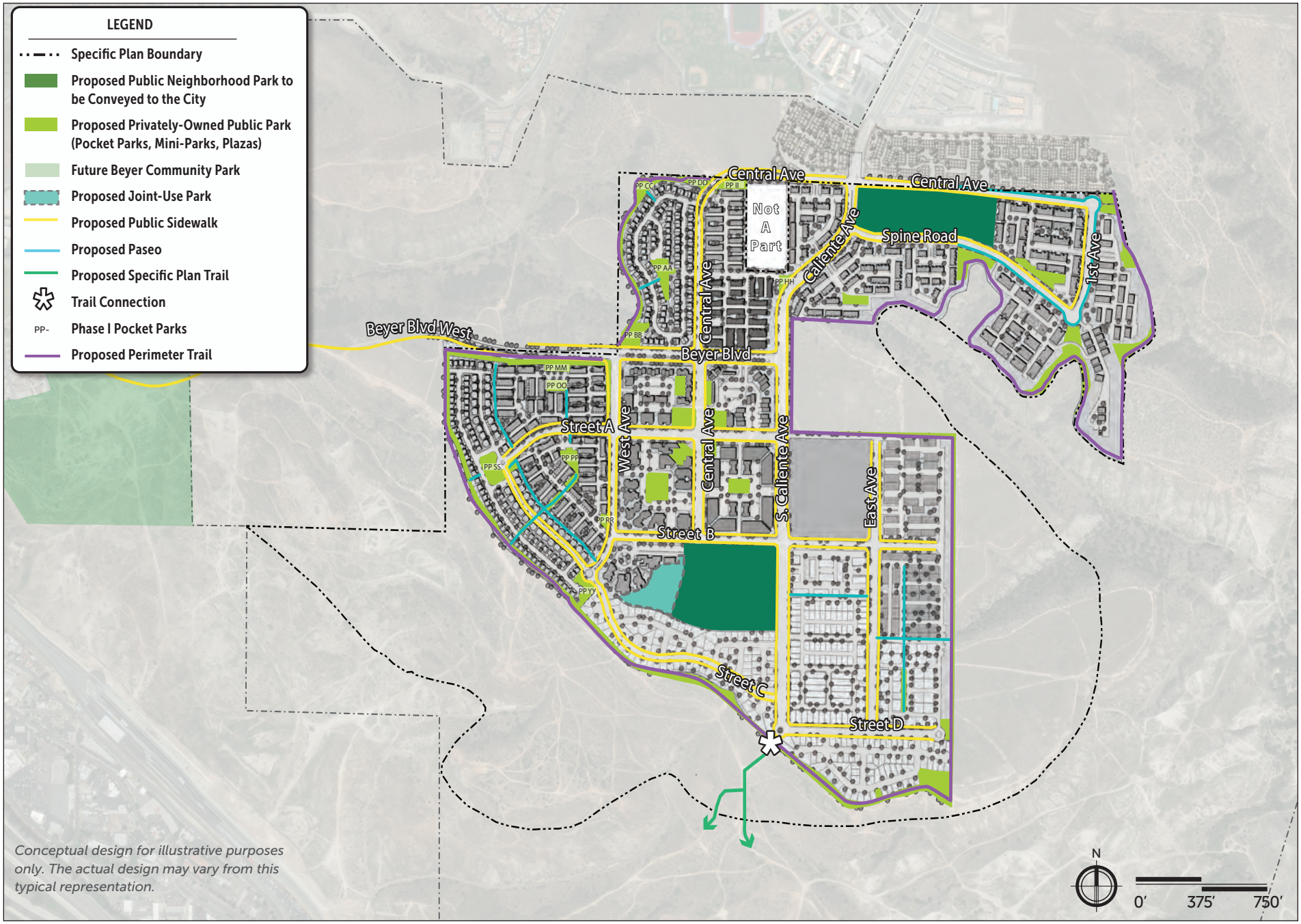
This chapter of the Specific Plan describes the framework for parks and other recreational opportunities within the Specific Plan area and the concept for siting and connecting parks and trails.

The Otay Mesa Community Plan, the Multiple Species Conservation Program (MSCP), Multi-Habitat Planning Area (MHPA), the Vernal Pool Habitat Conservation Plan (VPHCP), and the steep canyons in the Specific Plan area are vital elements shaping the Specific Plan and its development concept. This chapter guides the development of parks, trails, paseos, and other recreation opportunities and preservation of open space in the Specific Plan area.

- Trails, paseos, and sidewalks will include street furniture, lighting, and other recreational amenities.
- The proposed perimeter trail will be ADA accessible.

- Approximately 35 acres of interconnected publicly-owned and privately-owned community parks, neighborhood parks, pocket parks, and mini-parks
- Approximately 5 miles of trails to provide for interconnected neighborhoods, enhanced recreational opportunity, access to parks in Southwest Village and connections to Beyer Community Park and Grand Park
- Approximately 185 acres of surrounding natural open space, including 60 acres of preserved open space

Figure 5.1 — Parks and Trails



5.2 — PARKS OVERVIEW

Southwest Village will include a variety of parks to provide passive and active recreation opportunities throughout the community to create an interwoven recreational fabric. A variety of park opportunities may be provided, including neighborhood parks, mini-parks, pocket parks, paseos (linear parks), and plazas. Per the City of San Diego Parks Master Plan - Parks for All of Us, pocket parks are typically less than one acre, often found in residential developments; mini parks are approximately 1 to 3 acres, typically include small multi-purpose courts and landscaping; neighborhood parks typically serve a neighborhood of approximately 1/2-mile radius; and community parks are large parks typically serving one or more communities.

Southwest Village provides recommended locations for parks within each planning area, but defers to subsequent development approvals for each planning area to ensure that recreational value-based parks and trails are provided concurrently with each phase of development. The concept outlined as part of the Specific Plan provides linkages between parks through a system of paseos, multi-use paths, trails, sidewalks, and bike lanes, and provides connections between the village core and surrounding neighborhoods.

5.3 — RECREATION VALUE POINTS

Park amenity enhancements will be provided according to a recreational value point-based standard. The value point-based parks requirement is based on a scoring of recreation amenities, space for programmed activities, connectivity to the mobility network, and other factors. Each park amenity enhancement has an identified point value according to the scale, recreational and social value, and connectivity to the mobility network. The planned parks, paseos, and recreational trails need to comply with San Diego Municipal Code requirements to satisfy population-based park requirements.

5.4 — PARK TYPES

The neighborhood park sites will be conveyed to the City, while pocket parks, mini-parks, plazas, and trails will remain in private ownership with private maintenance and a recreation easement to allow for public use.

5.4.1 — Neighborhood Parks

The Southwest Village is anchored by two neighborhood parks located within the central and northern areas of the Specific Plan area to provide convenient access for community gathering areas and social activities. As indicated in ***Figure 5.1, Parks and Trails***, the proposed 10.5-acre neighborhood park in Planning Area 17 is adjacent to the school site on Planning Area 16 to the west, and the Village Core to the north. The neighborhood park would provide recreation amenities such as ball fields and internal pathway connections, and could be a joint-use facility for the adjacent school. The proposed 7.6-acre neighborhood park, located within the northern portion of the development in Planning Areas 2 and 3, would include recreational amenities such as hardcourt areas and sports fields.

Together, these two proposed neighborhood parks will encompass 18.1 acres and will be conveyed to the City upon construction. The City will then own and maintain these two parks. Both parks will be required to go through a General Development Plan process that requires public input into the design. The 10.5-acre neighborhood park and the 7.6-acre neighborhood park will be deeded to the City for ownership and maintenance. The 10.5-acre neighborhood park in Planning Area 17 can be a joint-use facility with the adjacent proposed school. A Joint Use Agreement between the City and the SYSD would be needed for shared use of a school's recreational facilities.

5.4.2 — Pocket Parks, Mini-Parks, Plazas, and Trails

The Specific Plan recommends locating parks within each planning area but defers to subsequent development approvals for each planning area to ensure that qualifying parks are provided concurrently with each phase of development.

Privately owned and maintained public parks, such as pocket parks and mini-parks, are planned throughout the community, offering neighborhood gathering places. Additional park amenities such as children's play areas, shaded seating areas, and dog parks will be provided with the other parks in the Specific Plan area. Each park contains amenities to accommodate the diverse needs and desires of the community and reinforce the aesthetic character of Southwest Village.

A cohesive system of public paseos, pedestrian nodes, and trails connects these parks and other community destinations to provide safe and direct access to the parks and serve as the interconnected fabric of the community. A perimeter trail will surround the entire Southwest Village, providing connections to adjacent neighborhoods. Trail amenities and enhancements with a recorded recreation easement will provide innovative recreational and social opportunities for the public to serve the modern-day recreational, social, physical, and emotional lifestyle needs of the Southwest Village community. These trail amenities and enhancements with a recorded recreation easement will provide equivalent population-based park acreage for the Southwest Village.

5.5 — PARK PHASING

Southwest Village's parks are anticipated to be developed in seven phases associated with dwelling unit thresholds, per ***Section 7.13, Phasing***, within each Planning Area as specified in ***Table 5.1, Parks Phasing***. Table 5.1, Parks Phasing, summarizes the implementation of the park program for each planning area. The park designations identified in ***Figure 5.1, Parks and Trails***, correspond to the park designations provided in ***Table 5.1, Parks Phasing***. This Specific Plan does not require that phases occur in any order. Phasing may occur in any order, and more than one phase may occur at one time, provided that the necessary parks and recreational facilities are provided concurrently as specified with each phase(s) of development. Refer to ***Section 7.9, Supplemental Development Regulations***, for the Recreation Value Points Phasing requirements.

Table 5.1, Parks Phasing, identifies the usable park acreage to be provided in each phase. Usable park acreage is defined in the General Plan as a graded pad not exceeding two percent rough grade, as required to provide for active recreational programs; or gently sloping land not exceeding ten percent grade for unstructured public recreational activities, unconstrained by environmental restrictions that would prevent its use as a park and recreation facility, free of structures, or easements. The allowable number of useable acres exceeding two percent grade at any given park site would be determined on a case-by-case basis by the City. Table 5.1 also includes the estimated recreational value points required for each phase.

5.6 — PARK VIGNETTES

In addition to the concept plan for the overall layout of parks and open space within the Southwest Village, additional vignettes have been provided to illustrate representative concepts of the different types of parks that are anticipated to be provided as development occurs. Vignettes for five park typologies are shown in ***Figures 5.2 through 5.6***. The conceptual location of parks and recreational amenities is indicated on ***Figure 5.1, Parks and Trails***. Vignettes are for illustrative purposes only and are intended to guide future park amenities while also providing for flexibility at implementation, based on public input during the General Development Plan process. The conceptual park typology plans serve to represent generalized programmatic elements that would be provided. The final park design may vary and will not require an amendment to this Specific Plan.

Example photos of similar park types.

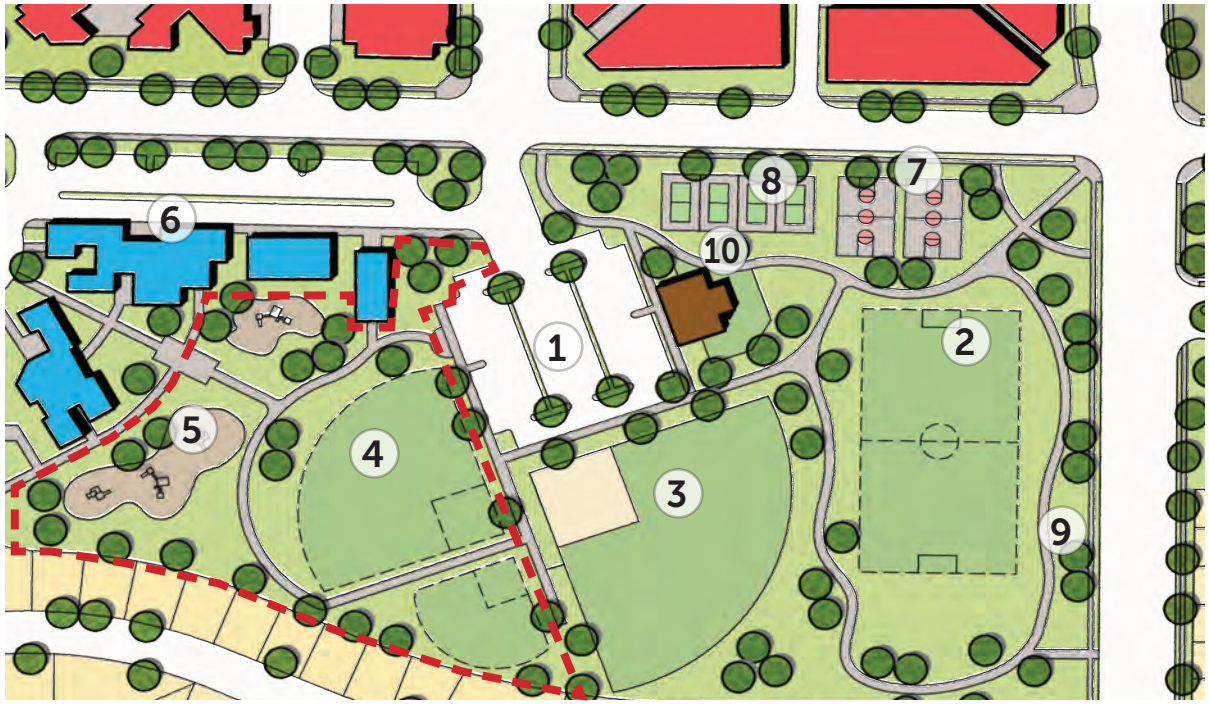
Table 5.1 — Parks Phasing

Phase	Summary	Estimated Recreational Value Points Required Based on DUs
1	Phase 1 will provide a series of pocket parks and paseos and a perimeter trail with amenities. These amenities will include active recreational opportunities. Approximately 4.3 acres of pocket parks may occur in Phase 1.	417
2	Phase 2 will provide a 10.5-acre neighborhood park, a 6.2-acre school site, with an opportunity for 2.6-acre joint-use fields, pocket parks, paseos, and continuation of the perimeter trail with recreational opportunities and amenities. Approximately 10.5 acres of pocket parks may occur in Phase 2.	270[1]
3	Phase 3 will provide a mini park in Planning Area 28, adjacent to Phase 3, south of Spine Road, as well as the opportunity for pocket parks, paseos, and continuation of the perimeter trail. Approximately 2 acres of pocket parks may occur in Phase 3.	260
4	Phase 4 may provide a 7.6-acre neighborhood park, as well as the opportunity for additional pocket parks, paseos, and continuation of the perimeter trail. A school overlay zone is included as a secondary site for a future elementary school. If a school is not built on Planning Area 7, the site would default to residential land use.	122
5	Phase 5 is adjacent to the 10.5-acre neighborhood park to the west in Planning Area 17. Phase 5 may provide paseos and pedestrian connections, as well as the opportunity for pocket parks.	97
6	Phase 6 may provide continuation of the perimeter trail, pedestrian connections, and a pocket park.	85
7	Phase 7 may provide pocket parks within the village core, pedestrian and mobility network enhancements, and recreational amenities. Approximately 3.0 acres of pocket parks may occur in Phase 7.	376
Total		**1,627[1]**

[1] If the SYSD determines a school is no longer needed on Planning Area 16, the site will default to Medium Density Residential land use designation with a maximum of 136 dwelling units, and thus require approximately 43 additional recreational value points.

Key Map

Figure 5.2 — Neighborhood Park Concept 1 (A Joint-Use Opportunity with School)



1. Opportunity for shared parking for the school and the neighborhood park
2. Multipurpose Field
3. Baseball Field
4. Softball Field
5. Park Amenities
6. School
7. Basketball Courts
8. Pickleball Courts
9. Trails and paths to provide connections
10. Recreation Center

Conceptual Joint Use Boundary

Conceptual design for illustrative purposes only. The actual park design will be designed per Council Policy 600-33. School design will be designed per school district standards.

Figure 5.3 — Neighborhood Park Concept 2

1. Bocce Ball
2. Kids Play Area
3. Tennis / Pickleball Courts
4. Basketball Courts
5. Internal Parking
6. Soccer Field
7. Medium-Density Residential
8. Trails and paths to provide connections

Conceptual design for illustrative purposes only. The actual park design will be designed per Council Policy 600-33.

Example photos of neighborhood parks.

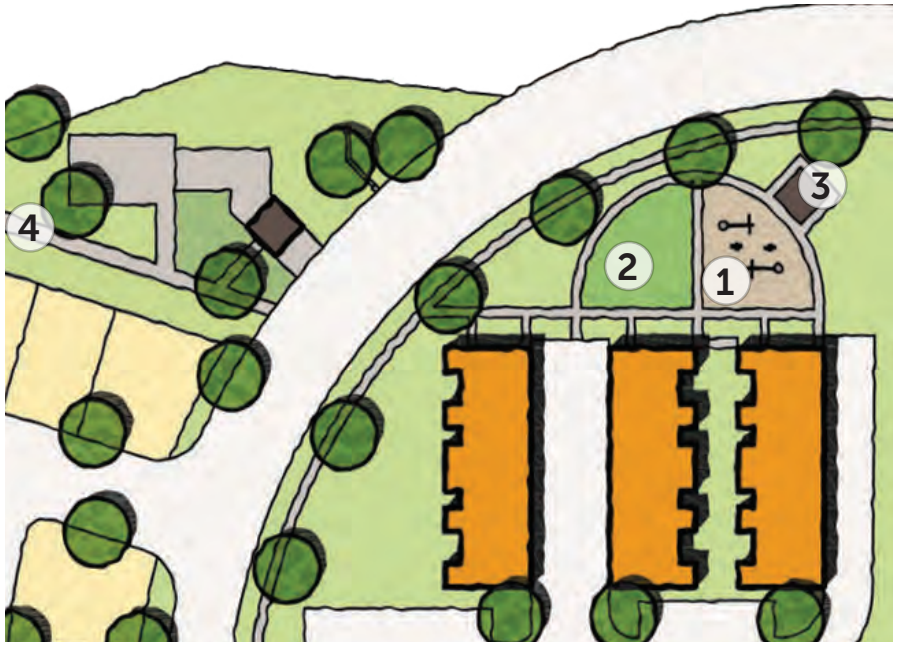
Figure 5.4 — Mini-Park Concept

1. Children's Play Area with Seating
2. Dog Park Area
3. Connection to Trail System
4. Open Turf Area
5. School

Conceptual design for illustrative purposes only. The actual park design will be designed per Council Policy 600-33.

Example photos of mini-parks.

Figure 5.5 — Pocket Park Concept

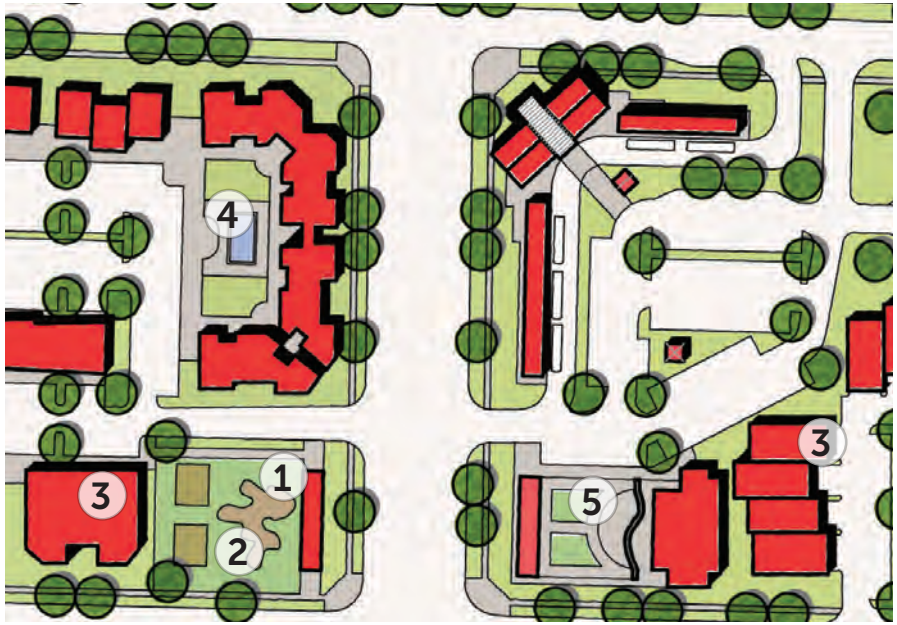


1. Children's Play Area
2. Turf Area
3. Picnic Tables
4. Open Space Trail Connection

Conceptual design for illustrative purposes only. The actual park design will be designed per Council Policy 600-33.

Example photos of pocket parks.

Figure 5.6 — Plaza Concept



1. Trellis
2. Sitting Area
3. Mixed Use
4. Water Feature
5. Planters

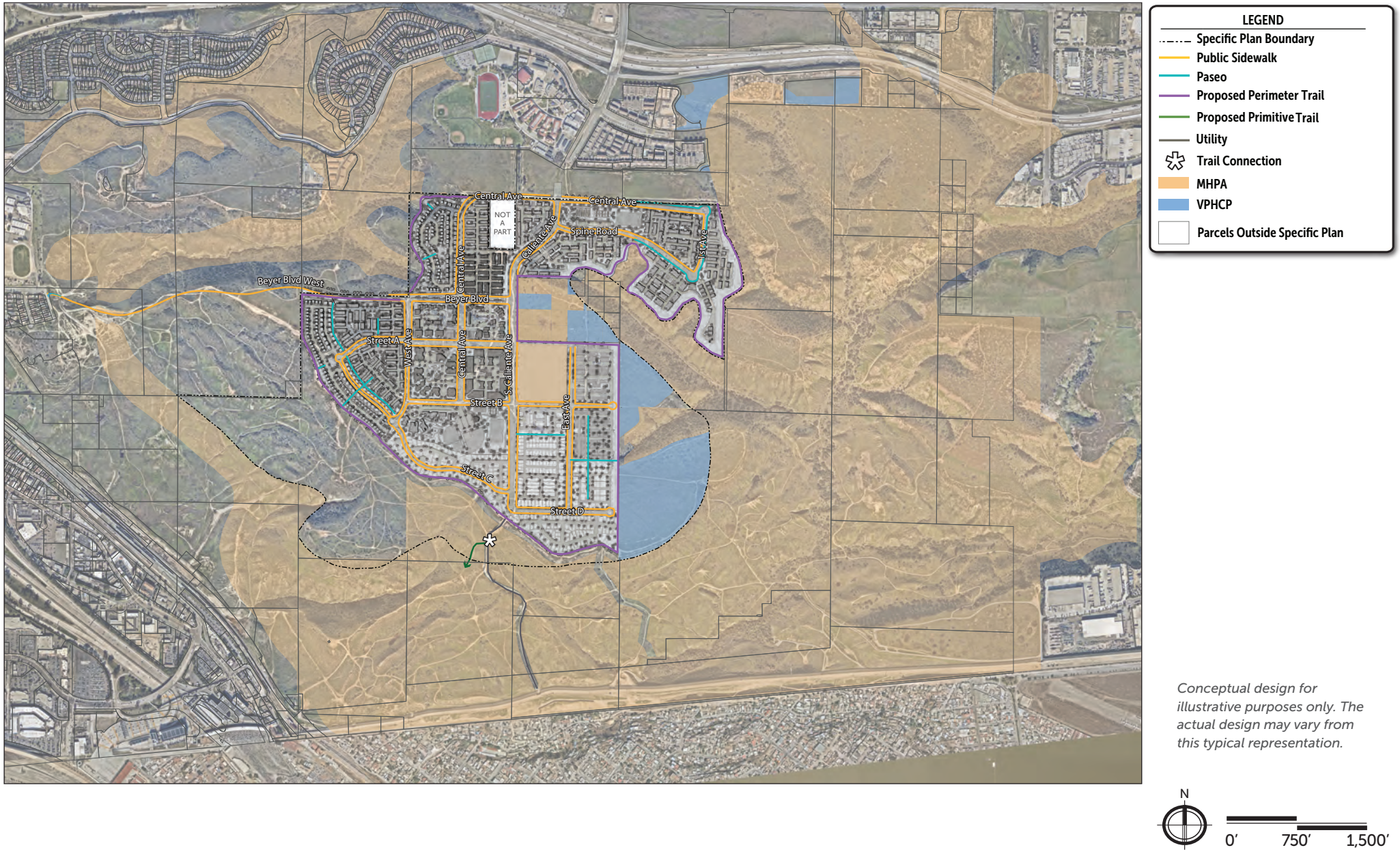
Conceptual design for illustrative purposes only. The actual park design will be designed per Council Policy 600-33.

Example photos of plazas.

5.7 — TRAILS OVERVIEW

- Southwest Village will include a connected network of trails, sidewalks, and other pedestrian facilities, as shown in ***Figure 5.7, Trail Network***, that will provide two key purposes:
  - » Connected mobility network for walking and biking; and
  - » Enhanced recreational opportunities.
- The trails network concept outlined as part of this Specific Plan provides linkages through the entire Specific Plan area and beyond through a system of paseos, multi-use paths, trails, sidewalks, and bike lanes, and provides connections between the Village Core and surrounding neighborhoods.
- Perimeter trails, paseos, and sidewalks will include street furniture, lighting, and other recreational amenities.
- Streets will be designed with sidewalks lined with landscape treatments, and public streets will be lined with trees and include pedestrian and Class I bike paths and/or Class II buffered bike lanes.
- Moderate-use trails and primitive trails will provide walking, jogging, and hiking opportunities in a natural environment.
- The primitive trails will be designed to provide connections from Southwest Village to the surrounding Otay Mesa Community Plan trail system.
- The trails identified in the Otay Mesa Community Plan are shown in ***Figure 5.7, Trail Network***.
- All trails satisfying City park requirements will be available for use by the public with the recording of recreation easements.

Figure 5.7 — Trail Network



Conceptual design for illustrative purposes only. The actual design may vary from this typical representation.

5.8 — TRAIL TYPOLOGY

The trail typologies identify different trail facilities and design policies for trails developed as part of the Southwest Village Specific Plan. The typologies have been developed based on the Otay Mesa Community Plan and Appendix K of the City's Consultant's Guide to Park Design & Development.

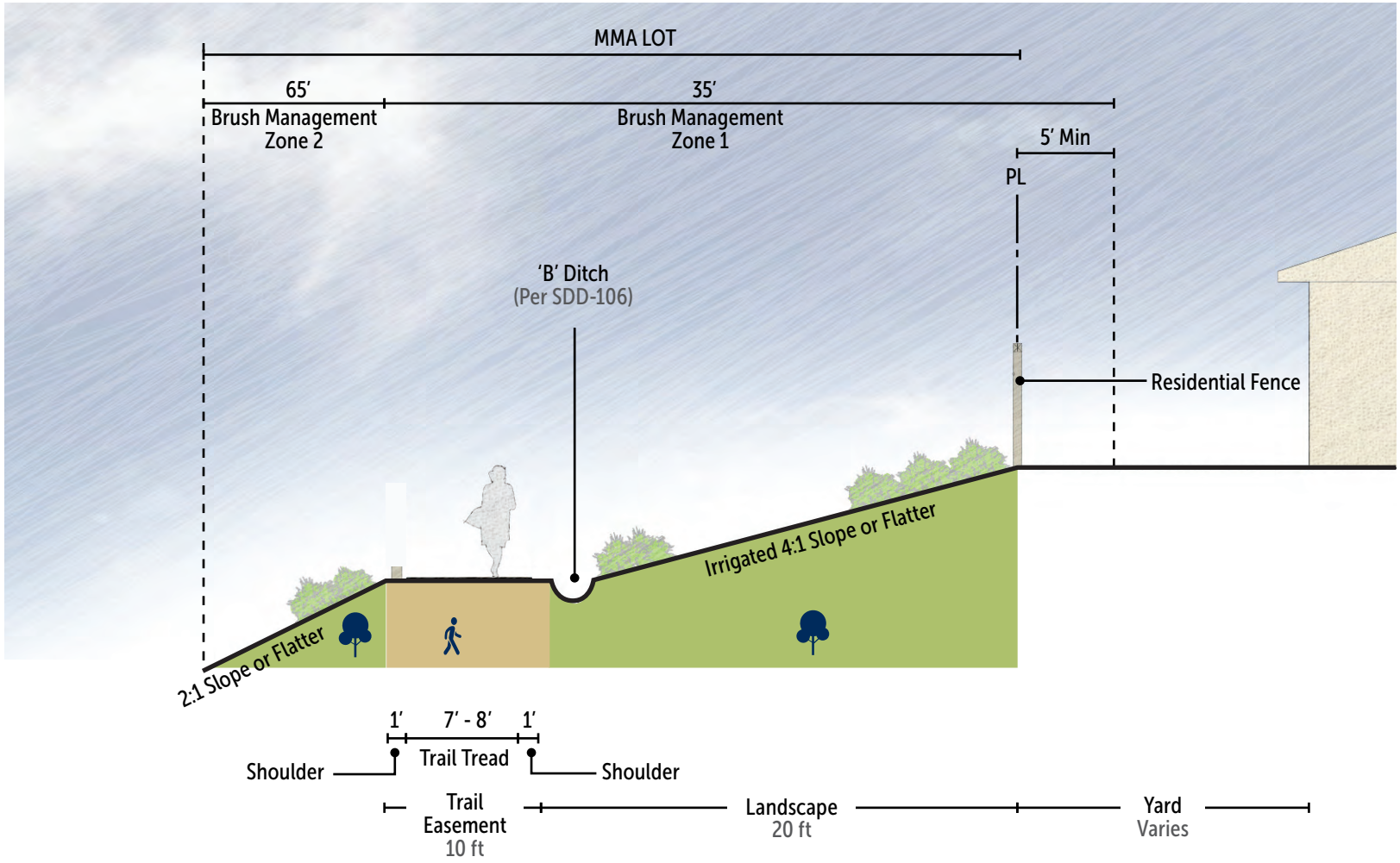
5.8.1 — Bike Lanes and Sidewalks

Bike lanes and sidewalks serve as the foundation for the mobility network in Southwest Village. For more information about bike lanes and sidewalks see ***Section 4.3, Bicycle Network*** and ***Section 4.4, Pedestrian Network***.

5.8.2 — Perimeter Trails

- Trails are planned around the perimeter of Southwest Village to provide a key recreational trail as well as increase access throughout the community for pedestrians and bicycles.
- The perimeter trail would provide a transition between the developed area of Southwest Village and the surrounding open space areas.
- The perimeter trail would have a natural surface that may include tread improvements such as stabilized decomposed granite. Ideally, the trail would sit below grade from the development to increase privacy to surrounding residents and enhance the feeling that the trail is connected to open space areas.
- An example cross-section showing the components of a perimeter trail is shown in ***Figure 5.8, Perimeter Trail Cross-Section***.
- Refer to ***Section 7.9, Supplemental Development Regulations***, for perimeter trail dimensions, brush management, and other requirements.

Figure 5.8 — Perimeter Trail Cross-Section

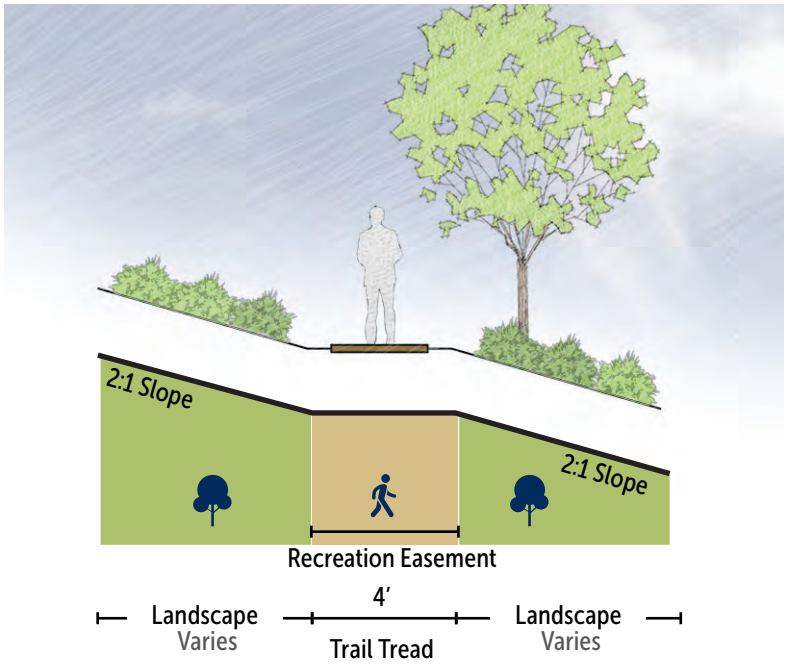


Example photo of perimeter trail.

5.8.3 — Primitive Trails

- Primitive trails would have a maximum width of 4 feet; however, actual trail widths may be less than 4 feet where constrained by sensitive resources.
- The minimum base is to accommodate maintenance needs, bi-directional travel, and provide safe passing space.
- These are trails that see limited use, are usually more difficult, with grades that may exceed trail standards, and are primarily for recreational users.
- Primitive trails can be located within the Multi-Habitat Planning Area (MHPA) .
- An example cross-section showing the components of a primitive trail is shown in ***Figure 5.9, Primitive Trail Cross-Section***.

Figure 5.9 – Primitive Trail Cross-Section



- The Specific Plan has two types of Primitive trails:
  - » Proposed Primitive Trails - Type A are to be completed under Phases 1 and 2 by private ownership as shown in ***Figure 5.7, Trail Network***.
  - » Community Plan Primitive - Type B are trails to be further investigated by the City, confirmed with the wildlife agencies, and constructed by future developers throughout the implementation of the Specific Plan.
- Refer to ***Section 7.9, Supplemental Development Regulations***.

Primitive Trails Policies:

1. Design trails within the Multi-Habitat Planning Area (MHPA) to be consistent with the Multiple Species Conservation Program (MSCP) and trail standards and design policies of the City of San Diego's Park and Recreation Department's Consultant's Guide to Park Design and Development.
2. Conduct further study to ensure trails in the MHPA areas avoid sensitive resources such as wetlands, vernal pools, and sensitive plant species before trail implementation, as the trail alignments shown are conceptual.
3. As primitive trails are formalized in the Specific Plan area, close non-compliant trails within a 50-foot buffer on each side of the primitive trail (100-foot total) to limit public access to unauthorized trail segments.
4. Design primitive trails for pedestrian use only.

Example photo of primitive trails.

5. Allow for passive recreation, including walking, jogging, hiking, and non-motorized mountain biking use.

6. Do not allow for equestrian use and motorized bicycles (E-bikes); however, where accessible, motorized wheelchairs would be allowed.

5.8.4 — Utility Trail

- The planned utility trail utilizes an existing service road that will provide recreational trail corridors and will be a destination-oriented utility trail for pedestrians and cyclists. The service road was originally constructed for utility access and Border Patrol and will remain active for these uses.
- The secondary Emergency Vehicle Access Road will ultimately be built following the existing service road. Upon completion, the access road will remain active for utility maintenance personnel, park management staff (i.e., park rangers), Border Patrol, emergency responders, pedestrians, and cyclists.
- The width of a utility trail will be no less than 8 feet and no more than 20 feet.
- An example cross-section showing the components of a utility trail is shown in ***Figure 5.10, Utility Trail Cross-Section***.
- The tread surface should be graded annually, along with other minor repairs by utility companies and other agencies that use the utility trail as needed, before the construction of the Emergency Vehicle Access Road.
- Tread surfaces may be improved with the installation of surfacing material to reduce erosion and provide for trail sustainability.
- As shown in ***Figure 5.7 Trail Network***, the utility trail south of the community plan trail is for the use of pedestrians and bicyclists, utility companies, and other agencies.

5.8.5 — Non-Compliant Trails

- Many existing or disturbed trails in Southwest Village are not compliant with City trail standards and are redundant, unsustainable, or potentially hazardous, and do not contribute to a sustainable trails system.
- Some of the existing or disturbed non-compliant trails will be closed and require rehabilitation and education efforts. The non-compliant trails will be closed off to the public.

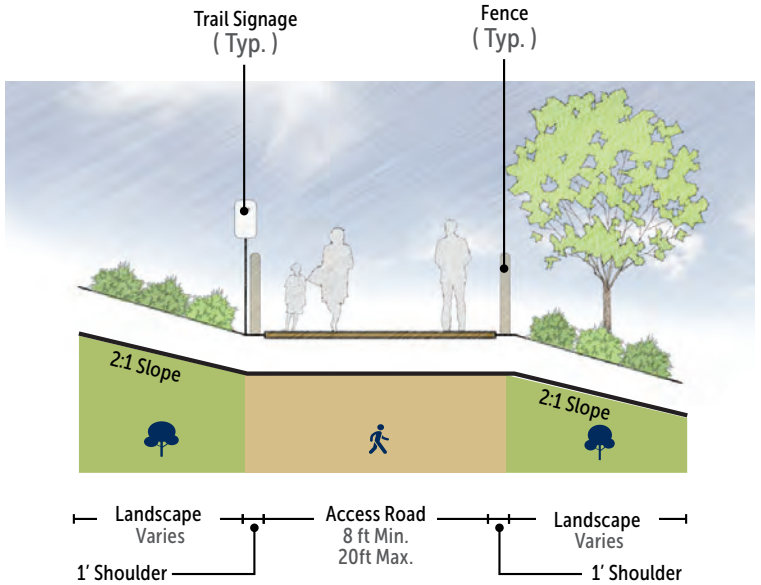
Non-Compliant Trails Policies:

1. Install signage where appropriate to provide education on trail closures and restoration areas.

2. Closures may involve habitat restoration, placement of barriers, or other methods to prevent unauthorized trail use.

Refer to ***Section 7.9, Supplemental Development Regulations***, for implementation details.

Figure 5.10 — Utility Trail Cross-Section



5.9 — TRAIL AMENITIES AND ENHANCEMENTS POLICIES

Amenities that will enhance the pedestrian experience and increase the recreational opportunities will be integrated into the fabric of the community along pedestrian facilities. The amenities should significantly expand the types of recreational and social interaction opportunities and provide an innovative strategy towards serving the recreational, social, physical, and lifestyle needs of the Southwest Village. All trail amenities satisfying City park requirements will be available for use by the public with the recording of recreation easements.

Amenities can include community gardens and edible landscapes, physical activity equipment, bicycle amenities, pet amenities, play areas, seating, refuse bins, water fountains, lighting, interactive walls and art, wayfinding and gateway signage, and interpretive signage. The use of community gardens and edible landscapes provides intergenerational community members a place to play, educate, and practice healthy habits. Physical activity equipment ranges in maintenance levels and complexities, and provides the community with the opportunity to practice physical fitness at no cost. Bicycle amenities include, but are not limited to, bicycle parking racks, repair stations, and informational signage. These amenities encourage both safe bicycling habits as well as new ridership. Pet amenities provide designated areas for pet recreation and encourage responsible pet ownership. Creative, nature, and adventure play areas can come in many forms. These play areas provide visual interest as well as recreation opportunities for children.

- Incorporate seating, refuse bins, water fountains, and lighting as typical amenities.
- Use amenities that add interest and create a sense of place. Murals, public art, and interactive walls allow for community projects, physical fitness, and artistic expression in creative ways that reflect the community.
- Use wayfinding and gateway signage to inform the public of distances and directions to landmarks or trail heads, and the entrance of a neighborhood or distinct area.
- Incorporate an interpretive signage program to highlight the history of Otay Mesa and the specific resources found within Southwest Village. These signs can offer a public educational context of the surrounding environment while featuring fun, interactive activities for all generations.
- Incorporate amenities on perimeter trails, paseos, and along sidewalks in the Village Core where appropriate.
- Use additional types of amenities that reflect trends and innovation in outdoor recreation and social interaction.

Representative amenities and enhancements concepts are provided as a reference in ***Figures 5.11 through 5.21***. See Key Map below for locations of these trail types. Images and types of amenities are for illustrative purposes only and are intended to provide guidance while also allowing for flexibility at implementation.

Key Map

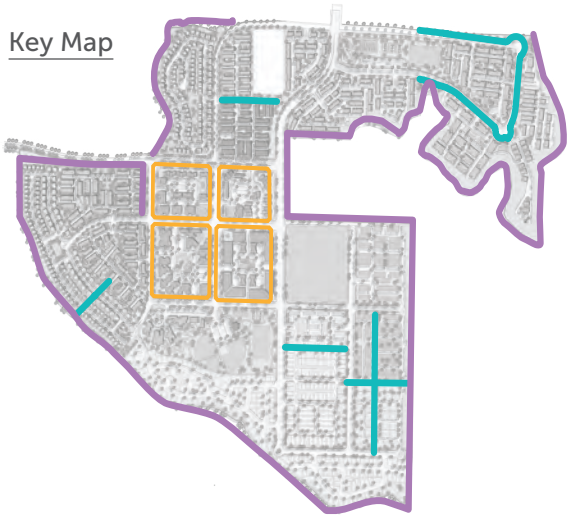


Figure 5.11 – Community Gardens and Edible Landscapes









Figure 5.12 – Physical Activity Equipment

Figure 5.13 – Bicycle Amenities

Figure 5.14 – Pet Amenities

Figure 5.15 – Creative, Nature, and Adventure Play Areas








Figure 5.16 – Seating

Figure 5.17 - Seating (Continued)

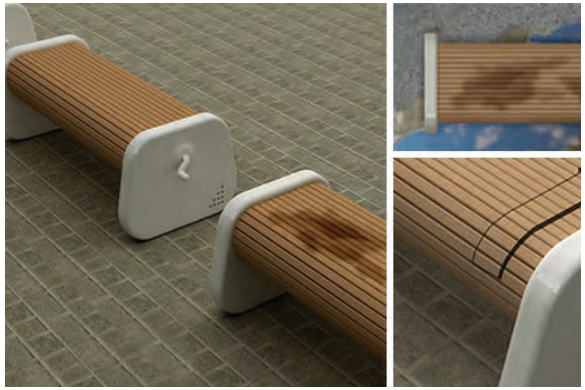


Figure 5.18 – Murals, Public Art, and Interactive Walls

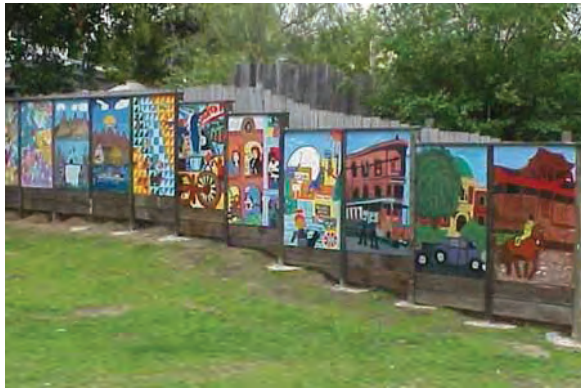


Figure 5.19 – Refuse Bins, Water Fountains and Lighting

Figure 5.20 – Wayfinding and Gateway Signage

Figure 5.21 – Interpretive Signage

5.10 — OPEN SPACE OVERVIEW

Approximately 185 acres, 38 percent of the land included in the Specific Plan, will be preserved as open space. Some of the areas are already identified for resource conservation as part of the City's Multi-Habitat Planning Area (MHPA) or Vernal Pool Habitat Conservation Plan (VPHCP), other areas are undevelopable due to steep slopes or other hazards. Open space areas identified as part of the Southwest Village Specific Plan are adjacent to other existing and planned open space areas and would expand the areas included in the City's MHPA. Open space lands may allow for limited opportunities for recreation, such as trails and nature viewing.

The Specific Plan area boundary is conterminous with the existing MHPA boundary on the west, south, and east. A portion of the MHPA is within the Specific Plan area. Open Space within the Specific Plan area is shown on ***Figure 5.22, Open Space Areas***. The known mitigation lands would be implemented concurrently with phased development impacts. Since development would occur over time, required mitigation areas would be implemented in phases as detailed in the Southwest Village Biological Resources Report. Refer to the Biological Resources Report for details on the mitigation requirements and phasing approach for mitigation.

5.10.1 — Southeast Pump Station Overlay

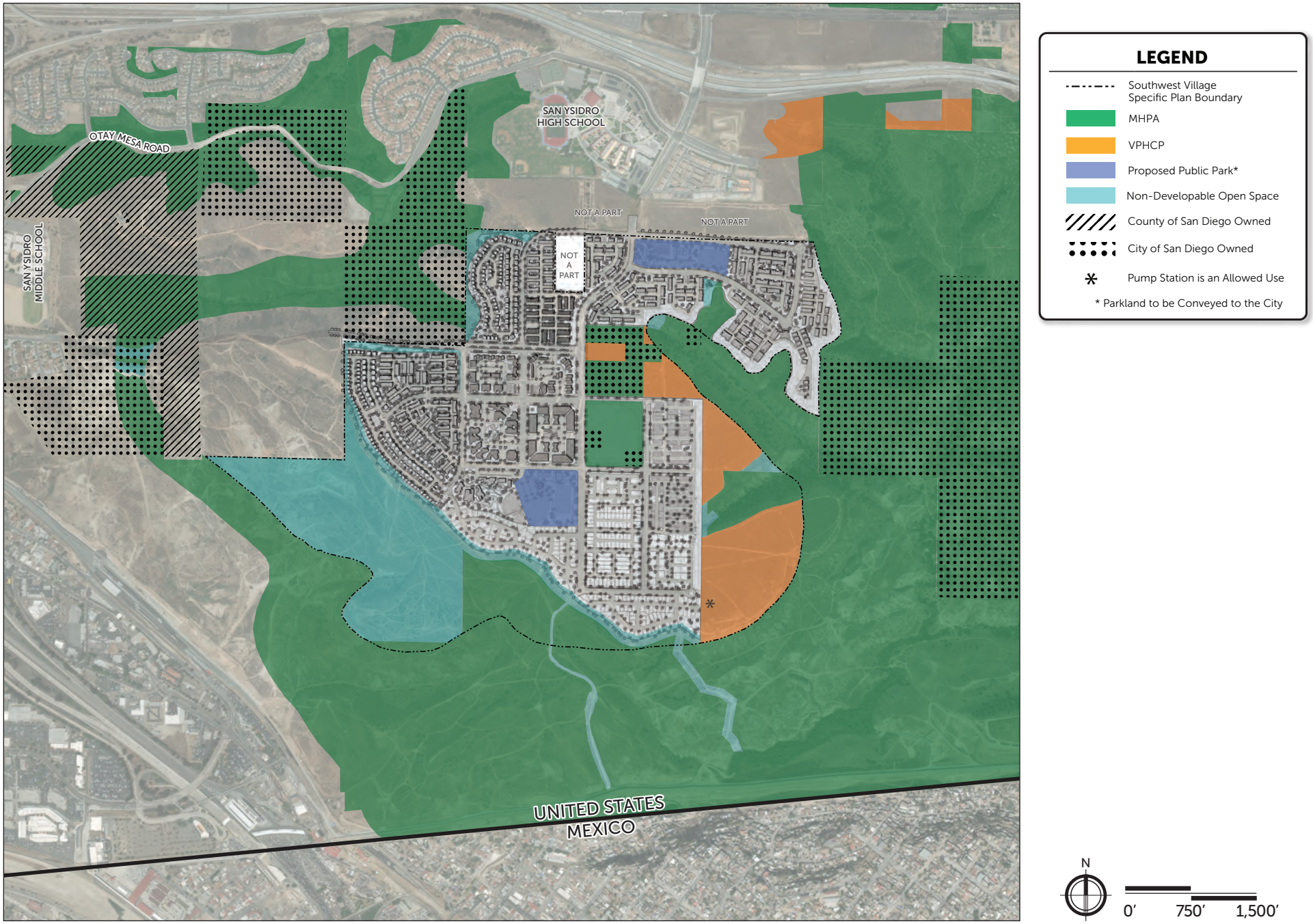
- An approximately 2-acre area in the southeast portion of the Specific Plan area, at the terminus of Street D, is planned to include a pump station as part of the wastewater infrastructure necessary to support the development within the Southwest Village Specific Plan.
- The pump station area is located within and allowed as a covered activity as part of the VPHCP.

5.10.2 — Brush Management Zones

- Brush management is required in all base zones on publicly or privately owned premises that are within 100 feet of a structure and contain native or naturalized vegetation.
- Brush management zones help reduce fire hazards around structures and help firefighters protect life and property when fires occur.
- Alternative compliance from standard brush management zones may be granted within the Specific Plan area pursuant to the SDMC, where appropriate, based on fire load modeling of adjacent land.
- Brush management zones are prohibited in adjacent City-owned open space and designated mitigation lands.
- Brush Management Zone 1 is considered development footprint.
- Brush Management Zone 1 may occur on lands maintained by a Master Maintenance Association or a private property owner.
- Brush Management Zone 2 needs to be on lands maintained by a Master Maintenance Association and may not extend onto City-owned open space or land set aside for mitigation for environmental impacts.
- Refer to Section ***7.9, Supplemental Development Regulations***.

Southwest Village sits atop a mesa, defined by its sloping edges and the shallow bottoms of the canyons.

Figure 5.22 – Open Space Areas



5.10.3 — Wildlife Corridor Crossings

Beyer Boulevard West would be designed, constructed, and maintained to allow for wildlife movement through a wildlife overcrossing and three culverts under the roadway, as shown in ***Figure 5.23, Beyer Boulevard West Wildlife Corridor Crossings***, to the satisfaction of MSCP, the City Engineer, and the City Parks and Recreation Department. Refer to ***Section 7.9, Supplemental Development Regulations***.

Wildlife Overcrossing Policies

1. Locate a 32-foot by 60-foot wildlife overcrossing across Beyer Boulevard West, approximately 515 feet west of the Specific Plan area boundary in the location of existing high-use wildlife movement patterns through an existing drainage swale area consistent with the City MSCP Subarea Plan and Area Specific Management Directives for Otay Mesa.
2. Design each end of the overcrossing to mimic the existing topographic conditions and include flared entrances to encourage wildlife entry.
3. Revegetate the surrounding slopes with native vegetation to match the surrounding habitats.

Wildlife Under-crossing Policies

1. Locate three additional small animal under-crossing features where Beyer Boulevard West crosses conserved lands. The three under-crossings shall include a minimum 6-foot-tall culverts, ranging from 103 to 105 feet in length, and shall be installed to provide passage for small mammals between Moody Canyon and habitat areas to the south.
2. Design under-crossings with flares at the ends to encourage entry.

Wildlife Corridor Crossing Fencing Policies

1. Install wildlife fencing concurrently during the construction of Beyer Boulevard West.
2. Install fencing along the length of Beyer Boulevard West on both the north and south sides to prevent wildlife crossings along the roadway and to funnel wildlife toward the wildlife crossings.
3. Install a gate on the north and south sides of the roadway to allow for vehicular entry while keeping wildlife from entering the roadway near the western end of the proposed Beyer Boulevard West, where vehicular access is needed for an SDG&E easement.
4. Install chain-link (or similar exclusionary) fencing along the length of Beyer Boulevard West to funnel wildlife toward the culvert under-crossings and the wildlife overcrossing, while preventing wildlife from crossing the roadway.
5. Provide a 6- to 8-foot-tall fence to prevent wildlife from crossing the Beyer Boulevard roadbed where vehicles travel.
6. Install an 8-foot fence when located mid-slope and a 6-foot fence where the fence is located at grade or with a wildlife use area located downslope of the fence.
7. Install fencing that is buried 6 inches into the soil to prevent animals from burrowing under. Install a fine-mesh screen along the bottom two feet of the fence to prevent small animals from moving through it.

Wildlife Overcrossing Landscaping Policies

1. Utilize excavated native soils from the roadway grading to install three feet of native soil on the overcrossing and plant the overcrossing area with native plant species identified in the plant palette.
2. Use the following plant palette for the wildlife overcrossing:
    - Coastal cholla (Cylindropuntia prolifera)
    - California encelia/Bush sunflower (Encelia californica)
    - Laurel sumac (Malosma laurina)
    - Coast prickly pear (Opuntia littoralis)

- Bladderpod (Peritoma arborea)
- Lemonade berry (Rhus integrifolia)
- Black sage (Salvia mellifera)
- Mojave yucca (Yucca schidigera)
- Purple needlegrass (Stipa pulchra)
- Small flowered needlegrass (Stipa lepida)
- Other species native to the Otay Mesa region may also be added to the planting palette with the approval of the City Biologist and Parks and Recreation resource management staff.

3. Place native bushes (such as lemonade berry and laurel sumac) found in the area that attain 6- to 8-foot heights along the sides of the overcrossing to screen the road and provide refugia.

4. Incorporate micro-refugia (e.g., rock and wood structures) onto the overcrossing and undercrossing surface for small animal stopping points/shelters.

5. Design native plant landscaping on the southern slope at the wildlife overcrossing with vegetation that would grow densely to deter human views toward the overcrossing and deter human use. Use native cacti and other uninviting species to deter human access.

Wildlife Corridor Management Policies

1. An endowment would be provided by the applicant constructing Beyer Boulevard to fund the management and monitoring of the wildlife features for a 10-year period, in addition to ongoing funding in perpetuity to support regular maintenance and monitoring.

2. Implement the Long-Term Management and Monitoring Plan to ensure all the wildlife movement features proposed along Beyer Boulevard are monitored and managed for 10 years to evaluate and maintain the functioning of the wildlife crossings.

3. Coordinate with City Departments and the developer who would construct Beyer Boulevard West for the implementation and long-term management of the wildlife movement features.

5.10.4 — Bird Safe Glass

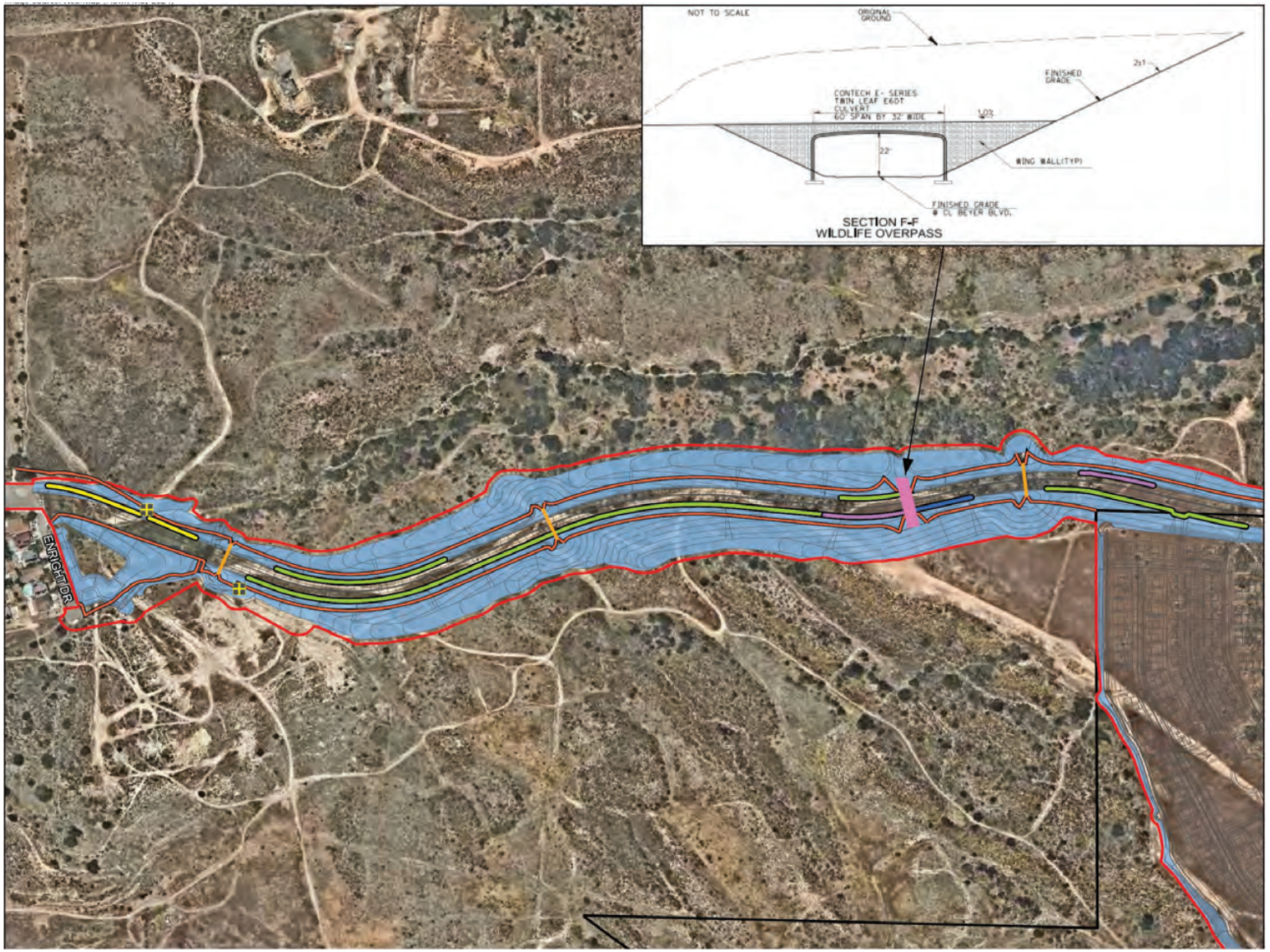
1. Use bird-safe glass to prevent bird collisions to the satisfaction of the MSCP, City Biologist, and City Engineer with glass or transparent panes adjacent to open space to reduce bird collisions.

2. Use bird-safe glass with ultraviolet reflective patterns visible to birds but transparent to the human eye, or etched or patterned glass that provides a visual barrier.

3. Use patterned or etched glass with vertical stripes or horizontal stripes consistent with the guidance provided in the USFWS publication Low-Cost Methods to Reduce Bird Collisions with Glass (dated June 4, 2021).

4. Refer *Section 7.9, Supplemental Development Regulations*.

Figure 5.23 – Beyer Boulevard West Wildlife Corridor Crossings



Legend

- Project-level Areas
- Specific Plan Area
- 4-foot Retaining Wall
- 6-foot Masonry Noise Wall
- 0 - 8-foot Retaining Wall
- 12-foot Retaining Wall
- SDG&E Access Gate
- Wildlife Fence
- Critter Crossing Culvert (6' dia.)
- Wildlife Overcrossing (32' wide by 60' long)
- Site Plan
- Beyer_Slopes — Manufactured Slopes to be Revegetated with Native Species

N

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06

INFRASTRUCTURE

6.1 — OVERVIEW

This section summarizes the requirements for water, wastewater, drainage, and stormwater, and other infrastructure to support the development of the Southwest Village. The Specific Plan provides an overall framework for utility infrastructure, such as water, stormwater, sewer, and electrical lines, to provide service.

6.2 — WATER

The Specific Plan area does not have existing potable water service; therefore, water facilities needed for service will mainly consist of extending the existing City of San Diego water distribution system and appurtenant facilities, as shown in ***Figure 6.1, Water System within the Specific Plan Area***. Based on the projected demands and phasing considerations in the Southwest Village Water Study, the recommended water supply facilities outside of the Specific Plan area include:

- A 16-inch water main in Otay Mesa Place, Otay Mesa Road, and Beyer Boulevard from the Princess Park Pump Station will supply water to the Specific Plan area.

Based on the projected demands and phasing considerations, the recommended water distribution facilities within the Specific Plan area include:

- A 16-inch water line backbone loop through the buildout development site.
- A 16-inch water main extended north to Caliente Avenue and connected to the existing 16-inch water main.
- 12-inch water line loops extended from the 16-inch backbone system.

The estimated peaking factors for water demand, in accordance with the City's Facility Design Guidelines - Book 2, are as follows:

- The estimated maximum day demand for the project is 3,425,031 gallons per day (gpd) or 2,378 gallons per minute (gpm).
- The estimated peak hour demand is 7,874,832 gpd (3,171 gpm).

The fire flow requirements for the Southwest Village development, as set forth by the City's design criteria, are anticipated to vary by land use. A range of 2,000 gpm to 4,000 gpm for five hours is the predicted fire flow requirement for the project.

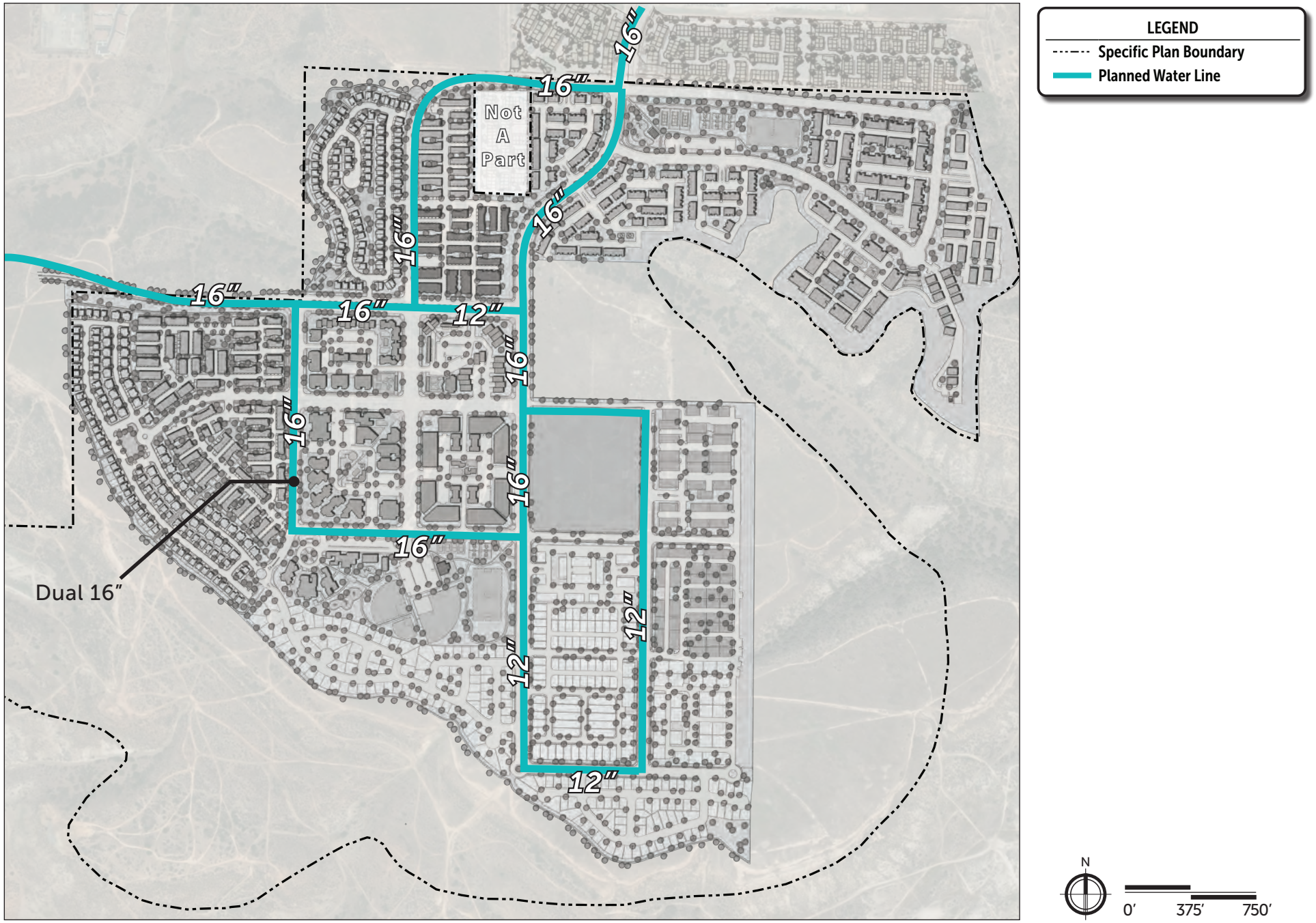
The Specific Plan area will be served by the City of San Diego Otay Mesa 680 Pressure Zone, which is a closed zone (completely pumped zone) and is supplied by three water booster pump stations and an emergency inter-district interconnect. Development within the Specific Plan area will require upgrades to the Princess Park Pump station.

The commercial fire flow is 2,000 - 4,000 gpm, and the total maximum day demand is 2,734 gpm. This demand would need to be always provided by at least two sources of supply, as this demand is greater than what can be supplied by a single water booster station.

Due to the varying elevations of the Specific Plan area, individual pressure regulators would need to be installed at all building services below an elevation of 496 feet to comply with the California Plumbing Code. The on-site potable water distribution for the Specific Plan area would result in a maximum static pressure range from 71 to 89 pounds per square inch, which is anticipated to serve the Specific Plan area by a single pressure zone (680 Zone).

The water facilities that would be extended and constructed in the Specific Plan area are expected to serve only the Specific Plan area. The Specific Plan does not assume that any future development in the vicinity of the Specific Plan area would utilize and extend the water distribution infrastructure beyond the Specific Plan area. Future development within the Specific Plan area would utilize the Lower Otay Treatment Plant and Clearwell Reservoir to meet the needed potable water storage.

Figure 6.1 — Water System within the Specific Plan Area



6.3 — WASTEWATER

The sewer facilities needed for service mainly consist of collection systems and lift stations within the Specific Plan area whose force main(s) would connect to the existing City of San Diego sewer system. The Specific Plan area does not have existing sewer service. Sewer service for the Specific Plan area would be provided by a combination of gravity flow and pumping the flow from future development within the Specific Plan area via two proposed sewer lift stations within the Specific Plan area to the existing City of San Diego public sewer system in South Beyer Boulevard, as shown in ***Figure 6.2, Sewer System within the Specific Plan Area***. The Specific Plan area would be connected to the Otay Mesa Trunk Sewer. Wastewater facilities within the Specific Plan area would be a combination of public and private facilities. Wastewater improvements outside the Specific Plan area would be public facilities and would be constructed in existing public streets and/or rights-of-way. The peak dry weather flow for the Southwest Village area would be 2,030,137 gpd (1,410 gpm), and the peak wet weather flow would be 3,755,754 gpd (2,608 gpm).

Based on projected demands and phasing considerations in the Southwest Village Sewer Study, the recommended wastewater facilities within the Specific Plan area include:

- Gravity sewer lines ranging from 8-inch to 18-inch diameter.
- Two sewer lift stations throughout the project.
- Force mains with a diameter of 6-inch to 8-inch conveying flow from the proposed on-site sewer lift stations to either other areas of the project site or off-site to the existing public sewer system.

Based on the projected demands and phasing considerations, the recommended wastewater facilities outside of the Specific Plan area include:

- An extension of the master planned Otay Mesa Trunk Sewer within Otay Mesa Road and Beyer Boulevard rights-of-way.
- A gravity sewer line in the Beyer Boulevard extension west of the Specific Plan area.

6.3.1 — Sewer System within the Specific Plan Area

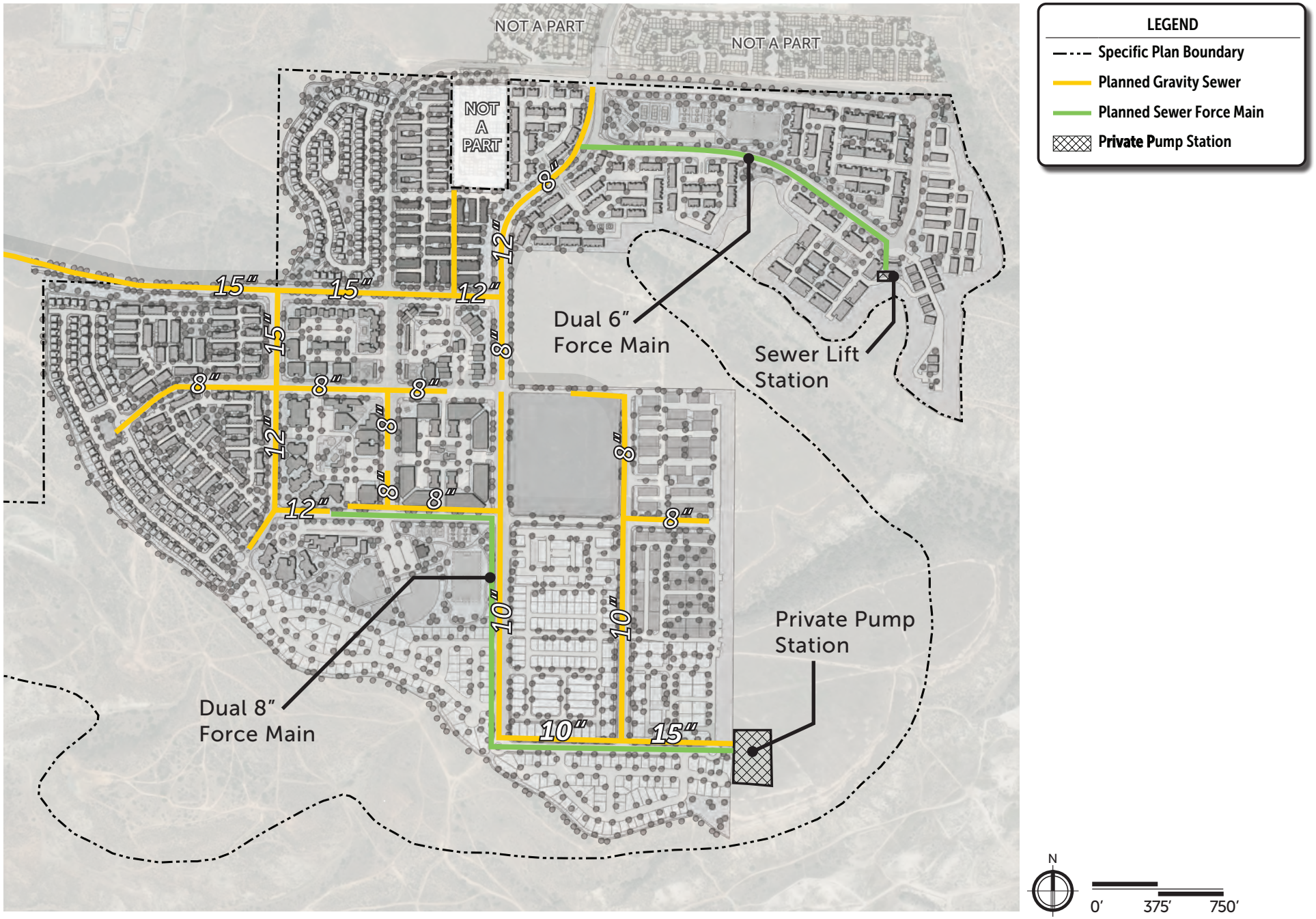
The sewer system within the Specific Plan area would be composed of 8-inch, 10-inch, 12-inch, 15-inch, and 18-inch gravity sewer piping; however, the entire Specific Plan area cannot be served by a gravity sewer system alone. The 18-inch gravity sewer piping would be needed for select segments on the western end of proposed Beyer Boulevard due to velocities being greater than 10 feet per second. The use of lift stations would be needed since the Specific Plan area is topographically positioned downhill of existing sewer facilities. The ultimate buildout of the sewer system configuration would result in one connection to an existing sewer main. This connection would be to an existing gravity sewer line west of the Specific Plan area in South Beyer Boulevard at the intersection of Old Otay Mesa Road. The Specific Plan area would use two lift stations, with an average flow of 411,926 gpd (286 gpm) for Lift Station 1, and 261,435 gpd (182 gpm) for Lift Station 2. The force mains of these two lift stations would discharge into the gravity sewer system within the Specific Plan area.

6.3.2 — Sewer System outside the Specific Plan Area

Since 2020, the City has implemented a basin-wide sewer improvement project that involves the construction of the new Otay Mesa Trunk Sewer line to convey the current and future sewer flows in the Otay Mesa sewer sub-basin. Portions of the Otay Mesa Trunk Sewer project have already been constructed.

Future development within the Specific Plan area would be responsible for certain improvements to the Otay Mesa Trunk Sewer along portions of Otay Mesa Road and Beyer Boulevard. The improvements to the Otay Mesa Trunk Sewer would involve the replacement of approximately 3,600 linear feet of existing gravity sewer with a 27-inch to 33-inch diameter PVC sewer line. Development within the Specific Plan area would share in the cost and construction of these improvements with other future development outside of the Specific Plan area.

Figure 6.2 — Sewer System within the Specific Plan Area



6.4 — DRAINAGE AND STORM WATER QUALITY

The drainage system design within the Specific Plan area is illustrated in ***Figure 6.3, Drainage System***. The Southwest Village drainage system is designed to utilize the property's natural drainage courses to the extent feasible. Anticipated locations of master storm drain facilities and outfall locations are also shown in Figure 6.3, although the exact siting of these facilities would be determined at the time future development applications are submitted. Storm drain lines, channels, detention basins, water quality treatment features, and other components of the drainage system shown in Figure 6.3 are based on the existing drainage patterns of the Specific Plan area, where feasible, and the anticipated needs of the drainage system.

6.4.1 — San Ysidro Landslide Complex Considerations

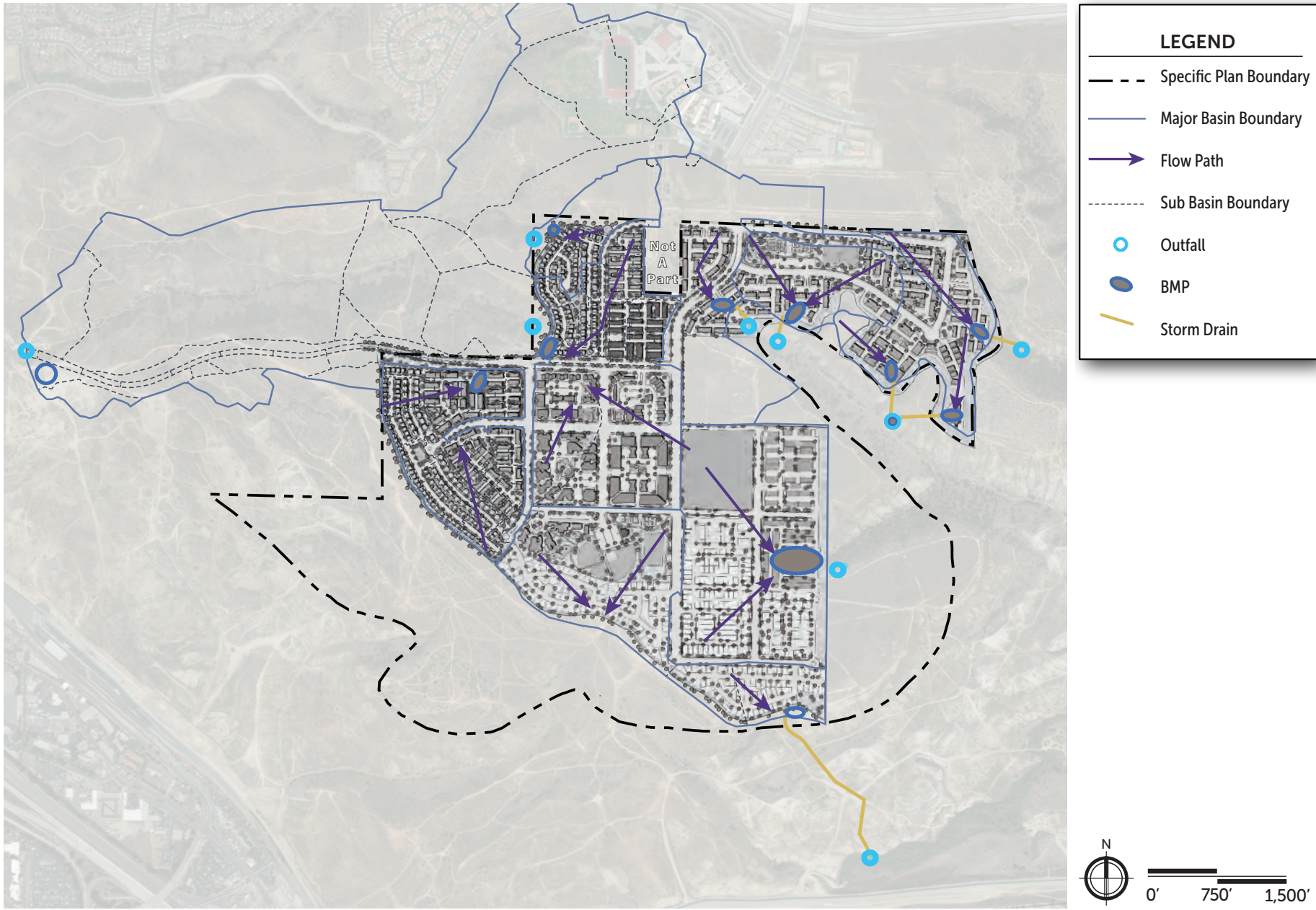
The San Ysidro Landslide complex borders Planning Areas 12, 14, 15, and 18 to the west and is one of the largest landslide features in San Diego County. A geotechnical report concluded that stormwater would need to be diverted away from the San Ysidro Landslide complex. The area that drains to the west in the pre-development condition would need to be diverted either north to Moody Canyon (25 acres) (and will ultimately flow west, discharging into the Tijuana Estuary), and/or the area would need to be diverted south to Spring Canyon (44 acres) (and into Mexico).

6.4.2 — Drainage Design

The Specific Plan Area is divided into two sub-watersheds, one that drains to Mexico via Spring Canyon (East Watershed) and the other that drains west to the Tijuana River, without crossing into Mexico via Moody Canyon (West Watershed). Therefore, the requirements of the sub-watersheds are different. While developments in the East watershed would require conformance with the Detention Notice, the West watershed would not be subject to the same requirements, but it is still expected that 100-year storm detention will be implemented to ensure that the existing downstream storm drain facilities within the Beyer Boulevard right-of-way would not be adversely impacted.

Due to the landslide complex to the west of Planning Areas 12, 14, 15, and 18, and based on the recommendations of the geotechnical and groundwater reports, drainage discharge from development within the Specific Plan area would need to be directed away from the San Ysidro landslide area complex. Flows directed to the Moody Canyon sub-watershed would meet hydromodification management plan requirements and detention requirements, while flows directed to the Spring Canyon sub-watershed would be subjected to hydromodification management plan requirements and enhanced detention requirements based on the Detention Notice (for a 5-year, 10-year, 25-year, 50-year, and 100-year storm events). Refer to ***Section 7.9, Supplemental Development Regulations***.

Figure 6.3 — Drainage System



6.4.3 — Stormwater Quality Best Management Practices

Best management practices (BMPs) would be incorporated into future developments in accordance with the requirements of the City of San Diego Storm Water Standards. Where feasible, regional-based structural (pollutant) control facilities may be used to accomplish water quality, hydromodification management, and detention requirements. The final BMP strategy would be determined during future site planning efforts.

A drainage and water quality technical report prepared for this Specific Plan recommended the following BMP strategy options to be considered:

- As a preferred alternative, a biofiltration BMP (in the form of a basin) is recommended at the downstream end of each regional drainage area to address the pollutant control, hydromodification management, and flood control detention requirements.
- If a combined hydromodification/pollutant control biofiltration basin with a single outfall is determined to be infeasible, a custom flow spreader design can be implemented along the perimeter of the canyon areas to mimic a sheet flow condition down the slope.
- At the downstream end of each regional drainage area, implement hydromodification control BMP(s) in series with a downstream pollutant control BMP to achieve pollutant control requirements. This could be achieved by the use of a subterranean detention vault for hydromodification control with a Modular Wetland System (or similar) downstream to provide pollutant control.
- As a last alternative, an "off-site alternative compliance" approach could be implemented if the project could utilize "credits" from an off-site to offset the on-site pollutant control (and possibly hydromodification management) requirements. Under this option, a "flow-thru" treatment facility within the Specific Plan area would still be needed for each drainage management area (or planning area) for treatment control requirements, but this may reduce extensive pollutant control and hydromodification control BMP footprint in the Specific Plan area.

6.5 — TELECOMMUNICATIONS AND CABLE SERVICE

Communications systems for telephone, telecom, computers, and cable television for the Specific Plan area are serviced by utility providers such as AT&T, Cox, and other independent telecommunications companies in the Specific Plan area.

6.6 — ENERGY (ELECTRICITY AND NATURAL GAS)

San Diego Gas and Electric Company (SDG&E) provides for the supply, transmission, and distribution of electricity and natural gas to customers in the Specific Plan area.

6.7 — PUBLIC FACILITIES

6.7.1 — Public Schools

The San Ysidro School District provides elementary and middle schools, and the Sweetwater Union High School District provides a high school that serves the Specific Plan area—San Ysidro Middle School and Vista Del Mar Middle School (grades 7–8) and San Ysidro High School (grades 9–12). An elementary school site will be provided within the Southwest Village to serve the Specific Plan area. A portion of the school site would be provided via a joint-use agreement on the adjacent City neighborhood park. The San Ysidro School District also provides elementary schools—Ocean View Hills Elementary School and La Mirada Elementary School (grades K–6). The Specific Plan includes two sites for schools, Planning Area 16 and Planning Area 7. Refer to ***Section 7.9, Supplemental Development Regulations*** for the provisions regarding alternative land uses.

6.7.2 — Solid Waste

The City's Environmental Services Department provides refuse, recycling, and yard waste collection and disposal services to primarily single-family homes as well as some multi-family and commercial/business customers. Most multi-family residences and commercial and industrial business customers are not served by the City and are required to fund and contract directly with private haulers for trash and recycling collection.

6.7.3 — Libraries

The City of San Diego's Public Library system has two branch libraries that serve the Specific Plan area: the Otay Mesa-Nestor Branch Library (3003 Coronado Avenue) and the San Ysidro Branch Library (4235 Beyer Boulevard).

6.7.4 — Police

The San Diego Police Department (SDPD) provides police services that include patrol, traffic, investigative, records, laboratory, and support services. The SDPD Southern Division station is the closest SDPD station to the Specific Plan area, located on 1120 27th Street.

6.7.5 — Fire/Emergency Services

The Specific Plan area is serviced by multiple fire stations: San Diego Fire- Rescue Station 29 at 198 West San Ysidro Boulevard, Fire Station 6 at 693 Twining Avenue, Fire Station 30 at 2265 Coronado Avenue, and Fire Station 43 at 1590 La Media Road. Fire Station 29 has an engine, truck, brush, and medic apparatus. The engine responds to both fire and medical incidents. Fire Station 6 serves Otay Mesa and its surrounding areas and has an engine apparatus. Fire Station 30 serves Nestor/South San Diego and its surrounding areas and has an engine and medic apparatus. Fire Station 43 serves Otay Mesa and its surrounding areas and has an engine and brush apparatus. The future Fire Station 49 will be north of the Specific Plan area, just west of Caliente Avenue on Otay Mesa Road, which will also serve the Specific Plan area.

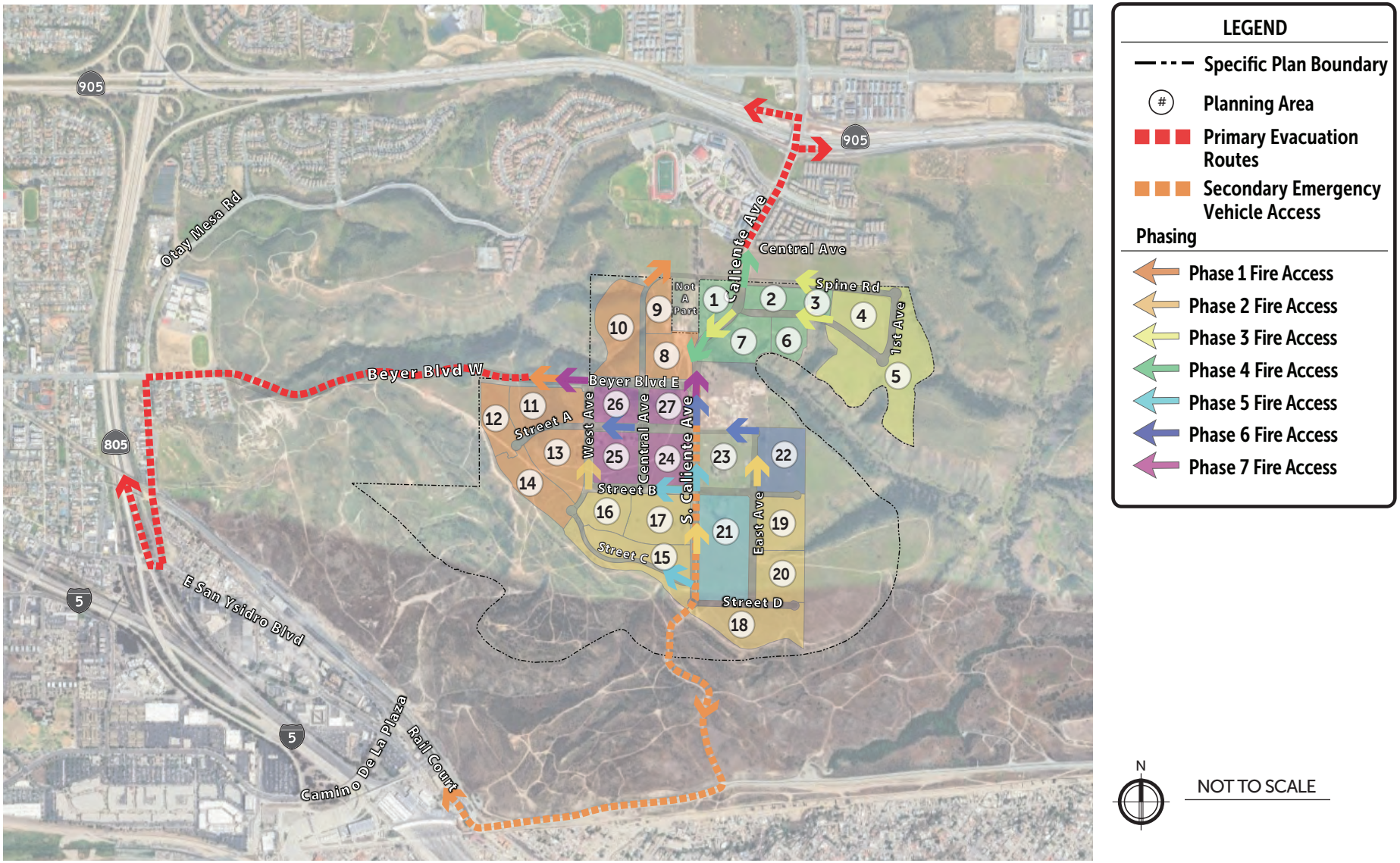
6.7.6 — Fire Access by Phase

As shown in ***Figure 6.4, Master Fire Access By Phase***, each phase of the Specific Plan would have at least two separate access routes. Beyer Boulevard will provide the primary east-west fire access to and from I-805 and the San Ysidro community. Caliente Avenue will provide the primary north-south fire access to and from I-8 and SR-905. A secondary emergency vehicle access road would provide access from East Beyer Boulevard to the south, southwest to Rail Court along existing utility roads.

The secondary emergency vehicle access road would be required before the construction of the 201st dwelling unit. If Beyer Boulevard West is not constructed before the requirement for a secondary fire access route is triggered, this emergency vehicle access road would serve as the secondary access route to the south of the Specific Plan. The emergency vehicle access road will remain open and usable beyond the construction of 699 dwelling units, when Beyer Boulevard West is required to be constructed. Vehicular access would be restricted to emergency responders only, with public vehicular access prohibited by a gate and Knox Box. Refer to ***Section 7.9, Supplemental Development Regulations***.

Before Phase 2 and the construction of South Caliente Avenue, the entrance to the secondary emergency vehicle access road may be located at the intersection of East Beyer Boulevard and future South Caliente Avenue. Once South Caliente Avenue is constructed, the gate and Knox Box will be relocated to the intersection of South Caliente Avenue and Street D. The road will be improved to meet emergency vehicle-only standards. The paving will consist of compacted decomposed granite for road grades of zero to five percent, asphalt paving for grades of five to 12 percent, and concrete paving for grades of 12 to 15 percent. Refer to Section 4.5.16, Secondary Emergency Vehicle Access Road.

Figure 6.4 — Master Fire Access By Phase



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07

IMPLEMENTATION & ADMINISTRATION

7.1 — PURPOSE

a) The purpose of the Southwest Village Specific Plan is to provide a framework for the implementation of the General Plan and Otay Mesa Community Plan by providing a planning and regulatory framework for development within the Southwest Village Specific Plan Area.

b) Implementation of the Specific Plan will occur through subsequent development permits and approvals by the City to ensure that development is consistent with the Specific Plan policies and conforms with Specific Plan supplemental development regulations and other applicable requirements.

c) Implementation of the Specific Plan will ensure orderly development of Southwest Village while allowing flexibility to adapt to more detailed site studies and tailor development to adapt to changes in the market.

d) Cooperation and coordination between the City of San Diego, regional, state, and federal agencies, private property owners, the San Ysidro School District, providers of public services, financing and maintenance entities, and design professionals will be required to ensure implementation of the Specific Plan.

7.2 — AUTHORITY

a) Pursuant to California Government Code, Title 7, Chapter 3, Articles 8, Sections 65450 through 65457 and San Diego Municipal Code Section 122.0107, the Southwest Village Specific Plan provides greater planning and design guidance for the Specific Plan area to implement the General Plan and the Otay Mesa Community Plan.

b) The Specific Plan serves as a bridge between the General Plan, Otay Mesa Community Plan, and development within the Specific Plan area.

c) The Southwest Village Specific Plan serves as both a planning and policy framework and the regulatory functions for Southwest Village.

d) The Specific Plan governs development within the Southwest Village and contains design guidelines and supplemental development regulations necessary to accomplish this purpose.

7.3 — ADMINISTRATION

a) The requirements of this chapter shall be administered and enforced in the same manner as the provisions of the City of San Diego Municipal Code (SDMC) and in conjunction with the supplemental development regulations contained in this Specific Plan.

b) Unless otherwise specified, where the requirements of this Specific Plan differ from those in the SDMC, the requirements of this Specific Plan shall take precedence. Where the Specific Plan is silent on a topic, the SDMC requirements shall remain applicable.

7.4 — DEVELOPMENT REVIEW

a) Development shall be reviewed for conformance with the development regulations in the SDMC and the supplemental development regulations within the Specific Plan.

b) At the time of building permit review, the applicant shall include on the title sheet of the development plans the Implementation Tracking Table provided in Appendix C.

7.5 — SEVERABILITY

a) All regulations, conditions, standards, and policies in this Specific Plan shall be deemed distinct and independent provisions.

b) If any section, clause, phrase, or portion of this document is determined to be invalid by the decision of any federal or state court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Specific Plan.

7.6 — ENVIRONMENTAL REVIEW

a) The Southwest Village Specific Plan was required by California law to undergo environmental review in accordance with the California Environmental Quality Act (CEQA).

b) Pursuant to State and local CEQA guidelines, the City of San Diego prepared a Subsequent Environmental Impact Report (SEIR, State Clearinghouse No. 2004051076) to address the potential environmental impacts of the Southwest Village Specific Plan.

c) The EIR analyzed the Southwest Village Specific Plan on both a programmatic and a project level. The project level analysis covers the Vesting Tentative Map (VTM) submitted concurrently with the Specific Plan.

d) Prior to the approval of the Specific Plan, the EIR was considered and certified by the San Diego City Council. The associated Mitigation Monitoring and Reporting Program, Findings, and Statement of Overriding Considerations were also adopted by the City Council.

e) Any amendments to this Specific Plan or discretionary approvals required to implement this Specific Plan are subject to the requirements of CEQA.

7.7 — WILDLIFE CORRIDOR MANAGEMENT

a) The developer constructing Beyer Boulevard shall provide an endowment to fund the management and monitoring of the wildlife features for 10 years, in addition to ongoing funding in perpetuity to support regular maintenance and monitoring. The fund shall be determined using a Property Analysis Record tool or an equivalent calculation method to the satisfaction of the Parks and Recreation Department Director.

b) The City shall be responsible for implementing the Long-Term Management and Monitoring Plan for the 10-year monitoring period to maintain adequate wildlife movement.

c) The City shall be responsible for maintaining the structural components of the wildlife overcrossing and associated Beyer Boulevard manufactured slopes.

d) The City shall be responsible for maintaining the culvert undercrossing structure and associated stormwater conveyance system components.

7.8 — ZONING

a) A base zone designation from the SDMC is identified for each specific plan land use category, as shown on ***Figure 2.1, Southwest Village Land Use Plan***, and ***Table 2.1, Development Summary***.

b) The development regulations and allowable uses from the base zones shall apply to the Specific Plan area.

c) All uses and development regulations of the base zones shall apply except where modified by the Specific Plan Supplemental Development Regulations.

d) All applicable overlay zones of the SDMC shall apply to the Specific Plan area.

7.9 — SUPPLEMENTAL DEVELOPMENT REGULATIONS

a) The purpose of the Supplemental Development Regulations is to provide regulations in addition to the regulations in the SDMC or modify the regulations in the SDMC.

b) The following Supplemental Development Regulations (SDRs) apply to development within the Specific Plan area:

SDR - 1: Building Setbacks

a) In the RM-3-7 zone:
   1) The minimum front, minimum street side, and minimum side setbacks shall be 0 feet.
   2) There shall be no standard front setback.

b) In the RM-2-5 zone:
   1) The minimum front and rear setbacks shall be 10 feet.
   2) The minimum side setback shall be 4 feet.
   3) Exceptions:
      A. The minimum side setback shall be 10 feet when abutting a brush management zone.
      B. The minimum rear setback shall be 4 feet when abutting an alley.

c) In the RM-1-3 zone:
   1) The minimum front setback shall be 8 feet.
   2) The standard front setback shall be 10 feet.
   3) The minimum rear setback shall be 10 feet.
   4) The minimum side setback shall be 4 feet.
   5) Exceptions:
      A. The minimum side setback shall be 10 feet when abutting a brush management zone.
      B. The minimum rear setback shall be 4 feet when abutting an alley.

SDR - 2: Floor Area Ratio

a) In the RM-3-7 and RM-2-5 zones, the maximum floor area ratio shall be 2.0.

b) In the RM-1-3 zone, the maximum floor area ratio shall be 1.3.

SDR - 3: Structure Height

In the RM-1-3 zone, the maximum structure height shall be 40 feet.

SDR - 4: Mixed Use Developments

In the RMX-1 zone, all premises shall comply with the regulations in Chapter 13, Article 1, Division 7, Section 131.0718.

SDR - 5: Driveways Fronting East Avenue

In the RM-2-5 zone, development fronting East Avenue, north of Street B, shall be limited to one driveway onto East Avenue south of the cul-de-sac. An additional driveway opening may be permitted, subject to approval by the City Engineer for a lot with at least 200 feet of total street frontage. For corner lots, the length of the street frontage may be combined for the purpose of this calculation.

SDR - 6: Minimum Required Parking Without an 18-foot Driveway

In the RM-1-3 zone, any multiple dwelling unit with a garage that does not provide a driveway that is at least 18 feet long, measured from the back of the sidewalk to that portion of the driveway most distant from the sidewalk, shall provide one additional parking space. This additional parking space may be on-street, abutting the subject property.

SDR - 7: Walls and Fences

a) Walls and fences in a front or street side yard abutting a public street shall be located a minimum of 3 feet from the property line.

b) Walls and fences shall be separated from the adjacent public right-of-way by a landscape strip that is a minimum of 3 feet in width, measured from the property line.

c) Walls and fences located in or adjacent to the required front or street-side yards that exceed 6 feet in height shall be screened by landscaping of at least 3 feet in height.

d) Walls or fences greater than 6 feet in height and over 50 linear feet that are visible to the public (including visible from public trails, parks, schools, roadways, etc.) shall include landscape screening to the satisfaction of the City's Development Services Director or designee.

SDR - 8: Grading

a) To the maximum extent feasible, manufactured slopes shall blend with existing or planned adjacent topography and be naturalized. Alternative grading design, including exceedance of allowable development area, may be used according to the following to achieve avoidance of sensitive natural resources:

   1) Newly created manufactured slopes shall be landform graded with undulating slopes, irregular/varying gradients, and with the top (crest) and bottom (toe) of new manufactured slopes rounded to resemble natural landforms.

   2) The transition between manufactured slopes and natural topography shall be blended to avoid harsh angular lines.

   3) Landscaping on manufactured slopes adjacent to natural topography shall be similar to the vegetation on the natural slopes.

b) Grading of manufactured slopes shall minimize substantial damage or alteration of significant permanent natural resources areas, wildlife habitats, or native vegetation areas which are designated by the Specific Plan or implementing tentative subdivision maps for future development.

c) Slopes that are adjacent to Beyer Boulevard, Caliente Avenue, and Central Street shall be landform graded regardless of the adjacent topography except when necessary to minimize impacts to sensitive natural resources.

d) Phasing of grading within each planning area shall provide for the safety and maintenance of other planning areas already developed or under construction, and visual mitigation (revegetation) of all manufactured slopes.

SDR - 9: Bioretention Basins

Bioretention basins shall be designed to meet horticultural requirements of the plant material used therein, to include a minimum growing medium depth of 24 inches for shrubs and 36 inches for trees.

SDR - 10: Sidewalks

Sidewalks (throughway zone) within the parkway for public streets shall be a minimum of five feet in width, except along Beyer Boulevard West due to environmental constraints.

SDR - 11: Street Design

The street design standards listed in the specification tables in *Section 4.5* of the Specific Plan that include the modifications to the Street Design Manual shall supersede the applicable standards within the Street Design Manual.

SDR - 12: Emergency Vehicle Access Road

a) A secondary emergency vehicle access road, shown as Segment 32, shall be required prior to issuing a building permit for the 201st dwelling unit.

b) The emergency vehicle access road shall have a gate and Knox Box to restrict vehicular access to emergency responders and authorized personnel only.

c) The emergency vehicle access road shall adhere to the standards outlined in the City of San Diego Fire-Rescue Department's Policy on Fire Access Roadways.

d) Development shall not front the emergency vehicle access road.

SDR - 13: Perimeter Trails

a) Perimeter trail tread widths shall be 8 feet, except in areas abutting a 4:1 slope, where the trail tread may be 7 feet in width.

b) The perimeter trail shall be integrated into the Zone One Brush Management Program as part of the development footprint outside of the Multi-Habitat Planning Area or conservation easements.

c) Where necessary and where avoidance can be maintained, small foot bridges may be installed to facilitate drainage crossings.

d) A recreation easement shall be recorded over each segment of the perimeter trail to allow public access. This shall also include the portion of any trail that utilizes the fire access road within Planning Area 29.

e) Perimeter trails shall be constructed concurrently with adjacent development.

SDR - 14: Primitive Trails

a) A recreation easement shall be recorded for primitive trails on privately owned property to allow for public access.

b) For trails in the Multi-Habitat Planning Area, the maintained trail tread shall not exceed 4 feet in width.

c) Trail implementation within the open space surrounding the Specific Plan development area shall be sited to avoid impacts to jurisdictional resources, including wetlands, drainages, and vernal pool resources.

d) Primitive trails shall be located around the vernal pools and outside of the vernal pool watersheds.

e) Primitive trails shall be constructed concurrently with development and prior to dedication of land to the City.

SDR - 15: Non-Compliant Trails

a) Any proposed trail alignment shall close all non-compliant trails within 50 feet of each side of the proposed trail alignment. Refer to *Figure B-1, Non-Compliant Trails*.

b) The closed non-compliant trails shall be restored to natural habitat to allow for natural vegetation regrowth to occur for the remaining portions.

c) Signage shall be installed where appropriate to prevent access to the closed non-compliant trails.

SDR - 16: Population-Based Parks

On-site parks meeting population-based park requirements shall be designed and constructed in accordance with the Park Development Standard Terms and Conditions and the City of San Diego Park Design Manual to the satisfaction of the Parks and Recreation Director.

SDR - 17: Brush Management

a) Fire load modeling shall be required wherever alternative compliance is allowed. Potential alternative compliance measures may include fire-rated site walls, upgraded windows as authorized by the Fire Chief, and private ownership areas maintained by the property owner.

b) Where a 100-foot brush management zone cannot be achieved along canyon edges and open space areas, and alternative compliance measures are in effect, 6-foot non-combustible walls will be required.

c) Brush Management Zone 2 shall be on lands maintained by a Master Maintenance Association.

SDR - 18: Maximum Residential Units

The maximum number of residential units within the Specific Plan area shall not exceed 5,130 dwelling units, as shown in *Table 2.1, Development Summary*.

SDR - 19: Density Transfers Between Planning Areas

Density may be transferred between planning areas that permit residential uses, including privately owned parcels within Planning Areas 2, 23, and 29, subject to the following:

a) The number of dwelling units in the planning area receiving the density transfer shall not exceed the maximum residential density range specified by the land use designation for the planning area, as shown in *Table 2.1, Development Summary*;

b) The residential density within the planning area where dwelling units are transferred from shall not be less than the minimum residential density range as a result of the density transfer as specified for that planning area, as shown in *Table 2.1, Development Summary*; and

c) The total number of dwelling units for the Specific Plan area does not exceed 5,130 dwelling units.

d) Density transfers shall be subject to the minor modifications process specified in *Section 7.11, Minor Modifications*.

SDR - 20: Maximum Commercial Square Footage

a) The maximum commercial square footage within the Specific Plan area shall not exceed a total gross floor area of 175,000 square feet, as shown in *Table 2.1, Development Summary*.

b) The gross floor area for commercial uses shall not exceed the maximum permitted by the floor area ratio for the RMX-1 zone.

c) Commercial uses are only permitted within Planning Areas 24, 25, 26, and 27.

SDR - 21: Alternative Land Uses Allowed

Alternative land uses within Planning Areas 7 and 16 may be allowed subject to the following conditions.

a) Planning Area 7.

1) Acquisition period. The San Ysidro School District (SYSD) shall have up to 2 years following the issuance of the construction permits for the 921st dwelling unit, or until January 1, 2035, whichever comes later, to acquire all or a portion of the school site in Planning Area 7. Documentation shall be submitted by the SYSD to the applicant and City by the 2-year deadline.

2) The applicant shall provide notification in writing to the SYSD and the City, with the final option for the SYSD to acquire all or a portion of the site for the development of a school, 180 days before submitting a permit application for the development of residential within Planning Area 7.

3) The applicant shall submit documentation that the SYSD declined to acquire all or a portion of the school site for the development of a school within Planning Area 7.

b) Planning Area 16.

1) The SYSD shall have up to 2 years following the issuance of the construction permits for the 921st dwelling unit or until January 1, 2032, whichever comes later, for Planning Area 16, to determine the need for the school site within Planning Area 16.

2) The applicant shall provide notification in writing to the SYSD and the City, with the final option for the SYSD to acquire all or a portion of the site for the development of a school, 180 days before submittal of a permit application for the development of residential within Planning Area 16.

3) The applicant shall submit documentation that the SYSD declined to acquire all or a portion of the school site for the development of a school within Planning Area 16.

4) If the regulations above ((b)(1-3)) have been satisfied, then the medium residential density land use designation shall apply to Planning Area 16, and it may be developed up to a maximum of 136 dwelling units.

SDR - 22: Residential Density

a) Development with a residential use shall not have a density that exceeds the maximum density for a planning area as shown in *Table 2.1*.

b) Development with a residential use shall not have a density below the minimum of the density for a planning area in *Table 2.1*, except if a development provides dedication or easement for open space conservation.

SDR - 23: Stormwater Drainage Design

a) Stormwater drainage discharge from development shall be directed away from the San Ysidro landslide complex area.

b) Flows directed to the Spring Canyon sub-watershed shall be subjected to hydromodification management plan requirements and enhanced detention requirements based on the Detention Notice for a 5-year, 10-year, 25-year, 50-year, and 100-year storm events.

SDR - 24: Fire Plan

Any development that includes more than 200 dwelling units shall submit a Fire Plan showing two separate access points located a distance not less than half of the maximum overall diagonal dimension of the planning area(s) where the development is located.

SDR - 25: Wildlife Corridor Crossings

a) Beyer Boulevard West shall be designed, constructed, and maintained to allow for wildlife movement through a wildlife overcrossing and three culverts under the roadway, as shown in *Figure 5.23, Beyer Boulevard West Wildlife Corridor Crossings*, to the satisfaction of the City Manager and the City Engineer.

b) Overcrossing.

1) Location. A wildlife overcrossing shall be constructed across Beyer Boulevard West, approximately 515 feet west of the Specific Plan area boundary, in the location of existing high-use wildlife movement patterns through an existing drainage swale area consistent with the Multiple Species Conservation Program Subarea Plan and Area Specific Management Directives for Otay Mesa.

2) Dimensions. The wildlife overcrossing shall have a minimum width of 32 feet and a minimum length of 60 feet.

3) Ends. The overcrossing shall be designed with ends to mimic the existing topographic conditions and include flared entrances to encourage wildlife entry.

4) Slopes. Slopes adjacent to the overcrossing ends shall also be revegetated with native vegetation to match the surrounding habitats.

c) Undercrossing. The Beyer Boulevard extension shall have 3 small animal-undercrossing culverts where the right-of-way crosses conserved habitat open space areas.

1) Location. The culverts shall be installed to provide passage for small animals between Moody Canyon and habitat areas to the south.

2) Dimensions. The culverts shall have a minimum height of 6 feet and a minimum length of 103 feet.

3) Ends. The culvert ends shall also be designed with flares at the ends to encourage entry.

d) Fencing.

1) Wildlife fencing shall be installed concurrently during the construction of Beyer Boulevard West.

2) Location. Chain-link fencing or similar exclusion fencing shall be constructed along the length of Beyer Boulevard West on both the north and south sides to prevent wildlife crossings along the roadway and to funnel wildlife toward the wildlife crossings. The precise location (elevation) of the fencing on the slope shall be determined during the final engineering of Beyer Boulevard West.

3) Height.

A. The height of the fencing shall be based on the slope aspect in relation to the fence, with fence heights being a minimum of 6 feet and a maximum of 8 feet, depending on the orientation of the slope.

B. Fence heights shall vary with topographic conditions to ensure adequate control of wildlife movement away from the roadway.

C. Where the fence is located mid-slope with a wildlife usage area located above the fence line, the height of the fence shall be 8 feet.

D. Where the fence is located at grade or with a wildlife use area located downslope of the fence, the height of the fence shall be 6 feet.

4) Installation.

A. Wildlife fencing shall be installed a minimum of 6 inches below grade to prevent animals from burrowing under.

B. A fine mesh shall be installed along the bottom two feet of the fence to prevent small animal movement through the fence.

e) Gate. Near the western end of the proposed Beyer Boulevard West, where vehicular access is needed for an SDG&E easement, a gate shall be added on the north and south sides of the roadway to allow for vehicular entry while keeping wildlife from entering the roadway.

f) Landscaping.

1) The wildlife overcrossing surface shall be landscaped with native plants and native soil at a minimum depth of 3 feet.

2) Soils for the overcrossing shall originate from the surface layer of the surrounding native soils.

3) The following plant palette shall be used for landscaping the wildlife overcrossing:

A. Coastal cholla (Cylindropuntia prolifera)

B. California encelia/Bush sunflower (Encelia californica)

C. Laurel sumac (Malosma laurina)

D. Coast prickly pear (Opuntia littoralis)

E. Bladderpod (Peritoma arborea)

F. Lemonade berry (Rhus integrifolia)

G. Black sage (Salvia mellifera)

H. Mojave yucca (Yucca schidigera)

I. Purple needlegrass (Stipa pulchra)

J. Small flowered needlegrass (Stipa lepida)

K. Other species native to the Otay Mesa region may also be added to the planting palette, to the satisfaction of the City Biologist and Parks and Recreation Director.

   i. Native bushes found in the area that attain 6- to 8-foot heights shall be placed along the sides of the overcrossing to screen the road and provide refugia. Native bushes include lemonade berry and laurel sumac.

   ii. Micro-refugia (e.g., rock or wood structures) shall be incorporated onto the overcrossing and undercrossing surface for small animal stopping points/shelters.

   iii. Native plant landscaping on the southern slope at the wildlife overcrossing shall be designed with vegetation to deter human views toward the overcrossing and deter human use. Native cacti and other uninviting species may be selected to deter human access.

SDR - 26: Bird Safe Glass

a) Where walls with glass or transparent panes are proposed adjacent to land designated as open space, bird-safe glass shall be used to prevent bird collisions to the satisfaction of the Development Services Department Director and City Engineer.

b) Bird safe glass shall include the use of glass with ultraviolet reflective patterns visible to birds but transparent to the human eye, or etched or patterned glass that provides a visual barrier.

a) Patterned or etched glass shall have vertical stripes at least 0.25 inch wide with a maximum spacing of 4 inches, or horizontal stripes that are at least 0.25 inch wide with a maximum spacing of 2 inches in accordance with the guidance provided in the USFWS publication *Low-Cost Methods to Reduce Bird Collisions with Glass, dated June 4, 2021*.

SDR - 27: Transportation Facilities

Developments requesting a subdivision shall demonstrate that public rights-of-way with pedestrian and bicycle facilities within the proposed subdivision align with public rights-of-way within adjacent development and planning areas.

SDR - 28: Recreational Amenity Enhancements

a) Recreational amenity enhancements shall be included within public spaces, parks, and along trails.

b) Amenity enhancement typology and design may vary.

c) Each amenity enhancement shall have an identified value category according to the scale and recreational/ social value it contributes to the recreational needs of the Specific Plan area, consistent with the Parks Master Plan.

d) Development shall provide amenities with a minimum number of recreational value points established by the Parks Master Plan and General Plan Parks Standards.

e) Trail amenity enhancements shall be provided along the perimeter trail, paseos, and sidewalks along the Village Core every one-quarter mile as addressed in ***Section 5.8, Trail Typology***.

SDR - 29: Recreation Value Points Phasing

a) The recreational value points phasing requirements for public spaces, parks, and trails shall be constructed and accepted by the Parks and Recreation Department Director before residential development is permitted beyond the dwelling unit threshold as specified in ***Table 7.1, Recreational Value Points Thresholds***, to the satisfaction of the Development Services Department Director. Refer to ***Table 5.1, Parks Phasing***.

b) If the SYSD declines to acquire all or a portion of the school site for the development of a school on Planning Area 16, a development with residential uses shall provide up to 43 recreational value points based on a maximum number of permitted dwelling units. Refer to ***Section 7.9*** for alternative land uses allowed.

Table 7.1 — Recreational Value Points Thresholds

TOTAL RECREATIONAL VALUE POINTS TO BE ACHIEVED PRIOR TO CORRESPONDING DWELLING UNIT THRESHOLD	DWELLING UNIT THRESHOLD
417	1,315
687	2,16
947	2,986
1,251	3,943
1,627	5,130

7.10 — CONSTRUCTION AND DEVELOPMENT PERMITS

The Specific Plan will be implemented in phases.

7.10.1 — Phase 1 Approvals

The Specific Plan was approved with a Vested Tentative Map and Site Development Permit for Phase 1, which includes Planning Areas 8 to 14.

7.10.2 — Future Phase Approvals

a) Future phasing of the Specific Plan may require additional discretionary approvals and permitting other than what was approved with the Specific Plan.

b) Unless otherwise specified in this section, applications for Development Permits and Construction Permits, as defined by the San Diego Municipal Code (SDMC), shall use Process One through Process Five as established in Chapter 11 Article 2 (Land Development Procedures) and permit types as described in Chapter 12 (Land Development Reviews).

c) All provisions of the SDMC apply except where specified by the Supplemental Development Regulations in ***Section 7.9***.

d) A development permit shall be obtained if development within the Specific Plan Area contains environmentally sensitive lands, as identified by Chapter 14, Article 3, Division 1 (Environmentally Sensitive Lands Regulations). A Site Development Permit may be reduced to a Neighborhood Development Permit for future development within a Transit Priority Area that does not impact wetlands.

e) Future development that is not already addressed in the Otay Mesa Community Plan Update Program Environmental Impact Report (EIR; SCH No. 2004051076) and/or the associated Southwest Village Specific Plan Subsequent EIR and/or does not impact environmentally sensitive lands or result in additional adverse environmental impacts analyzed in the CEQA document shall not require a Site Development Permit and may be processed with a Neighborhood Development Permit.

f) A decision on an application for a minor modification as described in ***Section 7.11*** shall be made in accordance with Process Two Substantial Conformance Review.

g) If a density or intensity transfer is proposed as part of future development, the density/intensity transfer shall be included with the applicable development permit, consistent with ***Section 7.9*** of this Specific Plan.

h) Future development will implement public improvements as identified in ***Table 7.2, Phasing Summary***.

i) Development will be subject to the General Plan population-based park requirements in place at the time of building permit issuance.

j) Public parks and recreational facilities satisfying population-based park requirements shall be designed through a General Development Plan public input process in accordance with City Council CP 600-33.

k) A Comprehensive Sign Plan, processed as a Neighborhood Use Permit, per Chapter 14, Article 1, Division 11, Section 141.1103, shall be submitted during the building permit and site infrastructure process to allow any signs that are inconsistent with or exceed the SDMC Sign Regulations.

l) An Encroachment Maintenance and Removal Agreement shall be obtained for any non-standard lighting, gateway, or wayfinding signage within the public right-of-way.

7.11 — MINOR MODIFICATIONS

a) Minor modifications shall be consistent with the vision and intent of the Specific Plan.

b) Minor modifications are subject to review and approval by the Development Services Department Director or his/her designee.

c) Minor modifications shall be consistent with the vision and intent of the Specific Plan and may include, but are not limited to, the following:

1) Decrease in overall Specific Plan density and intensity may be approved if the density and intensity for each planning area remains within the density range of the planning area's land use designation as applied by the Specific Plan.

2) Adjustment in the size of planning areas may be approved if the adjustment will result in parcels that align with the planning area boundaries and the density and intensity of development for each planning area remain within the density range of the planning area's land use designation as applied by the Specific Plan.

3) Adjustment to open space acreage may be approved if the revised open space boundaries comply with the open space designations shown with the Specific Plan area by the Otay Mesa Community Plan Land Use Plan.

4) Adjustments to the Multi-Habitat Planning Area boundaries may be approved where the new Multi-Habitat Planning Area boundary would result in an area of equivalent or higher biological value. The determination of the biological value will be made by the City in accordance with Section 5.4.2 of the Multiple Species Conservation Program Plan, with the concurrence of the wildlife agencies. Any adjustment to the Multi-Habitat Planning Area boundary will be disclosed in the environmental document prepared for the specific project and shall comply with the Environmentally Sensitive Lands Regulations.

5) Consolidation of Planning Areas may be approved if the consolidation will result in contiguous Planning Areas that have the same land use designation, as shown in ***Figure 2.1, Southwest Village Land Use Plan***, and the consolidated Planning Area will have the same development intensity allowance as the total of individual Planning Areas before they were combined.

6) The consolidated Planning Area shall have the same required infrastructure and accessible park and recreational amenities, meeting the recreational value-based standard in the Specific Plan.

7) Alternative land use development of residential and recreational uses in place of a school within Planning Area 16, subject to the supplemental development regulations in ***Section 7.9***.

8) Alternative land use development of residential in place of a school within Planning Area 7, subject to the supplemental development regulations in ***Section 7.9***.

9) Changes to landscape, wall material, wall alignment, and streetscape design may be approved if the changes substantially conform to the intent of the design policies in the Specific Plan.

10) Density transfers between planning areas, subject to the supplemental development regulations in ***Section 7.9***.

d) Minor modifications to improvements and infrastructure, listed in ***Section 7.13*** within and outside of the Specific Plan area, may occur in an alternative phase if development occurs outside of its designated phase shown in ***Table 7.2, Phasing Table***, per approval of the City Engineer. All changes to the final sizing and precise location of water, sewer, storm drainage, and other infrastructure improvements are subject to the approval of the City Engineer.

e) Adjustments to the wildlife crossing dimensions to address engineering and site conditions will require an updated wildlife crossing study to the satisfaction of the City Engineer and Parks and Recreation Director.

7.12 — SPECIFIC PLAN AMENDMENTS

a) All Specific Plan modifications that do not meet the criteria of a Minor Modification as defined in ***Section 7.11*** shall require a Specific Plan Amendment.

b) Specific Plan Amendments shall be processed pursuant to Process Five, as established in Division 5, Article 2, Chapter 11, requiring the approval of the City Council.

7.13 — PHASING

a) Implementation of Southwest Village will require construction of new infrastructure and facilities, as well as improvements to existing infrastructure and facilities, as part of a proposed development. Improvements will be necessary to the circulation network, drainage facilities, utilities (e.g., water, sewer, etc.), and other infrastructure. In addition, the Specific Plan includes provisions for streetscape enhancement, pedestrian elements, and overall design guidance. These improvements will be phased according to the associated planning area(s) being developed.

b) While ***Table 7.2, Phasing Summary***, provides the targeted land use assumptions in chronological order, it does not dictate the exact sequence in which development may occur. Flexibility in the sequence (phasing) of development in the Specific Plan area shall be allowed without constituting an amendment to the Specific Plan, provided it can be demonstrated that all infrastructure improvements and public facilities required for the phase of development in question are in place or will be constructed as part of the development.

c) The necessary infrastructure and public facilities required for each phase of development shall be constructed as part of the development, or may be necessary to construct prior to the construction of the development, consistent with ***Table 7.2, Phasing Summary***, below, and the Southwest Village Specific Plan Transportation Phasing Plan, included as ***Appendix F*** of this document.

d) The Southwest Village Environmental Impact Report (EIR) analyzed the comprehensive build-out of the Specific Plan area and identified an appropriate Mitigation, Monitoring, and Reporting Program. The Southwest Village Local Mobility Analysis (Appendix J-4 to the EIR) analyzes the roads associated with two phases of development for Vesting Tentative Map (VTM)-1 (the first 920 dwelling units).

e) The Southwest Village Transportation Phasing Plan will help ensure that the appropriate circulation system is provided as the project builds out over an extended period.

f) Infrastructure improvements, including water, sewer, drainage, landscaping, and dry utilities, will also be phased in a logical progression to meet the development needs associated with each phase. Depending on when a development applies for development permits, certain infrastructure shall be installed relevant to its location and scale, in addition to the timing. For example, the sewer pump station at the terminus of Street D would need to be installed at the time Planning Areas 15 through 22, as well as portions of Planning Areas 24 and 25, are constructed.

g) ***Table 7.2, Phasing Summary***, summarizes each of the phases of development. It is anticipated that the Specific Plan area will be developed in multiple phases over time due to the multiple property ownership. This Specific Plan does not require that phases occur in any special order. Phasing may occur in any order, and more than one phase may occur at one time, provided that the necessary infrastructure is in place or occurs concurrently as specified in each phase(s) of development. For example, Beyer Boulevard shall be extended to the west prior to the 700th dwelling unit in Phase 1. ***Figure 7.1, Phasing*** illustrates the implementation of the Specific Plan by Planning Area.

7.14 — DEVELOPMENT IMPACT FEES

a) Pursuant to SDMC Section 142.0640(f), development impact fees may be used for a Reimbursement Agreement for the development of eligible public infrastructure and facility projects.

b) Pursuant to SDMC Section 142.0640(b)(9), development that designs and constructs an on-site park that satisfies the development's population-based park requirements and is constructed in accordance with Council Policy 600-33 and meets the Parks Master Plan standards can get a waiver for up to 90% of the Citywide Parks DIF.

Table 7.2 — Phasing Summary

PHASE / TARGET LAND USE ASSUMPTIONS	ON-SITE IMPROVEMENTS	OFF-SITE IMPROVEMENTS
Phase 1		
Planning Areas • 8, 9, 10, 11, 12, 13, 14 1,315 Maximum Residential Units: • 282 Multifamily Residential (20-44 du/ac) • 490 Multifamily Residential (15-29 du/ac) • 543 Single Family Residential (8-22 du/ac)	Mobility Network. The following shall be constructed: • Beyer Boulevard West (from West Avenue to the western Specific Plan boundary) shall be constructed prior to the 700th dwelling unit in Phase 1. • Beyer Boulevard East (from Caliente Avenue to West Avenue, northern half of the street) • Central Avenue (from Caliente Avenue to Beyer Boulevard) • Street A (from western cul-de sac to West Avenue) • West Avenue (western half of the street from Beyer Boulevard to Street B and full width south of Street B) • Beyer Boulevard / Central Avenue Intersection (interim conditions per Southwest Village Specific Plan Transportation Phasing Plan (Appendix F)) • T-intersection at Caliente Avenue/Central Avenue • Secondary Emergency Vehicle Access Road (shall be constructed at the 201st dwelling unit) Parks and Trails. The following shall be constructed: • Planning Area 8 Pocket Park: HH • Planning Area 9 Pocket Park: II • Planning Area 10 Pocket Parks: AA, BB, CC, and DD • Planning Area 10 Paseos • Planning Area 11 Pocket Parks: MM and OO • Planning Area 12 Pocket Parks: SS, XX • Planning Area 12 Paseos • Planning Area 13 Pocket Parks: PP, RR • Planning Area 13 Paseos • Planning Area 14 Pocket Parks: YY • Planning Area 14 Paseos • Multi-use Perimeter Trail and trail amenities (Specific Plan area entrance at Caliente Avenue to the eastern boundary of Planning Area 14) • Primitive Trails Type A that connect to Planning Areas 12 and 14 (including the closure of non-conforming trails adjacent to these trails) Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Areas 8 - 14 • 16-inch water line backbone loop along Central Avenue, Beyer Boulevard between Central Avenue and West Avenue, and along West Avenue • 18-inch gravity sewer line along Beyer Boulevard and West Avenue. Eight-inch gravity sewer along Street A in Planning Areas 11-14	Mobility Network: The following shall be constructed: • Beyer Boulevard from the Specific Plan boundary to Enright Drive shall be constructed prior to the 700th dwelling unit in Phase 1 • Intersection of Caliente Avenue at SR- 905 westbound ramp: re-stripe the northbound single left turn lane into a dual left turn lane, upgrade the traffic controller, and construct a second receiving lane to the westbound on-ramp • Intersection of Caliente Avenue at SR- 905 eastbound ramp: upgrade traffic controller • Intersection of Caliente Avenue/Ocean View Hills/Otay Mesa Road: upgrade traffic controller • Intersection of Caliente Avenue/Airway Road: upgrade traffic controller • Caliente Avenue from the existing southern terminus to Central Avenue • Secondary Emergency Vehicle Access Road, from the Specific Plan boundary to Rail Court to the southwest, will be required to be constructed at the 201st dwelling unit Park and Trails: The following shall be constructed: • Primitive Trails Type A

PHASE / TARGET LAND USE ASSUMPTIONS	ON-SITE IMPROVEMENTS	OFF-SITE IMPROVEMENTS
Phase 2		
Planning Areas • 15, 16, 17, 18, 19, 20 988 Residential Units: • 237 Multifamily Residential (15-29 du/ac) • 136[1] Contingency Multifamily Residential in Planning Area 16 (15-29 du/ac) • 615 Single Family Residential (8-22 du/ac)	Mobility Network. The following shall be constructed: • Caliente Avenue from Central Avenue to Beyer Boulevard • Caliente Avenue / Beyer Boulevard Intersection • South Caliente Avenue (full-width north of Beyer Boulevard and south of Street B) • South Caliente Avenue (eastern half of the street from Beyer Boulevard to Street B) • Street B (full-width east of South Caliente Avenue) • Street B (southern half of the street from West Avenue to South Caliente Avenue) • Street C (all segments) • Street D (all segments) • East Avenue (all segments) Parks and Trails. The following shall be constructed: • Neighborhood Park in Planning Area 17 • Paseo along Street C (from West Avenue to East Avenue) • Paseo between Planning Area 19 and 20 • Multi-use Perimeter Trail (Terminus of Phase 1 to northern boundary of Planning Area 19) • Public multi-use Perimeter Trail in Planning Areas 15, 18, and 19 • Public mini/pocket parks in Planning Areas 19 and 20 • Perimeter Trail in Planning Area 20 • Primitive Trails Type A that connect to Planning Areas 15 and 18 (including the closure of non-conforming trails adjacent to these trails) Other Infrastructure • Landscape infrastructure in Planning Areas 15 - 20 • Southwest Village Elementary School (1) (Planning Area 16) • Sewer Pump Station east of Street D	Other Infrastructure. The following shall be constructed: • A 16-inch water line in Otay Mesa Road and Beyer Boulevard between Enright Drive and Princess Park Pump Station. • A conditional assessment report to determine the required upgrades at the Princess Park Pump Station to provide a redundant water supply. • Upsize the existing 12-inch gravity sewer to 27 inches in East Beyer Boulevard between Beyer Boulevard and the rail right-of-way. • Upsize the existing 18-inch gravity sewer to 33 inches in East Beyer Boulevard and Center Street between Hill Street and East San Ysidro Boulevard.

1. If the SYSD determines that a school is no longer needed on Planning Area 16, the site will default to Medium Density Residential use. Although the contingency for Planning Area 16 would result in approximately 136 additional dwelling units, the maximum dwelling unit cap of 5,130 units would still apply.

PHASE / TARGET LAND USE ASSUMPTIONS	ON-SITE IMPROVEMENTS	OFF-SITE IMPROVEMENTS
Phase 3		
Planning Areas • 4, 5 819 Multifamily Residential (15-29 du/ac) units	Mobility Network. The following shall be constructed: • 1st Avenue • Spine Road • Central Avenue (Caliente Avenue to 1st Avenue) Parks and Trails. The following shall be constructed: • Public mini/pocket parks in Planning Area 5 • Public multi-use Pathway (internal to Planning Area 5) • Public multi-use Perimeter Trail (Planning Area 5) • Paseo Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Areas 4 and 5 • 12-inch sewer force main along Spine Road • 10-inch gravity sewer line along Caliente Avenue from the terminus to Beyer Boulevard • Sewer Lift Station	
Phase 4		
Planning Areas: 1, 2, 3, 6, 7 384 Multifamily Residential (15-29 du/ac) units	Parks and Trails. The following shall be constructed: • Public multi-use Perimeter Trail in Planning Area 6 and 7 • Public neighborhood park in Planning Area 2 and 3 Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Areas 1, 2, 3, 6, and 7 • [Water/sewer improvements to be determined]	Mobility Network. The following shall be constructed: • Improve Beyer Boulevard between East Beyer Boulevard and Enright Drive to a Modified 4-Lane Urban Collector with buffered Class II bike lanes prior to the 3,298th dwelling unit. Parks and Trails. The following shall be constructed: • Eastern Quadrant Trails – Segment number(s) to be determined Other Infrastructure. The following shall be constructed: • Upsize existing 10-inch gravity sewer to 15 inches in Beyer Boulevard between Enright Drive and East Beyer Boulevard.

PHASE / TARGET LAND USE ASSUMPTIONS	ON-SITE IMPROVEMENTS	OFF-SITE IMPROVEMENTS
Phase 5		
Planning Areas: 21 306 Multifamily Residential (8-22 du/ac) units	Parks and Trails. The following shall be constructed: • Paseo (bike/pedestrian connection- South Caliente Avenue to East Avenue) • Public mini/pocket parks in Planning Area 21 Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Area 21 • [Water/sewer improvements to be determined]	
Phase 6		
Planning Areas: 22 267 Multifamily Residential (15-29 du/ac) units	Mobility Network. The following shall be constructed: • Emergency Vehicle Access Road from South Caliente Avenue to East Avenue Parks and Trails. The following shall be constructed: • Public pocket park(s) in Planning Area 22 Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Area 22 • [Water/sewer improvements to be determined]	
Phase 7		
Planning Areas: 24, 25, 26, 27 1,187 Multifamily Residential (30-62 du/ac) units 175,000 square feet of commercial uses	Mobility Network. The following shall be constructed: • Central Ave from Beyer Boulevard East to Street B • Street A from West Avenue to South Caliente Avenue • Beyer Boulevard (southern half of the street from West Avenue to South Caliente Avenue) • West Avenue (eastern half of the street from Beyer Boulevard to Street B) • Street B (northern half of the street) • South Caliente Avenue (western half of the street from Beyer Boulevard East to Street B) Parks and Trails. The following shall be constructed: Pocket parks and urban plazas in the Village Core (Planning Areas 24 - 27) Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Areas 24 - 27 • Mobility hub with public transit stop	Other Infrastructure. The following shall be constructed: • Upsize the existing 15-inch gravity sewer to 27 inches in East Beyer Boulevard between the rail right-of-way and Hill Street. • Perform efficiency testing at Ocean View Hills Pump Station.
Total Dwelling Units: 5,130 Commercial Square Footage: 175,000		

Figure 7.1 — Phasing

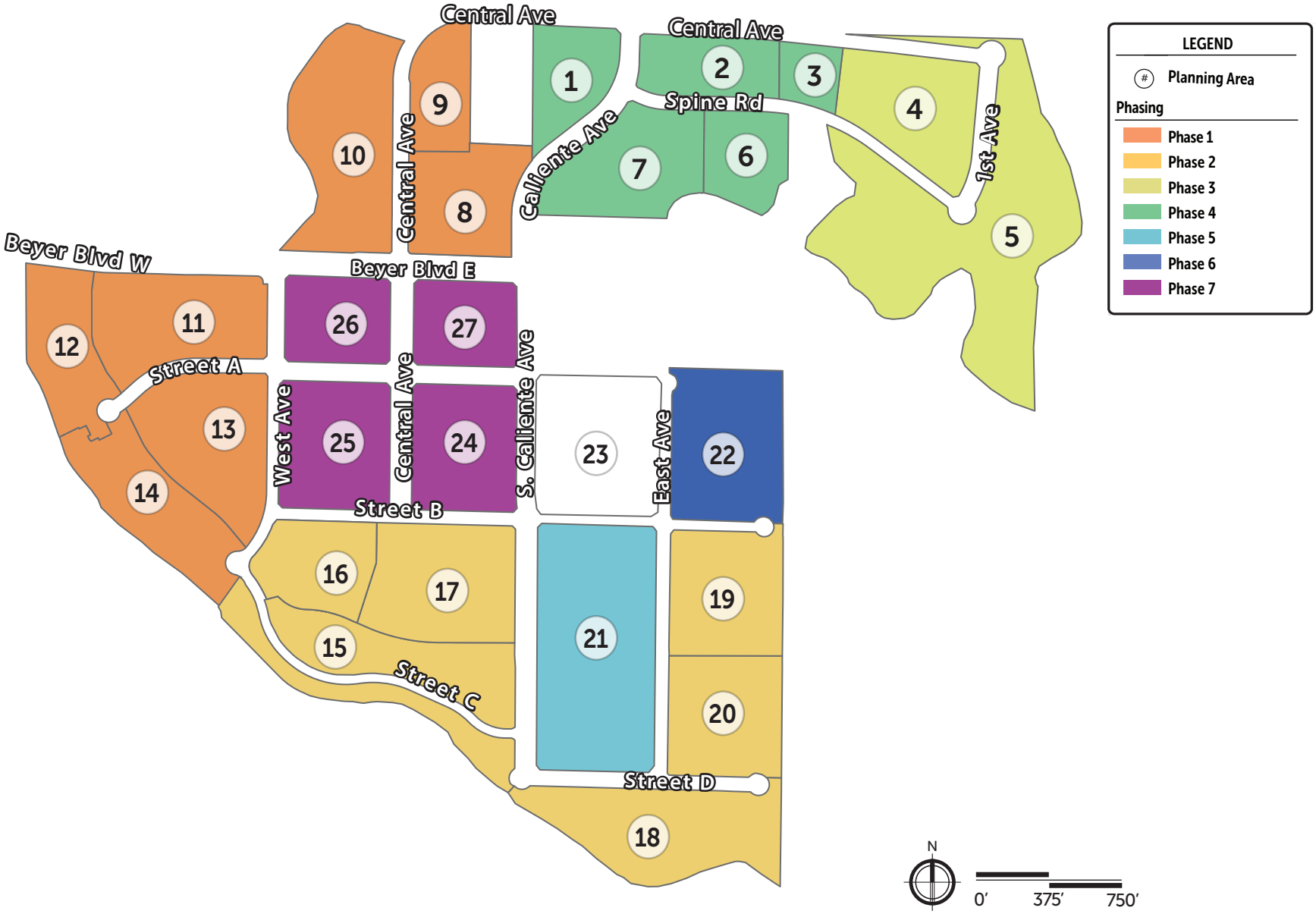
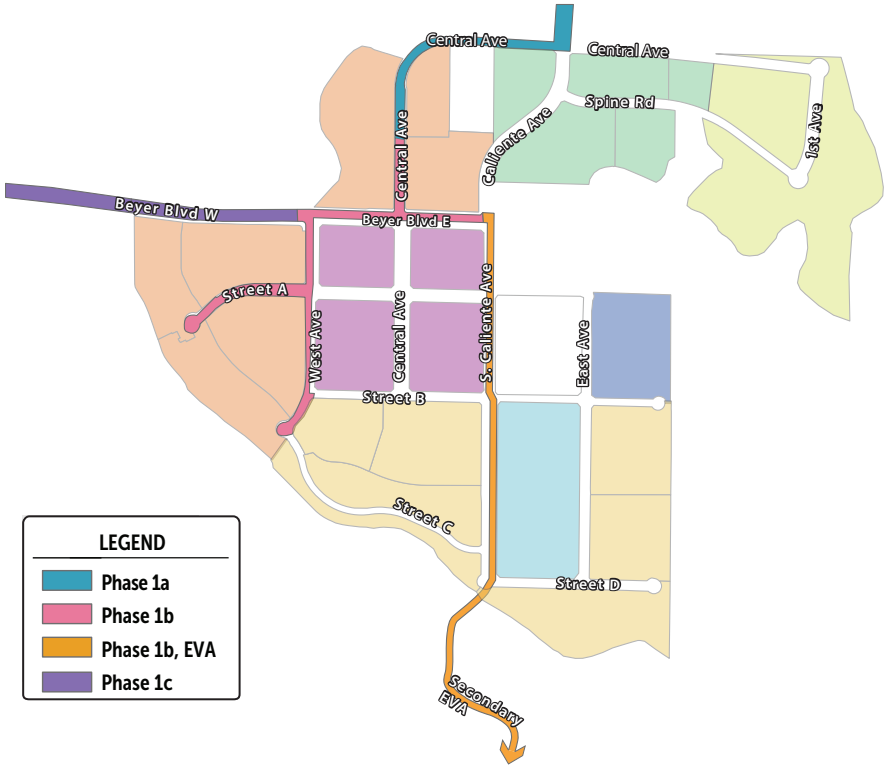


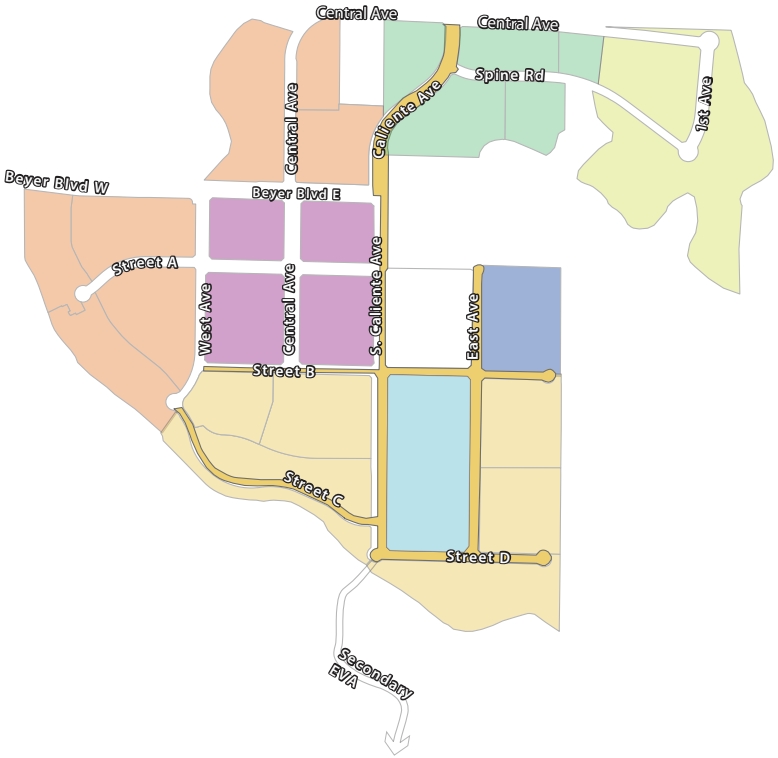
Figure 7.2 — Phase 1 Roadways



Note: Phase 1b, Secondary Emergency Vehicle Access Road at the eastern terminus of East Beyer Boulevard and the future South Caliente Avenue intersection, extending south to Rail Court, as shown, will be implemented at the 201st dwelling unit. Refer to Section 7.9, Supplemental Development Regulations

Note: Phase 1c, Beyer Boulevard West, will be implemented prior to the 700th dwelling unit in Phase 1.

Figure 7.3 — Phase 2 Roadways

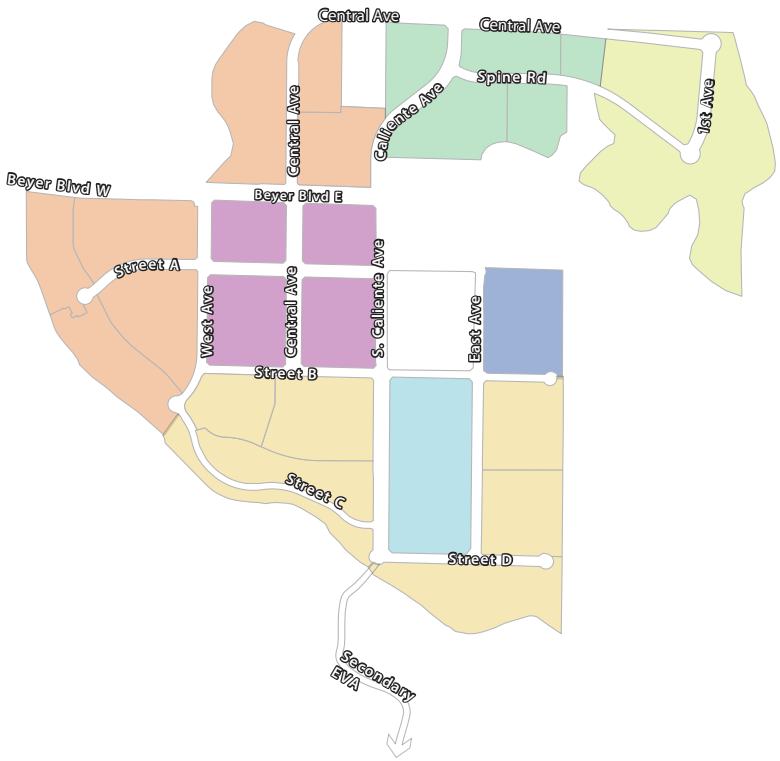


Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court.

Figure 7.4 — Phase 3 Roadways

Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court.

Figure 7.5 — Phase 4 Roadways



Note: Off-site improvements will widen Beyer Boulevard between East Beyer Boulevard /Otay Mesa Road to Enright Drive prior to the 3,298th dwelling unit.

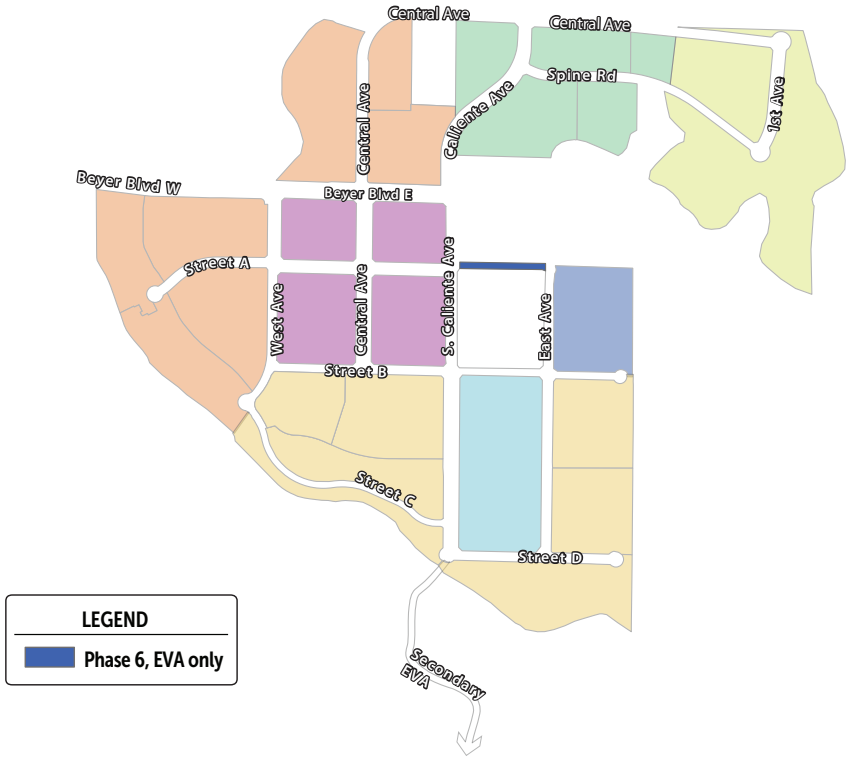
Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court.

Figure 7.6 — Phase 5 Roadways

Note: No additional streets are expected to be required in this phase.

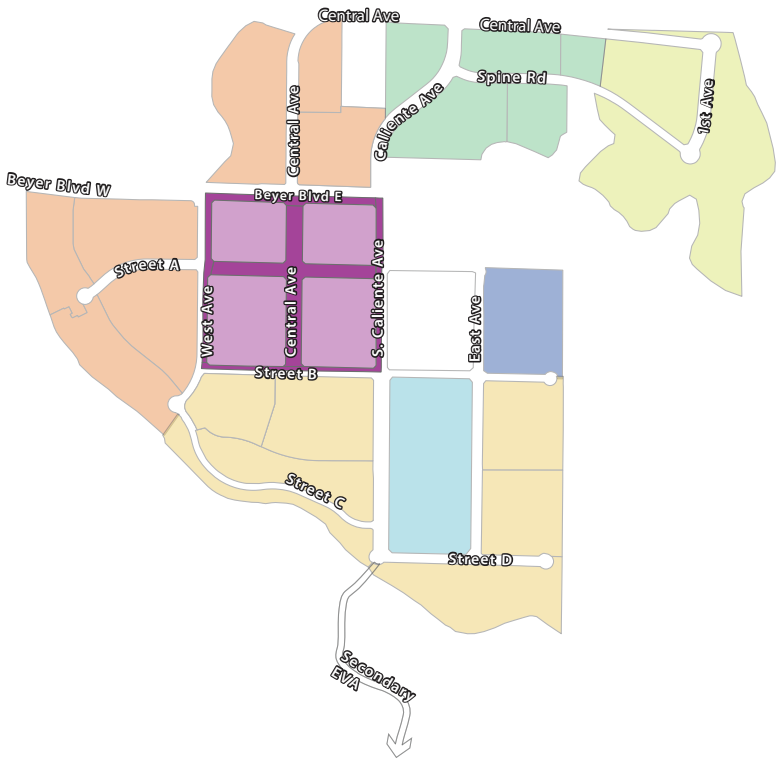
Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court.

Figure 7.7 — Phase 6 Roadways



Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court..

Figure 7.8 — Phase 7 Roadways



Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court.

Table 7.3 — Trip Generation by Phase

PHASE & LAND USE		RESIDENTIAL DAILY TRIP RATES	NON-RESIDENTIAL DAILY TRIP RATES	DAILY TRIPS	AM PEAK HOUR TRIPS			PM PEAK HOUR TRIPS		
					IN	OUT	TOTAL	IN	OUT	TOTAL
1	City SD Trip Rates: Single Family	10 /DU 543 DU		5,430	20% 87	80% 347	8% 434	70% 380	30% 163	10% 543
	City SD Trip Rates: Multi-Family < 20 du/ac	8 /DU 490 DU		3,920	20% 63	80% 251	8% 314	70% 274	30% 118	10% 392
	City SD Trip Rates: Multi-Family > 20 du/ac	6 /DU 282 DU		1,692	20% 27	80% 108	8% 135	70% 106	30% 46	9% 152
	Phase 1 Totals	1,315 DU		11,042	177	706	883	761	326	1,087
2	City SD Trip Rates: Single Family	10 /DU 615 DU		6,150	20% 98	80% 394	8% 492	70% 431	30% 185	10% 615
	City SD Trip Rates: Multi-Family < 20 du/ac	8 /DU 237 DU		1,896	20% 30	80% 122	8% 152	70% 133	30% 57	10% 190
	City SD Trip Rates: Elementary School (1)		2.9 /Student 600 Students	1,740	60% 323	40% 216	31% 539	40% 132	60% 199	19% 331
	City SD Trip Rates: Developed Park		50 /Acre 10.5 Acres	525	50% 11	50% 11	4% 21	50% 21	50% 21	8% 42
	Phase 2 Totals	852 DU		10,311	463	742	1,204	717	461	1,178
3	City SD Trip Rates: Multi-Family < 20 du/ac	8 /DU 819 DU		6,552	20% 105	80% 419	8% 524	70% 459	30% 197	10% 655
4	City SD Trip Rates: Developed Park		50 /Acre 7.6 Acres	380	50% 6	50% 6	4% 14	50% 15	50% 15	8% 30
	City SD Trip Rates: Elementary School (2)		2.9 /Student 668 Students	1,937	60% 361	40% 240	31% 601	40% 147	60% 221	19% 368
	City SD Trip Rates: Multi-Family < 20 du/ac	8 /DU 384 DU		3,072	20% 49	80% 197	8% 246	70% 215	30% 92	10% 307
	Phase 4 Totals	384 DU		5,389	416	443	861	377	328	705
5	City SD Trip Rates: Multi-Family < 20 du/ac	8 /DU 306 DU		2,448	20% 39	80% 157	8% 196	70% 172	30% 74	10% 245
6	City SD Trip Rates: Multi-Family < 20 du/ac	8 /DU 306 DU		2,136	20% 34	80% 137	8% 171	70% 150	30% 64	10% 214
7	City SD Trip Rates: Multi-Family > 20 du/ac	6 /DU 1,187 DU		7,122	20% 114	80% 456	8% 570	70% 449	30% 192	9% 641
	City SD Trip Rates: Community Shopping Cnt		70 /KSF 175 KSF	12,250	60% 221	40% 147	3% 368	50% 613	50% 613	10% 1,226
	Phase 7 Totals	1,187 DU		19,372	335	603	938	1,062	805	1,867
Overall Target Density/Intensity		5,130 DU	175 KSF 1 School (1) Comm. & 1 Park	57,250	1,569	3,208	4,777	3,696	2,254	5,950
Total Remaining		5,130 DU	175 KSF 1 School (1) Comm. & 1 Park	57,250	1,569	3,208	4,777	3,696	2,254	5,950

Source: City of San Diego Trip Generation Manual, May 2003. DU: Dwelling Unit, KSF=1,000s.f. (1) In the unlikely event a school is not needed on PA 16, the planning area will default to Medium Density Residential use. Although the contingency for Planning Area 16 would result in approximately 136 additional dwelling units, the maximum dwelling unit cap of 5,130 units would still apply. Comm. = Commercial

7.15 — MAINTENANCE

Table 7.4, Maintenance Responsibilities, summarizes the anticipated long-term maintenance responsibilities for facilities within the Southwest Village Specific Plan area.

Table 7.4 — Maintenance Responsibilities

FACILITY	RESPONSIBILITY
Public Common Open Space (Including Common Area Slopes)	Master Maintenance Association
Common Area Slopes (Including Common Area Slopes)	Master Maintenance Association
Private Common Open Space	Master Maintenance Association
Public Roadways	City of San Diego
Standard Public Road Improvements	City of San Diego
Landscape Elements of Public Roadways	Master Maintenance Association / Maintenance Assessment District
Private Drives	Master Maintenance Association
School Site	San Ysidro School District or other school operator
City-Owned Parks and Trails	City of San Diego
Privately-Owned Parks and Trails	Master Maintenance Association
Pedestrian Paseos (outside the Public Right-of-Way)	Master Maintenance Association
Natural Open Space	Master Maintenance Association
Community Monuments and Hardscaping (outside the Public Right-of-Way)	Master Maintenance Association
Brush Management Zones	Master Maintenance Association / private property owner
Potable Water Facilities	City of San Diego
Wastewater Treatment and Conveyance Facilities	City of San Diego
Storm Drain Facilities (within the Public Right-of-Way)	City of San Diego
Storm Drain Facilities (within private streets)	Master Maintenance Association
Detention / Water Quality Basins	Master Maintenance Association
Pedestrian-Scale Lighting (within the Public Right-of-Way)	Master Maintenance Association
Lighting (in common areas outside the Public Right-of-Way)	Master Maintenance Association
Wayfinding Signage	Master Maintenance Association

7.16 — AIRPORT INFLUENCE AREA

Property within the Specific Plan area is located in the vicinity of an airport, within what is known as an Airport Influence Area (AIA). For that reason, properties within the Specific Plan area may be subject to some of the annoyances or inconveniences associated with proximity to airport operations, which can include noise, vibration, or odors. A formal overflight disclosure statement will be recorded in each property's chain of title to inform current and prospective property owners about the potential airport-related effects.

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APPENDICES

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A

LANDSCAPE PLANT PALETTE

Table A.1 — Neighborhood Plant Palette

TREES (24" box min.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Albizia julibrissin[1]	Mimosa	30x40	L	Canopy
Cinnamomum camphora	Camphor Tree	20x20	M	
Lagerstroemia indica	Crape Myrtle	25x12	M	Upright/Deciduous
Geijera parviflora	Australian Willow	20x15	L	Upright/Evergreen
Tipuana tipu	Tipu Tree	25x25	L	Canopy
Quercus agrifolia	Coast Live Oak	25x20	L	
Podocarpus gracilior	Yew Pine	20x15	M	Upright/Evergreen
Parkinsonia aculeata[1]	Palo Verde	20x20	L	Upright/Deciduous
Pistacia chinensis[1]	Chinese Pistache	40x40	M	Broadhead

SHRUBS (60% 5 gal./ 40% 5 gal.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Agave attenuata	Foxtail Agave	3x3	L	Flowering Accent
Anigozanthos flavidus	Kangaroo Paw	2x3	M	Midstory/Evergreen
Dasylirion wheeleri	Desert Spoon	3x3	L	
Cistus spp.[1]	Rockrose	4x4	L	Flowering Accent
Dietes bicolor	Fortnight Lily	3x3	L	Flowering Accent
Hesperaloe parviflora	Red Yucca	3x3	L	Midstory/Evergreen
Russelia eqquisetiformis	Firecracker Bush	4x4	L	Midstory/Evergreen
Aloe barbadensis	Aloe Vera	3x3	L	Flowering Accent
Salvia leucantha 'Midnight'	Mexican Bush Sage	3x3	L	Flowering Accent
Rhus ovata	Sugar Bush	6x6	VL	Large Background

Table A.1 — Neighborhood Plant Palette (Continued)

GROUNDCOVER (pots @ 12" o.c.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Carex pansa	California Meadow Sage	1x1	M	Parkways
Senecio mandraliscae	Blue Chalk sticks	1x3	L	Parkways

1. This plant species shall be planted at least 200 feet away from Non-Developable Open Space and MHPA areas identified on Figure 5.22 of this Specific Plan.

Table A.2 — Streetscapes and Entries Plant Palette

TREES (24" box min.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Lophostemon confertus	Brisbane Box	35 x 35	M	Upright/Evergreen
Jacaranda mimosifolia	Jacaranda	25 x 30	M	
Magnolia grandiflora	Southern Magnolia	60x40	M	
Cercidium 'Desert Museum'	Desert Museum Palo Verde	20x20	L	Upright/Deciduous
Platanus racemosa	California Sycamore	60x50	M	Upright/Deciduous
Quercus agrifolia	Coast Live Oak	50x45	VL	Broadhead
Rhus lancea[1]	African Sumac	25x25	L	Multi-trunked

PALMS (only to be used as special markers of entries and not to be located within 100 feet of homes)

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Chamaerops humilis	Mediterranean Fan Palm	20 x 20	M	
Trachycarpus fortunei	Windmill Palm	30X10	M	
Brahea armata	Mexican Blue Palm	30X15	L	
Phoenix dactylifera[1]	Date Palm	60X20	L	

Table A.2 — Streetscapes and Entries Plant Palette (Continued)

SHRUBS (25% 15 gal./50% 5 gal/ 25% 1 gal) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Agave attenuata	Fox Tail Agave	3x3	L	Flowering Accent
Agave SPP	Agave	3x3	L	Accent shrub
Aloe saponaria	African Aloe	3x3	L	Midstory Shrub
Anigozanthos flavidus	Kangaroo Paw	2x3	M	Flowering Shrub
Cistus spp.[1]	Rockrose	4x4	L	Flowering Shrub
Dasylirion wheeleri	Desert Spoon	5x6	VL	Midstory Shrub
Escallonia fradesii	Escallonia	4x4	M	
Leptospermum scoparium[1]	New Zealand Tea Tree	6x4	M	Large Background
Russelia equisetiformis	Firecracker Bush	4x4	L	Large Background
Phormium 'Maori Maiden'	New Zealand Flax	4x4	M	Midstory Shrub
Dietes vegeta	Fortnight lily	3x3	L	Midstory Shrub
Rosmarinus 'Prostratus'	Prostrate Rosemary	1x3	L	Low Spreading
Salvia leucantha 'Midnight'	Mexican Sage Bush	3x3	M	Flowering Accent

VINES (100% 15 gal.)

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Bougainvillea spp.	Bougainvillea	4x4	L	San Diego Red
Ficus pumila	Creeping Fig	4x4	M	
Macfadyena unguis-cati	Cat's Claw	15'	L	
Passiflora alatocaerula	Passion Vine	4x4	M	

GRASSES (100% 15 gal.)

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Chondropetalum tectorum	Cape Rush	3x3	L	
Festuca glauca	Blue Fescue	1x1	L	
Helictotrichon sempervirens	Blue Oat Grass	2x2	M	
Muhlenbergia rigens	Deergrass	4x5	L	

Table A.2 — Streetscapes and Entries Plant Palette (Continued)

GROUNDCOVER (1 gal. min.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Convolulus mauritanicus	Ground Morning Glory	1x3	M	Groundcover
Carex pansa	California Meadow Sedge	1x1	M	Groundcover
Dymondia margaretae	Silver Carpet	3"x2	L	Groundcover
Senecio mandraliscae	Blue Chalk Sticks	1x3	L	Groundcover
Verbena peruviana	N.C.N.	2x2	M	

1. This plant species shall be planted at least 200 feet away from Non-Developable Open Space and MHPA areas identified on Figure 5.22 of this Specific Plan.

Table A.3 — Developed Parks Plant Palette

TREES (24" box min.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Albizia julibrissin[1]	Mimosa	30x40	L	Broadhead/Evergreen
Lagestroemia indica	Crape Myrtle	25x12	M	Single Trunk
Prosopis velutina[1]	Velvet Mesquite	30x30	L	Upright/Evergreen
Cercidium 'Desert Museum'	Desert Museum Palo Verde	20x20	L	Upright/Deciduous
Platanus racemosa	Western Sycamore	60x50	S	Upright/Deciduous
Quercus agrifolia	Coast Live Oak	50x45	VL	Broadhead
Rhus lancea[1]	African Sumac	25x25	L	Multi-Trunked
Tipuana tipu[1]	Tipu Tree	25x25	L	Single Trunk

PALMS (only to be used as special markers of entries and not to be located within 100 feet of homes)

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Phoenix dactylifera[1]	Date Palm	60x20	L	
Chamaerops humilis	Mediterranean Fan Palm	20x20	M	
Trachycarpus fortunei	Windmill Palm	30X10	M	
Brahea armata	Mexican Blue Palm	30X15	L	

Table A.3 — Developed Parks Plant Palette (Continued)

SHRUBS (25% 15 gal./50% 5 gal./ 25% 1 gal.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Agave attenuata	Fox Tail Agave	3x3	L	Flowering Accent
Aloe barbadensis	Aloe Vera	3x3	L	Flowering Accent
Aloe saponaria	African Aloe	3x3	L	Flowering Shrub
Anigozanthos flavidus	Kangaroo Paw	2x3	M	Flowering Shrub
Cistus spp.[1]	Rockrose	4x4	L	Flowering Shrub
Calliandra eriophylla	Fairy Duster	3x4	VL	Flowering Shrub
Dietes bicolor	Fortnight Lily	3x3	L	Flowering Accent
Leptospermum scoparium[1]	New Zealand Tea Tree	6x4	M	Large Background
Phormium 'Maori Maiden'	New Zealand Flax	4x4	L	Low Spreading
Rosmarinus spp.	Prostrate Rosemary	1x3	L	Low Spreading
Salvia leucantha 'Midnight'	Mexican Bush Sage	3x3	M	Flowering Accent

VINES (100% 15 gal.)

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Clytostoma callistigiodes	Violet Trumpet Vine	4x4	M	Flowering
Ficus pumila	Creeping Fig	4x4	M	Flowering
Passiflora alatocaerulea	Passion Vine	4x4	M	Flowering
Bougainvillea 'San Diego Red'	San Diego Red Bougainvillea	4x4	L	Flowering

Table A.3 — Developed Parks Plant Palette (Continued)

GRASSES such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Chondropetalum tectorum	Cape Rush	3x3	L	
Festuca glauca	Blue Fescue	1x1	L	
Helictotrichon sempervirens	Blue Oat Grass	1x1	M	
Muhlenbergia rigens	Deergrass	4x5	L	

GROUNDCOVER (1 gal. min.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Carex pansa	California Meadow Sedge	1x1	M	Groundcover
Dymondia margaretae	Silver Carpet	3"x 2	L	Groundcover
Senecio mandraliscae	Blue Chalk Sticks	1x3	L	Groundcover
Festuca spp.	Marathon Sod I	4"x6"	M	Turf

1. This plant species shall be planted at least 200 feet away from Non-Developable Open Space and MHPA areas identified on Figure 5.22 of this Specific Plan.

Table A.4 — Interior Slope Plant Palette

TREES (36" box min.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Jacaranda mimosifolia	Jacaranda	25x30	M	Multi-trunked
Cercis occidentalis	Western Redbud	10x10	L	Multi-trunked
Platanus racemosa	Western Sycamore	60x50	M	Upright/Deciduous
Quercus agrifolia	Coast Live Oak	50x45	VL	Broadhead

SHRUBS (25% 15 gal./ 50% 5 gal./25% 1 gal). such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Cistus spp.[1]	Rockrose	4x4	L	
Escallonia fradesii	Escallonia	4x4	M	
Leptospermum scoparium[1]	New Zealand Tea Tree	6x4	M	Large Background
Salvia Clevelandii	California Blue Sage	3x3	VL	
Rosmarinus 'Prostratus'	Prostrate Rosemary	1x3	L	Low Spreading

VINES (100% 5 gal.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Calliandra eriophylla	Fairy Duster	4x4	VL	
Ficus pumila	Creeping Fig	4x4	M	
Bougainvillea spp.	Bougainvillea	4x4	L	'San Diego Red'

GROUNDCOVER (pots @ 12" o.c.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Coprosma kirkii	N.C.N.	2x4	M	
Ceanothus griseus horizontalis	Carmel Creeper	2x5	L	

1. This plant species shall be planted at least 200 feet away from Non-Developable Open Space and MHPA areas identified on Figure 5.22 of this Specific Plan.

Table A.5 — Exterior Slope Plant Palette for Manufactured Slopes

TREES (15-gal. min.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Arbutus x 'marina'	Strawberry Tree	25x25	L	Upright
Parkinsonia aculeata	Palo Verde	20x20	L	Upright/Deciduous
Platanus racemosa	Western Sycamore	60x50	M	Upright/Deciduous
Populus fremontii	Fremont Cottonwood	60x25	L	Vertical/Deciduous
Quercus agrifolia	Coast Live Oak	50x45	VL	Broadhead
Rhus lancea[1]	African Sumac	25x25	L	Multi-Trunked

SHRUBS (25% 5 gal. / 75% 1 gal.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Ceanothus 'Julia Phelps'	California Lilac	5x8	L	
Cercocarpus betuloides	Mountain Mahogany	6x6	VL	
Heteromeles arbutifolia	Toyon	25x20	L	
Rhus laurina	Laurel Sumac	10x10	VL	
Rhamnus crocea	Spiny Redberry	3x5	VL	
Rhus integrifolia	Lemonade Berry	10x15	VL	
Ribes speciosum	Fuscia Flowered Gooseberry	6x6	L	
Yucca spp.	Yucca	50	L	
Iva havesiana	San Diego Marsh-Elder	1x5	VL	

GROUNDCOVER (1-gal. min.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Arctostaphylos uva-ursi	Bearberry	1x10	-	
Baccharis 'Pigeon Point'	Dwarf Coyote Bush	1x6	VL	
Ceanothus griseus horizontalis	Carmel Creeper	2x5	L	

Table A.6 — Trailhead Plant Palette

TREES (36" box min.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Rhus lancea[1]	African Sumac	25x25	L	Multi-trunked
Arbutus x 'marina'	Strawberry Tree	25x25	L	
Cercis occidentalis	Western Redbud	10x10	L	

SHRUBS (25% 15 gal./50% 5 gal./ 25% 1 gal.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	WUCOLS	COMMENT
Fremontadendron 'California Glory'	Flannel Bush	15x15	VL	
Rhamnus californica 'Eva Case'	Compact Coffeeberry	8x8	VL	
Artemisia californica	Artemsia	3x5	VL	
Muhlenbergia rigens	Deer Grass	3x3	VL	
Salvia clevlandii	Cleveland Sage	2x3	VL	
Salvia gregii	Autumn Sage	2x2	VL	
Mimulus aurantiacus	Coast Monkey Flower	2x2	VL	
Ribes speciosum	Fuchsia-Flowering Gooseberry	2x2	VL	
Carex tumulicolia	Foothill Sedge	1x1	L	
Juncus patens	Juncus 'Elk Blue'	3x3	L	
Achillea millofolium	Common Yarrow	3x3	L	
Heuchera maxima	Island Alum Root	1x1	L	
Arctostophylos 'Emerald Carpet'	Manzanita	1x5	VL	
Ceanothus 'Yankee Point'	Ceanothus	1x5	VL	

1. This plant species shall be planted at least 200 feet away from Non-Developable Open Space and MHPA areas identified on Figure 5.22 of this Specific Plan.

Table A.7 — MHPA Adjacent Lands and Brush Management Zone 2 Plant Palette

BOTANICAL NAME	APPLICATION RATE LBS. PLS/ACRE	NOTES
Acmispon glaber	2	Seed source should originate within coastal regions of San Diego. Substitutions to this list are acceptable as long as the seed is sourced from within 20 miles of the site.
Astragalus trichopodus lonchus	0.5	
Encelia californica	1	Restoration for any graded areas of the MHPA are required to be restored.
Guterrezia californica	0.1	
Isocoma menziesii	0.5	Provide native trees/shrubs (minimum 1 gallon container size) at a rate of one plant per 100 square feet of disturbed areas in addition to the MHPA hydroseed mix.
Malosma laurina	1	
Stipa pulchra	2	
Salvia apiana	0.5	
Yucca schidigera	1	
Sisyrinchium bellum	1	
Dichelostemma capitatum	0.2	
Ambrosia chenopodiifolia	2	
Corethrogyne filaginifolia	0.1	
Hazardia squarrosa	0.3	
Phacelia cicutaria hispida	0.5	
Peritoma arborea	2	
Adolphia californica	N/A	Should be planted from containers
Simmondsia chinensis	1	
Lycium californicum	N/A	Should be planted from containers
Stipa lepida	2	
Deinandra fasciculata	1	
Cylindropuntia prolifera	N/A	Should be planted from containers
Opuntia littoralis	N/A	Should be planted from containers
Euphorbia misera	N/A	Should be planted from containers

Table A.8 — Wildlife Overcrossing Plant Palette

SHRUBS (25% 5 gal. / 75% 1 gal.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	TYPE
Cylindropuntia prolifera	Coast cholla	10 x 4	Upright
Encelia californica	Bush sunflower	4 x 6	Flowering
Eriogonum fasciculatum	California buckwheat	5 x 5	
Malosma laurina	Laurel sumac	10 x 10	Large Background
Opuntia littoralis	Coast prickly pear	3 x 5	Succulent
Peritoma arborea	Bladderpod	6 x 6	Mounding
Rhus integrifolia	Lemonade berry	10 x 15	Large Background
Salvia mellifera	Black sage	5 x 8	Mounding
Yucca schidigera	Mojave yucca	10 x 5	Succulent

GRASSES (1 gal. min.) such as:

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	TYPE
Stipa pulchra	Purple needlegrass	3 x 1.5	Accent
Stipa lepida	Small-flowered needlegrass	3 x 2	Accent

INSECT HOST / NECTAR SPECIES (QUINO CHECKERSPOT BUTTERFLY and CROTCH'S BUMBLEBEE)

BOTANICAL NAME	COMMON NAME	MATURE HEIGHT / SPREAD	TYPE
Asclepias fascicularis	Narrow-leaf milkweed	4 x 4	Accent
Castilleja exserta	Purple owl's clover	Low	Herbaceous Annual
Clarkia delicata	Delicate clarkia	Low	Herbaceous Annual
Clarkia unguiculata	Elegant clarkia	Low	Herbaceous Annual
Eschscholzia californica	California poppy	3 x 2	Herbaceous Annual
Lupinus bicolor	Miniature lupine	Low	Herbaceous Annual
Lupinus succulentus	Arroyo lupine	5 x 5	Herbaceous Annual
Plantago erecta	Dot-seed plantain	Low	Herbaceous Annual

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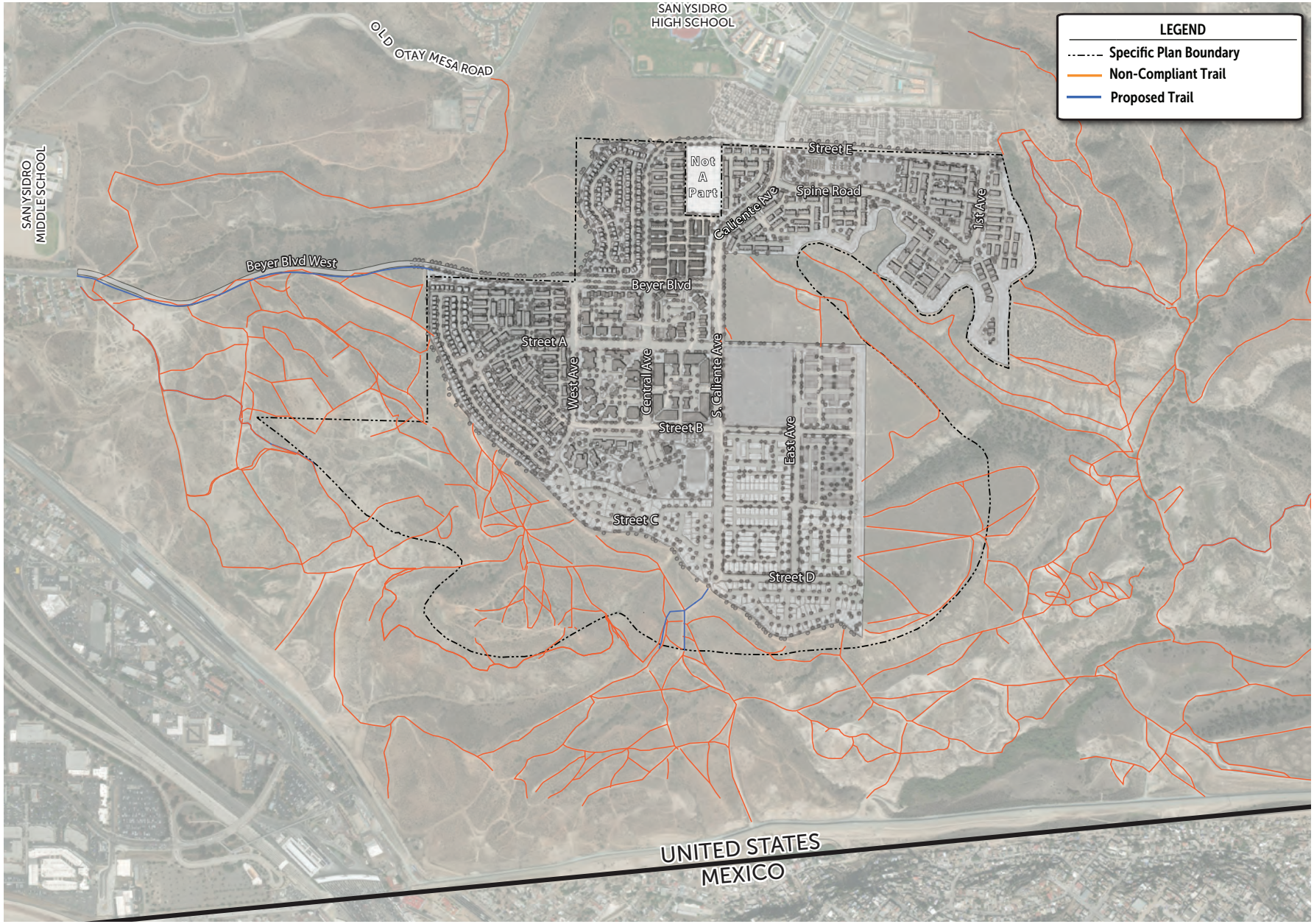
B

NON-COMPLIANT TRAILS

Figure B.1 — Non-Compliant Trails



Note: Non-compliant trails will be closed within a 50-foot buffer around the trail (100-foot total).

C

SPECIFIC PLAN IMPLEMENTATION TRACKING

C.1 — SPECIFIC PLAN IMPLEMENTATION TRACKING TABLE

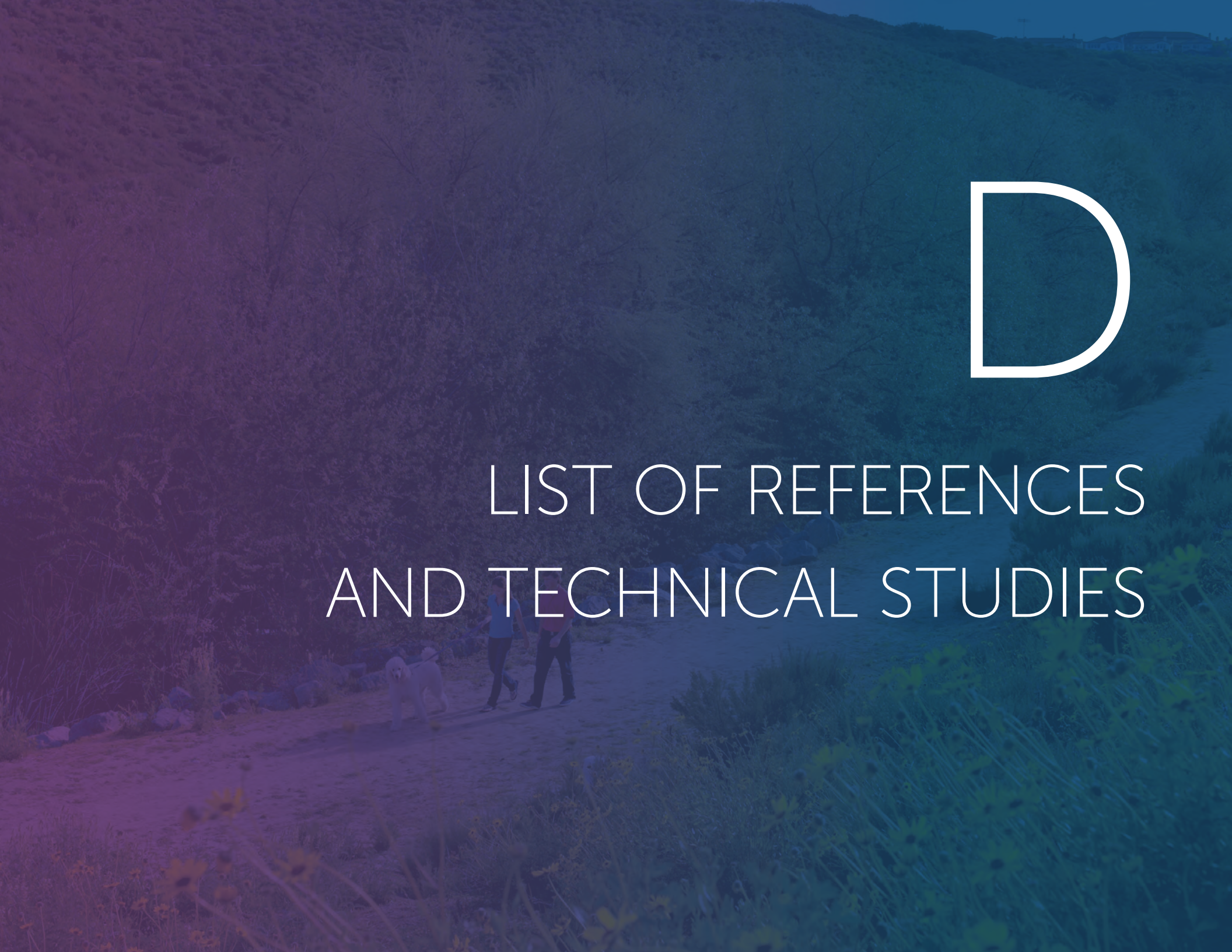
The Implementation Tracking Table shall be included with development plans at the time of building permit application. The purpose of the table is to development applicant and the City staff in tracking the implementation of development use, parks, and average daily trips within the Specific Plan area.

Table C.1 - Specific Plan Implementation Tracking Table

PLANNING AREA	DWELLING UNITS	COMMERCIAL (SF)	AVERAGE DAILY TRIPS (DRIVEWAY ADT)	AM PEAK HOUR TRIPS			PM PEAK HOUR TRIPS		
				IN	OUT	TOTAL	IN	OUT	TOTAL
1									
2									
3									
4									
5									
6									
7									
8									
9									

PLANNING AREA	DWELLING UNITS	COMMERCIAL (SF)	AVERAGE DAILY TRIPS (DRIVEWAY ADT)	AM PEAK HOUR TRIPS			PM PEAK HOUR TRIPS		
				IN	OUT	TOTAL	IN	OUT	TOTAL
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									

PLANNING AREA	DWELLING UNITS	COMMERCIAL (SF)	AVERAGE DAILY TRIPS (DRIVEWAY ADT)	AM PEAK HOUR TRIPS			PM PEAK HOUR TRIPS		
				IN	OUT	TOTAL	IN	OUT	TOTAL
22									
23									
24									
25									
26									
27									
28									
29									
30									
Totals									



D

LIST OF REFERENCES AND TECHNICAL STUDIES

Southwest Village Specific Plan References and Technical Studies

City of San Diego Transportation & Storm Water Design Manuals. Street Design Manual. March 2017. https://www.sandiego.gov/sites/default/files/street_design_manual_march_2017-final.pdf.

Dexter Wilson Engineering, Inc. Southwest Village Specific Plan Sewer Study in the City of San Diego. December 2024.

Dudek. Wildfire Evacuation Study for Southwest Village Project. September 2024.

LOS Engineering, Inc. Southwest Village VTM 1 Local Mobility Analysis. April 2026.

LOS Engineering, Inc. Southwest Village VTM 1 Vehicle Miles Traveled Analysis. April 2026.

LOS Engineering, Inc. Southwest Village Programmatic Level VTM. April 2026.

LOS Engineering, Inc. Southwest Village Transportation Phasing Plan. April 2026.

RICK Engineering. Priority Development Project (PDF) Stormwater Water Quality Management Plan (SWQMP). April 2023.

RECON. Air Quality Analysis for the Southwest Village Specific Plan. March 2025.

RECON. Biological Resources Report for the Southwest Village Specific Plan. March 2026.

RECON. Results of the Historical Resources Investigation of the Southwest Village Specific Plan. March 2026.

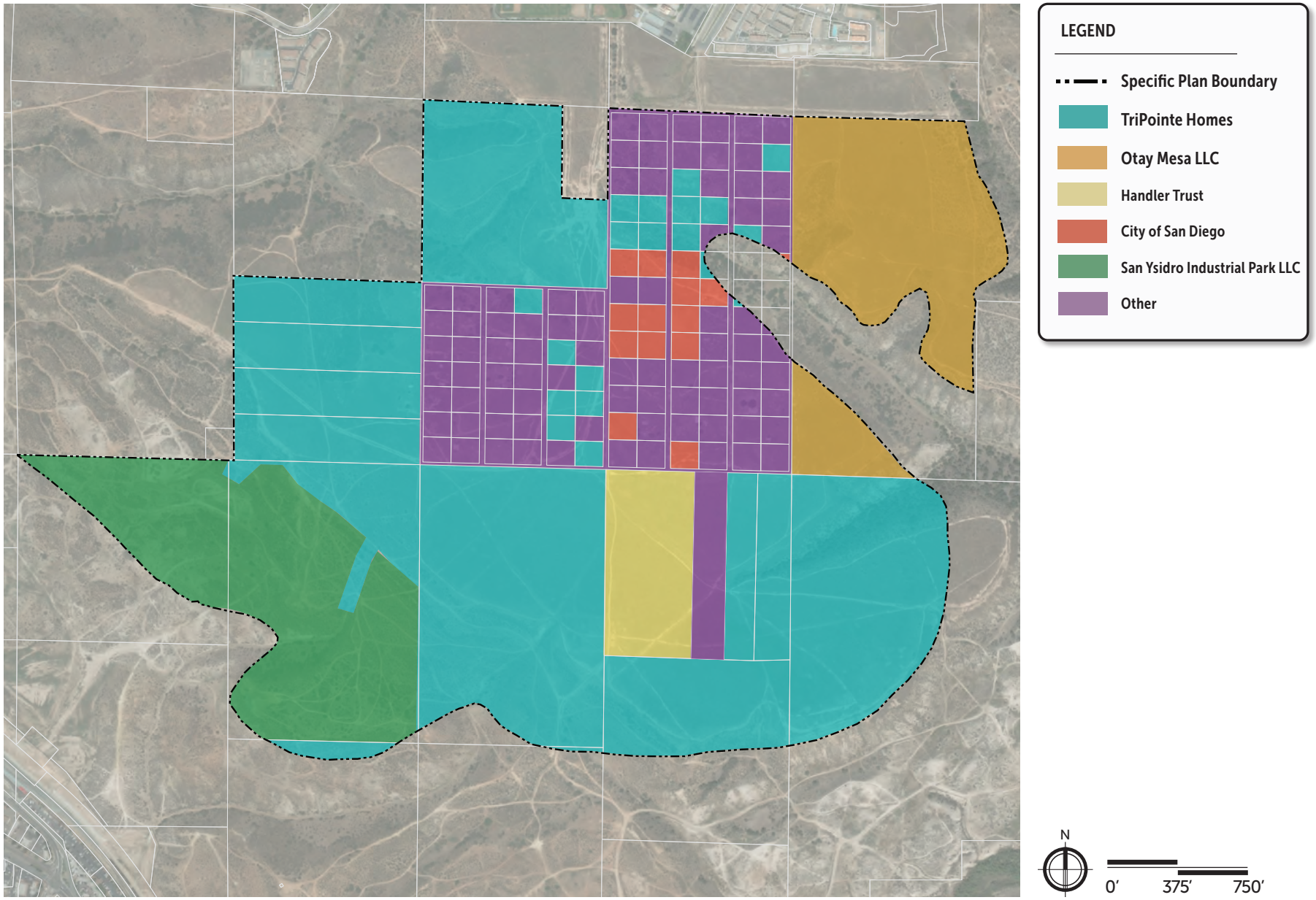
RECON. Waste Management Plan for the Southwest Village Specific Plan. June 2024.

RICK Engineering. Drainage Study for Southwest Village VTM (Preliminary Engineering). May 2024.

E

LAND OWNERSHIP MAP

Figure E-1 - Property Ownership Map



F

TRANSPORTATION PHASING PLAN

LOS Engineering, Inc.
Traffic and Transportation

11622 El Camino Real, Suite #100, San Diego, CA 92130
Phone 619-890-1253, Email: Justin@LOSengineering.com

April 1, 2026

Ms. Ann Gonsalves, T.E.
City of San Diego
1222 First Avenue, MS 501
San Diego, CA 92101

Subject: Southwest Village Specific Plan Transportation Phasing Plan (PRJ-0614791)

Dear Ms. Gonsalves:

The Southwest Village Specific Plan (Specific Plan) provides a comprehensive policy framework intended to guide future development in Southwest Village, consistent with the City of San Diego - Otay Mesa Community Plan (OMCP) and City of Villages Strategy. This Phasing Plan includes the following sections:

1) Project Description and Trip Generation
2) Community Plan Circulation Changes
3) Planning Areas and Phasing
4) Community Access and On-Site Vehicular Circulation
5) Conclusion

PROJECT DESCRIPTION AND TRIP GENERATION

The Specific Plan encompasses approximately 490 acres, will allow up to 5,130 attached and detached residences, and will facilitate creation of a new village anchored by up to 175,000 square feet of commercial and retail uses in a mixed-use Village Core. The Specific Plan would provide public facilities including dedication of up to two new elementary schools, approximately 18.1 acres of publicly owned developed parks in addition to approximately 18 acres of trails, and approximately 185 acres of surrounding natural open space and habitat conservation.

Access to the Specific Plan area will be from two Mobility Element roadways, Caliente Avenue to the north and from an extension of Beyer Boulevard to the west, connecting the Specific Plan area to San Ysidro. If Beyer Blvd is not extended by the 200th unit, then an alternative secondary access is proposed south of the Specific Plan area along an existing utility road to be improved as an emergency vehicle access (EVA) road to facilitate regional fire and emergency response.

The Specific Plan contains 30 planning areas and identifies a range of allowable residential densities for each planning area to allow for flexibility in future planning and design. The following land use designations are proposed:

- Medium-Low Density Residential allowing 8 to 22 dwelling units per acre
- Medium Density Residential allowing 15 to 29 dwelling units per acre
- Medium-High Density Residential allowing 20 to 44 dwelling units per acre
- Residential Mixed-Use allowing up to 175,000 square feet of commercial and retail uses at a maximum Floor Area Ratio (FAR) of 3.0 and multi-family attached residential units at a density range of 30 to 62 dwelling units per acre.

Implementation of the Specific Plan will require a number of discretionary approvals including an amendment to the OMCP related to land use to refine the buildout of the Southwest District area as defined in the OMCP; roadway circulation classification change of Beyer Boulevard from a 4-Lane Major to a 4-Lane Modified Urban Collector and Caliente Avenue from a 6-Lane Major to a 4-lane Modified Urban Collector; a rezone to implement Specific Plan land uses; a Multi-Habitat Planning Area (MHPA) Boundary Line Adjustment (BLA); and approval of an update to the Otay Mesa Public Facilities Financing Plan to include new parks, a sewer pump station, and other public facilities to reflect the project needs.

Furthermore, since the Specific Plan is under multiple property ownerships and the timing of build-out is not known at this time, the ultimate mix of residential densities cannot be known with certainty. However, the following assumptions consistent with the Specific Plan land use framework were used in this analysis that identifies build-out of up to:

- 1,158 single family residential units
- 2,503 multi-family units under 20 dwelling units per acre
- 1,469 multi-family units over 20 dwelling unit per acre
- 175,000 SF Commercial/Retail
- 2 elementary schools

Under these land use assumptions, the Specific Plan has a calculated driveway trip generation of 57,250 ADT with 4,777 AM peak hour trips (1,569 inbound and 3,208 outbound) and 5,950 PM peak hour trips (3,696 inbound and 2,254 outbound). The City of San Diego *Otay Mesa Community Plan 2014* identified Southwest Village with 5,880 homes, 190,800 SF commercial, two elementary schools, and 40 acres of developed parks for a driveway trip generation of 64,393 ADT with 5,249 peak hour trips (1,690 inbound and 3,559 outbound) and 6,596 PM peak hour trips (4,108 inbound and 2,488 outbound). The proposed Specific Plan land use mix results in an overall reduction from the 2014 OMCPU in the amount of -7,143 ADT, -472 AM trips (-121 inbound and -351 outbound), and -646 PM trips (-412 inbound and -234 outbound) as shown in **Table 1**.

Table 1: Proposed and Adopted Specific Plan Uses and Traffic Comparison

Land Use	ADT Rate	Size & Units	ADT	%	Split	AM IN	AM OUT	AM Total	%	Split	PM IN	PM OUT	PM Total
Single-Family	10 /DU	1,158 DU	11,580	8%	0.2 0.8	185	741	926	10%	0.7 0.3	811	347	1,158
Multi-Family (< 20 du/ac)	8 /DU	2,503 DU	20,024	8%	0.2 0.8	320	1,282	1,602	10%	0.7 0.3	1402	601	2,003
Multi-Family (>20 du/ac)	6 /DU	1,469 DU	8,814	8%	0.2 0.8	141	564	705	9%	0.7 0.3	555	238	793
Community Shopping Cnt	70 /KSF	175,000 SF	12,250	3%	0.6 0.4	221	147	368	10%	0.5 0.5	613	613	1,226
Two Elem. Schools (1)	2.9 /Student	1,268 Students	3,677	31%	0.6 0.4	684	456	1,140	19%	0.4 0.6	279	419	698
Developed Park	50 /Acre	18.1 Acres	905	4%	0.5 0.5	18	18	36	8%	0.5 0.5	36	36	72
Proposed Southwest Village Driveway Totals			57,250			1,569	3,208	4,777			3,696	2,254	5,950
Single-Family	10 /DU	1,400 DU	14,000	8%	0.2 0.8	224	896	1,120	10%	0.7 0.3	980	420	1,400
Multi-Family (< 20 du/ac)	8 /DU	2,240 DU	17,920	8%	0.2 0.8	287	1,147	1,434	10%	0.7 0.3	1254	538	1,792
Multi-Family (>20 du/ac)	6 /DU	2,240 DU	13,440	8%	0.2 0.8	215	860	1,075	9%	0.7 0.3	847	363	1,210
Community Shopping Cnt	70 /KSF	190,800 SF	13,356	3%	0.6 0.4	240	160	400	10%	0.5 0.5	668	668	1,336
Two Elem. Schools (1)	2.9 /Student	1,268 Students	3,677	31%	0.6 0.4	684	456	1,140	19%	0.4 0.6	279	419	698
Developed Park	50 /Acre	40 Acres	2,000	4%	0.5 0.5	40	40	80	8%	0.5 0.5	80	80	160
Adopted Otay Mesa CPU Driveway Totals			64,393			1,690	3,559	5,249			4,108	2,488	6,596
Reduction between CPU and Southwest Village			*-7,143*			*-121*	*-351*	*-472*			*-412*	*-234*	*-646*

Source: City of San Diego *Trip Generation Manual*, May 2003. DU=Dwelling Unit. KSF=1,000 square feet. (1) Number of students based on estimated student enrollment for an elementary school of similar size per the Long Range Facilities Master Plan for San Ysidro School District 2021.

The regional location of the project site is shown in **Figure 1**. The 30 planning areas that make up Southwest Village are shown in **Figure 2**.

Figure 1: Regional Project Location

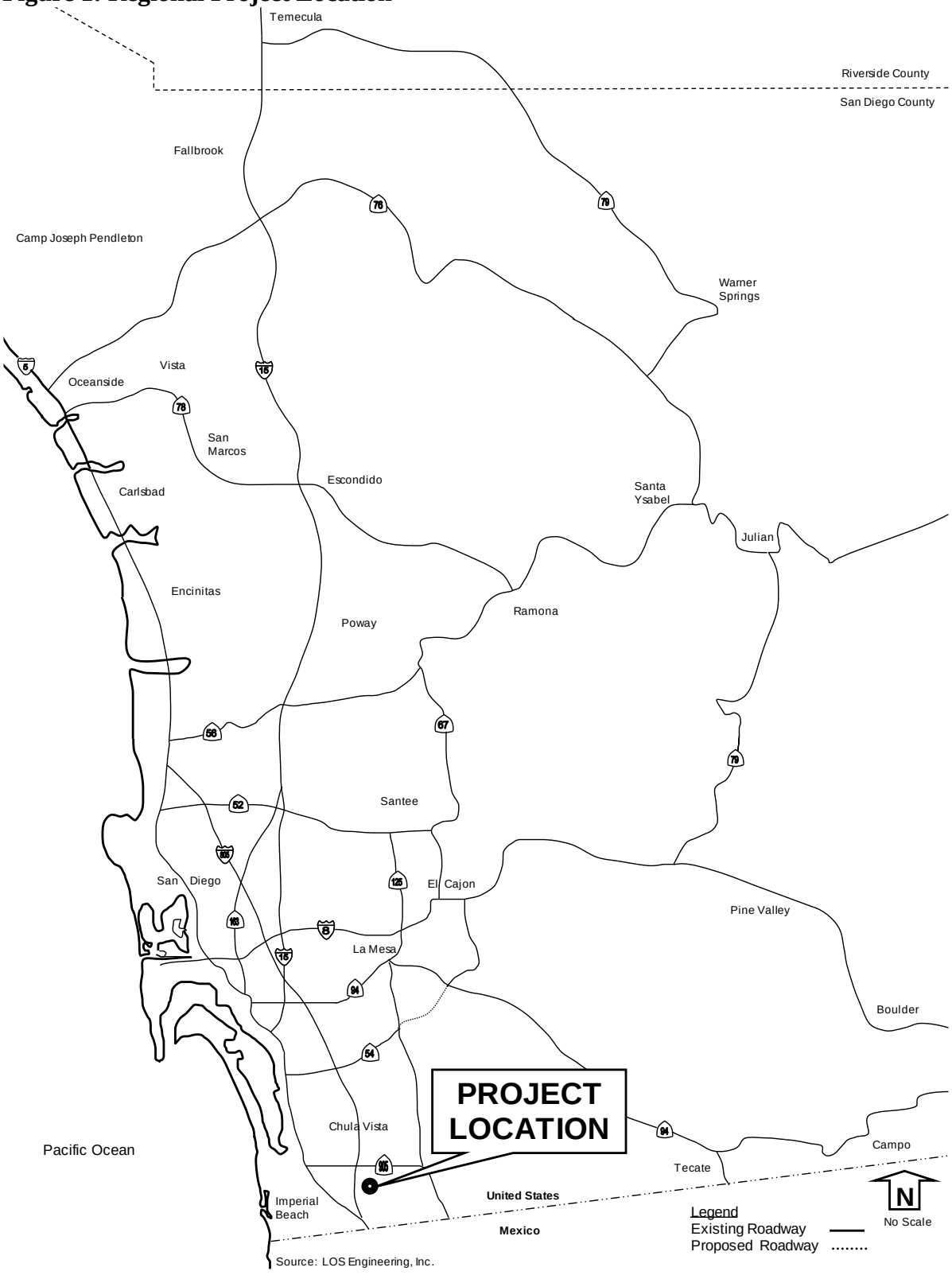
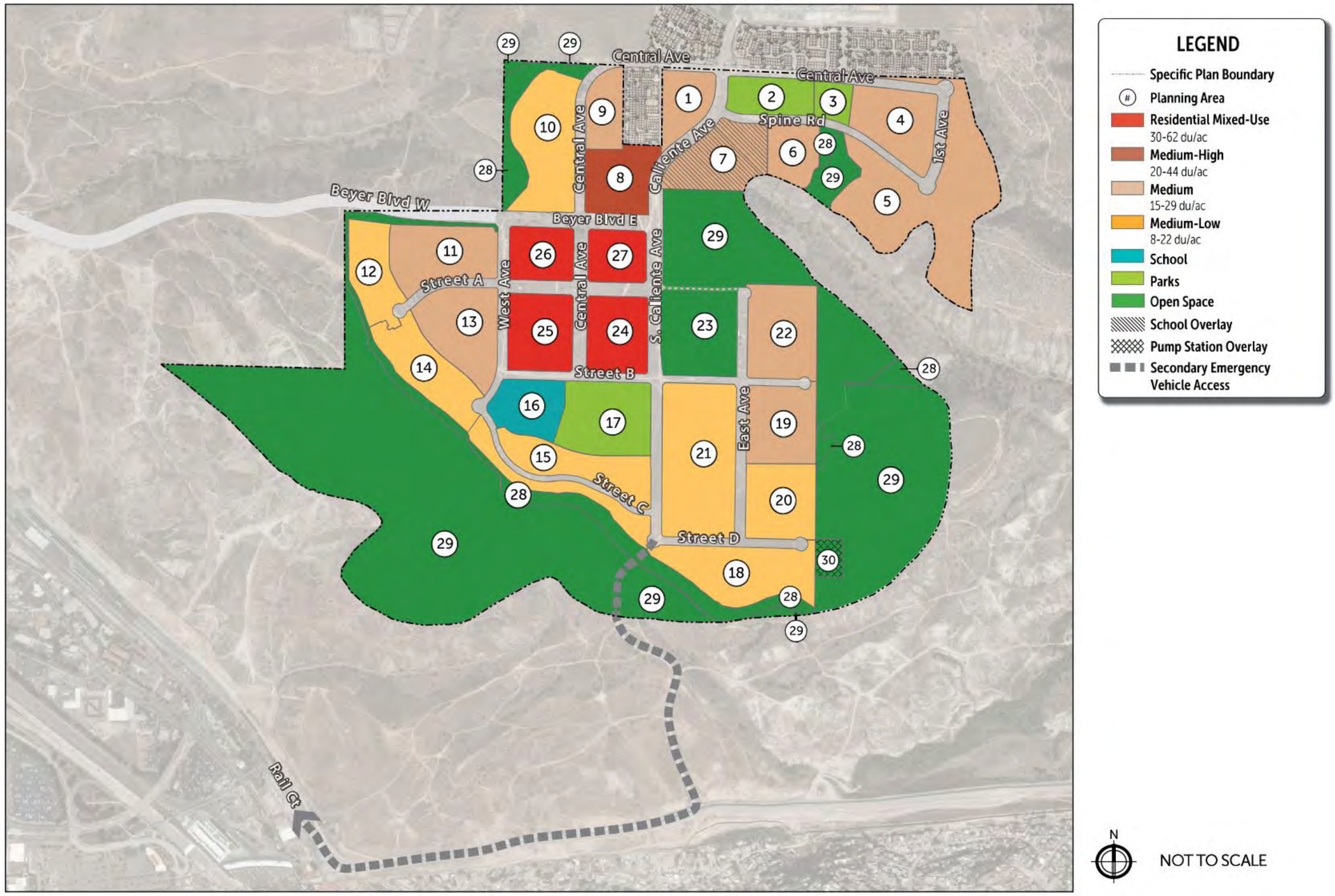


Figure 2: Southwest Village Specific Plan



Source: Rick Engineering

COMMUNITY PLAN CIRCULATION CHANGES

The Specific Plan is consistent with the Otay Mesa Community Plan Update (OMCPU) transportation assumptions from a trip generation perspective. However, the Specific Plan identifies circulation network changes that require operational analyses to ensure the network still functions at the community level. Two circulation network changes are proposed:

1) Caliente Ave downgrade from a 6 Lane Major to a 4 Lane Modified Urban Collector between Central Ave and Beyer Blvd to avoid sensitive habitat, specifically a 1-acre City of San Diego owned Vernal Pool Habitat Conservation Plan 100 percent conserved parcel. The downgrade was supported by City staff during a meeting on 3/11/20 after review of materials provided by the project team. As a 4 Lane Urban Collector, this segment would operate at LOS E under Horizon Year 2062 community buildout conditions. The OMCPU EIR identified this segment as significant and unmitigated under Horizon Year conditions. This impact is considered significant, unavoidable, and consistent with the OMCPU EIR (support materials included in **Attachment A**).

2) Beyer Blvd downgrade from a 4 Lane Major to a 4 Lane Modified Urban Collector between Enright Dr and Caliente Ave. From Enright Dr to West Ave, Beyer Blvd will be constructed with a 2 lane cross section to avoid and minimize impacts to sensitive habitat, as requested by California wildlife agencies. From West Ave to Caliente Ave, Beyer Blvd will be constructed as a 4 Lane Urban Major. An arterial analysis supporting the narrower 2 lane cross section with raised median and pedestrian and bicycle facilities and proposed Beyer Blvd alignment are included in **Attachment B**. Beyer Blvd between E. Beyer Blvd/Old Otay Mesa Rd and Enright Dr has not yet been completed to the ultimate San Ysidro Community Plan Update classification of a 4 Lane Collector (excerpt from the San Ysidro Community Plan Update is included in **Attachment C**). Sufficient right of way does not exist on Beyer Blvd between E. Beyer Blvd and Enright Dr to complete this section to the ultimate classification. The right of way constraint is on the north side of Beyer Blvd along the San Ysidro School District parcel. The requirement of a 4 Lane Collector of Beyer Blvd between E. Beyer Blvd/Old Otay Mesa Rd and Enright Dr is forecasted to occur in Phase 4 forecasted at the 3,298th dwelling unit, after accounting for traffic from a second elementary school and 7.6 of park based on the assignment of the SWV Specific Plan residential traffic to Beyer Blvd using a SANDAG Series 13 Select Zone Assignment (**Attachment D**). The Beyer Blvd LOS between E. Beyer Blvd and Enright Dr within San Ysidro and when the existing 2 lanes will be required to be widened to 4 lanes at Phase 4 is shown in **Table 2**.

Table 2: Four Lane Trigger for Beyer Blvd (E. Beyer to Enright) within San Ysidro

Phase		Single Family	Multi-Family < 20 du/ac	Multi-Family > 20 du/ac	Dwelling Unit (DU) Total	Running DU Total	ADT by Phase	Aggregate ADT	W. Beyer ADT based on SANDAG SZA 24% distribution	Beyer Blvd (E Beyer to Enright) ADT E+C	Beyer Blvd (E Beyer to Enright) ADT E+C+P		E+C+P at 2 lanes LOS E* 10k	E+C+P at 4 lanes LOS E* 30k cap.
1	Units	543	490	282	1,315	1,315						V/C	0.38	0.13
	ADT	5,430	3,920	1,692			11,042	11,042	*2,650*	1,149	3,799	LOS	A	A
2	Units	615	237		852	2,167						V/C	0.57	0.19
	ADT	6,150	1,896				8,046	19,088	*4,581*	1,149	5,730	LOS	C	A
	Developed Parks											V/C	0.59	0.20
	ADT at 50 ADT/Acre for 10.5 acres						525	19,613	*4,707*	1,149	5,856	LOS	C	A
	Elementary School (PA16)											V/C	0.63	0.21
	ADT at 2.9 ADT/Student with 600 students						1,740	21,353	*5,125*	1,149	6,274	LOS	C	A
3	Units		819		819	2,986						V/C	0.78	0.26
	ADT		6,552				6,552	27,905	*6,697*	1,149	7,846	LOS	D	A
4	Developed Parks											V/C	0.79	0.26
	ADT at 50 ADT/Acre for 7.6 acres						380	28,285	*6,788*	1,149	7,937	LOS	D	A
	Elementary School (PA7 Overlay)											V/C	0.84	0.28
	ADT at 2.9 ADT/Student with 668 students						1,937	30,222	*7,253*	1,149	8,402	LOS	D	A
	Units		311		311	3,297						V/C	0.90	0.30
	ADT		2,488				2,488	32,710	*7,850*	1,149	8,999	LOS	D	A
	Units		73		73	3,370						V/C	0.91	0.30
	ADT		584				584	33,294	*7,991*	1,149	9,140	LOS	E	A
5	Units		306		306	3,676						V/C	0.97	0.32
	ADT		2,448				2,448	35,742	*8,578*	1,149	9,727	LOS	E	A
6	Units		267		267	3,943						V/C	1.02	0.34
	ADT		2,136				2,136	37,878	*9,091*	1,149	10,240	LOS	F	B
7	Units			1,187	1,187	5,130						V/C	1.19	0.40
	ADT			7,122			7,122	45,000	*10,800*	1,149	11,949	LOS	F	B
	Commercial Shopping Center											V/C	1.49	0.50
	ADT at 70 ADT/KSF for 175,000 square feet						12,250	57,250	*13,740*	1,149	14,889	LOS	F	C
TOTALS		Dwelling units:		5,130		ADT:	57,250							

Notes: ADT: Average Daily Trips. E+C: Existing + Cumulative. E+C+P: Existing + Cumulative + Project. KSF: 1,000 Square Feet. V/C: Volume over Capcity. Cap. = Capacity. *LOS E capacity at 10,000 ADT for 2 lanes with no fronting property and 30,000 ADT for 4 lanes with two way left turn lane from TSM Appendix F (included in Attachment E). SZA=Select Zone Assignment. Shading notes when Beyer Blvd (E. Beyer to Enright) needs to be widened to 4 lanes.

PLANNING AREAS AND PHASING

The Southwest Village Specific Plan has 30 planning areas and seven planned phases. However, the phasing is a current estimate that can change due to the unknown timing of when other planning area owners will initiate their own development process. Therefore, future planning area development will be subject to discretionary review for consistency with the current Specific Plan Phasing and will be required to complete the Specific Plan onsite and off-site improvements needed to support their development. The necessary infrastructure and public facilities required for each phase of development shall both be constructed as part of the implementing project or may be necessary to construct upfront of an implementing project consistent with Specific Plan details included in **Attachment E**. The anticipated trip generation by phase is shown in **Table 3**. The planning areas are currently anticipated to be developed over seven phases.

Table 3: Specific Plan Traffic Generation Implementation Table

Phase & Land Use	Residential Trip Rates		Non-Residential Trip Rates		Daily Trips	AM Peak Hour Trips IN	AM Peak Hour Trips OUT	AM Peak Hour Trips Total	PM Peak Hour Trips IN	PM Peak Hour Trips OUT	PM Peak Hour Trips Total
1 City SD Trip Rates:	10	/DU				20%	80%	8%	70%	30%	10%
Single Family	543	DU			5,430	87	347	434	380	163	543
City SD Trip Rates:	8	/DU				20%	80%	8%	70%	30%	10%
Multi-Family < 20 du/ac	490	DU			3,920	63	251	314	274	118	392
City SD Trip Rates:	6	/DU				20%	80%	8%	70%	30%	9%
Multi-Family > 20 du/ac	282	DU			1,692	27	108	135	106	46	152
Phase 1 Totals:	**1,315**	DU			**11,042**	177	706	**883**	761	326	**1,087**
2 City SD Trip Rates:	10	/DU				20%	80%	8%	70%	30%	10%
Single Family	615	DU			6,150	98	394	492	431	185	615
City SD Trip Rates:	8	/DU				20%	80%	8%	70%	30%	10%
Multi-Family < 20 du/ac	237	DU			1,896	30	122	152	133	57	190
City SD Trip Rates:			2.9	/Student		60%	40%	31%	40%	60%	19%
Elementary School (1)			600	Students	1,740	323	216	539	132	199	331
City SD Trip Rates:			50	/Acre		50%	50%	4%	50%	50%	8%
Developed Park			10.5	Acres	525	11	11	21	21	21	42
Phase 2 Totals:	**852**	DU			**10,311**	463	742	**1,204**	717	461	**1,178**
3 City SD Trip Rates:	8	/DU				20%	80%	8%	70%	30%	10%
Multi-Family < 20 du/ac	819	DU			6,552	105	419	524	459	197	655
Phase 3 Totals:	**819**	DU			**6,552**	105	419	**524**	459	197	**655**
4 City SD Trip Rates:			50	/Acre		50%	50%	4%	50%	50%	8%
Developed Park			7.6	Acres	380	6	6	14	15	15	30
City SD Trip Rates:			2.9	/Student		60%	40%	31%	40%	60%	19%
Elementary School (2)			668	Students	1,937	361	240	601	147	221	368
City SD Trip Rates:	8	/DU				20%	80%	8%	70%	30%	10%
Multi-Family < 20 du/ac	384	DU			3,072	49	197	246	215	92	307
Phase 4 Totals:	**384**	DU			**5,389**	416	443	**861**	377	328	**705**
5 City SD Trip Rates:	8	/DU				20%	80%	8%	70%	30%	10%
Multi-Family < 20 du/ac	306	DU			2,448	39	157	196	172	74	245
Phase 5 Totals:	**306**	DU			**2,448**	39	157	**196**	172	74	**245**
6 City SD Trip Rates:	8	/DU				20%	80%	8%	70%	30%	10%
Multi-Family < 20 du/ac	267	DU			2,136	34	137	171	150	64	214
Phase 6 Totals:	**267**	DU			**2,136**	34	137	**171**	150	64	**214**
7 City SD Trip Rates:	6	/DU				20%	80%	8%	70%	30%	9%
Multi-Family > 20 du/ac	1,187	DU			7,122	114	456	570	449	192	641
City SD Trip Rates:			70	/KSF		60%	40%	3%	50%	50%	10%
Community Shopping Cnt:			175	KSF	12,250	221	147	368	613	613	1,226
Phase 7 Totals:	**1,187**	DU			**19,372**	335	603	**938**	1,062	805	**1,867**
Overall Target Density/Intensity:	*5,130*	DU	175 KSF Comm.	Schools & Parks	*57,250*	*1,569*	*3,208*	*4,777*	*3,696*	*2,254*	*5,950*
Total Remaining	**5,130**	**DU**	175 KSF Comm.	Schools & Parks	**57,250**	1,569	3,208	**4,777**	3,696	2,254	**5,950**

Source: City of San Diego *Trip Generation Manual* , May 2003. DU: Dwelling Unit, KSF=1,000sf. Comm. = Commercial. (1) In the unlikely event a school is no longer needed on Planning Area 16, the site will default to Medium Density Residential use. Although the contingency for Planning Area 16 would result in approximately 136 additional dwelling units, the maximum dwelling unit cap of 5,130 units would still apply. (2) In the event a school is not needed on Planning Area 7, the site will default to Medium Density Residential Use.

COMMUNITY ACCESS AND ON-SITE VEHICULAR CIRCULATION

Community access and on-site circulation classifications are based on two sources:

1) Arterial roadways of Beyer Blvd and Caliente Ave as proposed in the Otay Mesa and San Ysidro Community Plan Updates, and
2) Local internal roadway network being proposed as part of the Southwest Village Specific Plan.

The arterial roadways of Beyer Blvd and Caliente Ave were analyzed using volumes from the San Ysidro Community Plan Update (August 2016). The San Ysidro CPU horizon year Average Daily Traffic (ADT) was based on a Series 12 SANDAG traffic model forecast. The Otay Mesa Community Plan Update (March 2014) was not applied because it used an older Series 11 SANDAG traffic model forecast. The San Ysidro horizon year SANDAG volumes (included in **Attachment F**) were applied to the following arterial roadways:

- Beyer Blvd from Enright Dr to Caliente Ave: 28,100 ADT
- Caliente Ave from Airway Rd to Central Ave: 36,900 ADT
- Caliente Ave from Central Ave to Beyer Blvd: 29,200 ADT

The local internal roadways were analyzed based on a manual internal distribution and assignment of individual Planning Areas. On-site roadway traffic distribution and assignment worksheets are included in **Attachment G**.

The following roadway classification were applied to support the forecasted roadway volumes:

- Six Lane Major (striped as 5 lanes)
- Four Lane Urban Major
- Four Lane Urban Collector
- Four Lane Modified Urban Collector
- Two Lane Collector with two-way left turn lane.
- Two Lane Collector
- Sub-Collector

The assignment and proposed roadway classification are shown in **Figure 3** with the segment LOS calculations shown in **Table 3**.

Figure 3: On-Site Roadway Volumes and Proposed Classifications

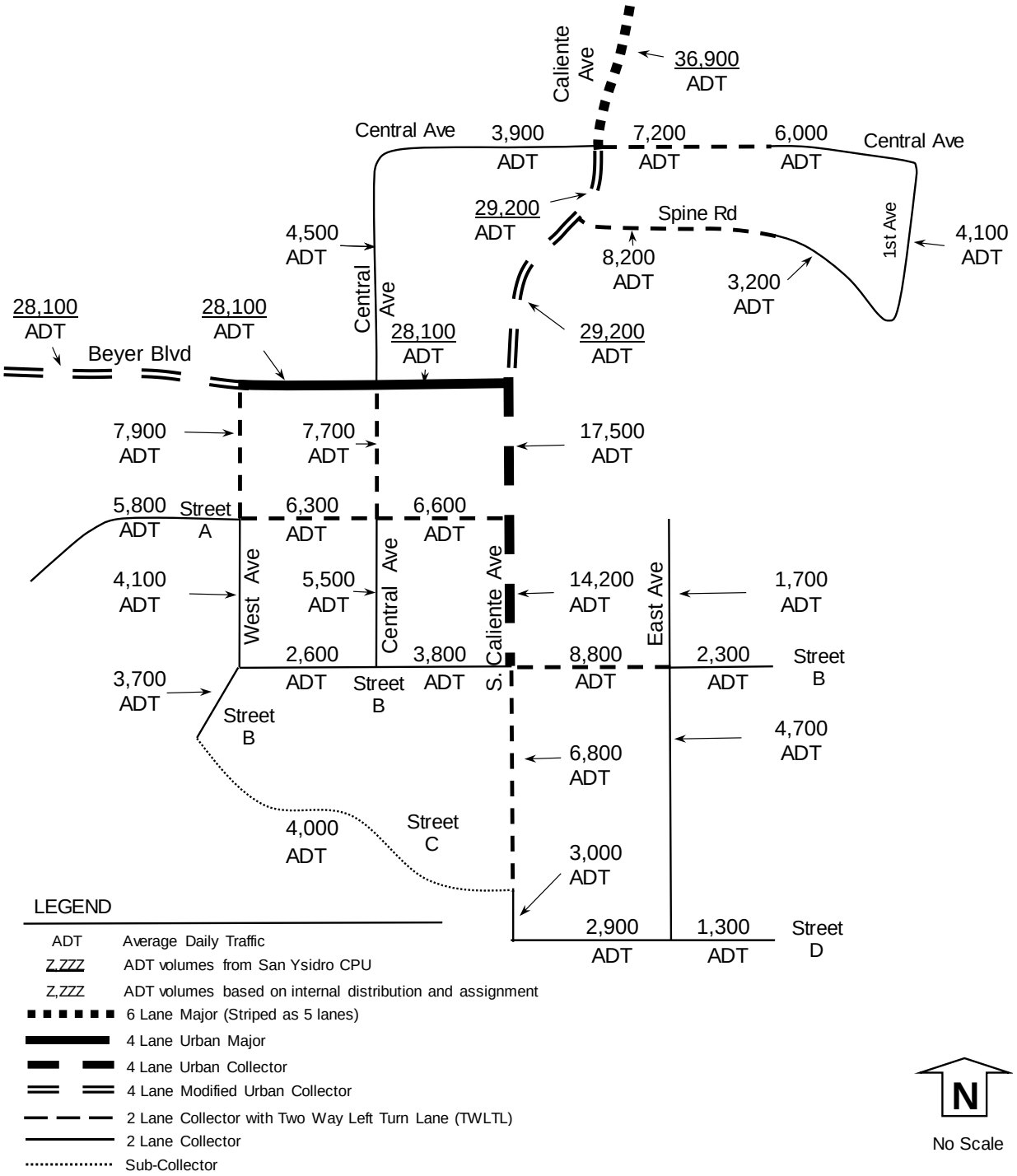


Table 3: On-Site Roadway Horizon Year Volumes and Level of Service

Segment	Functional Classification	LOS E Capacity	Horizon Year ADT	V/C Ratio	Level of Service
Beyer Blvd					
Enright Dr to West Ave	4 Lane Modified Urban Collector	30,000	28,100	0.94	**E**
West Ave to Central Ave	4 Lane Urban Major	40,000	28,100	0.70	C
Central Ave to Caliente Ave	4 Lane Urban Major	40,000	28,100	0.70	C
Caliente Ave					
Airway Rd to Central Ave	6 Ln Major (Striped as 5 Ln)	45,000	36,900	0.82	D
Central Ave to Spine Rd	4 Lane Modified Urban Collector	30,000	29,200	0.97	**E**
Spine Rd to Beyer Blvd	4 Lane Modified Urban Collector	30,000	29,200	0.97	**E**
Beyer Blvd to Street A	4 Lane Urban Collector	30,000	17,500	0.58	C
Street A to Street B	4 Lane Urban Collector	30,000	14,200	0.47	C
Street B to Street C	2 Collector + TWLTL	15,000	6,800	0.45	B
Street C to Street D	2 Lane Collector	8,000	3,000	0.38	B
Central Ave					
West of 1st Ave	2 Lane Collector	8,000	6,000	0.75	D
East of Caliente Ave	2 Collector + TWLTL	15,000	7,200	0.48	C
West of Caliente Ave	2 Lane Collector	8,000	3,900	0.49	C
North of Beyer Blvd	2 Lane Collector	8,000	4,500	0.56	C
Beyer Blvd to Street A	2 Collector + TWLTL	15,000	7,700	0.51	C
Street A to Street B	2 Lane Collector	8,000	5,500	0.69	D
East Ave					
Street A to Street B	2 Lane Collector	8,000	1,700	0.21	A
Street B to Street D	2 Lane Collector	8,000	4,700	0.59	C
Spine Rd					
West Half	2 Collector + TWLTL	15,000	8,200	0.55	C
East Half	2 Lane Collector	8,000	3,200	0.40	B
Street A					
West of West Ave	2 Lane Collector	8,000	5,800	0.73	D
West Ave to Central Ave	2 Collector + TWLTL	15,000	6,300	0.42	B
Central Ave to Caliente Ave	2 Collector + TWLTL	15,000	6,600	0.44	B
Street B					
Street C to West Ave	2 Lane Collector	8,000	3,700	0.46	C
West Ave to Central Ave	2 Lane Collector	8,000	2,600	0.33	B
Central Ave to S. Caliente Ave	2 Lane Collector	8,000	3,800	0.48	C
S. Caliente Ave to East Ave	2 Collector + TWLTL	15,000	8,800	0.59	C
East of East Ave	2 Lane Collector	8,000	2,300	0.29	A
Street C					
West Ave to S. Caliente Ave	Sub-Collector	(1)	4,000	(1)	(2)
Street D					
S. Caliente Ave to East Ave	2 Lane Collector	8,000	2,900	0.36	B
East of East Ave	2 Lane Collector	8,000	1,300	0.16	A
West Ave					
Beyer Blvd to Street A	2 Collector + TWLTL	15,000	7,900	0.53	C
Street A to Street B	2 Lane Collector	8,000	4,100	0.51	C
1st Ave					
Central Ave to Spine Rd	2 Lane Collector	8,000	4,100	0.51	C

TWLTL: Two Way Left Turn Lane. BOLD indicates unacceptable LOS, which is due to environmental constraints that requires a reduced classification with a lower minimum curve radius to avoid sensitive habitat. Underlined ADT obtained from San Ysidro Community Plan Update SANDAG model. Remaining ADTs from internal distribution and assignments included in the Appendix. V/C: Volume to Capacity. (1) Sub-Collector LOS C threshold = 2,200 ADT. (2) Under capacity.

CONCLUSION

The Southwest Village Specific Plan provides a comprehensive policy framework intended to guide future development in Southwest Village, consistent with the City of San Diego - Otay Mesa Community Plan and City of Villages Strategy. The Specific Plan encompasses approximately 490 acres, will allow up to 5,130 attached and detached residences, and will facilitate creation of a new village anchored by up to 175,000 square feet of commercial and retail uses in a mixed-use Village Core. The timing along with the final number of homes and commercial space is unknown at this time; therefore, each Vesting Tentative Map will be subject to a discretionary review for consistency with the Specific Plan Subsequent EIR and will be required to prepare as needed LMA and VMT analyses.

The timing along with the final number of homes and commercial space is unknown at this time; therefore, each future Specific Plan Vesting Tentative Map will be subject to a discretionary review for consistency with the Specific Plan Subsequent EIR and will be required to prepare LMA and VMT analyses.

Sincerely,
LOS Engineering, Inc.

Justin Rasas, P.E.(TE 2135), PTOE
Principal and Officer of LOS Engineering, Inc.

Job 1733
Attachment A: Caliente Ave Downgrade Details
Attachment B: Beyer Blvd Downgrade Details
Attachment C: Excerpts from the San Ysidro Community Plan Update
Attachment D: SANDAG Series 13 Select Zone Assignment for SWV
Attachment E: Specific Plan Planning Area Phasing Details
Attachment F: San Ysidro Community Plan Update SANDAG Output
Attachment G: On-Site Roadway Trip Assignment Details

Attachment A

Caliente Ave Downgrade Details

Support materials for Caliente Ave downgrade from a 6 Lane Major to a 4 Lane Urban Collector between Central Ave and Beyer Blvd.

This segment of Caliente Ave can only be designed to a 4 Lane Urban Collector (with a minimum curve radius of 470 ft with 2% superelevation and design speed of 35 MPH) to avoid sensitive habitat and to be able to align with the intersection of Caliente Ave/Central Ave. Therefore, a downgrade is being proposed as part of the Southwest Village Specific Plan. A graphic of the alignment is shown on the next page.

A community buildout horizon year volume of 29,200 ADT for Caliente Ave between Central Ave and Beyer Blvd was obtained from the San Ysidro CPU EIR (SANDAG traffic model output included within the next few pages).

As a 4 Lane Urban Collector, this segment is calculated to operate at LOS E shown in **Table 1**.

Table 1: Caliente Ave Downgrade LOS

Segment	Classification & LOS E Capacity	Horizon Year ADT	V/C Ratio & LOS	CPU EIR Overrides
Caliente Ave (Central Ave to Beyer Blvd)	4 Lane Urban Collector 30,000 ADT	29,200	0.97 LOS E	Yes

The Otay Mesa CPU EIR identifies this segment as significant and unmitigated under community buildout Horizon Year conditions. This impact is considered significant, unavoidable, and consistent with the OM CPU EIR. Historical correspondence and excerpts from the OMCPU EIR are included on the next few pages.

SOUTHWEST VILLAGE CALIENTE AVENUE ALIGNMENT ALTERNATIVE 2 -

ROADWAY ALIGNMENT AS A 4 LANE URBAN COLLECTOR

DESIGN SPEED = 35 MPH W/ 2% SUPERELEVATION

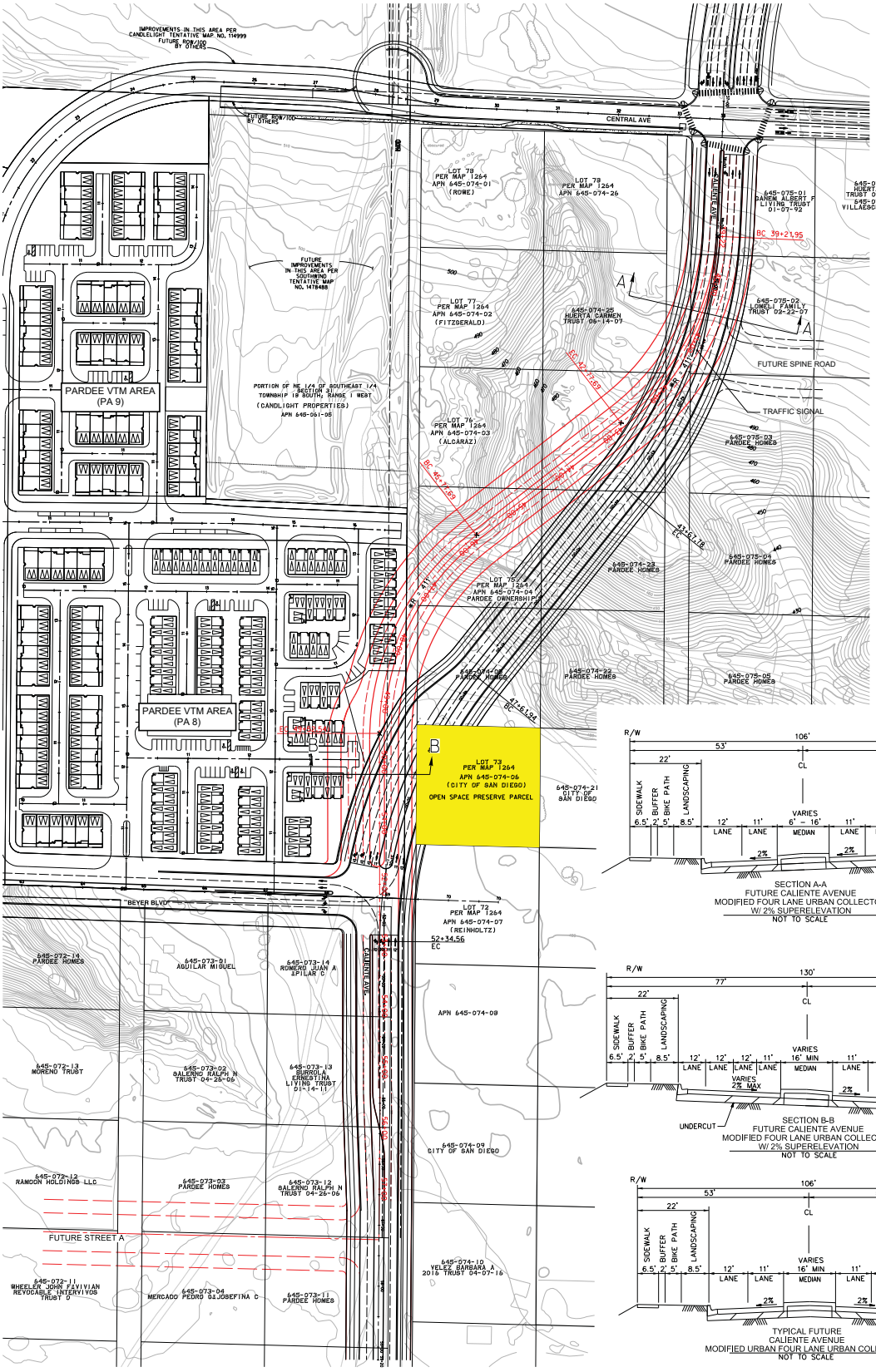


EXHIBIT 2

CLIENTE AVE. DESIGN REQUIREMENTS
DESIGN SPEED - 35 mph
MAXIMUM GRADE - 8%
MINIMUM CURVE RADIUS:
610' WITH 2% CROWN CROSS SECTION
* PER CALTRANS DESIGN MANUAL FIGURE 202.2
MINIMUM RADIUS WITH 2% SUPERELEVATION IS 411 FEET.

GRAPHIC SCALE 1" = 80'

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SAN DIEGO, CA 92110
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rickengineering.com
San Diego Riverside • Orange • Sacramento • San Luis Obispo • Phoenix • Tucson • Denver
J-15013CCC

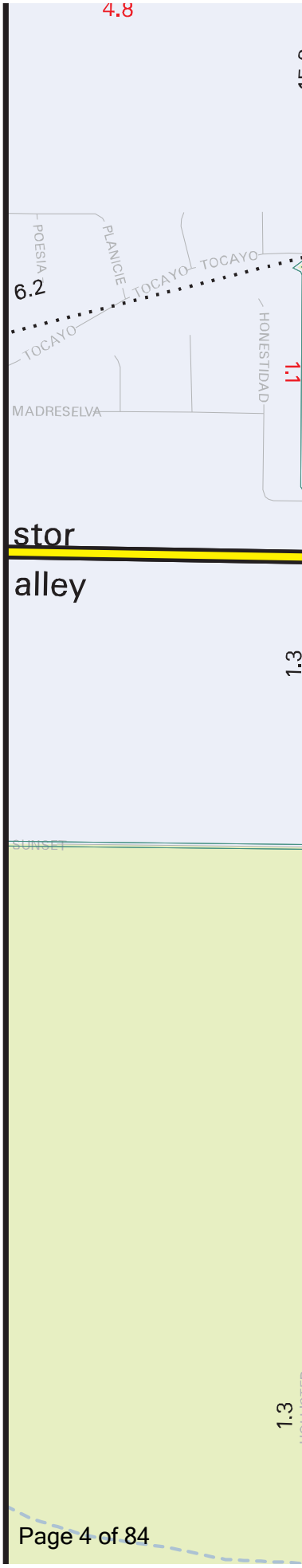
SANDAG Series 12 2035 Revenue Constrained 2011 RTP Highway Network Forecasted Daily Volumes

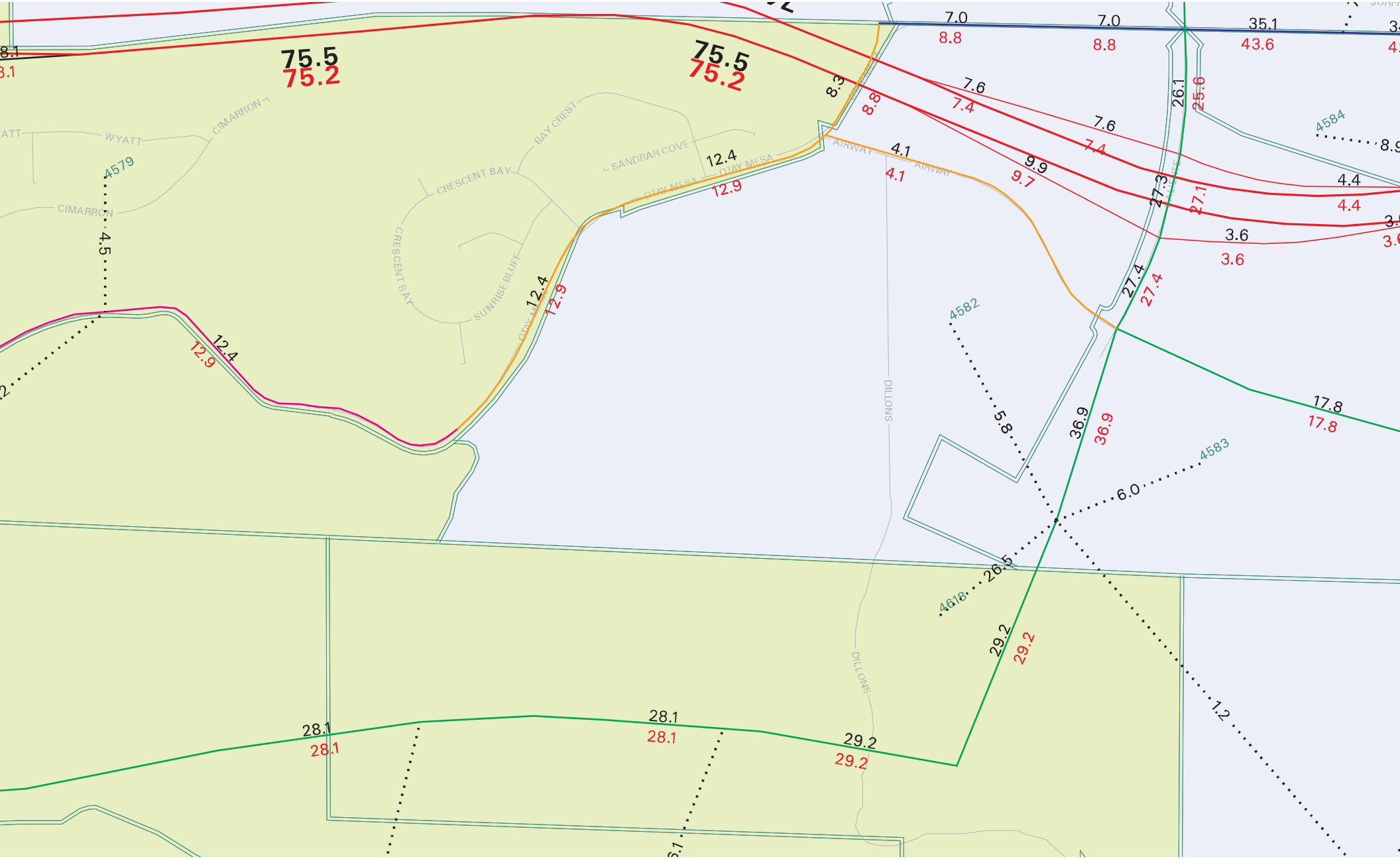
SAN YSIDRO

Model Rerun 05/14/14
San Ysidro CPU
2035 Scenario D - Proposed LU 2, Hybrid Network

Forecasted Volumes:

- # Adjusted Volume
- # Unadjusted Volume
- # Traffic Analysis Zone

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From Brooke Peterson **Date** 5/8/2020, 10:52:18 AM
To Shannon Baer
Cc
Subject FW: Caliente/Beyer Follow Up
image001.jpg (3 KB HTML)

From: Brooke Peterson
Sent: Thursday, May 7, 2020 3:14 PM
To: Ghossain, George <GGhossain@sandiego.gov>
Subject: Caliente/Beyer Follow Up

George,

I wanted to follow up on our discussion yesterday on two items.

First, thank you again for all your effort and coordination with City staff and Planning particularly, to confirm an agreed upon design for the realignment and downgrade of Caliente. Your willingness to work with us and City staff to find a solution was excellent and much appreciated. Based on your and Planning's concurrence with Alternative 3, we will proceed with redesign of the VTM and specific plan land use plan based on the down-grade of Caliente from the 6-land Urban Major identified in the Otay Mesa Community Plan to a 4-land Urban Collector with the Alternative 3 alignment and cross-section design.

Second, regarding your request for us to revise our design for Beyer Blvd. to accommodate a Class II bikeway in addition to our Class IV, I would appreciate asking yet again for some of your time to discuss. I recognize that we are working together to compromise from both the City and applicant side. I understand the political priorities and the focus and intent of the community plan – and the need to adhere and implement that intent. Understanding that however, I wanted to give you a more detailed description of the constraints I referred to and the implications of adding to the right-of-way (below) and then discuss when you are able.

- Our ROW is 90-ft. in our Beyer Blvd West of the project boundary and 106-ft. within the project boundary. Adding the Class II would add an additional 16-ft to the ROW.
- There is significant topography so 16 more feet would significantly increase the grading, cut/fill etc.
- Everything along Beyer between the project boundary to the San Ysidro boundary is MHPA, including the County of San Diego Furby Preserve. We have minimized our footprint of Beyer Rd from the very beginning in response to this to minimize MHPA and particularly conservation preserve lands.

MEMORANDUM

DATE	September 3, 2020
TO	George Ghossain, City of San Diego, Transportation Department
FROM	Brooke Peterson, Rick Engineering, Southwest Village Project Manager
SUBJECT	Beyer Boulevard and Caliente Avenue Alignment Rationale for Southwest Village
PROJECT NUMBER	PTS 614791

This memorandum is intended to document the rationale for the Beyer Boulevard and Caliente Avenue alignments and act as a baseline in which to reference in future coordination related to the transportation network of the Southwest Village. Considering the complexity and magnitude of the Southwest Village project, we believe it is worthwhile to summarize in written-form the methodologies and conclusions that have led to the currently proposed Beyer Blvd and Caliente Ave.

I. Background

The alignments of Beyer Boulevard and Caliente Avenue in the Southwest Village Specific Plan Area (SPA) were first outlined in the Otay Mesa Community Plan Update (OMCPU). These roadways are key to the SPA as they are intended to be the two main points of direct access to the SPA from the surrounding communities to the north and west. The preparation of the Southwest Village Specific Plan prompted the need to engineer and finalize the alignments of Beyer Blvd and Caliente Ave. In doing so, Beyer Blvd and Caliente Ave have been designed and engineered to minimize and address various development constraints which has led to its current design.

The development constraints for Beyer Blvd include:

- Environmental and topographic challenges within Moody Canyon;
- Cut and fill quantity limitations;
- The Furby Preserve 100% Conserved parcel that bisects the Beyer Blvd alignment;
- County Multiple Habitat Conservation Plan (MHPA) designation;
- 90-foot Right-of-Way for Beyer Blvd West;
- The OMCPU designation of a 4-Lane Major Arterial.

The development constraints for Caliente Avenue include:

- The City-owned Vernal Pool Habitat Conservation Plan (VPHCP) 100% Conserved parcel to the east of Caliente Ave;
- The City's request to make the SPA a grid-system;
- Turning and speed limit minimums for the curved alignment of Caliente Ave;
- The OMCPU designation of a 6-Lane Major Arterial.

II. Methodology

The OMCPU designated Beyer Blvd as a 4-Lane Major Arterial and Caliente Ave as a 6-Lane Major Arterial based on anticipated average daily trips (ADT), which was based on anticipated population within the SPA. With the preparation of the Southwest Village Specific Plan, development constraints and land use designations have lowered the number of anticipated residential units, thus lowering future ADT, compared to the OMCPU estimates. LOS Engineering

conducted modeling and analysis on the ADT caused by construction and buildout of the Southwest Village, and concluded that future conditions would result in 7,393 less average daily trips (ADT) than what was assumed in the OMCP. A meeting on March 11, 2020 was held with representatives from City Transportation, Mobility, and Long-Range Planning Departments to discuss and decide on a preferred method of classifying Beyer Blvd and Caliente Ave. The following conclusions were presented to the City on March 11, 2020 which support the preferred classifications of Beyer Blvd as a 4-Lane Urban Major Street and Caliente Ave as a 4-Lane Urban Collector:

- The Otay Mesa Community Plan (OMCP) has industrial land uses with an overall mix of 11% residential and 89% industrial/other. Most of the industrial uses are located in the center and eastern side of the community while residential is mostly in the west with some in the center of the community. The Otay Mesa Southwest Village is unique without industrial uses and in the far Southwest corner of the Community Plan.

- Truck routes/restriction do not appear to exist for Beyer Blvd and Caliente Ave. There are no industrial uses in the Southwest Village, thus there would be no reason for Otay Mesa commercial trips to use Beyer Blvd and Caliente Ave other than for local deliveries. Without the demand or cut-through needs for commercial traffic, Beyer Blvd and Caliente Ave would predominately be for Southwest Village retail and residential traffic, supporting a lower volume than shown in the OMCP.

- Since the OMCP, there have been multiple different projects, Central Village SPA, and the proposed Southwest Village, that have in combination reduced the number of residential units by 2,519 from the OMCP. Similarly, the more recent San Ysidro Community Plan Update (SYCPU) had a traffic model that included the Southwest Village, which included an ADT of 29.2k for Caliente Ave between Central Ave and Beyer Blvd, compared to the 46k ADT used in the OMCPU.

- Cut through traffic on Beyer Blvd and Caliente Ave would result in a more circuitous route and more traffic signals than using SR-905 and I-805. Additionally, the cut through route would have the Caliente Ave interchange at SR-905, but no equivalent at the Beyer bridge over I-805. Therefore, a cut-through trip would end up in a San Ysidro neighborhood and not on I-805.

The preferred Caliente Ave alignment discussed at the March 11, 2020 meeting curves around the VPHCP parcel. The new curved alignment requires a speed reduction around the curve, affects the ability of Caliente Ave to be classified as a 4-Lane Urban Major Street. Thus, further justifying the downgrade of Caliente Ave to a 4-Lane Urban Collector.

Beyer Blvd was designed in it's current alignment in order to best replicate the alignment identified in the OMCPU, while minimizing adverse effects on resources in the area. The OMCPU envisioned Beyer Blvd to the secondary access road to the SPA, with Caliente Ave being the primary access road. To adequately alleviate vehicle trips on Caliente Ave, Beyer Blvd would need to be a straight shot from the San Ysidro community to the west. Therefore, Beyer Blvd was designed within the slope of Mood Canyon. Although the design of Beyer Blvd requires large quantities of grading and buttressing for the roadway, and bisects the Furby Preserve, the Applicant is working with wildlife agencies to find concurrence on the alignment of Beyer Blvd.

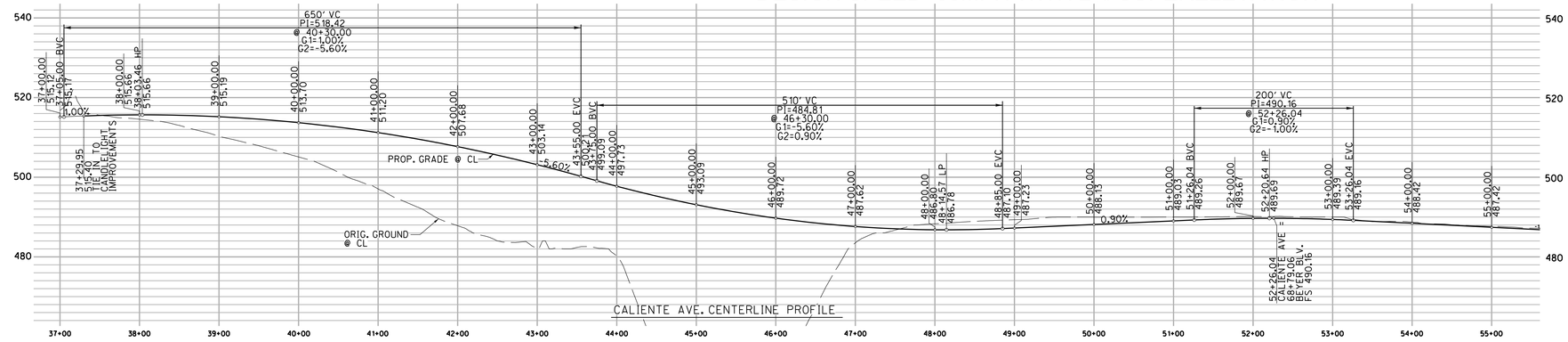
III. Conclusions

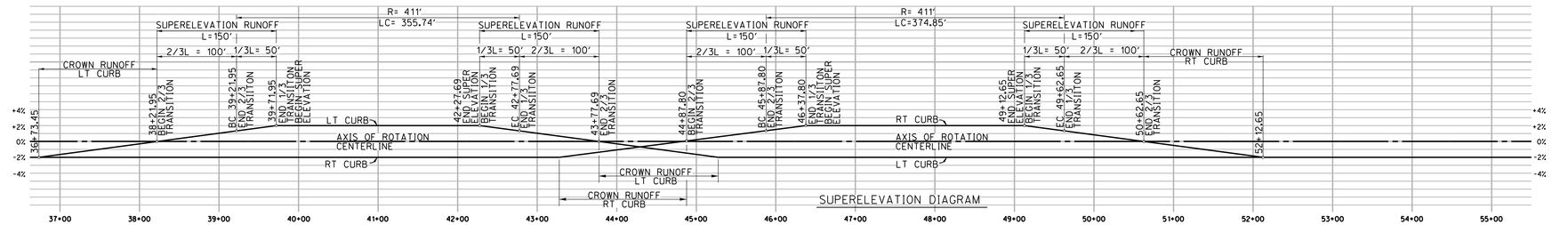
In the March 11, 2020 meeting, City staff concurred that a downgrade to Caliente Ave from 4-Lane Major Arterial to a 4-Lane Urban Collector is the preferred method to maintain the grid system south of Central Ave, avoid mobility implications, maintain lot lines to the greatest extent feasible, and avoid impacting the VPHCP parcel adjacent to Caliente Ave. Upon providing concurrence on downgrading Caliente Ave from a 6M to a 4-Lane Urban Collector, the City requested the Applicant redesign Caliente Ave to have on-street Class II bike facilities with a two-foot buffer to facilitate the downgrade and speed limit reduction. This request has been accommodated. In addition, City Long Range staff suggested a traffic circle as a traffic calming measure at the intersection of Central Ave and Caliente Ave. It was discussed that considering the environmental documentation and VTM for a project north of Specific Plan boundary, there would be design and analysis implications with incorporating a traffic circle at that location. Thus, a

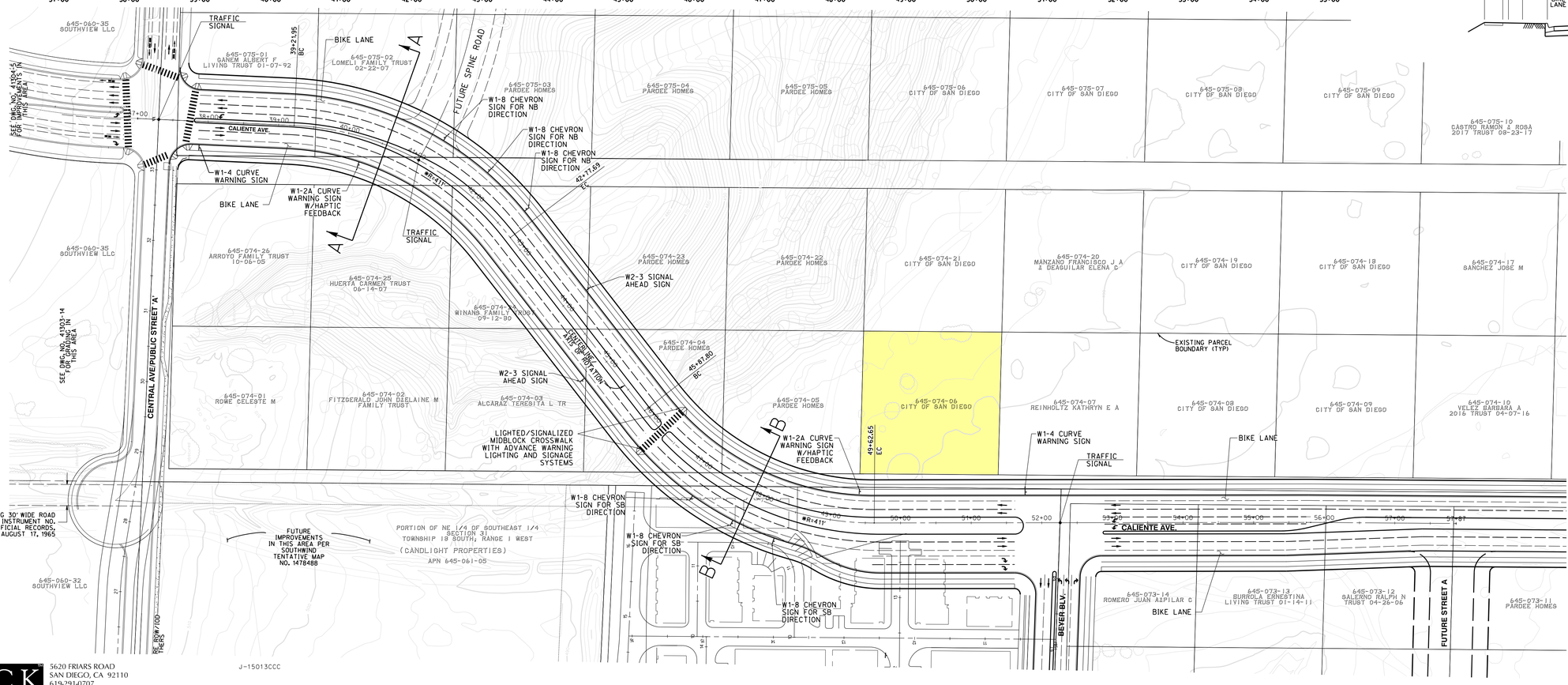
traffic circle at the intersection of Central Ave and Caliente Ave was not carried through in the current designs. See the currently proposed alignment, cross-sections, and elevations of Caliente Ave in Section IV Alignments, Elevations, and Cross-Sections.

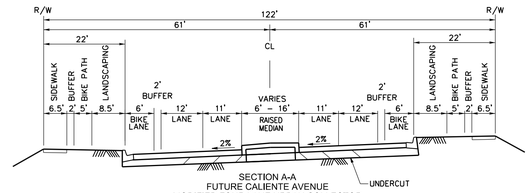
After the City's concurrence with the classification of Beyer Blvd as a 4-Lane Urban Collector, the City requested Beyer Blvd to provide on-street Class II bike facilities with a two-foot buffer to facilitate the downgrade and align with the OMCPU. This request has been accommodated in the ROW by reducing the outside travel lane from 12 feet to 11 feet and the landscape strip in the parkway down to 6.5 feet. See the currently proposed alignment, cross-sections, and elevations of Beyer Blvd in Section IV Currently Proposed Cross-Sections.

SOUTHWEST VILLAGE - CALIENTE AVENUE ALTERNATIVE 3 LINE AND GRADE STUDY
ROADWAY ALIGNMENT AS A 4 LANE URBAN COLLECTOR WITH BIKE LANE
DESIGN SPEED=35MPH WITH 2% SUPERELEVATION

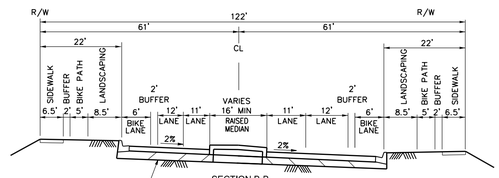




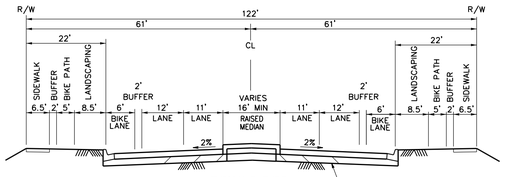




SECTION A-A
FUTURE CALIENTE AVENUE
MODIFIED FOUR LANE URBAN COLLECTOR
W/ 2% SUPERELEVATION
NOT TO SCALE



SECTION B-B
FUTURE CALIENTE AVENUE
MODIFIED FOUR LANE URBAN COLLECTOR
W/ 2% SUPERELEVATION
NOT TO SCALE



TYPICAL FUTURE
CALIENTE AVENUE
MODIFIED FOUR LANE URBAN COLLECTOR
NOT TO SCALE

CLIENTE AVE. DESIGN REQUIREMENTS
DESIGN SPEED - 35 mph
MAXIMUM GRADE - 7%
MINIMUM CURVE RADIUS:
610' WITH 2% STANDARD CROWN CROSS SECTION
• PER CALTRANS DESIGN MANUAL FIGURE 202.2
MINIMUM RADIUS WITH 2% SUPERELEVATION IS 411 FEET.

SIGNAGE LEGEND

W1-4 CURVE WARNING SIGN

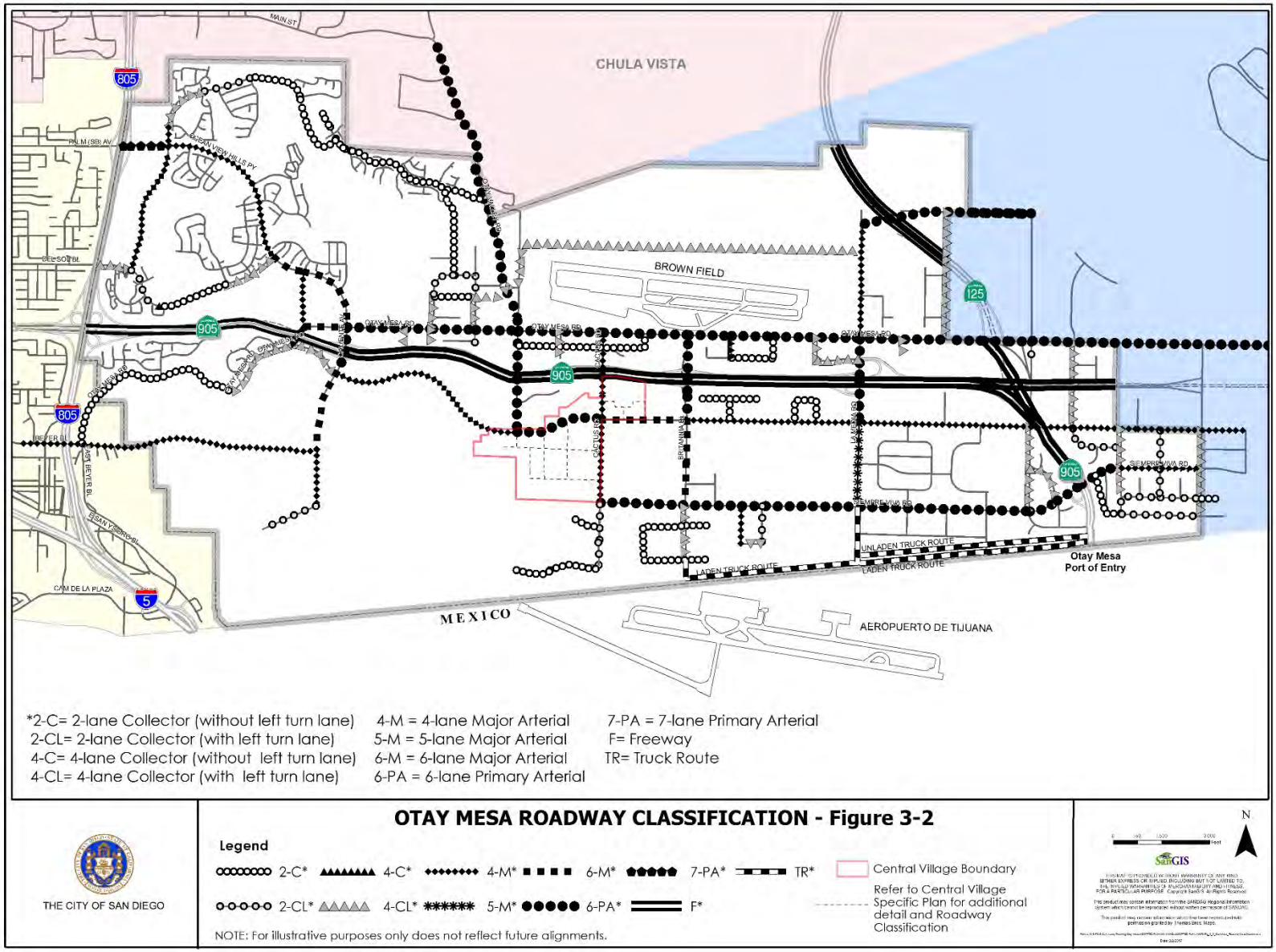
W1-2A CURVE WARNING WITH HAPTIC FEEDBACK

W1-8 CHEVRON SIGN

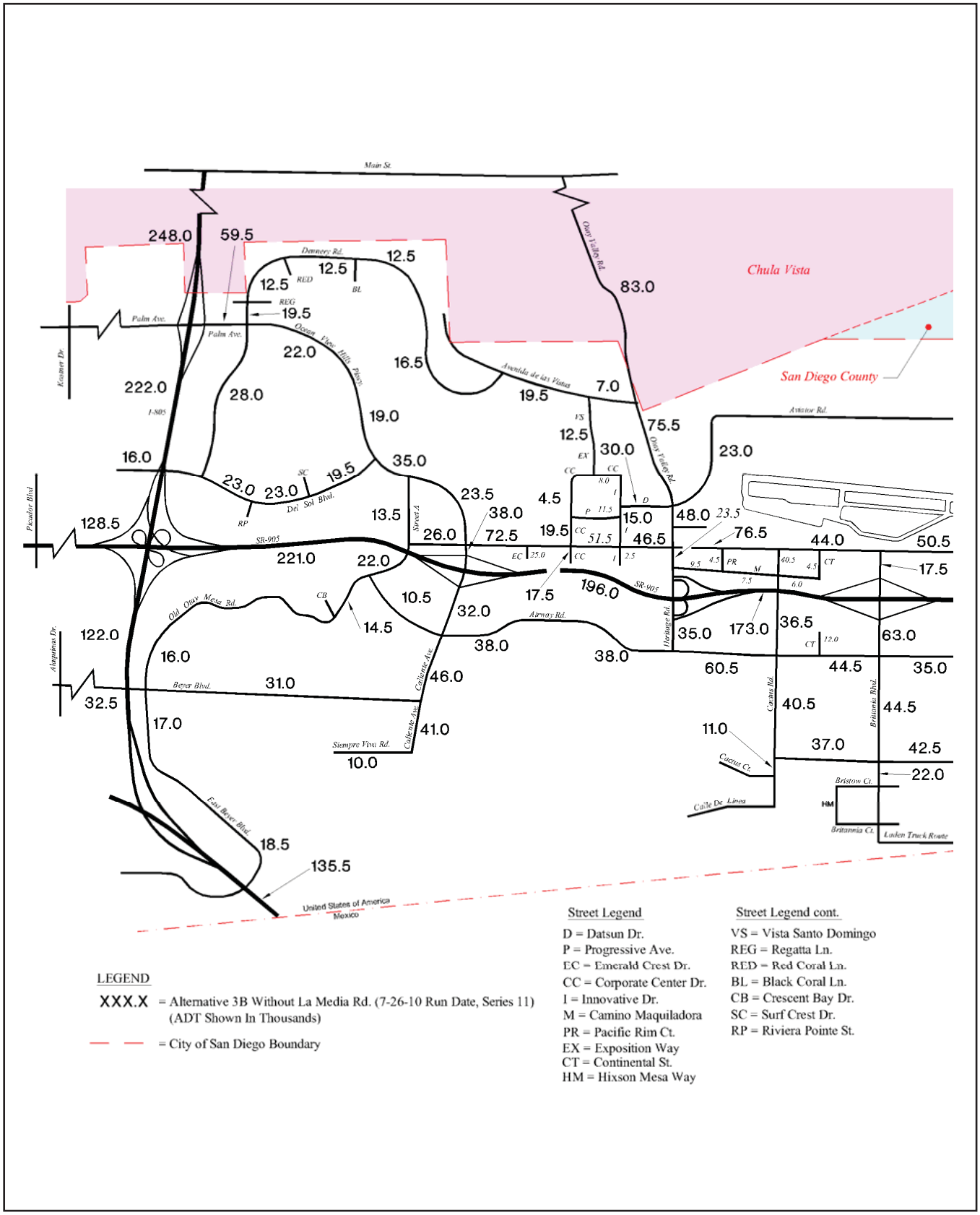
W2-3 SIGNAL AHEAD SIGN

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
San Diego - Orange - Riverside - Phoenix - Tucson - Denver

J-15013CCC


CHULA VISTA
MEXICO
BROWN FIELD
Otay Mesa
Port of Entry
AEROPUERTO DE TIJUANA
UNLADEN TRUCK ROUTE
LADEN TRUCK ROUTE
*2-C= 2-lane Collector (without left turn lane)
2-CL= 2-lane Collector (with left turn lane)
4-C= 4-lane Collector (without left turn lane)
4-CL= 4-lane Collector (with left turn lane)
4-M = 4-lane Major Arterial
5-M = 5-lane Major Arterial
6-M = 6-lane Major Arterial
6-PA = 6-lane Primary Arterial
7-PA = 7-lane Primary Arterial
F= Freeway
TR= Truck Route
OTAY MESA ROADWAY CLASSIFICATION - Figure 3-2
Legend
2-C* 4-C* 4-M* 6-M* 7-PA* TR*
2-CL* 4-CL* 5-M* 6-PA* F*
Central Village Boundary
Refer to Central Village Specific Plan for additional detail and Roadway Classification
NOTE: For illustrative purposes only does not reflect future alignments.
THE CITY OF SAN DIEGO
N

Map Source: Urban Systems Associates, Inc. 2012



LEGEND

XXX.X = Alternative 3B Without La Media Rd. (7-26-10 Run Date, Series 11) (ADT Shown In Thousands)

— — = City of San Diego Boundary

Street Legend

D = Datsun Dr.
P = Progressive Ave.
EC = Emerald Crest Dr.
CC = Corporate Center Dr.
I = Innovative Dr.
M = Camino Maquiladora
PR = Pacific Rim Ct.
EX = Exposition Way
CT = Continental St.
HM = Hixson Mesa Way

Street Legend cont.

VS = Vista Santo Domingo
REG = Regatta Ln.
RED = Red Coral Ln.
BL = Black Coral Ln.
CB = Crescent Bay Dr.
SC = Surf Crest Dr.
RP = Riviera Pointe St.

Not to Scale

FIGURE 5.12-3a

Horizon Year Plus CPU Condition Roadway Segment Volumes (West)

TABLE 5.12-5
CPU HORIZON YEAR ROADWAY SEGMENT LEVEL OF SERVICE
(continued)

Street	Segment	Horizon Year					Horizon Year with CPU			
		Class[1]	LOS E ADT[2]	Segment ADT	V/C	LOS	New Class	New V/C	New LOS	Sig?
Palm Ave.	I-805 to Dennery Rd.	7-PA	65,000	59,500	0.92	D	-	-	-	N
Ocean View Hills Parkway	Dennery Rd. to Del Sol Blvd.	4-M	40,000	22,000	0.55	C	-	-	-	N
	Del Sol Blvd. to Street "A"	6-M	50,000	35,000	0.70	C	-	-	-	N
	Street "A" to Otay Mesa Rd.	6-M	50,000	23,500	0.42	B	-	-	-	N
Caliente Avenue	Otay Mesa Rd. to SR-905	6-M	50,000	38,000	0.76	C	6-PA	0.63	C	N
	SR-905 to Airway Rd.	6-M	50,000	32,000	0.64	C	6-PA	0.53	B	N
	Airway Rd. to Beyer Blvd.	4-M	40,000	46,000	1.15	**F**	6-M	0.92	**E**	**Y**
	Beyer Blvd. to Siempre Viva Rd.	4-M	40,000	41,000	1.03	**F**	-	-	-	**Y**
Beyer Boulevard	Alaquinas Dr. to Old Otay Mesa Rd.	4-M	40,000	32,500	0.81	D	-	-	-	N
	Old Otay Mesa Rd. to Caliente Ave.[3]	4-M	40,000	31,000	0.78	D	-	-	-	N
Heritage Road/ Otay Valley Road	Main St. to Avenida de Las Vistas**	6-PA	60,000	83,000	1.38	**F**	-	-	-	**Y**
	Avenida De Las Vistas to Datsun St.	6-M	50,000	75,500	1.51	**F**	6-PA	1.26	**F**	**Y**
	Datsun St. to Otay Mesa Rd.	6-M	50,000	48,000	0.96	**E**	6-PA	0.80	C	N
	Otay Mesa Rd. to SR-905	6-M	50,000	23,500	0.47	B	6-PA	0.39	A	N
	SR-905 to Airway Rd.	6-M	50,000	35,000	0.70	C	6-PA	0.58	B	N
Cactus Road	Otay Mesa Rd. to Airway Rd.	4-CL	30,000	40,500	1.35	**F**	4-M	1.01	**F**	**Y**
	Airway Rd. to Siempre Viva Rd.	4-CL	30,000	40,500	1.35	**F**	4-M	1.01	**F**	**Y**
	Siempre Viva Rd. to South End	2-CL	15,000	11,000	0.73	D	-	-	-	N
Britannia Boulevard	Otay Mesa Rd. to SR-905	4-M	40,000	17,500	0.44	B	6-PA	0.29	A	N
	SR-905 to Airway Rd.	4-M	40,000	63,000	1.58	**F**	6-PA	1.05	**F**	**Y**
	Airway Rd. to Siempre Viva Rd.	4-M	40,000	44,500	1.11	**F**	6-M	0.89	D	N
	Siempre Viva Rd. to South End	2-C	8,000	22,000	2.75	**F**	4-CL	0.73	D	N
La Media Road	Birch Rd. to Lone Star Rd.**	6-PA	60,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Lone Star Rd. to Aviator Rd.	6-PA	60,000	19,500	0.33	A	4-M	0.49	B	N
	Aviator Rd. to Otay Mesa Rd.	6-PA	60,000	22,500	0.38	A	4-M	0.56	C	N
	Otay Mesa Rd. to SR-905	6-PA	60,000	37,500	0.63	C	-	-	-	N
	SR-905 to Airway Rd.	6-PA	60,000	64,000	1.06	**F**	-	-	-	**Y**
	Airway Rd. to Siempre Viva Rd.	4-M	40,000	33,000	0.83	D	5-M	0.73	C	N
Harvest Road	South of Otay Mesa Rd.	4-M	40,000	8,500	0.21	A	2-CL	0.57	C	N
	Airway Rd. to Otay Center Dr.	4-M	40,000	16,000	0.40	B	4-CL	0.53	C	N
	Otay Center Dr. to Siempre Viva Rd.	4-M	40,000	10,000	0.25	A	4-CL	0.33	A	N
Enrico Fermi Drive	SR-11 to Airway Rd.*	4-M	40,000	15,500	0.62	B	-	-	-	N
	Airway Rd. to Siempre Viva Rd.	4-M	40,000	8,000	0.20	A	4-CL	0.27	A	N
	Siempre Viva Rd. to Via de la Amistad	4-M	40,000	10,500	0.26	A	4-CL	0.35	B	N

However, due to the uncertainty associated with implementing freeway ramp improvements, and uncertainty related to implementation of TDM measures, the freeway ramp impacts associated with the CPU would remain significant and ~~unavoidable~~ unmitigated at the program-level.

5.12.3.4 Significance After Mitigation

a. Roadway Segments

Implementation of roadway segment improvements proposed as part of the CPU (see Section 5.12.3.1(a) above) would resolve several traffic impacts that would occur under the Horizon Year. However, 24 significant impacts as shown in Table 5.12-5 would remain ~~unavoidable~~unmitigated and would operate unacceptably in the Horizon Year plus CPU Condition as shown below~~.~~:

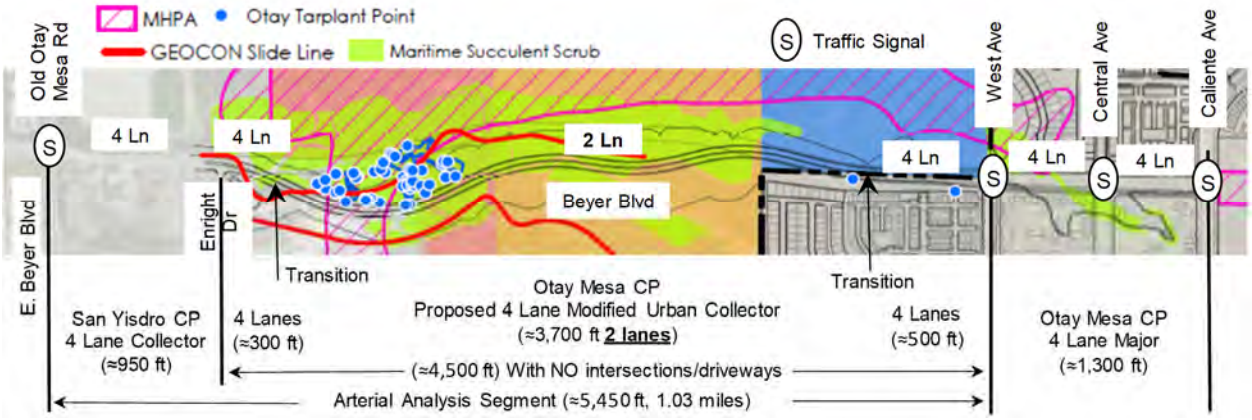
1. Otay Mesa Road, Caliente Ave. to Corporate Center Dr.
2. Otay Mesa Road, Heritage Rd. to Cactus Rd.
3. Airway Road, Caliente Ave. to Heritage Rd.
4. Airway Road, Heritage Rd. to Cactus Rd.
5. Siempre Viva Road, Otay Center Dr. to SR-905
6. Siempre Viva Road, SR-905 to Paseo de las Americas
7. Caliente Avenue, Airway Rd. to Beyer Blvd.
8. Caliente Avenue, Beyer Blvd. to Siempre Viva Rd.
9. Heritage Road/Otay Valley Road, Main St. to Avenida de Las Vistas
10. Heritage Road/Otay Valley Road, Avenida de las Vistas to Datsun St.
11. Cactus Road, Otay Mesa Rd. to Airway Rd.
12. Cactus Road, Airway Rd. to Siempre Viva Rd.
13. Britannia Boulevard, SR-905 to Airway Rd.
14. La Media Road, SR-905 to Airway Rd.
15. Dennery Road, Black Coral Ln. to East End
16. Avenida de las Vistas, Vista Santo Domingo to Dennery Rd.
17. Del Sol Boulevard, Surf Crest Dr. to Riviera Pointe
18. Del Sol Boulevard, Riviera Pointe to Dennery Rd.
19. Old Otay Mesa Road, Crescent Bay Dr. to Beyer Blvd.
20. Camino Maquiladora, Heritage Rd. to Pacific Rim Ct.
21. Camino Maquiladora, Pacific Rim Ct. to Cactus Rd.
22. Progressive Avenue, Corporate Center Dr. to Innovative Dr.
23. Datsun Street, Innovative Dr. to Heritage Rd.
24. Exposition Way/Vista Santo Domingo, Avenida de las Vistas to Corporate Center Dr.

Attachment B

Beyer Blvd Downgrade Details

Beyer Blvd Horizon Year Arterial Analysis (LOS Engineering, Inc.)

Purpose: To find a solution to support a 2-lane cross section across environmentally sensitive lands regulated by a non-City of San Diego jurisdiction. Horizon year arterial analysis from Old Otay Mesa Rd/E. Beyer Blvd to Caliente Ave as shown.



The proposed Beyer Blvd alignment and section with 2 lanes is shown on the next page.

The horizon year intersection volumes for Beyer/E. Beyer/Old Otay Mesa Rd were obtained from the San Ysidro CPU EIR. This horizon year volumes set is higher over existing volumes by 310% AM and 411% PM. Therefore, this intersection was expanded in Synchro beyond the available right-of-way to reach acceptable LOS with the horizon year volumes.

The San Ysidro CPU EIR did not expand this intersection to accommodate the volumes and listed this intersection as failing with overrides. Following this Arterial Analysis is a Supplemental Analysis that provides the percentage of horizon year volumes that can be accommodated within the existing right-of-way and within the anticipated right-of-way that is typically required for the respective roadway approach classifications.

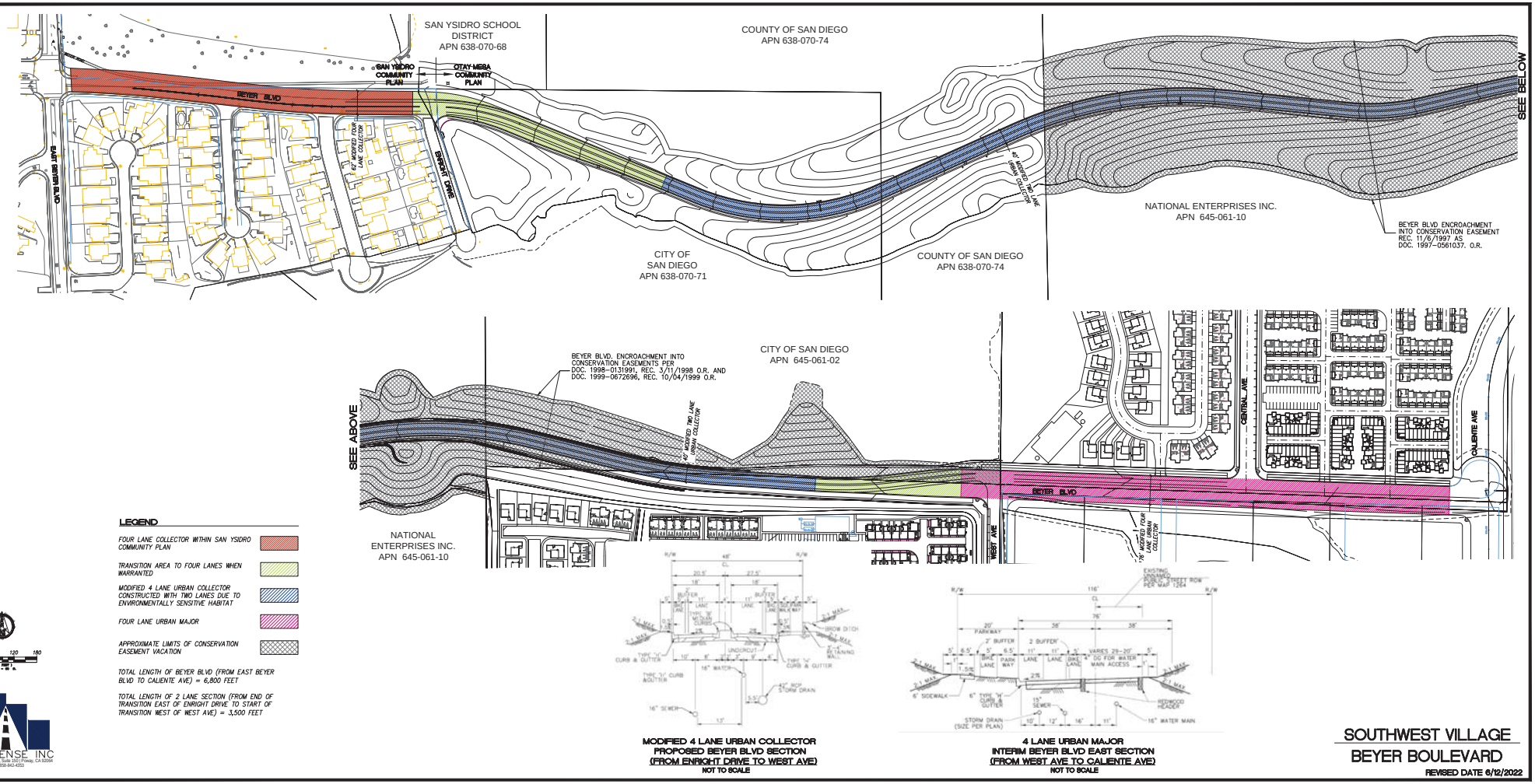
Expanding the intersection at Beyer/E. Beyer/Old Otay Mesa Rd (west end) and the proposed lane configuration along the three signalized intersection in Southwest Village (east end) to match the proposed classification along with 5,130 homes for Southwest Village (max units), the arterial speeds and the intersections at both ends of this arterial analysis are at acceptable LOS as shown below.

Horizon Year Beyer Blvd Arterial Analysis LOS and Speeds

Beyer Blvd 35 MPH	**2 Lanes (≈3,700 ft Enright Dr to West Ave) Overall Segment ≈6,750 ft**
AM EB	LOS A 31.1 MPH (Enright Dr to West Ave) & Overall Segment = LOS D
AM WB	LOS C 22.1 MPH (West Ave to Enright Dr) & Overall Segment = LOS C
PM EB	LOS B 27.5 MPH (Enright Dr to West Ave) & Overall Segment = LOS D
PM WB	LOS B 27.7 MPH (West Ave to Enright Dr) & Overall Segment = LOS C
West end Old Otay signal LOS D/D (AM/PM)	East end Caliente signal LOS B/B (AM/PM)

Design speed of 35 MPH from Street Design Manual for a Four Lane Urban Collector

Attachments


SAN YSIDRO SCHOOL DISTRICT APN 638-070-68
COUNTY OF SAN DIEGO APN 638-070-74
SAN YSIDRO COMMUNITY PLAN
OTAY MESA COMMUNITY PLAN
BEYER BLVD
EAST BEYER BLVD
62' MODIFIED FOUR LANE COLLECTOR
ENRIGHT DRIVE
40' MODIFIED TWO LANE MAJOR COLLECTOR
SEE BELOW
NATIONAL ENTERPRISES INC. APN 645-061-10
BEYER BLVD ENCROACHMENT INTO CONSERVATION EASEMENT REC. 11/6/1997 AS DOC. 1997-0561037, O.R.
CITY OF SAN DIEGO APN 638-070-71
COUNTY OF SAN DIEGO APN 638-070-74
BEYER BLVD. ENCROACHMENT INTO CONSERVATION EASEMENTS PER DOC. 1998-0131991, REC. 3/11/1998 O.R. AND DOC. 1999-0672696, REC. 10/04/1999 O.R.
CITY OF SAN DIEGO APN 645-061-02
SEE ABOVE
NATIONAL ENTERPRISES INC. APN 645-061-10
WEST AVE
CENTRAL AVE
CALIENTE AVE
BEYER BLVD
76' MODIFIED FOUR LANE MAJOR COLLECTOR
LEGEND
FOUR LANE COLLECTOR WITHIN SAN YSIDRO COMMUNITY PLAN
TRANSITION AREA TO FOUR LANES WHEN WARRANTED
MODIFIED 4 LANE URBAN COLLECTOR CONSTRUCTED WITH TWO LANES DUE TO ENVIRONMENTALLY SENSITIVE HABITAT
FOUR LANE URBAN MAJOR
APPROXIMATE LIMITS OF CONSERVATION EASEMENT VACATION
TOTAL LENGTH OF BEYER BLVD (FROM EAST BEYER BLVD TO CALIENTE AVE) = 6,800 FEET
TOTAL LENGTH OF 2 LANE SECTION (FROM END OF TRANSITION EAST OF ENRIGHT DRIVE TO START OF TRANSITION WEST OF WEST AVE) = 3,500 FEET
0 30 60 120 180
CIVIL SENSE INC
13475 Danielson Street, Suite 150 | Poway, CA 92064
Office: 858-842-4333
MODIFIED 4 LANE URBAN COLLECTOR
PROPOSED BEYER BLVD SECTION
(FROM ENRIGHT DRIVE TO WEST AVE)
NOT TO SCALE
4 LANE URBAN MAJOR
INTERIM BEYER BLVD EAST SECTION
(FROM WEST AVE TO CALIENTE AVE)
NOT TO SCALE
SOUTHWEST VILLAGE
BEYER BOULEVARD
REVISED DATE 6/12/2022

Arterial Level of Service: EB Beyer Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
E Beyer Blvd	III	35	14.6	91.7	106.3	0.11	3.7	F
West Ave	III	35	106.1	13.2	119.3	1.03	31.1	A
Central Ave	III	35	17.0	26.0	43.0	0.13	11.1	E
Caliente Ave	III	35	15.4	18.4	33.8	0.11	12.1	E
Total	III		153.1	149.3	302.4	1.39	16.5	D

Arterial Level of Service: WB Beyer Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Ave	III	35	15.4	21.7	37.1	0.11	11.1	E
West Ave	III	35	17.0	10.7	27.7	0.13	17.3	D
Otay Mesa Rd	III	35	106.1	61.9	168.0	1.03	22.1	C
Total	III		138.5	94.3	232.8	1.28	19.8	C

Arterial Level of Service: EB Beyer Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
E Beyer Blvd	III	35	14.6	73.9	88.5	0.11	4.4	F
West Ave	III	35	106.1	28.9	135.0	1.03	27.5	B
Central Ave	III	35	17.0	69.9	86.9	0.13	5.5	F
Caliente Ave	III	35	15.4	24.1	39.5	0.11	10.4	E
Total	III		153.1	196.8	349.9	1.39	14.3	D

Arterial Level of Service: WB Beyer Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Central Ave	III	35	15.4	26.3	41.7	0.11	9.8	F
West Ave	III	35	17.0	5.7	22.7	0.13	21.1	C
Otay Mesa Rd	III	35	106.1	28.0	134.1	1.03	27.7	B
Total	III		138.5	60.0	198.5	1.28	23.2	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	564	802	340	866	920	218	466	372	808	133	265	508
Future Volume (veh/h)	564	802	340	866	920	218	466	372	808	133	265	508
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.96	1.00		0.88	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	613	872	370	941	1000	237	507	404	878	145	288	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	688	952	1167	893	1174	665	595	745	1234	181	502	934
Arrive On Green	0.20	0.27	0.27	0.26	0.33	0.33	0.17	0.21	0.21	0.10	0.14	0.14
Sat Flow, veh/h	3456	3554	2562	3456	3554	1525	3456	3554	2446	1781	3554	2678
Grp Volume(v), veh/h	613	872	370	941	1000	237	507	404	878	145	288	280
Grp Sat Flow(s),veh/h/ln	1728	1777	1281	1728	1777	1525	1728	1777	1223	1781	1777	1339
Q Serve(g_s), s	21.5	29.6	11.7	32.1	32.6	13.0	17.7	12.6	26.0	9.9	9.4	9.6
Cycle Q Clear(g_c), s	21.5	29.6	11.7	32.1	32.6	13.0	17.7	12.6	26.0	9.9	9.4	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	688	952	1167	893	1174	665	595	745	1234	181	502	934
V/C Ratio(X)	0.89	0.92	0.32	1.05	0.85	0.36	0.85	0.54	0.71	0.80	0.57	0.30
Avail Cap(c_a), veh/h	826	952	1167	893	1174	665	718	745	1234	483	970	1286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.4	44.1	22.8	46.1	38.7	23.7	49.9	43.8	27.3	54.6	49.8	30.2
Incr Delay (d2), s/veh	10.5	14.8	0.7	45.3	6.1	0.3	9.7	1.2	2.3	13.1	1.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	14.5	3.5	19.2	14.9	4.6	8.2	5.5	10.4	5.0	4.2	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.9	58.9	23.5	91.4	44.9	24.1	59.6	45.0	29.5	67.7	51.6	30.5
LnGrp LOS	E	E	C	F	D	C	E	D	C	E	D	C
Approach Vol, veh/h		1855			2178			1789			713	
Approach Delay, s/veh		51.8			62.7			41.5			46.6	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	38.2	26.3	22.8	29.2	46.0	17.8	31.2
Change Period (Y+Rc), s	4.9	4.9	4.9	5.2	4.5	4.9	5.2	* 5.2
Max Green Setting (Gmax), s	32.1	33.3	25.8	33.9	29.7	36.1	33.7	* 26
Max Q Clear Time (g_c+I1), s	34.1	31.6	19.7	11.6	23.5	34.6	11.9	28.0
Green Ext Time (p_c), s	0.0	1.1	1.7	4.8	1.3	1.1	0.7	0.0

Intersection Summary			
HCM 6th Ctrl Delay		52.1	
HCM 6th LOS		D	

LOS Engineering, Inc.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	275	136	54	773	326	163
Future Volume (veh/h)	275	136	54	773	326	163
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	299	148	59	840	354	177
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	584	282	90	1559	512	456
Arrive On Green	0.25	0.25	0.05	0.44	0.29	0.29
Sat Flow, veh/h	2417	1122	1781	3647	1781	1585
Grp Volume(v), veh/h	227	220	59	840	354	177
Grp Sat Flow(s),veh/h/ln	1777	1668	1781	1777	1781	1585
Q Serve(g_s), s	3.6	3.7	1.1	5.7	5.8	2.9
Cycle Q Clear(g_c), s	3.6	3.7	1.1	5.7	5.8	2.9
Prop In Lane		0.67	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	446	419	90	1559	512	456
V/C Ratio(X)	0.51	0.52	0.65	0.54	0.69	0.39
Avail Cap(c_a), veh/h	1378	1294	569	4378	2194	1953
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.6	10.6	15.3	6.8	10.4	9.4
Incr Delay (d2), s/veh	0.9	1.0	7.7	0.3	1.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.1	0.5	1.2	1.5	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.5	11.6	23.1	7.1	12.1	9.9
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	447			899	531	
Approach Delay, s/veh	11.5			8.1	11.4	
Approach LOS	B			A	B	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		13.9	6.2	12.8		18.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		40.5	10.5	25.5		40.5
Max Q Clear Time (g_c+I1), s		7.8	3.1	5.7		7.7
Green Ext Time (p_c), s		1.6	0.1	2.5		6.6

Intersection Summary	
HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

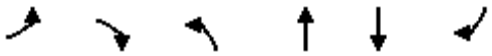
LOS Engineering, Inc.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	284	83	126	476	5	196	33	236	5	27	155
Future Volume (veh/h)	39	284	83	126	476	5	196	33	236	5	27	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	42	309	90	137	517	5	213	36	257	5	29	168
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	64	499	143	155	845	8	294	50	353	155	41	238
Arrive On Green	0.04	0.18	0.18	0.09	0.23	0.23	0.16	0.25	0.25	0.09	0.17	0.17
Sat Flow, veh/h	1781	2726	781	1781	3606	35	1781	198	1417	1781	239	1383
Grp Volume(v), veh/h	42	200	199	137	255	267	213	0	293	5	0	197
Grp Sat Flow(s),veh/h/ln	1781	1777	1730	1781	1777	1864	1781	0	1615	1781	0	1621
Q Serve(g_s), s	1.1	4.7	4.9	3.5	5.9	5.9	5.2	0.0	7.6	0.1	0.0	5.2
Cycle Q Clear(g_c), s	1.1	4.7	4.9	3.5	5.9	5.9	5.2	0.0	7.6	0.1	0.0	5.2
Prop In Lane	1.00		0.45	1.00		0.02	1.00		0.88	1.00		0.85
Lane Grp Cap(c), veh/h	64	325	317	155	416	437	294	0	403	155	0	279
V/C Ratio(X)	0.65	0.61	0.63	0.88	0.61	0.61	0.72	0.00	0.73	0.03	0.00	0.71
Avail Cap(c_a), veh/h	155	620	604	155	620	651	622	0	564	622	0	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.8	17.2	17.3	20.7	15.7	15.7	18.1	0.0	15.8	19.1	0.0	17.9
Incr Delay (d2), s/veh	10.6	1.9	2.1	40.0	1.5	1.4	3.4	0.0	2.9	0.1	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.8	1.8	3.0	2.1	2.2	2.0	0.0	2.5	0.0	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	19.1	19.3	60.6	17.1	17.1	21.5	0.0	18.6	19.2	0.0	21.2
LnGrp LOS	C	B	B	E	B	B	C	A	B	B	A	C
Approach Vol, veh/h		441			659			506			202	
Approach Delay, s/veh		20.5			26.2			19.9			21.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	15.9	8.5	12.9	12.1	12.4	6.2	15.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	16.0	16.0	4.0	16.0	16.0	16.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	2.1	9.6	5.5	6.9	7.2	7.2	3.1	7.9
Green Ext Time (p_c), s	0.0	0.8	0.0	1.5	0.4	0.6	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

LOS Engineering, Inc.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	408	112	261	792	367	340
Future Volume (veh/h)	408	112	261	792	367	340
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	443	122	284	861	399	370
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	762	349	495	1896	949	745
Arrive On Green	0.22	0.22	0.14	0.53	0.27	0.27
Sat Flow, veh/h	3456	1585	3456	3647	3647	2790
Grp Volume(v), veh/h	443	122	284	861	399	370
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1395
Q Serve(g_s), s	4.2	2.4	2.8	5.5	3.4	4.1
Cycle Q Clear(g_c), s	4.2	2.4	2.8	5.5	3.4	4.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	762	349	495	1896	949	745
V/C Ratio(X)	0.58	0.35	0.57	0.45	0.42	0.50
Avail Cap(c_a), veh/h	2315	1062	1654	4518	2381	1869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.7	12.0	14.6	5.3	11.1	11.3
Incr Delay (d2), s/veh	0.7	0.6	1.1	0.2	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.3	0.9	0.7	0.9	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.5	12.6	15.7	5.4	11.4	11.8
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	565			1145	769	
Approach Delay, s/veh	13.3			8.0	11.6	
Approach LOS	B			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		24.0		12.6	9.7	14.3
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		46.5		24.5	17.5	24.5
Max Q Clear Time (g_c+I1), s		7.5		6.2	4.8	6.1
Green Ext Time (p_c), s		6.4		1.9	0.7	3.7

Intersection Summary		
HCM 6th Ctrl Delay		10.3
HCM 6th LOS		B

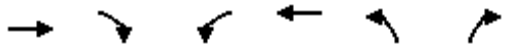
LOS Engineering, Inc.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	582	212	1030	657	78	130	121	591	222	130	116
Future Volume (veh/h)	79	582	212	1030	657	78	130	121	591	222	130	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.97	1.00		0.86	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	633	230	1120	714	85	141	132	642	241	141	-146
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	719	668	1157	1781	1013	200	621	1351	272	965	865
Arrive On Green	0.04	0.20	0.20	0.33	0.50	0.50	0.06	0.17	0.17	0.15	0.27	0.00
Sat Flow, veh/h	3456	3554	2507	3456	3554	1539	3456	3554	2389	1781	3554	2790
Grp Volume(v), veh/h	86	633	230	1120	714	85	141	132	642	241	141	-146
Grp Sat Flow(s),veh/h/ln	1728	1777	1253	1728	1777	1539	1728	1777	1194	1781	1777	1395
Q Serve(g_s), s	3.7	25.7	11.1	47.5	18.7	3.0	6.0	4.7	26.0	19.7	4.5	0.0
Cycle Q Clear(g_c), s	3.7	25.7	11.1	47.5	18.7	3.0	6.0	4.7	26.0	19.7	4.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	719	668	1157	1781	1013	200	621	1351	272	965	865
V/C Ratio(X)	0.65	0.88	0.34	0.97	0.40	0.08	0.71	0.21	0.48	0.89	0.15	-0.17
Avail Cap(c_a), veh/h	708	719	668	1163	1781	1013	536	621	1351	406	965	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.6	57.6	44.9	48.7	23.2	9.4	68.9	52.7	24.5	61.8	41.1	0.0
Incr Delay (d2), s/veh	5.2	14.6	1.4	19.1	0.1	0.0	7.6	0.3	0.4	18.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	12.8	3.6	22.9	7.7	1.0	2.8	2.1	7.4	10.2	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.8	72.2	46.3	67.9	23.3	9.5	76.5	52.9	24.9	80.2	41.2	0.0
LnGrp LOS	E	E	D	E	C	A	E	D	C	F	D	A
Approach Vol, veh/h		949			1919			915			236	
Approach Delay, s/veh		66.2			48.7			36.9			106.6	
Approach LOS		E			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	54.7	35.0	13.5	45.6	10.2	79.5	27.9	31.2
Change Period (Y+Rc), s	4.9	4.9	4.9	5.2	4.5	4.9	5.2	* 5.2
Max Green Setting (Gmax), s	50.1	30.1	23.1	36.8	30.5	50.1	33.9	* 26
Max Q Clear Time (g_c+I1), s	49.5	27.7	8.0	6.5	5.7	20.7	21.7	28.0
Green Ext Time (p_c), s	0.3	1.1	0.6	1.3	0.2	4.9	1.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.6
HCM 6th LOS	D

LOS Engineering, Inc.

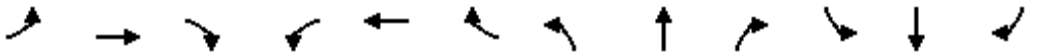


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	912	439	187	491	273	149
Future Volume (veh/h)	912	439	187	491	273	149
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	991	477	203	534	297	162
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1116	526	245	2402	354	315
Arrive On Green	0.48	0.48	0.14	0.68	0.20	0.20
Sat Flow, veh/h	2437	1105	1781	3647	1781	1585
Grp Volume(v), veh/h	746	722	203	534	297	162
Grp Sat Flow(s),veh/h/ln	1777	1672	1781	1777	1781	1585
Q Serve(g_s), s	27.3	28.7	8.0	4.1	11.5	6.6
Cycle Q Clear(g_c), s	27.3	28.7	8.0	4.1	11.5	6.6
Prop In Lane		0.66	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	846	796	245	2402	354	315
V/C Ratio(X)	0.88	0.91	0.83	0.22	0.84	0.51
Avail Cap(c_a), veh/h	876	824	285	2542	483	429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	17.4	30.2	4.4	27.7	25.7
Incr Delay (d2), s/veh	10.2	13.5	16.2	0.0	9.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	12.4	4.3	1.1	5.3	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.3	30.8	46.4	4.5	37.0	27.0
LnGrp LOS	C	C	D	A	D	C
Approach Vol, veh/h	1468			737	459	
Approach Delay, s/veh	29.0			16.0	33.5	
Approach LOS	C			B	C	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	18.8	14.4	38.8		53.2
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	19.5	11.5	35.5		51.5
Max Q Clear Time (g_c+I1), s	13.5	10.0	30.7		6.1
Green Ext Time (p_c), s	0.8	0.1	3.6		3.9

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

LOS Engineering, Inc.

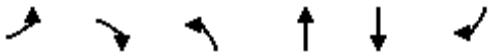


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	614	252	343	452	5	154	30	245	5	94	72
Future Volume (veh/h)	166	614	252	343	452	5	154	30	245	5	94	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	180	667	274	373	491	5	167	33	266	5	102	78
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	662	272	410	1350	14	214	38	303	94	141	108
Arrive On Green	0.13	0.27	0.27	0.23	0.37	0.37	0.12	0.21	0.21	0.05	0.14	0.14
Sat Flow, veh/h	1781	2457	1009	1781	3604	37	1781	178	1434	1781	983	752
Grp Volume(v), veh/h	180	482	459	373	242	254	167	0	299	5	0	180
Grp Sat Flow(s),veh/h/ln	1781	1777	1689	1781	1777	1864	1781	0	1612	1781	0	1735
Q Serve(g_s), s	7.5	20.5	20.5	15.5	7.5	7.5	6.9	0.0	13.7	0.2	0.0	7.5
Cycle Q Clear(g_c), s	7.5	20.5	20.5	15.5	7.5	7.5	6.9	0.0	13.7	0.2	0.0	7.5
Prop In Lane	1.00		0.60	1.00		0.02	1.00		0.89	1.00		0.43
Lane Grp Cap(c), veh/h	223	479	455	410	665	698	214	0	340	94	0	249
V/C Ratio(X)	0.81	1.01	1.01	0.91	0.36	0.36	0.78	0.00	0.88	0.05	0.00	0.72
Avail Cap(c_a), veh/h	391	479	455	410	665	698	375	0	382	375	0	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.4	27.8	27.8	28.5	17.2	17.2	32.5	0.0	29.1	34.2	0.0	31.1
Incr Delay (d2), s/veh	6.8	42.9	44.0	23.9	0.3	0.3	6.1	0.0	18.9	0.2	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	13.8	13.2	8.9	2.9	3.0	3.1	0.0	6.6	0.1	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.1	70.7	71.8	52.4	17.6	17.5	38.5	0.0	47.9	34.5	0.0	35.1
LnGrp LOS	D	F	F	D	B	B	D	A	D	C	A	D
Approach Vol, veh/h		1121			869			466			185	
Approach Delay, s/veh		66.0			32.5			44.6			35.1	
Approach LOS		E			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	20.5	22.0	25.0	13.6	15.4	14.0	33.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	16.0	18.0	17.5	20.5	16.0	18.0	16.7	21.3
Max Q Clear Time (g_c+I1), s	2.2	15.7	17.5	22.5	8.9	9.5	9.5	9.5
Green Ext Time (p_c), s	0.0	0.4	0.0	0.0	0.2	0.5	0.3	2.2

Intersection Summary	
HCM 6th Ctrl Delay	49.1
HCM 6th LOS	D

LOS Engineering, Inc.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	541	317	187	597	966	609
Future Volume (veh/h)	541	317	187	597	966	609
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	588	345	203	649	1050	662
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	908	417	311	2030	1416	1112
Arrive On Green	0.26	0.26	0.09	0.57	0.40	0.40
Sat Flow, veh/h	3456	1585	3456	3647	3647	2790
Grp Volume(v), veh/h	588	345	203	649	1050	662
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1777	1777	1395
Q Serve(g_s), s	8.2	11.1	3.1	5.2	13.7	10.2
Cycle Q Clear(g_c), s	8.2	11.1	3.1	5.2	13.7	10.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	908	417	311	2030	1416	1112
V/C Ratio(X)	0.65	0.83	0.65	0.32	0.74	0.60
Avail Cap(c_a), veh/h	1019	467	363	2291	1624	1275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	18.9	23.9	6.1	13.9	12.9
Incr Delay (d2), s/veh	1.2	10.8	3.3	0.1	1.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	10.3	1.2	1.2	4.4	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.0	29.6	27.2	6.2	15.5	13.5
LnGrp LOS	B	C	C	A	B	B
Approach Vol, veh/h	933			852	1712	
Approach Delay, s/veh	22.9			11.2	14.7	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		35.5		18.8	9.4	26.1
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		35.0		16.0	5.7	24.8
Max Q Clear Time (g_c+I1), s		7.2		13.1	5.1	15.7
Green Ext Time (p_c), s		4.3		1.1	0.0	5.9

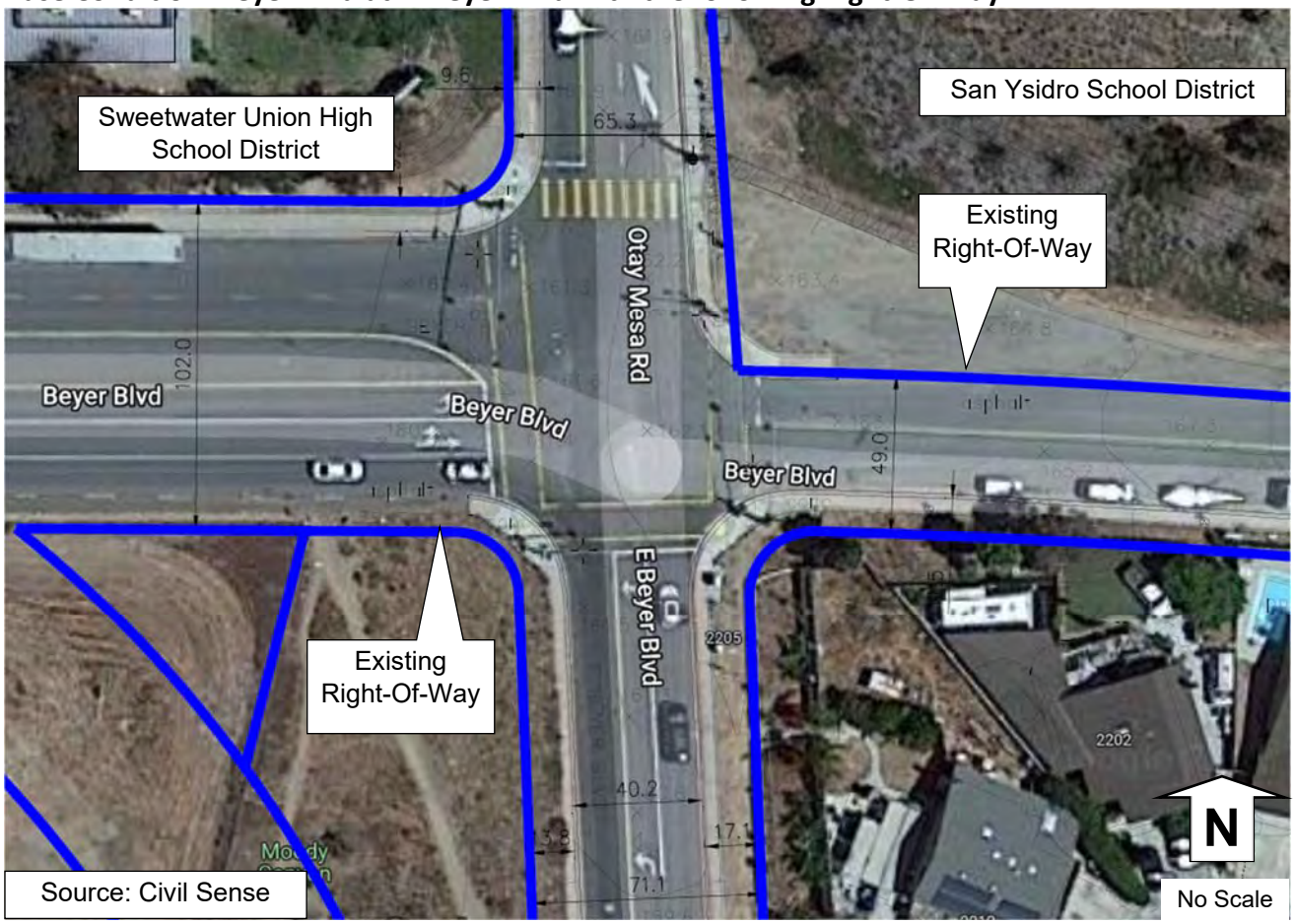
Intersection Summary	
HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

LOS Engineering, Inc.

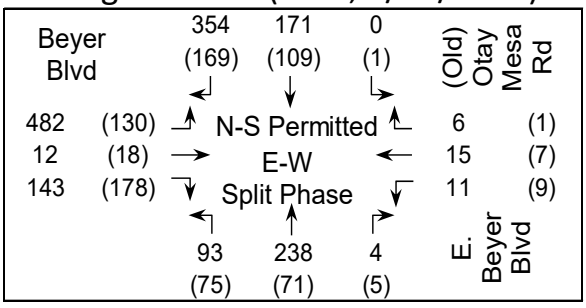
Beyer Blvd 2 Lane Supplemental Analysis (LOS Engineering, Inc.)
Beyer at E. Beyer Intersection Options for Horizon Year Operations

This planning level analysis includes widening scenarios at intersection of Beyer Blvd at E. Beyer Blvd to determine what percent of San Ysidro CPU horizon year volumes can be supported. LOS worksheets are included following the text.

Base Condition: Beyer Blvd at E. Beyer Blvd with the following Right-Of-Way

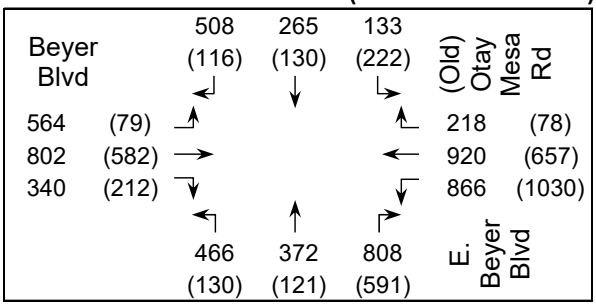


Existing Volumes (Thur, 2/10/2022)



AM LOS C 28.6 sec of delay
PM LOS C 20.1 sec of delay

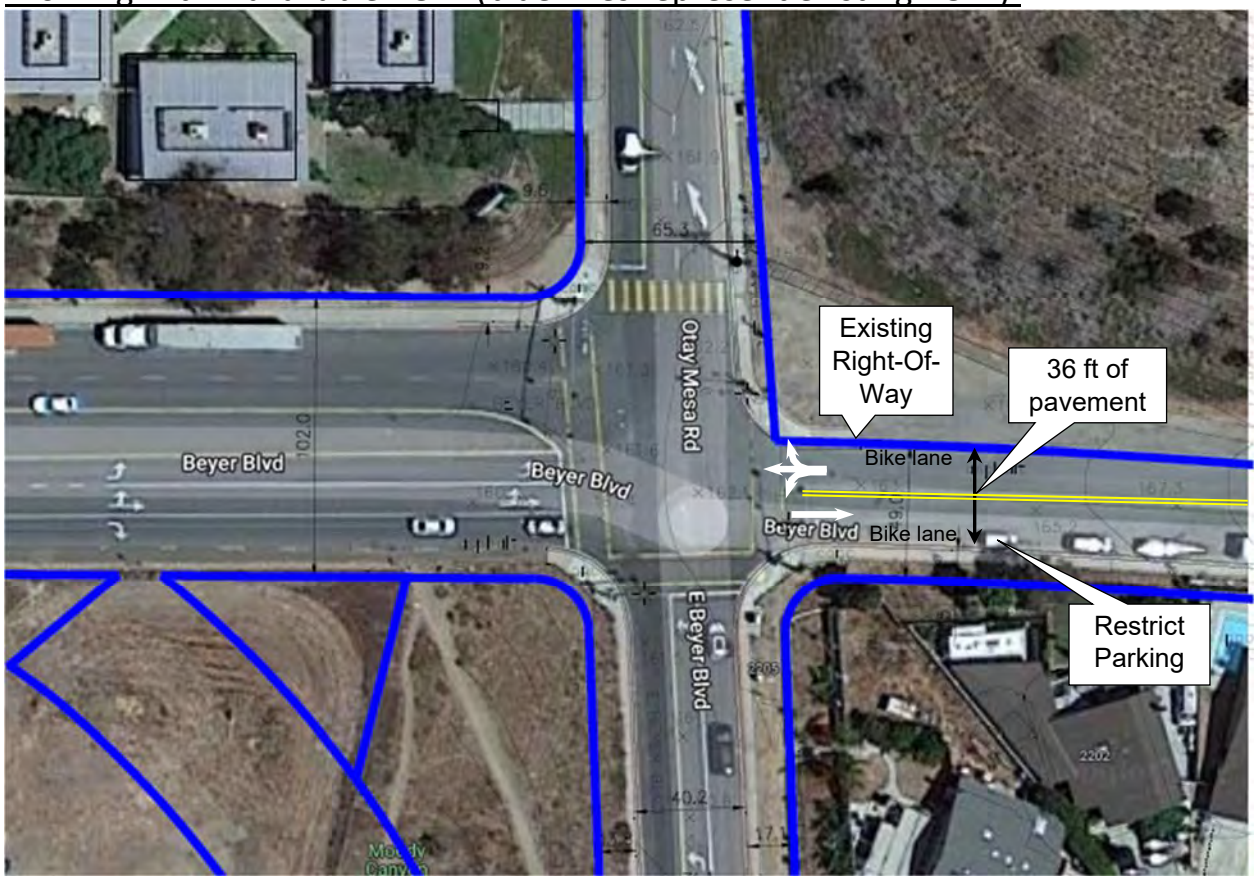
Horizon Year Volumes (San Ysidro CPU)



AM LOS F 195.2 sec of delay after Mitigation
PM LOS F 155.8 sec of delay after Mitigation
SYCPU: Impact considered unavoidable.

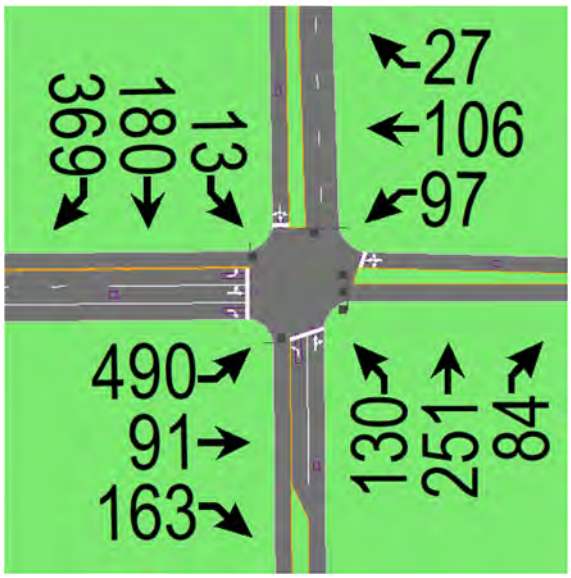
Scenario 1: Within Existing Right-Of-Way

Working within available ROW (blue lines represent existing ROW).

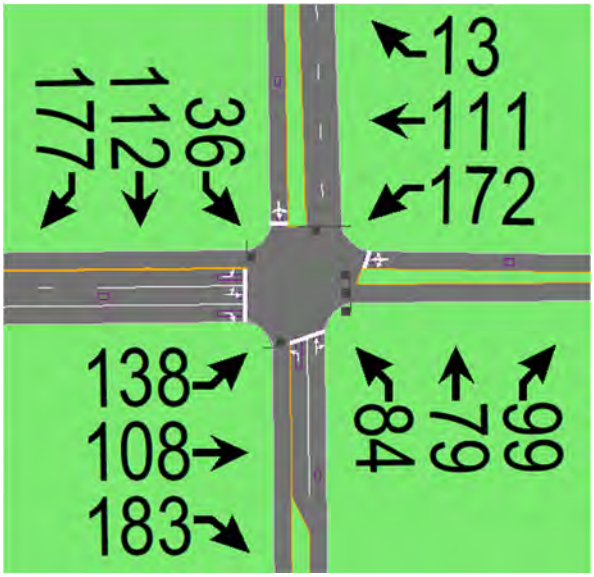


AM LOS D (50.7 sec of delay) at 32% of SYCPU Horizon Year Volumes
PM LOS D (52.5 sec of delay) at 33% of SYCPU Horizon Year Volumes

AM (32% of horizon volume)

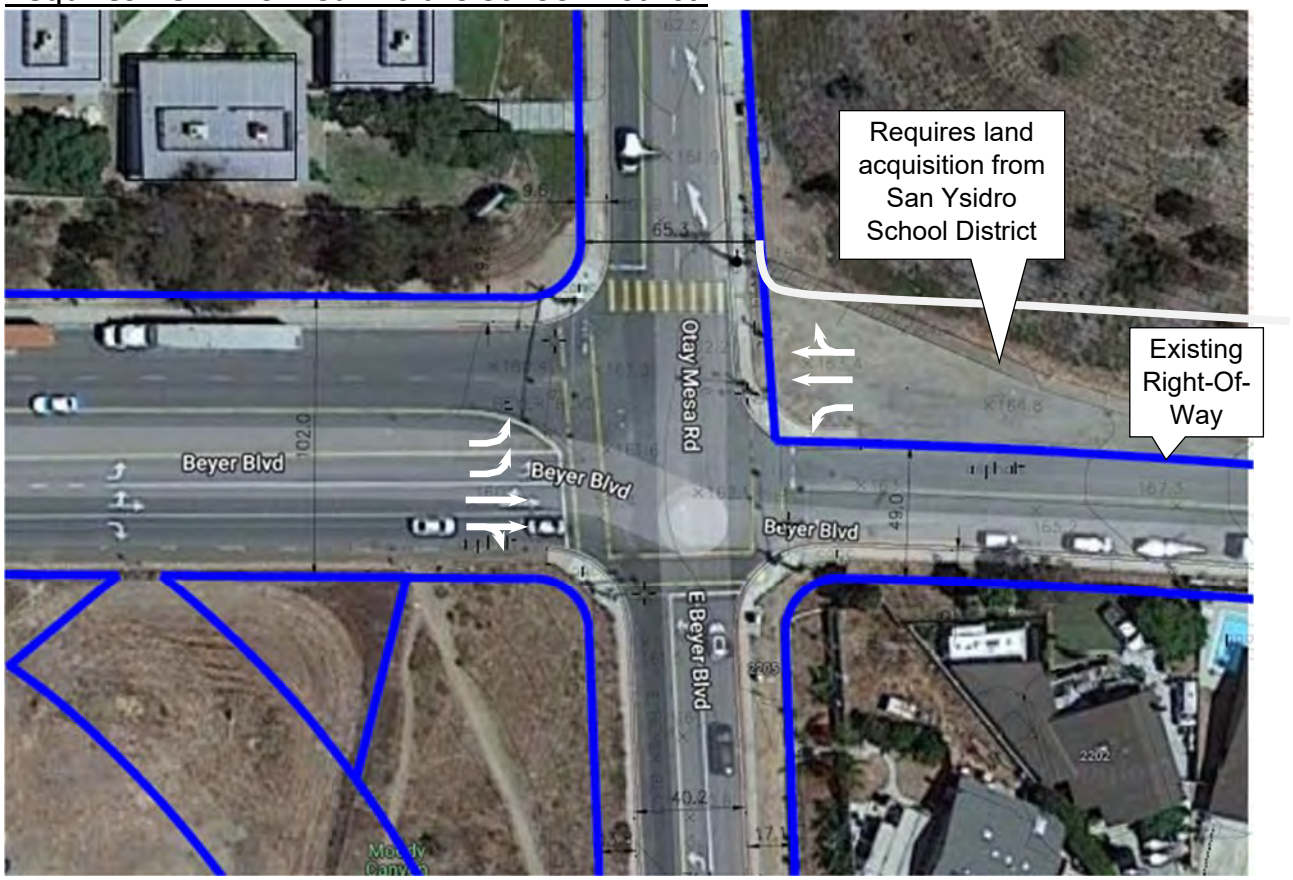


PM (33% of horizon volume)



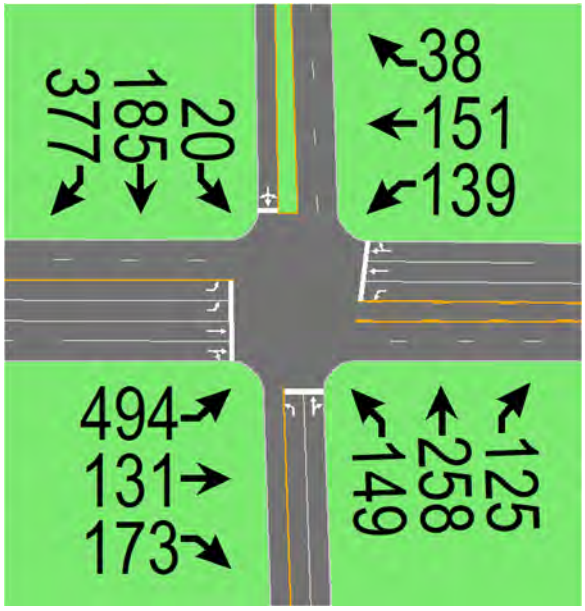
Scenario 2: Widening within San Ysidro School District with lanes as shown

Requires ROW from San Ysidro School District.

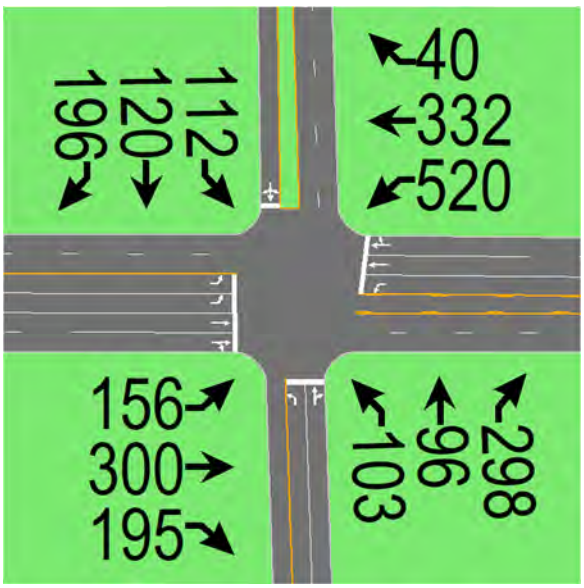


AM LOS D (54.0 sec of delay) at 36% of SYCPU Horizon Year Volumes
PM LOS D (52.7 sec of delay) at 63% of SYCPU Horizon Year Volumes

AM (36% of horizon volumes)

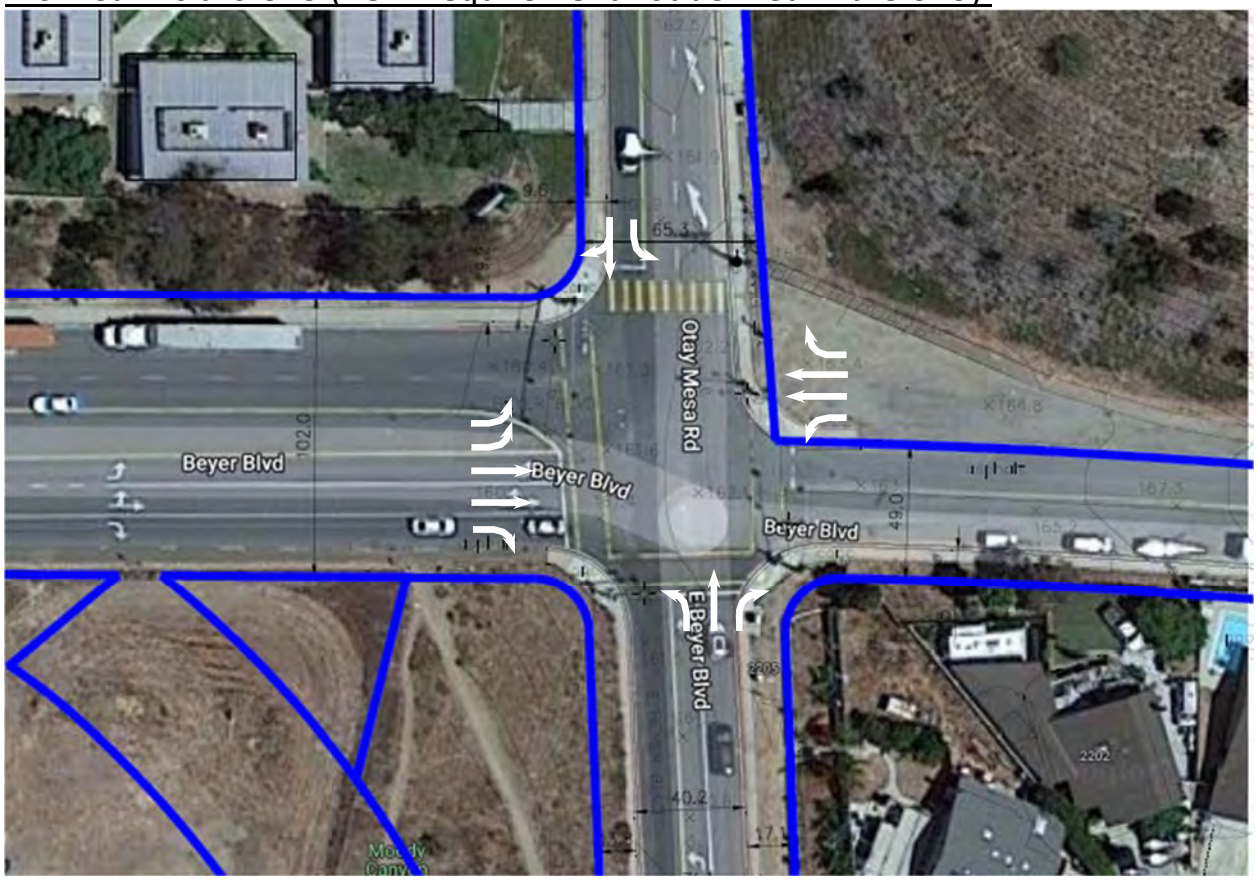


PM (63% of horizon volumes)



Scenario 3: SYCPU EIR fails to support 100% of the Horizon Year Volumes

From San Ysidro CPU (ROW requirement not defined in the CPU).



AM LOS F (195.2 sec of delay) with SYCPU Horizon Year Volumes
AM LOS Worksheet SYCPU (Kimley-Horn)

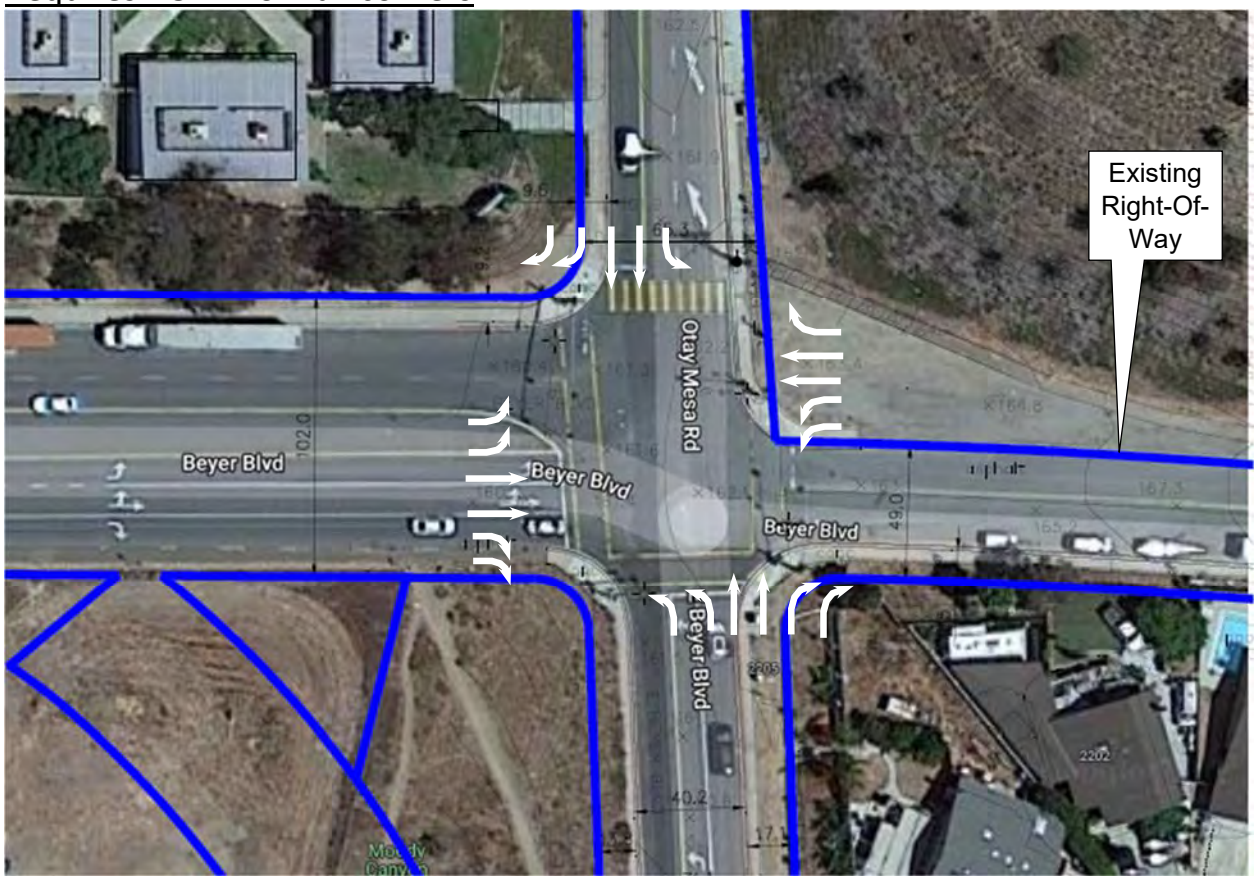
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	557	803	329	856	918	219	452	369	796	135	260	504

PM LOS F (155.8 sec of delay) with SYCPU Horizon Year Volumes
PM LOS Worksheet from SYCPU (Kimley-Horn)

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	79	580	205	1018	657	79	123	118	586	223	126	116

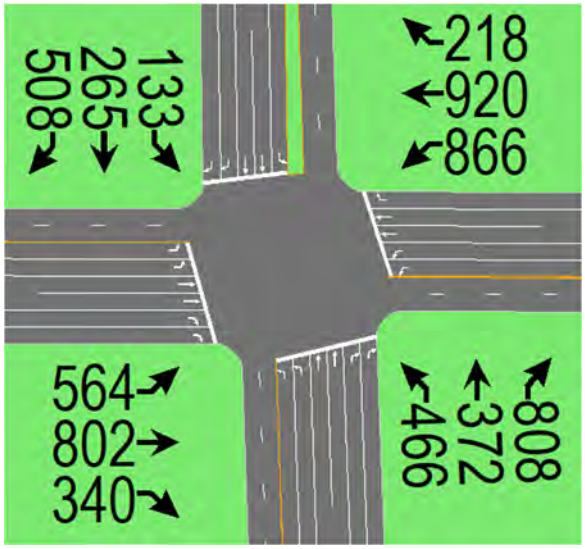
Scenario 4: Lane requirements to support 100% of the Horizon Year Volumes

Requires ROW from all corners

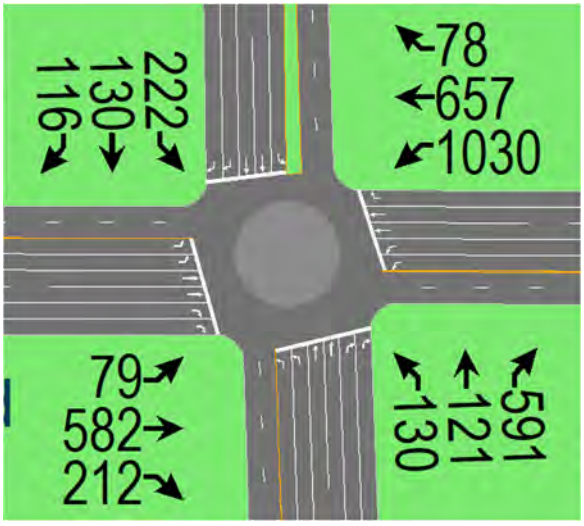


AM LOS D (54.8 sec of delay) at 100% of SYCPU Horizon Year Volumes
PM LOS D (54.9 sec of delay) at 100% of SYCPU Horizon Year Volumes

AM (100% of horizon volumes)



PM (100% of horizon volumes)



CONCLUSION

Scenario 1 shows how much of the Horizon Year volumes can be supported within the existing right-of-way, which is 32% in the AM and 33% in the PM.

Scenario 2 covers widening within San Ysidro School District that results in supporting Horizon Year volumes at 36% in the AM and 63% in the PM.

Scenario 3 shows how the SYCPU EIR fails to support 100% of the Horizon Year Volumes.

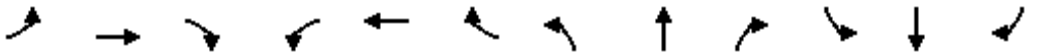
Scenario 4 covers what is required to support 100% of the San Ysidro CPU horizon year volumes at the intersection of Beyer Blvd/E. Beyer Blvd. This scenario requires expanding the intersection well beyond available ROW to incorporate multiple approach lanes that are excessive for the roadway classifications.

The findings for each option are summarized below.

Summary Table

Scenario	% Capacity of Horizon Year Volume	Notes
1	AM 32% PM 33%	Within existing ROW Adding E-W protected lefts
2	AM 36% PM 63%	Required ROW from San Ysidro School District Completes west leg of Beyer Blvd by adding left, thought, and through-right lanes.
3	AM ≈100% PM ≈100%	From San Ysidro CPU with undefined ROW needs. Continues to have LOS F AM & PM
4	AM 100% PM 100%	Requires ROW from each corner. Approach lanes exceed what is typically required for the respective approach classifications.

Scenario 1 LOS Worksheets

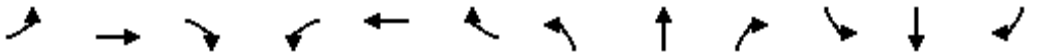


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	490	91	163	97	106	27	130	251	84	13	180	369
Future Volume (veh/h)	490	91	163	97	106	27	130	251	84	13	180	369
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.96	1.00		0.93	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	669	0	196	121	132	34	186	359	120	15	202	415
Peak Hour Factor	0.83	0.83	0.83	0.80	0.80	0.80	0.70	0.70	0.70	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	898	0	368	146	159	41	164	545	182	40	222	439
Arrive On Green	0.25	0.00	0.25	0.20	0.20	0.20	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	3534	0	1448	746	814	210	800	1304	436	17	532	1050
Grp Volume(v), veh/h	669	0	196	287	0	0	186	0	479	632	0	0
Grp Sat Flow(s),veh/h/ln	1767	0	1448	1769	0	0	800	0	1740	1599	0	0
Q Serve(g_s), s	19.3	0.0	12.9	17.2	0.0	0.0	4.2	0.0	24.5	16.8	0.0	0.0
Cycle Q Clear(g_c), s	19.3	0.0	12.9	17.2	0.0	0.0	46.2	0.0	24.5	42.0	0.0	0.0
Prop In Lane	1.00		1.00	0.42		0.12	1.00		0.25	0.02		0.66
Lane Grp Cap(c), veh/h	898	0	368	346	0	0	164	0	727	701	0	0
V/C Ratio(X)	0.75	0.00	0.53	0.83	0.00	0.00	1.14	0.00	0.66	0.90	0.00	0.00
Avail Cap(c_a), veh/h	898	0	368	416	0	0	164	0	727	707	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.0	0.0	35.6	42.7	0.0	0.0	44.4	0.0	25.9	30.9	0.0	0.0
Incr Delay (d2), s/veh	5.6	0.0	5.4	11.3	0.0	0.0	111.4	0.0	2.7	14.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	4.9	8.3	0.0	0.0	9.5	0.0	10.0	17.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.6	0.0	41.0	54.0	0.0	0.0	155.8	0.0	28.6	45.6	0.0	0.0
LnGrp LOS	D	A	D	D	A	A	F	A	C	D	A	A
Approach Vol, veh/h		865			287			665			632	
Approach Delay, s/veh		43.0			54.0			64.2			45.6	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	33.0	51.1	26.5	51.1
Change Period (Y+Rc), s	4.9	* 4.9	4.9	4.9
Max Green Setting (Gmax), s	28.1	* 47	26.0	46.2
Max Q Clear Time (g_c+I1), s	21.3	44.0	19.2	48.2
Green Ext Time (p_c), s	1.9	1.1	0.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	50.7
HCM 6th LOS	D

LOS Engineering, Inc.



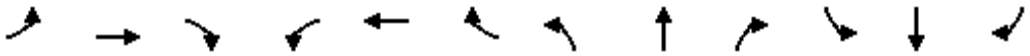
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	108	183	172	111	13	84	79	99	36	112	177
Future Volume (veh/h)	138	108	183	172	111	13	84	79	99	36	112	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	131	137	195	242	156	18	100	94	118	54	167	264
Peak Hour Factor	0.94	0.94	0.94	0.71	0.71	0.71	0.84	0.84	0.84	0.67	0.67	0.67
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	519	545	448	270	174	20	180	210	264	75	157	226
Arrive On Green	0.29	0.29	0.29	0.26	0.26	0.26	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1767	1856	1526	1040	670	77	949	730	917	110	548	786
Grp Volume(v), veh/h	131	137	195	416	0	0	100	0	212	485	0	0
Grp Sat Flow(s),veh/h/ln	1767	1856	1526	1787	0	0	949	0	1647	1444	0	0
Q Serve(g_s), s	5.2	5.2	9.5	20.7	0.0	0.0	0.0	0.0	9.7	16.8	0.0	0.0
Cycle Q Clear(g_c), s	5.2	5.2	9.5	20.7	0.0	0.0	25.7	0.0	9.7	26.5	0.0	0.0
Prop In Lane	1.00		1.00	0.58		0.04	1.00		0.56	0.11		0.54
Lane Grp Cap(c), veh/h	519	545	448	463	0	0	180	0	473	458	0	0
V/C Ratio(X)	0.25	0.25	0.43	0.90	0.00	0.00	0.55	0.00	0.45	1.06	0.00	0.00
Avail Cap(c_a), veh/h	519	545	448	525	0	0	180	0	473	458	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.8	24.8	26.4	33.0	0.0	0.0	32.6	0.0	26.9	34.4	0.0	0.0
Incr Delay (d2), s/veh	1.2	1.1	3.1	16.7	0.0	0.0	5.3	0.0	1.1	58.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	2.3	3.6	10.5	0.0	0.0	2.3	0.0	3.7	17.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.0	25.9	29.4	49.7	0.0	0.0	37.9	0.0	28.0	92.6	0.0	0.0
LnGrp LOS	C	C	C	D	A	A	D	A	C	F	A	A
Approach Vol, veh/h		463			416			312			485	
Approach Delay, s/veh		27.4			49.7			31.2			92.6	
Approach LOS		C			D			C			F	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	32.0	31.4	28.8	31.4
Change Period (Y+Rc), s	4.9	* 4.9	4.9	4.9
Max Green Setting (Gmax), s	27.1	* 27	27.1	26.1
Max Q Clear Time (g_c+I1), s	11.5	28.5	22.7	27.7
Green Ext Time (p_c), s	1.4	0.0	0.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.5
HCM 6th LOS	D

LOS Engineering, Inc.

Scenario 2 LOS Worksheets

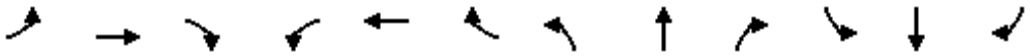


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	494	131	173	139	151	38	149	258	125	20	185	377
Future Volume (veh/h)	494	131	173	139	151	38	149	258	125	20	185	377
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.93	1.00		0.94	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	537	142	188	151	164	41	162	280	136	22	201	138
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	607	390	315	182	419	101	492	321	156	25	226	155
Arrive On Green	0.18	0.22	0.22	0.10	0.15	0.15	0.28	0.28	0.28	0.23	0.23	0.23
Sat Flow, veh/h	3456	1777	1435	1781	2795	672	1781	1162	565	105	964	662
Grp Volume(v), veh/h	537	142	188	151	102	103	162	0	416	361	0	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1435	1781	1777	1691	1781	0	1727	1731	0	0
Q Serve(g_s), s	18.0	8.1	14.0	9.9	6.1	6.6	8.6	0.0	27.3	24.0	0.0	0.0
Cycle Q Clear(g_c), s	18.0	8.1	14.0	9.9	6.1	6.6	8.6	0.0	27.3	24.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.40	1.00		0.33	0.06		0.38
Lane Grp Cap(c), veh/h	607	390	315	182	266	254	492	0	477	405	0	0
V/C Ratio(X)	0.89	0.36	0.60	0.83	0.38	0.41	0.33	0.00	0.87	0.89	0.00	0.00
Avail Cap(c_a), veh/h	701	390	315	390	425	404	603	0	584	478	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.8	39.3	41.6	52.3	45.5	45.7	34.2	0.0	41.0	44.0	0.0	0.0
Incr Delay (d2), s/veh	11.8	2.6	8.1	8.8	0.9	1.0	0.7	0.0	13.4	18.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	3.8	5.6	4.8	2.8	2.8	3.7	0.0	12.9	12.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.6	41.9	49.7	61.0	46.4	46.7	34.9	0.0	54.4	62.2	0.0	0.0
LnGrp LOS	E	D	D	E	D	D	C	A	D	E	A	A
Approach Vol, veh/h		867			356			578			361	
Approach Delay, s/veh		54.5			52.7			48.9			62.2	
Approach LOS		D			D			D			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.1	31.0		33.0	25.4	22.7		37.7				
Change Period (Y+Rc), s	4.9	4.9		5.2	4.5	4.9		4.9				
Max Green Setting (Gmax), s	26.0	26.1		32.8	24.1	28.4		40.2				
Max Q Clear Time (g_c+I1), s	11.9	16.0		26.0	20.0	8.6		29.3				
Green Ext Time (p_c), s	0.3	1.4		1.7	0.8	1.0		3.5				

Intersection Summary	
HCM 6th Ctrl Delay	54.0
HCM 6th LOS	D

LOS Engineering, Inc.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	300	195	520	332	40	103	96	298	112	120	196
Future Volume (veh/h)	156	300	195	520	332	40	103	96	298	112	120	196
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.97	1.00		0.94	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	170	326	212	565	361	43	112	104	324	122	130	-59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	547	344	592	1717	203	452	96	300	301	320	0
Arrive On Green	0.07	0.27	0.27	0.33	0.54	0.54	0.25	0.25	0.25	0.00	0.00	0.00
Sat Flow, veh/h	3456	2019	1268	1781	3190	377	1781	380	1183	1211	1290	-585
Grp Volume(v), veh/h	170	286	252	565	200	204	112	0	428	0	0	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1511	1781	1777	1790	1781	0	1563	0	0	0
Q Serve(g_s), s	5.0	14.4	15.0	31.9	6.0	6.1	5.2	0.0	26.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.0	14.4	15.0	31.9	6.0	6.1	5.2	0.0	26.1	0.0	0.0	0.0
Prop In Lane	1.00		0.84	1.00		0.21	1.00		0.76	0.63		-0.31
Lane Grp Cap(c), veh/h	239	482	410	592	956	963	452	0	397	0	0	0
V/C Ratio(X)	0.71	0.59	0.62	0.95	0.21	0.21	0.25	0.00	1.08	0.00	0.00	0.00
Avail Cap(c_a), veh/h	410	482	410	608	956	963	452	0	397	0	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	46.9	32.6	32.8	33.6	12.4	12.4	30.6	0.0	38.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	3.9	5.3	6.8	25.3	0.1	0.1	0.5	0.0	68.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	6.7	6.1	17.4	2.3	2.4	2.2	0.0	16.9	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.8	37.8	39.6	58.9	12.5	12.5	31.1	0.0	106.5	0.0	0.0	0.0
LnGrp LOS	D	D	D	E	B	B	C	A	F	A	A	A
Approach Vol, veh/h		708			969			540			0	
Approach Delay, s/veh		41.6			39.6			90.8			0.0	
Approach LOS		D			D			F				

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	39.1	32.8		0.0	11.6	60.3		31.0				
Change Period (Y+Rc), s	4.9	4.9		5.2	4.5	4.9		4.9				
Max Green Setting (Gmax), s	35.1	27.9		36.0	12.2	51.2		26.1				
Max Q Clear Time (g_c+I1), s	33.9	17.0		0.0	7.0	8.1		28.1				
Green Ext Time (p_c), s	0.3	2.4		0.0	0.2	2.4		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	52.7
HCM 6th LOS	D

LOS Engineering, Inc.

Scenario 3 LOS Worksheets

From SYCPU. Volumes below are slightly lower than EIR figure (AM Analysis)

San Ysidro CPU-Mobility Element Horizon Year Alternative B with Improvements I-805 Ramps
7: East Beyer Blvd/Otay Mesa Rd & Beyer Blvd 11/21/2014

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	557	803	329	856	918	219	452	369	796	135	260	504
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.0	4.9	4.9	4.9	4.0	4.9	4.0		5.2	4.9
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.98	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1863	1583		1832	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.72	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	1863	1583		1332	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Adj. Flow (vph)	666	960	393	1023	1098	262	540	441	952	161	311	603
RTOR Reduction (vph)	0	0	70	0	0	55	0	0	0	0	0	45
Lane Group Flow (vph)	666	960	323	1023	1098	207	540	441	952	0	472	558
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Free	Perm	NA	pm+ov
Protected Phases	5	2	3	1	6		3	8			4	5
Permitted Phases			2			6			Free	4		4
Actuated Green, G (s)	26.9	30.1	50.1	44.1	47.3	47.3	20.0	61.1	150.0		36.8	63.7
Effective Green, g (s)	26.9	30.1	50.1	44.1	47.3	47.3	20.0	61.1	150.0		36.8	63.7
Actuated g/C Ratio	0.18	0.20	0.33	0.29	0.32	0.32	0.13	0.41	1.00		0.25	0.42
Clearance Time (s)	4.9	4.9	4.0	4.9	4.9	4.9	4.0	4.9			5.2	4.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	615	710	528	520	1115	499	236	758	1583		326	672
v/s Ratio Prot	0.19	c0.27	0.08	c0.58	0.31		c0.31	0.24				0.15
v/s Ratio Perm			0.12			0.13			0.60		c0.35	0.20
v/c Ratio	1.08	1.35	0.61	1.97	0.98	0.41	2.29	0.58	0.60		1.45	0.83
Uniform Delay, d1	61.5	59.9	41.8	53.0	51.0	40.4	65.0	34.5	0.0		56.6	38.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	60.8	167.7	2.1	442.2	23.1	0.6	592.9	1.1	1.7		218.0	8.4
Delay (s)	122.3	227.6	43.9	495.2	74.1	41.0	657.9	35.7	1.7		274.6	46.7
Level of Service	F	F	D	F	E	D	F	D	A		F	D
Approach Delay (s)		157.1			251.2			192.8			146.8	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	195.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.73		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	144.0%	ICU Level of Service	H
Analysis Period (min)	15		

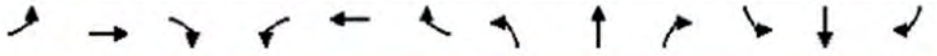
c Critical Lane Group

Kimley-Horn and Associates
HCM Signalized Intersection Capacity Analysis

Synchro 8 Report
Page 7

From SYCPU. Volumes below are slightly lower than EIR figure (PM Analysis)

San Ysidro CPU-Mobility Element Horizon Year Alternative B with Improvements I-805 Ramp
7: East Beyer Blvd/Otay Mesa Rd & Beyer Blvd 11/21/2014



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	79	580	205	1018	657	79	123	118	586	223	126	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.0	4.9	4.9	4.9	4.0	4.9	4.0		5.2	4.9
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.97	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	1770	1863	1583		1805	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.72	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	1770	1863	1583		1348	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Adj. Flow (vph)	94	693	245	1217	786	94	147	141	701	267	151	139
RTOR Reduction (vph)	0	0	134	0	0	39	0	0	0	0	0	55
Lane Group Flow (vph)	94	693	111	1217	786	55	147	141	701	0	418	84
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Free	Perm	NA	pm+ov
Protected Phases	5	2	3	1	6		3	8			4	5
Permitted Phases			2			6			Free	4		4
Actuated Green, G (s)	9.5	26.1	34.1	61.1	77.7	77.7	8.0	48.1	150.0		35.8	45.3
Effective Green, g (s)	9.5	26.1	34.1	61.1	77.7	77.7	8.0	48.1	150.0		35.8	45.3
Actuated g/C Ratio	0.06	0.17	0.23	0.41	0.52	0.52	0.05	0.32	1.00		0.24	0.30
Clearance Time (s)	4.9	4.9	4.0	4.9	4.9	4.9	4.0	4.9			5.2	4.9
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	217	615	359	720	1833	819	94	597	1583		321	478
v/s Ratio Prot	0.03	c0.20	0.02	c0.69	0.22		c0.08	0.08				0.01
v/s Ratio Perm			0.05			0.03			0.44		c0.31	0.04
v/c Ratio	0.43	1.13	0.31	1.69	0.43	0.07	1.56	0.24	0.44		1.30	0.18
Uniform Delay, d1	67.7	62.0	48.1	44.5	22.4	18.1	71.0	37.4	0.0		57.1	38.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	1.4	76.5	0.5	316.6	0.2	0.0	298.8	0.2	0.9		156.9	0.2
Delay (s)	69.0	138.4	48.6	361.1	22.6	18.1	369.8	37.7	0.9		214.0	38.8
Level of Service	E	F	D	F	C	B	F	D	A		F	D
Approach Delay (s)		110.8			218.8			61.0			170.3	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	155.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.46		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.0
Intersection Capacity Utilization	124.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Kimley-Horn and Associates
HCM Signalized Intersection Capacity Analysis

Synchro 8 Report
Page 7

Table 6-1 Post Mitigation Summary of Intersection Analysis

	INTERSECTION	PEAK-HOUR	PREFERRED LAND USE ALTERNATIVE			WITH IMPROVEMENTS				
			TRAFFIC CONTROL	DELAY (a)	LOS (b)	TRAFFIC CONTROL	DELAY (a)	LOS (b)	Δ	SIGNIFICANT?
1	Beyer Blvd & Iris Ave/SR-905 WB Ramps	AM	Signal	32.7	C	Signal	22.1	C	-10.6	NO
		PM		117.0	F		54.9	D	-62.1	NO
2	Beyer Blvd & Dairy Mart Rd/SR-905 Ramps	AM	Signal	79.7	E	Signal	25.9	C	-53.8	NO
		PM		44.6	D		41.3	D	-3.3	NO
4	Smythe Crossing & Beyer Blvd	AM	One-Way Stop	13.8	B	Signal	10.5	B	-3.3	NO
		PM		ECL	F		6.6	A	-	NO
5	Beyer Blvd & Smythe Ave	AM	Signal	ECL	F	Signal	54.9	D	-	NO
		PM		38.5	D		17.3	B	-21.2	NO
6	W. Park Ave/Alaquinas Dr & Beyer Blvd	AM	Signal	160.6	F	Signal	51.0	D	-109.6	NO
		PM		20.7	C		15.3	B	-5.4	NO
7	East Beyer Blvd/Otay Mesa Rd & Beyer Blvd	AM	Signal	ECL	F	Signal (c)	195.2	F	-	NO
		PM		ECL	F		155.8	F	-	NO

Notes:
Bold values indicate intersections operating at LOS E or F.
ECL = Exceeds Calculable Limit. Reported when delay exceeds 180 seconds.
Shaded cells indicate roadway segment improvements identified in the San Ysidro Impact Study Fee (ISF)
(a) Delay refers to the average control delay for the entire intersection, measured in seconds per vehicle. At a two-way stop-controlled intersection, delay refers to the worst movement.
(b) LOS calculations are based on the methodology outlined in the 2000 Highway Capacity Manual and performed using Synchro 8
(c) With Otay Mesa Community Plan Improvements
(d) The construction of the new roundabout, new connection between Calle Primera dn Camino de la Plaza, and traffic calming measures along Willow Road will degongest the area.
The saturation flow rate at the intersection of Camino de la Plaza and I-5 Southbound Ramps was adjusted to replicate existing conditions when the I-5 Southbound inspection lane is open entering Mexico.
\\sndfp01\ca_and1\SND_TPTO\095413002\Excel\[41300ZN04-Alt-B.xlsm]2035 ALTB WITH IMP 805 Ramp

Intersections

Implementation of the improvements identified in Tables 5.2-13 and 5.2-15 of the Final PEIR would reduce impacts of the SYCPU on local intersections. Improvements within Tables 5.2-13 are included in the IFS, and will be implemented based on funding generated by development fees. Other improvements are identified in Tables 5.2-15. However, no identified funding sources exist because they are not included in the IFS. While implementation of the improvements identified in Tables 5.2-13 and 5.2-15 would reduce impacts on roadway segments to acceptable levels, the City cannot assure that these improvements would be implemented. Insufficient right-of-way is likely to exist to accommodate Mitigation Measure 55, and Mitigation Measure TRF-56 is not considered consistent with the mobility goals. Thus, the impact of the SYCPU with respect to intersections is considered unavoidable.

TABLE 5.2-15
INTERSECTION IMPROVEMENTS
(Not Included In Impact Fee Study)

Mitigation Measure Number	Intersection Number	Intersection	Improvement
TRF-55	7	East Beyer Blvd/Otay Mesa Road and Beyer Boulevard	Install 4-lane major arterial with exclusive left- and right-turn lanes on east leg of the intersection.

Scenario 4 LOS Worksheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	564	802	340	866	920	218	466	372	808	133	265	508
Future Volume (veh/h)	564	802	340	866	920	218	466	372	808	133	265	508
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.96	1.00		0.88	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	613	872	370	941	1000	237	507	404	878	145	288	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	688	952	1167	893	1174	665	595	745	1234	181	502	934
Arrive On Green	0.20	0.27	0.27	0.26	0.33	0.33	0.17	0.21	0.21	0.10	0.14	0.14
Sat Flow, veh/h	3456	3554	2562	3456	3554	1525	3456	3554	2446	1781	3554	2678
Grp Volume(v), veh/h	613	872	370	941	1000	237	507	404	878	145	288	280
Grp Sat Flow(s),veh/h/ln	1728	1777	1281	1728	1777	1525	1728	1777	1223	1781	1777	1339
Q Serve(g_s), s	21.5	29.6	11.7	32.1	32.6	13.0	17.7	12.6	26.0	9.9	9.4	9.6
Cycle Q Clear(g_c), s	21.5	29.6	11.7	32.1	32.6	13.0	17.7	12.6	26.0	9.9	9.4	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	688	952	1167	893	1174	665	595	745	1234	181	502	934
V/C Ratio(X)	0.89	0.92	0.32	1.05	0.85	0.36	0.85	0.54	0.71	0.80	0.57	0.30
Avail Cap(c_a), veh/h	826	952	1167	893	1174	665	718	745	1234	483	970	1286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.4	44.1	22.8	46.1	38.7	23.7	49.9	43.8	27.3	54.6	49.8	30.2
Incr Delay (d2), s/veh	10.5	14.8	0.7	45.3	6.1	0.3	9.7	1.2	2.3	13.1	1.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	14.5	3.5	19.2	14.9	4.6	8.2	5.5	10.4	5.0	4.2	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.9	58.9	23.5	91.4	44.9	24.1	59.6	45.0	29.5	67.7	51.6	30.5
LnGrp LOS	E	E	C	F	D	C	E	D	C	E	D	C
Approach Vol, veh/h		1855			2178			1789			713	
Approach Delay, s/veh		51.8			62.7			41.5			46.6	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	38.2	26.3	22.8	29.2	46.0	17.8	31.2
Change Period (Y+Rc), s	4.9	4.9	4.9	5.2	4.5	4.9	5.2	* 5.2
Max Green Setting (Gmax), s	32.1	33.3	25.8	33.9	29.7	36.1	33.7	* 26
Max Q Clear Time (g_c+I1), s	34.1	31.6	19.7	11.6	23.5	34.6	11.9	28.0
Green Ext Time (p_c), s	0.0	1.1	1.7	4.8	1.3	1.1	0.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.1
HCM 6th LOS	D

LOS Engineering, Inc.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	582	212	1030	657	78	130	121	591	222	130	116
Future Volume (veh/h)	79	582	212	1030	657	78	130	121	591	222	130	116
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.97	1.00		0.86	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	633	230	1120	714	85	141	132	642	241	141	-146
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	719	668	1157	1781	1013	200	621	1351	272	965	865
Arrive On Green	0.04	0.20	0.20	0.33	0.50	0.50	0.06	0.17	0.17	0.15	0.27	0.00
Sat Flow, veh/h	3456	3554	2507	3456	3554	1539	3456	3554	2389	1781	3554	2790
Grp Volume(v), veh/h	86	633	230	1120	714	85	141	132	642	241	141	-146
Grp Sat Flow(s),veh/h/ln	1728	1777	1253	1728	1777	1539	1728	1777	1194	1781	1777	1395
Q Serve(g_s), s	3.7	25.7	11.1	47.5	18.7	3.0	6.0	4.7	26.0	19.7	4.5	0.0
Cycle Q Clear(g_c), s	3.7	25.7	11.1	47.5	18.7	3.0	6.0	4.7	26.0	19.7	4.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	719	668	1157	1781	1013	200	621	1351	272	965	865
V/C Ratio(X)	0.65	0.88	0.34	0.97	0.40	0.08	0.71	0.21	0.48	0.89	0.15	-0.17
Avail Cap(c_a), veh/h	708	719	668	1163	1781	1013	536	621	1351	406	965	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	70.6	57.6	44.9	48.7	23.2	9.4	68.9	52.7	24.5	61.8	41.1	0.0
Incr Delay (d2), s/veh	5.2	14.6	1.4	19.1	0.1	0.0	7.6	0.3	0.4	18.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	12.8	3.6	22.9	7.7	1.0	2.8	2.1	7.4	10.2	2.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.8	72.2	46.3	67.9	23.3	9.5	76.5	52.9	24.9	80.2	41.2	0.0
LnGrp LOS	E	E	D	E	C	A	E	D	C	F	D	A
Approach Vol, veh/h		949			1919			915			236	
Approach Delay, s/veh		66.2			48.7			36.9			106.6	
Approach LOS		E			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	54.7	35.0	13.5	45.6	10.2	79.5	27.9	31.2
Change Period (Y+Rc), s	4.9	4.9	4.9	5.2	4.5	4.9	5.2	* 5.2
Max Green Setting (Gmax), s	50.1	30.1	23.1	36.8	30.5	50.1	33.9	* 26
Max Q Clear Time (g_c+I1), s	49.5	27.7	8.0	6.5	5.7	20.7	21.7	28.0
Green Ext Time (p_c), s	0.3	1.1	0.6	1.3	0.2	4.9	1.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.6
HCM 6th LOS	D

LOS Engineering, Inc.

Attachment C

Excerpts from the San Ysidro Community Plan Update

San Ysidro

COMMUNITY PLAN AND LOCAL COASTAL PROGRAM LAND USE PLAN

Adopted: November, 2016. Amended: October, 2017

Figure 3-15: Existing 2012 Functional Street Classification

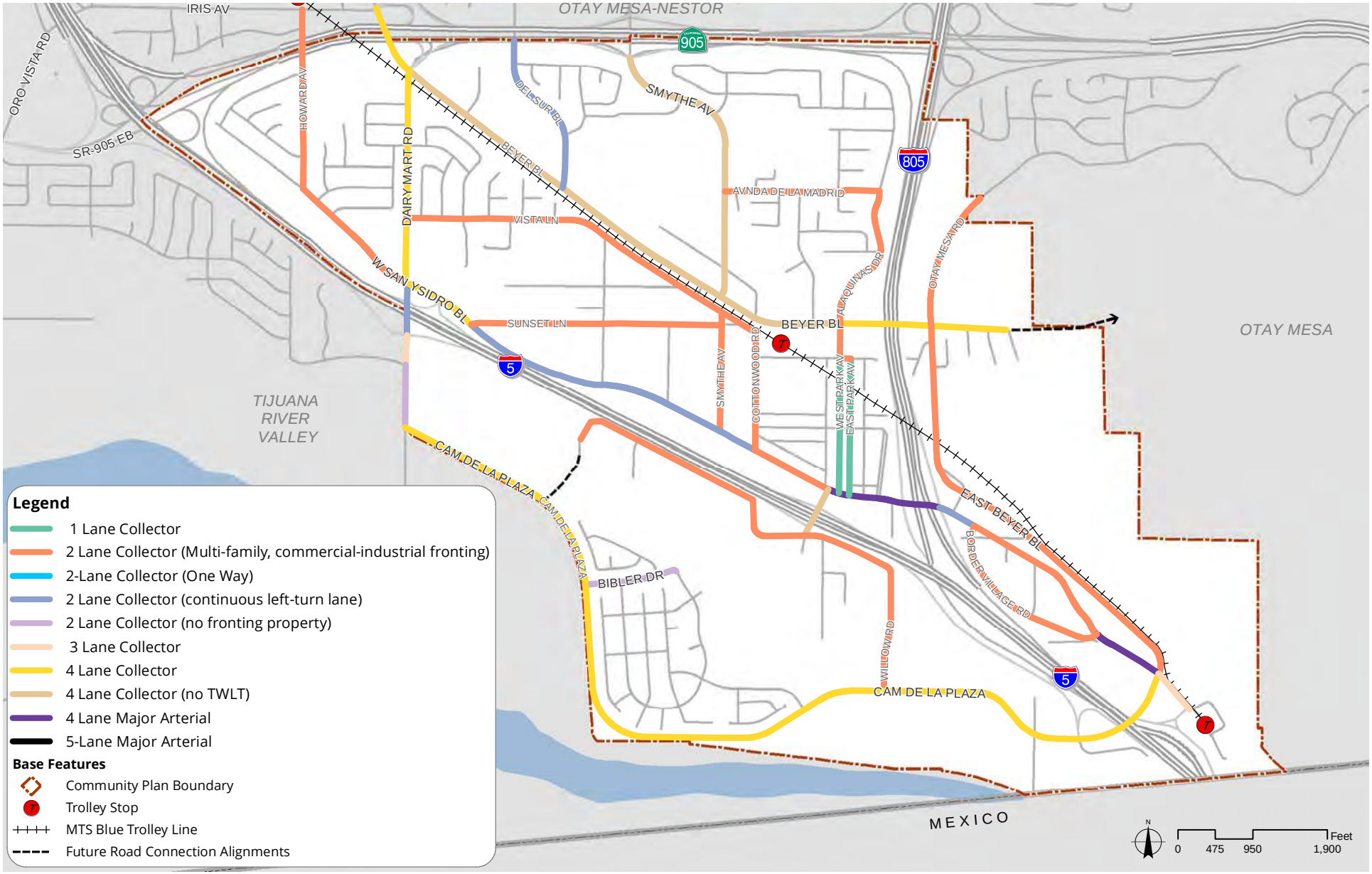
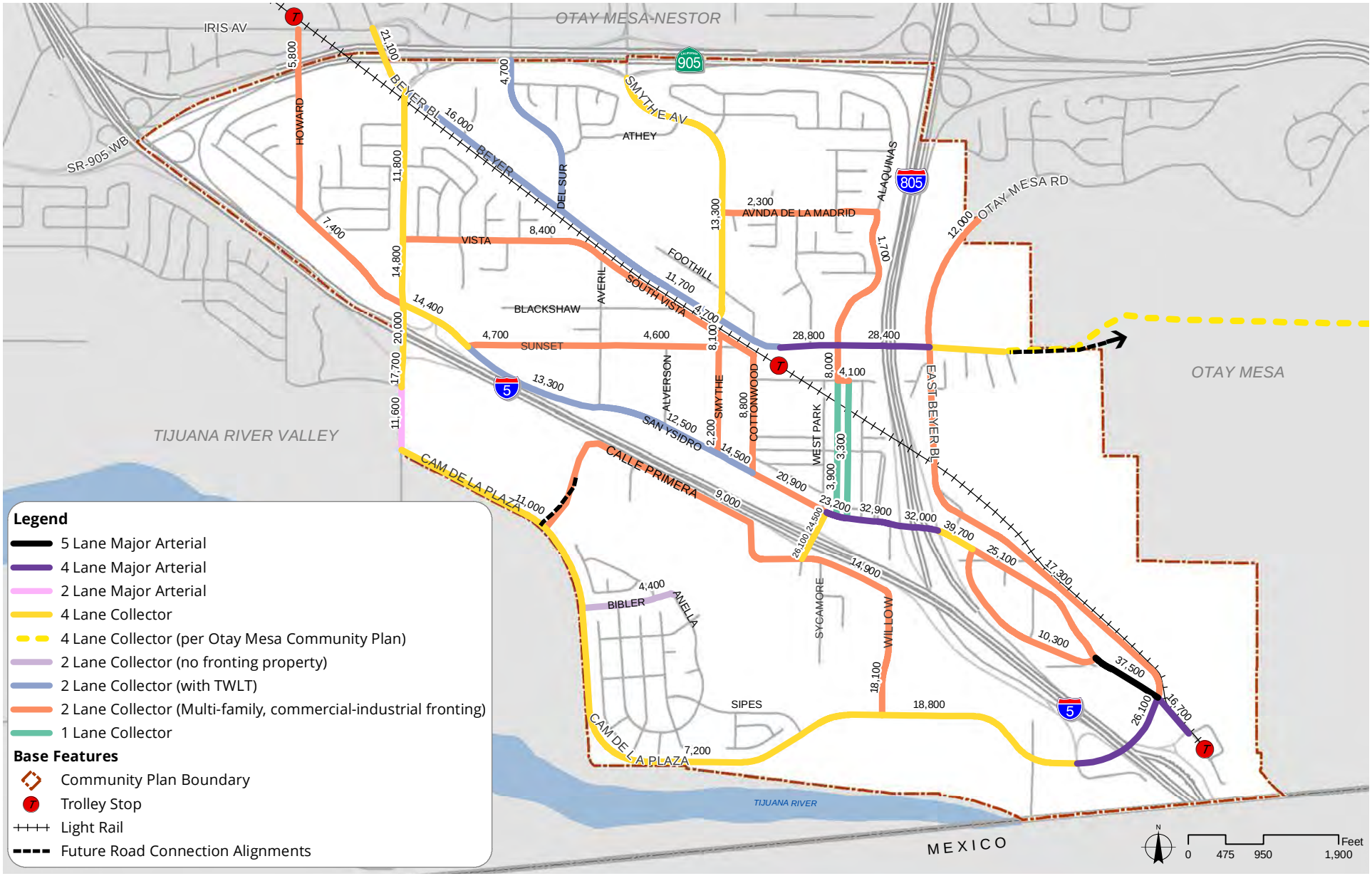


Figure 3-16: Future Planned Street Classifications and Daily Traffic



Attachment D

SANDAG Series 13 Select Zone Assignment for SWV

SANDAG
Series13

Regional Model
Year 2012

Otay Mesa

Select Zone Run
TAZ 4948

Version 13.3.3
Scenario ID1315

join

ifc

10

1; 2; 3; 4; 5; 6; 7; 8; 9

Selected Zone(s)

\# **Select Zone Vol and %**

\# **Model Estimated ADT**

SAN DIEGO ASSOCIATION OF GOVERNMENTS
401 B STREET, SUITE 800
SAN DIEGO, CALIFORNIA 92101 USA
(619) 699-1900
E-mail: sandag@sandag.org
Web site: www.sandag.org

N

0 0.045 0.09 0.135
Miles

SANDAG

servicebureau

Date: July 2, 2021

Attachment E

Specific Plan Planning Area Phasing Details

Table 7.2 – Phasing Summary

PHASE / TARGET LAND USE ASSUMPTIONS	ON-SITE IMPROVEMENTS	OFF-SITE IMPROVEMENTS
Phase 1		
Planning Areas • 8, 9, 10, 11, 12, 13, 14 1,315 Maximum Residential Units: • 282 Multifamily Residential (20-44 du/ac) • 490 Multifamily Residential (15-29 du/ac) • 543 Single Family Residential (8-22 du/ac)	Mobility Network. The following shall be constructed: • Beyer Boulevard West (from West Avenue to the western Specific Plan boundary) ~~would be required to~~shall be constructed ~~at the 700th dwelling unit~~ prior to the 700th dwelling unit~~or earlier~~ in Phase 1~~way~~. • Beyer Boulevard East (from Caliente Avenue to West Avenue, northern half of the street) • Central Avenue (from Caliente Avenue to Beyer ~~Blvd~~Boulevard) • Street A (from western cul-de sac to West Avenue) • West Avenue (western half of the street from Beyer ~~Blvd~~ Boulevard to Street B and~~&~~ full width south of Street B) • Beyer Boulevard ~~Blvd~~ / Central Avenue Intersection (interim conditions per Southwest Village Specific Plan Transportation Phasing Plan (Appendix ~~F~~F)) • T-intersection at Caliente Avenue/Central Avenue • Secondary Emergency Vehicle Access Road (shall be constructed at the 201st dwelling unit) Parks and Trails. The following shall be constructed: • Planning Area 8 Pocket Park: HH • Planning Area 9 Pocket Park: II • Planning Area 10 Pocket Parks: AA, BB, CC, and DD • Planning Area 10 Paseos • Planning Area 11 Pocket Parks: MM and OO • Planning Area 12 Pocket Parks: SS, XX • Planning Area 12 Paseos • Planning Area 13 Pocket Parks: PP, RR • Planning Area 13 Paseos • Planning Area 14 Pocket Parks: YY • Planning Area 14 Paseos • Multi-use Perimeter Trail and trail amenities (Specific Plan area entrance at Caliente Avenue to the eastern boundary of Planning Area 14) • Primitive Trails Type A that connect to Planning Areas 12 and 14 (including the closure of non-conforming trails adjacent to these trails) Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Areas 8 - 14 • 16-inch water line backbone loop along Central Avenue, Beyer Boulevard between Central Avenue and West Avenue, and along West Avenue • 18-inch gravity sewer line along Beyer Boulevard and West Avenue. Eight-inch gravity sewer along Street A in Planning Areas 11-14	Mobility Network. The following shall be constructed: • Beyer Boulevard ~~from~~from the ~~project~~ Specific Plan boundary to ~~current terminus in San Ysidro at~~ Enright Drive ~~will~~ shall be ~~required to be~~ constructed ~~at the 700th dwelling unit~~prior to the 700th dwelling unit ~~or earlier~~ in Phase 1 • Intersection of Caliente Avenue at SR- 905 ~~WB~~ westbound ramp: re-stripe the northbound single left turn lane into a dual left turn lane, upgrade the traffic controller, and construct a second receiving lane to the westbound on-ramp • Intersection of Caliente Avenue at SR- 905 eastbound~~EB~~ ramp: upgrade traffic controller • Intersection of Caliente Avenue/Ocean View Hills/Otay Mesa Road: upgrade traffic controller • Intersection of Caliente Avenue/Airway Road: upgrade traffic controller • Caliente Avenue from the existing southern terminus to Central Avenue • Secondary Emergency Vehicle Access Road, from the Specific Plan ~~project~~ boundary to Rail Court to the southwest, will be required to be constructed at the 201st dwelling unit Park and Trails. The following shall be constructed: • Primitive Trails Type A

PHASE / TARGET LAND USE ASSUMPTIONS	ON-SITE IMPROVEMENTS	OFF-SITE IMPROVEMENTS
Phase 2		
Planning Areas • 15, 16, 17, 18, 19, 20 988 Residential Units: • 237 Multifamily Residential (15-29 du/ac) • 136[1] Contingency Multifamily Residential in Planning Area 16 (15-29 du/ac) • 615 Single Family Residential (8-22 du/ac)	Mobility Network. The following shall be constructed: • Caliente Avenue from Central Avenue to Beyer Boulevard • Caliente Avenue / Beyer Boulevard Intersection • ~~S.~~South ~~-~~Caliente Avenue (full-width north of Beyer Boulevard and~~&~~ south of Street B) • South ~~S.~~ Caliente Avenue (eastern half of the street from Beyer Boulevard to Street B) • Street B (full-width east of South~~.~~ Caliente Avenue) • Street B (southern half of the street from West Avenue to South~~.~~ Caliente Avenue) • Street C (all segments) • Street D (all segments) • East Avenue (all segments) Parks and Trails. The following shall be constructed: • Neighborhood Park in Planning Area 17 • Paseo along Street C (from West Avenue to East Avenue) • Paseo between Planning Area 19 and 20 • Multi-use Perimeter Trail (Terminus of Phase 1 to northern boundary of Planning Area 19) • Public multi-use Perimeter Trail in Planning Areas 15, 18, and 19 • Public mini/pocket parks in Planning Areas 19 and 20 • Perimeter Trail in Planning Area 20 • Primitive Trails Type A that connect to Planning Areas ~~PA~~ 15 and 18 (including the closure of non-conforming trails adjacent to these trails) Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Areas 15 - 20 • Southwest Village Elementary School (1) (Planning Area 16) • Sewer ~~Lift~~ Pump Station east of Street D	Other Infrastructure. The following shall be constructed: • A 16-inch water line in Otay Mesa Road and Beyer Boulevard between Enright Drive and Princess Park Pump Station. • ~~-~~A conditional assessment report to determine the required upgrades ~~Improvements~~ at ~~existing~~the Princess Park Pump Station to ~~become operational~~provide a redundant water supply. • • Upsize the existing 12~~-~~inch~~"~~ gravity sewer to 27 inches~~"~~ in East~~.~~ Beyer Boulevard between Beyer Boulevard and ~~trolley tracks~~the rail right-of-way. • Upsize the existing 18~~-~~inch~~"~~ gravity sewer to 33 inches~~"~~ in East~~.~~ Beyer Boulevard and Center Street between Hill Street and East~~.~~ San Ysidro Boulevard.

1. ~~In the unlikely event~~If the SYSD determines that a school is no longer needed on Planning Area 16, the site will default to Medium Density Residential use. Although the contingency for Planning Area 16 would result in approximately 136 additional dwelling units, the maximum dwelling unit cap of 5,130 units would still apply.

PHASE / TARGET LAND USE ASSUMPTIONS	ON-SITE IMPROVEMENTS	OFF-SITE IMPROVEMENTS
Phase 3		
Planning Areas • 4, 5 819 Multifamily Residential (15-29 du/ac) units	Mobility Network. The following shall be constructed: • 1st Avenue • Spine Road • Central Avenue (Caliente Avenue to 1st Avenue) Parks and Trails. The following shall be constructed: • Public mini/pocket parks in Planning Area 5 • Public multi-use Pathway (internal to Planning Area 5) • Public multi-use Perimeter Trail (Planning Area 5) • Paseo Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Areas 4 and 5 • 12-inch sewer force main along Spine Road • 10-inch gravity sewer line along Caliente Avenue from the terminus to Beyer Boulevard • Sewer Lift Station	
Phase 4		
Planning Areas: 1, 2, 3, 6, 7 ~~424~~ 384 Multifamily Residential (15-29 du/ac) units	Parks and Trails. The following shall be constructed: • Public multi-use Perimeter Trail in Planning Area 6 and~~/~~7 • Public neighborhood park in Planning Area 2 and~~/~~3 Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Areas 1, 2, 3, 6, and 7 • [Water/sewer improvements to be determined~~TBD~~]	Mobility Network. The following shall be constructed: • Improve Beyer ~~Blvd~~ Boulevard between East~~.~~ Beyer ~~Blvd~~ Boulevard and Enright Drive to a Modified 4-Lane Urban Collector with buffered Class II bike lanes prior to the ~~3,301~~*3,298th dwelling unit. Parks and Trails. The following shall be constructed: • Eastern Quadrant Trails – Segment number~~o.~~(s) t~~T~~o b~~B~~e d~~D~~etermined Other Infrastructure. The following shall be constructed: • Upsize existing 10-inch~~"~~ gravity sewer to 15 inches~~"~~ in Beyer Boulevard between Enright Drive and East~~.~~ Beyer Boulevard.

PHASE / TARGET LAND USE ASSUMPTIONS	ON-SITE IMPROVEMENTS	OFF-SITE IMPROVEMENTS
Phase 5		
Planning Areas: 21 ~~266~~ 306 Multifamily Residential (8-22 du/ac) units	Parks and Trails. The following shall be constructed: • Paseo (bike/pedestrian connection- South~~-~~ Caliente Avenue to East Avenue) • Public mini/pocket parks in Planning Area 21 Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Area 21 • [Water/sewer improvements to be determined~~TBD~~]	
Phase 6		
Planning Areas: 22 267 Multifamily Residential (15-29 du/ac) units	Mobility Network. The following shall be constructed: · Emergency Vehicle Access Road from South~~-~~ Caliente Avenue to East Avenue Parks and Trails. The following shall be constructed: • Public pocket park(s) in Planning Area 22 Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Area 22 • [Water/sewer improvements to be determined~~TBD~~]	
Phase 7		
Planning Areas: 24, 25, 26, 27 1,187 Multifamily Residential (30-62 du/ac) units 175,000 square feet of commercial uses	Mobility Network. The following shall be constructed: · Central Ave from Beyer Boulevard East to Street B · Street A from West Avenue to South~~-~~ Caliente Avenue · Beyer Boulevard (southern half of the street from West Avenue to South~~-~~ Caliente Avenue) · West Avenue (eastern half of the street from Beyer Boulevard to Street B) · Street B (northern half of the street) · South~~-~~ Caliente Avenue (western half of the street from Beyer Boulevard East to Street B) Parks and Trails. The following shall be constructed: Pocket parks and urban plazas in the Village Core (Planning Areas 24 - 27) Other Infrastructure. The following shall be constructed: • Landscape infrastructure in Planning Areas 24 - 27 • Mobility hub with public transit stop	Other Infrastructure. The following shall be constructed: • Upsize the existing 15-inch" gravity sewer to 27 inches" in East~~-~~ Beyer Boulevard between the ~~trolley tracks~~rail right-of-way and Hill Street. • Perform efficiency testing at Ocean View Hills Pump Station.
Total Dwelling Units: 5,130 Commercial Square Footage: 175,000		

Figure 7.1 — Phasing

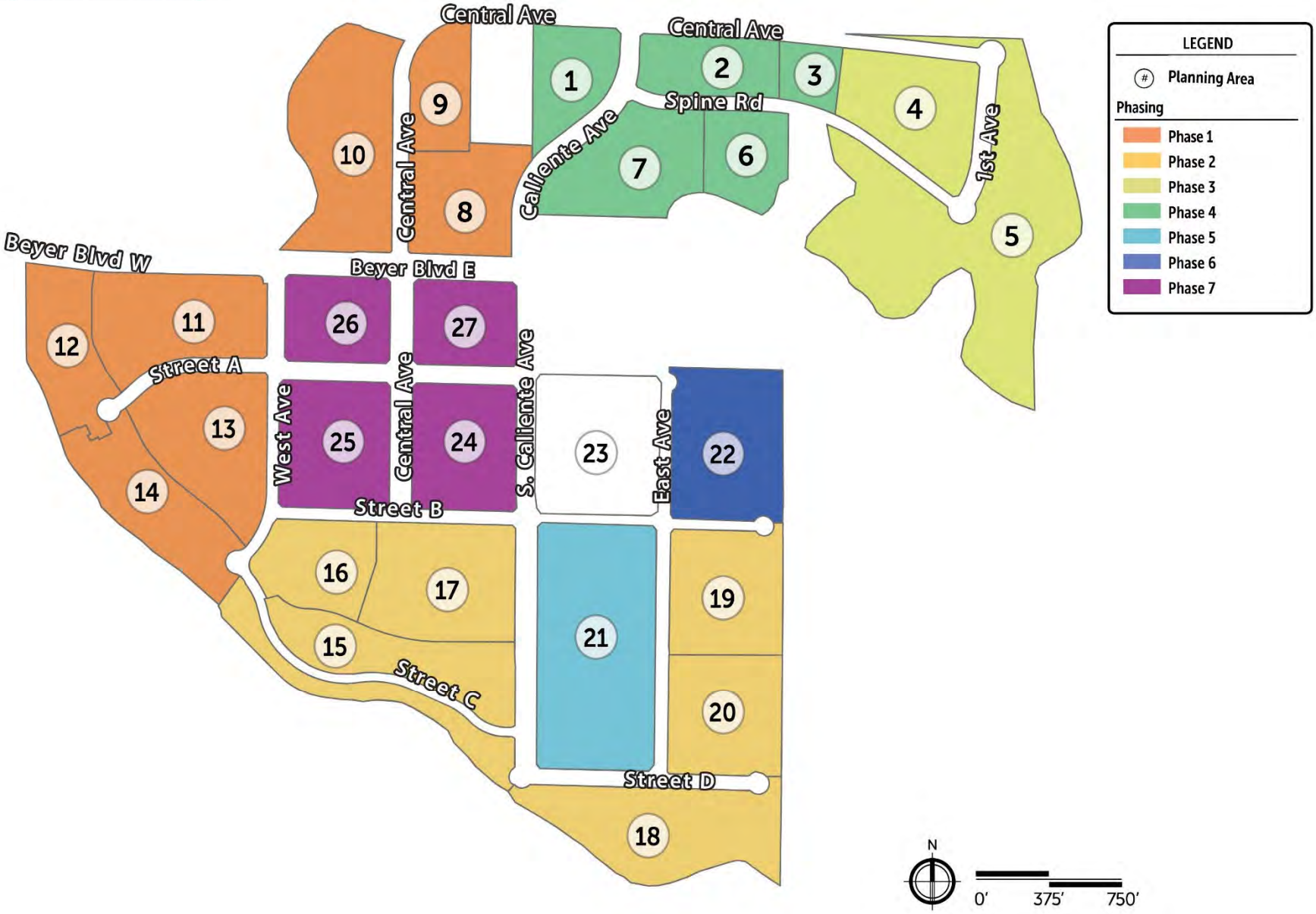
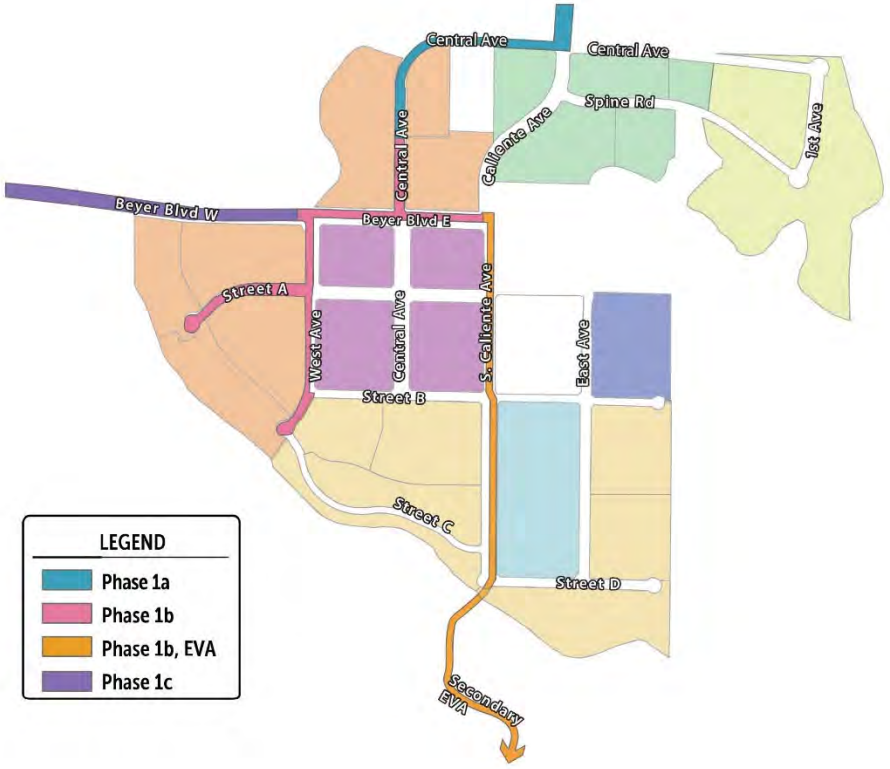


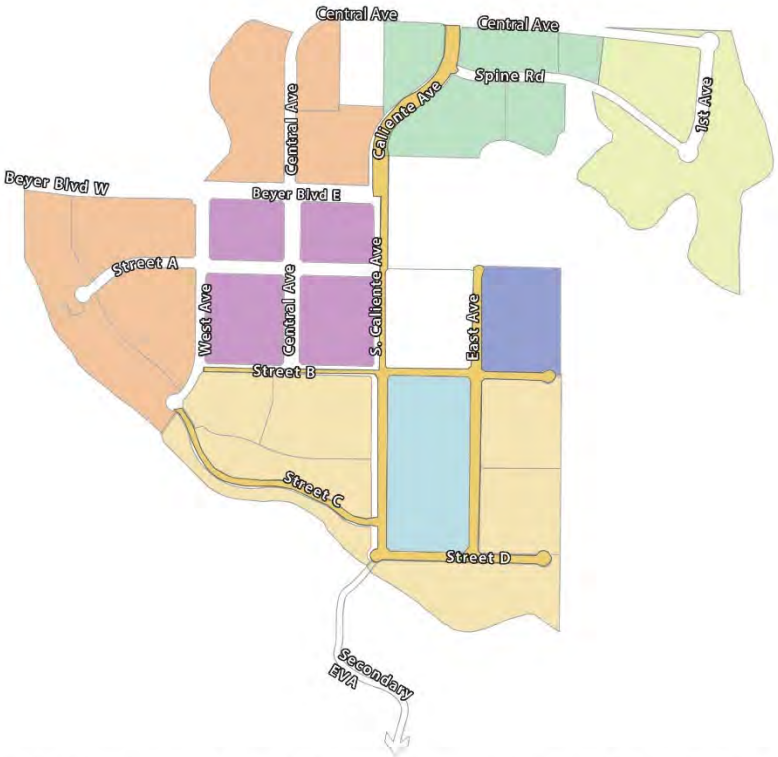
Figure 7.2 — Phase 1 Roadways



Note: Phase 1b, Secondary Emergency Vehicle Access Road at the eastern terminus of East Beyer Boulevard and the future South Caliente Avenue intersection, extending south to Rail Court, as shown, will be implemented at the 201st dwelling unit. Refer to Section 7.9, Supplemental Development Regulations

Note: Phase 1c, Beyer Boulevard West, will be implemented prior to the 700th dwelling unit in Phase 1.

Figure 7.3 — Phase 2 Roadways



Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court.

Figure 7.4 — Phase 3 Roadways

Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court.

Figure 7.5 — Phase 4 Roadways

Note: Off-site improvements will widen Beyer Boulevard between East Beyer Boulevard /Otay Mesa Road to Enright Drive prior to the 3,298th dwelling unit.

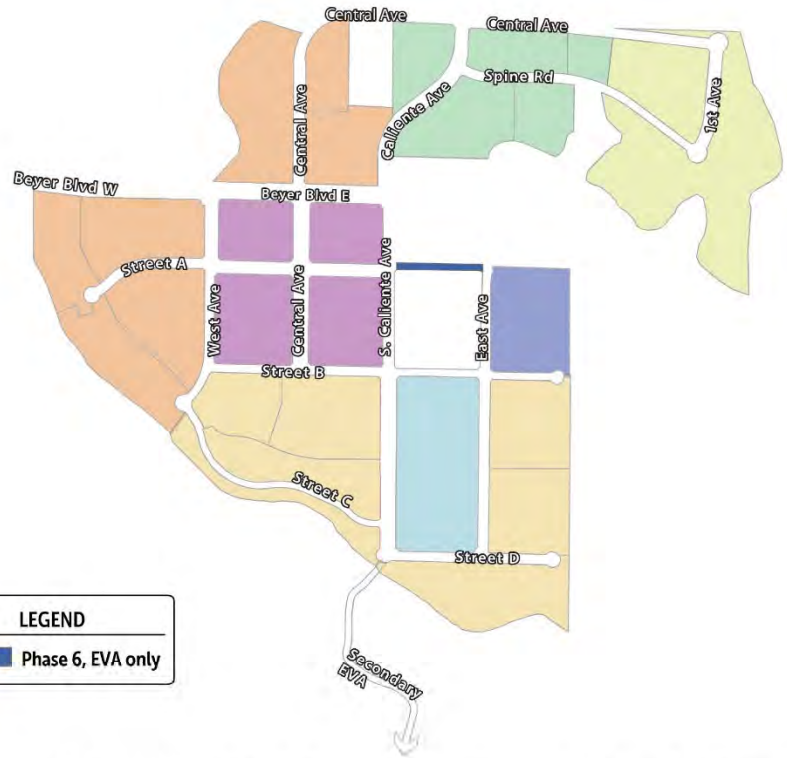
Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court.

Figure 7.6 — Phase 5 Roadways

Note: No additional streets are expected to be required in this phase.

Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court.

Figure 7.7 — Phase 6 Roadways



Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court..

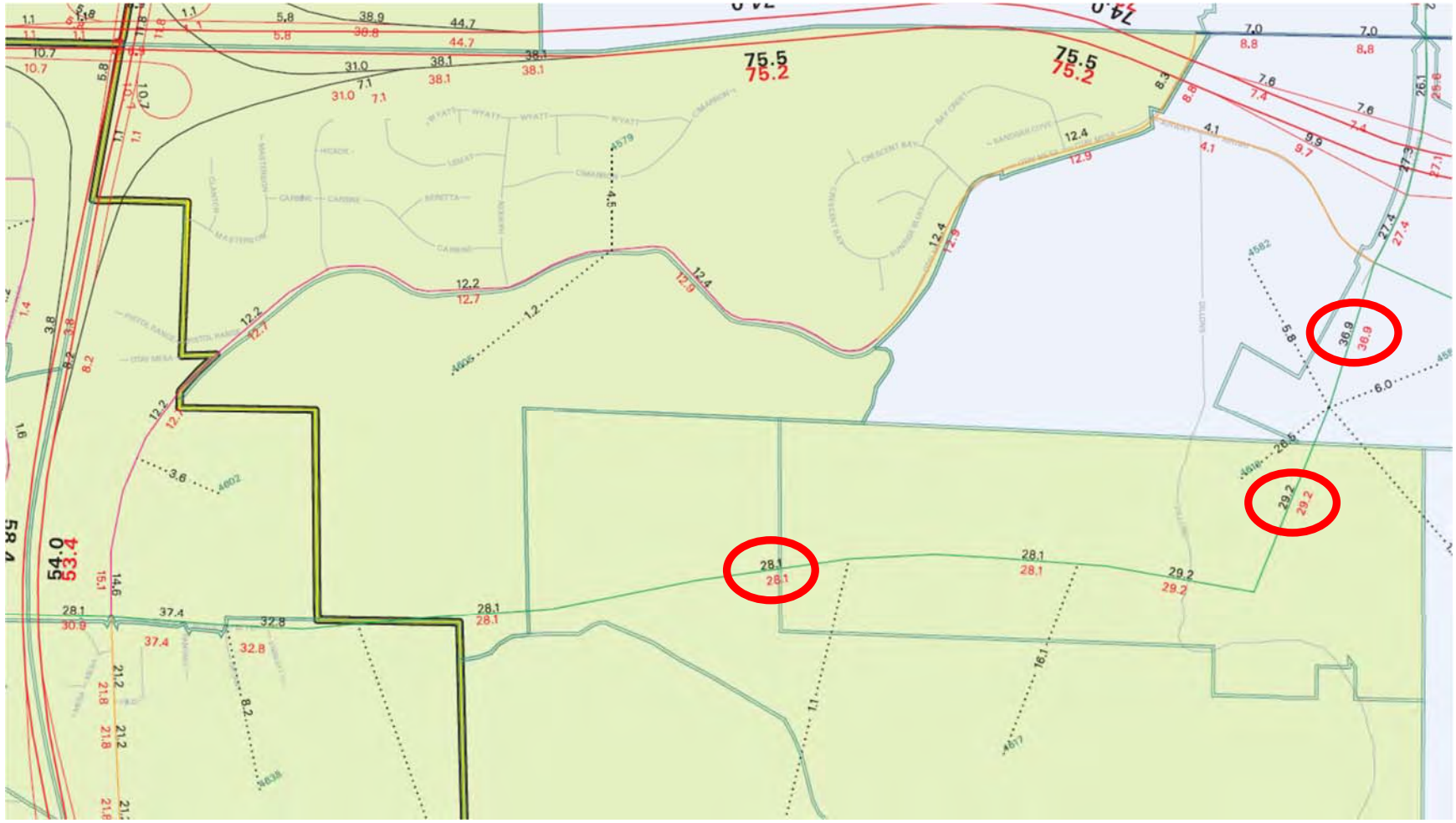
Figure 7.8 — Phase 7 Roadways

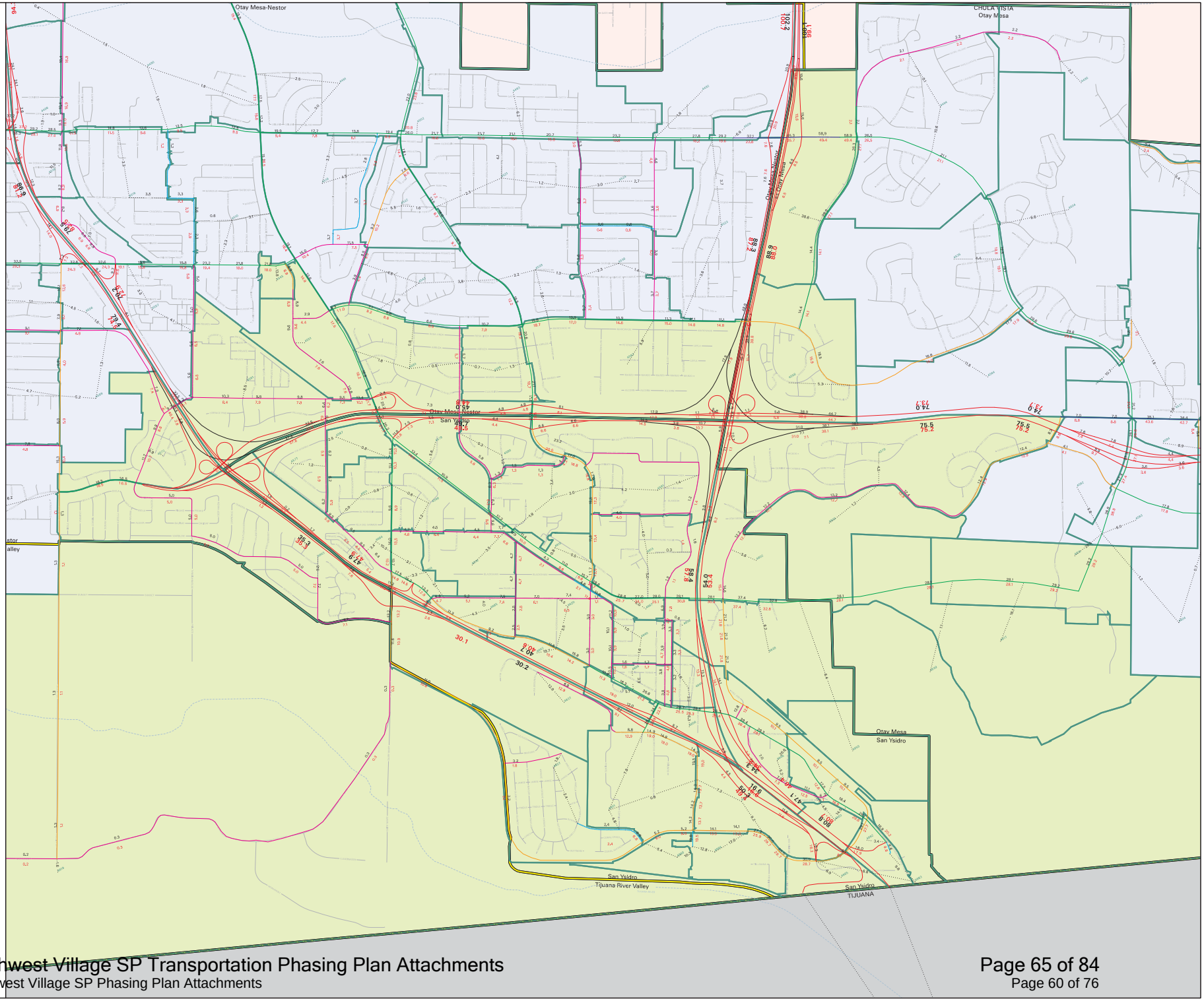
Note: Secondary Emergency Vehicle Access Road will extend south to Rail Court.

Attachment F

San Ysidro Community Plan Update SANDAG Output

SANDAG Series 12 Output





SANDAG Series 12 2035
Revenue Constrained
2011 RTP Highway Network
Forecasted Daily Volumes

SAN YSIDRO

Model Rerun 05/14/14
San Ysidro CPU
2035 Scenario D - Proposed LU 2, Hybrid Network

Forecasted Volumes:
- Adjusted Volume
- Unadjusted Volume
- Traffic Analysis Zone

Feet 0 500 1,000
Meters 60 180 300

SANDAG

May 15, 2014

Attachment G

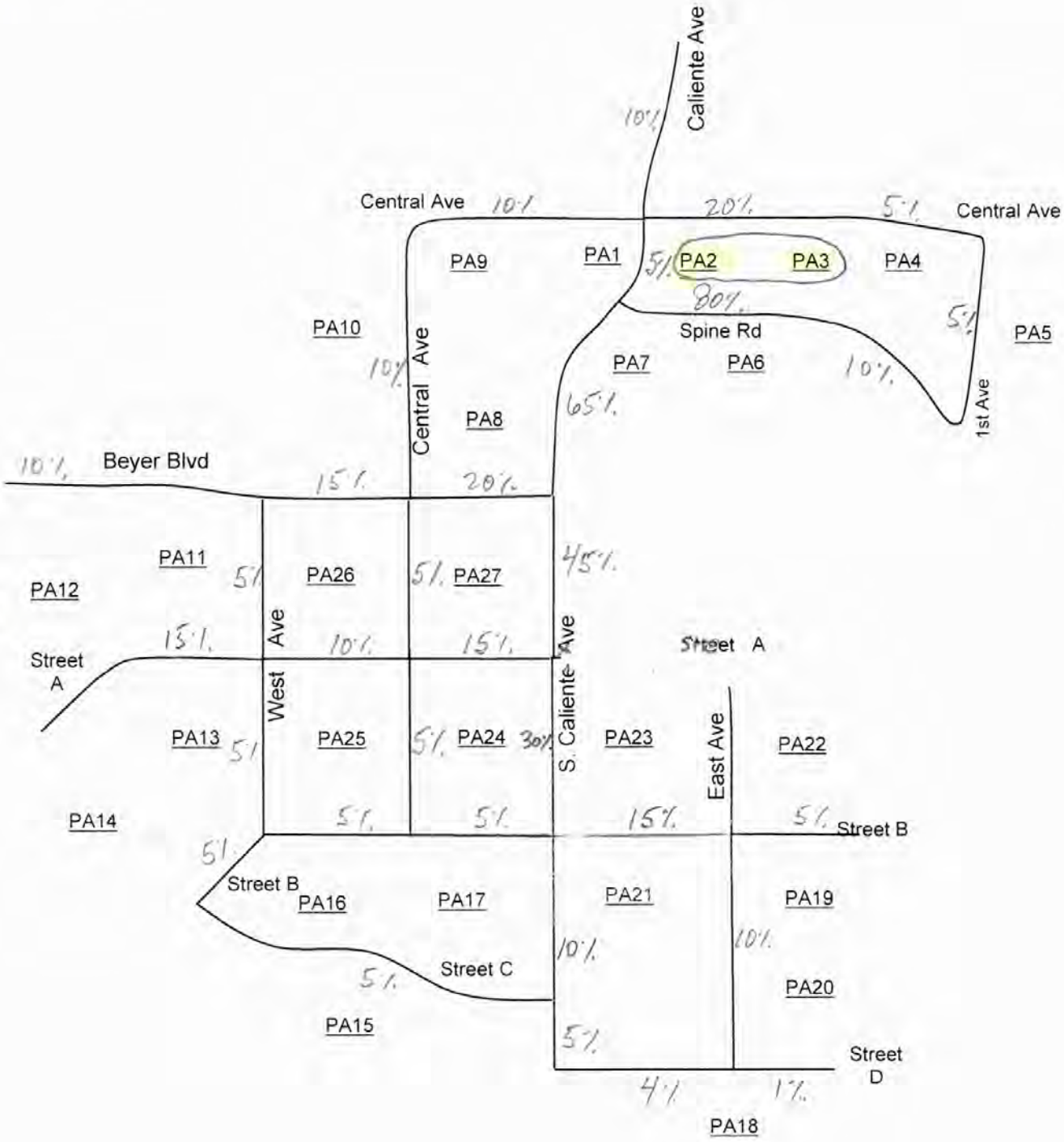
On-Site Roadway Trip Assignment Details

PA1

~~160 DU MF < 20~~
120 DU MF < 20

PA2 & PA3

PA2K
~~7.1 AC~~
7.6 AC

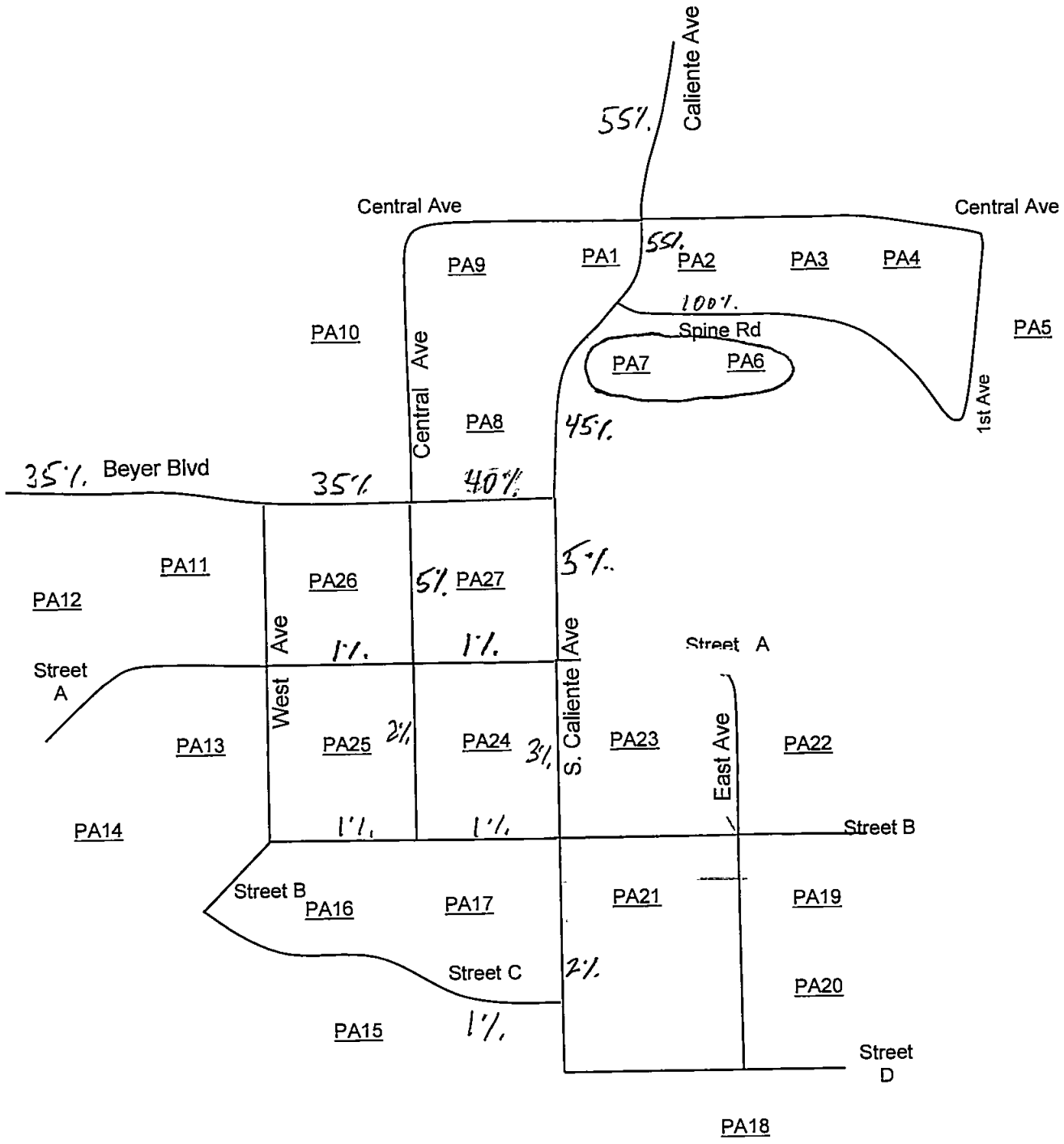


PA4 & PA5

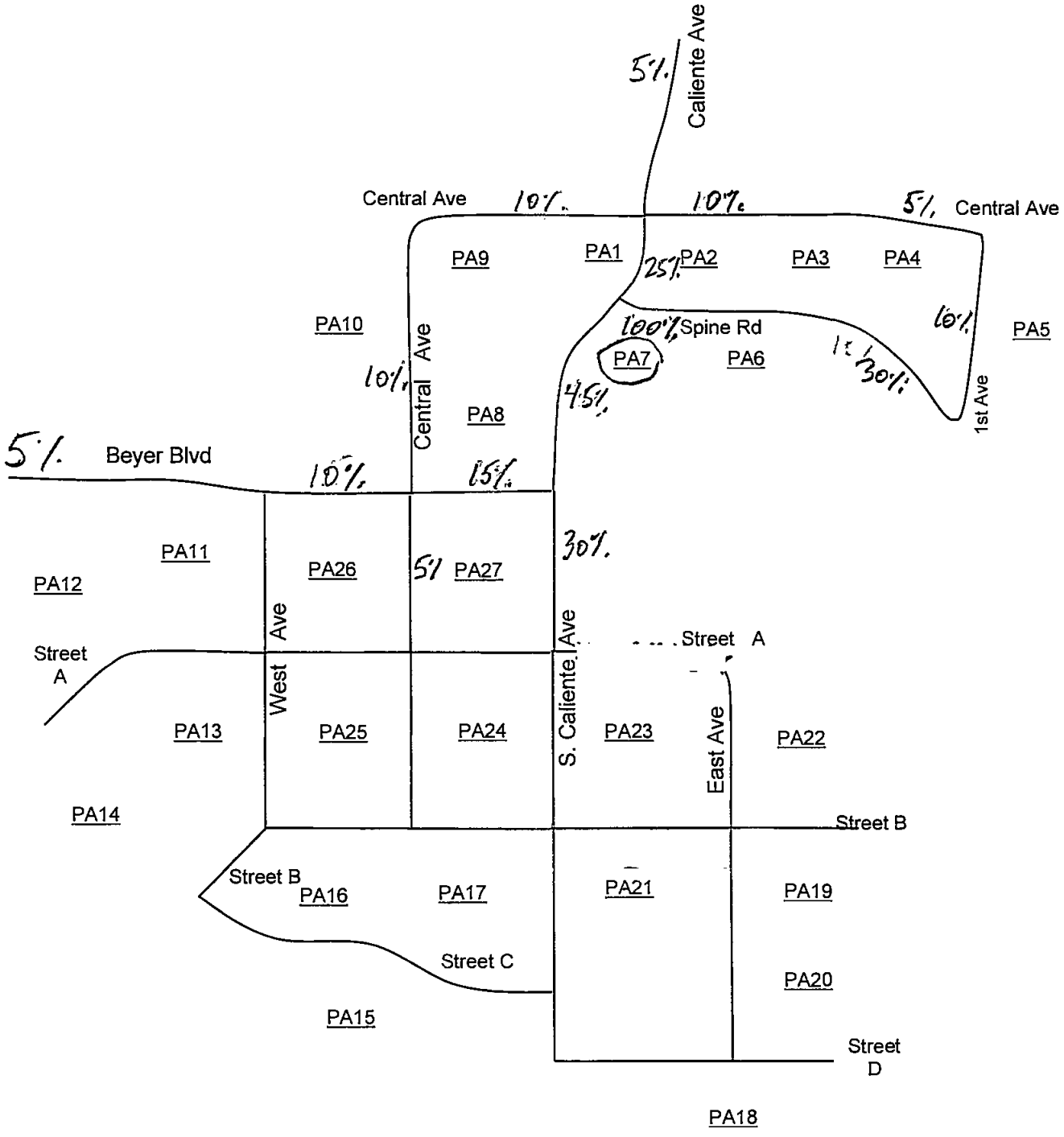
819 DU
MF
L 20

PA6 & PA 7

264 DU
MF
< 20

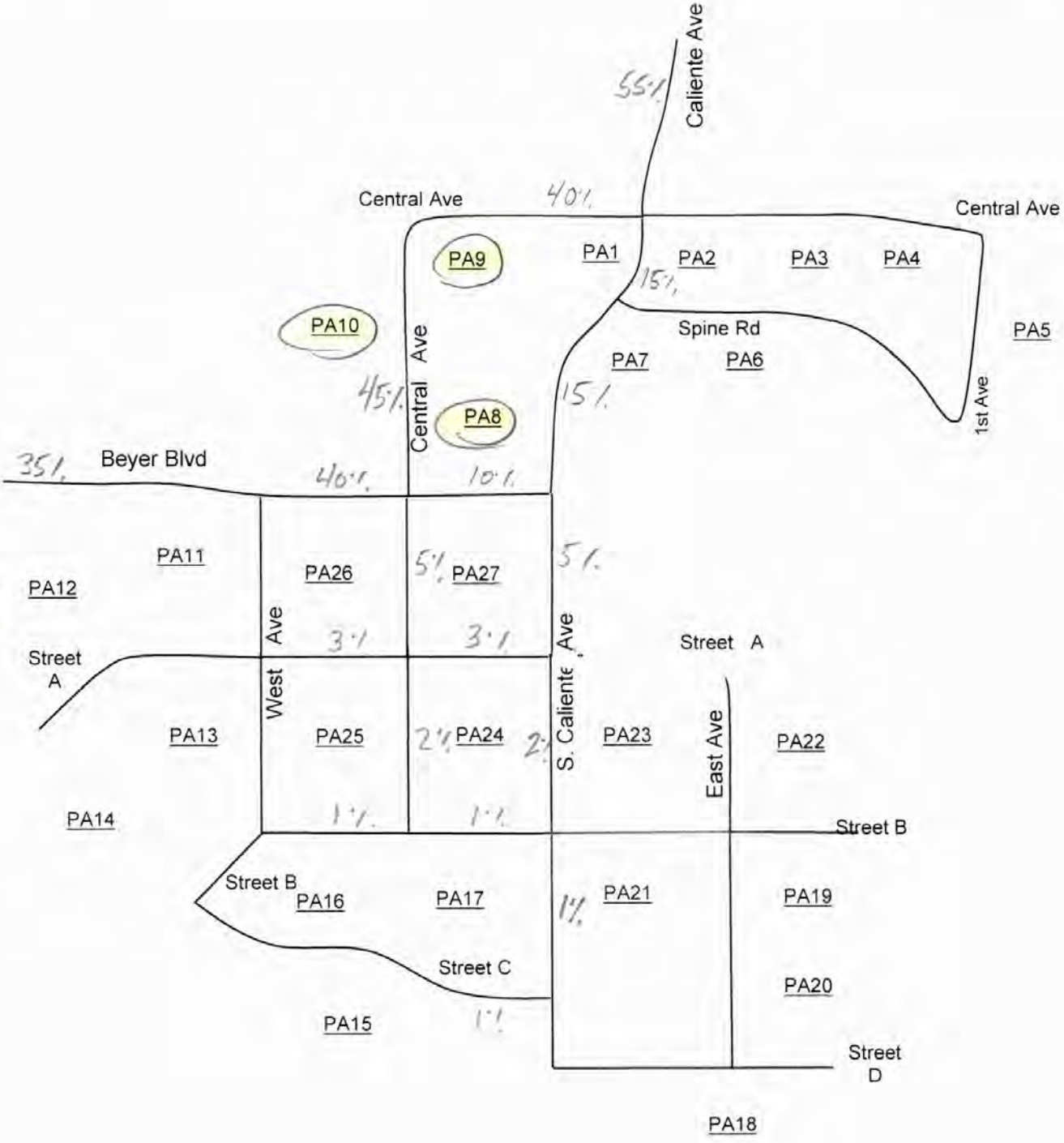


PA 7 SCHOOL OVERLAY



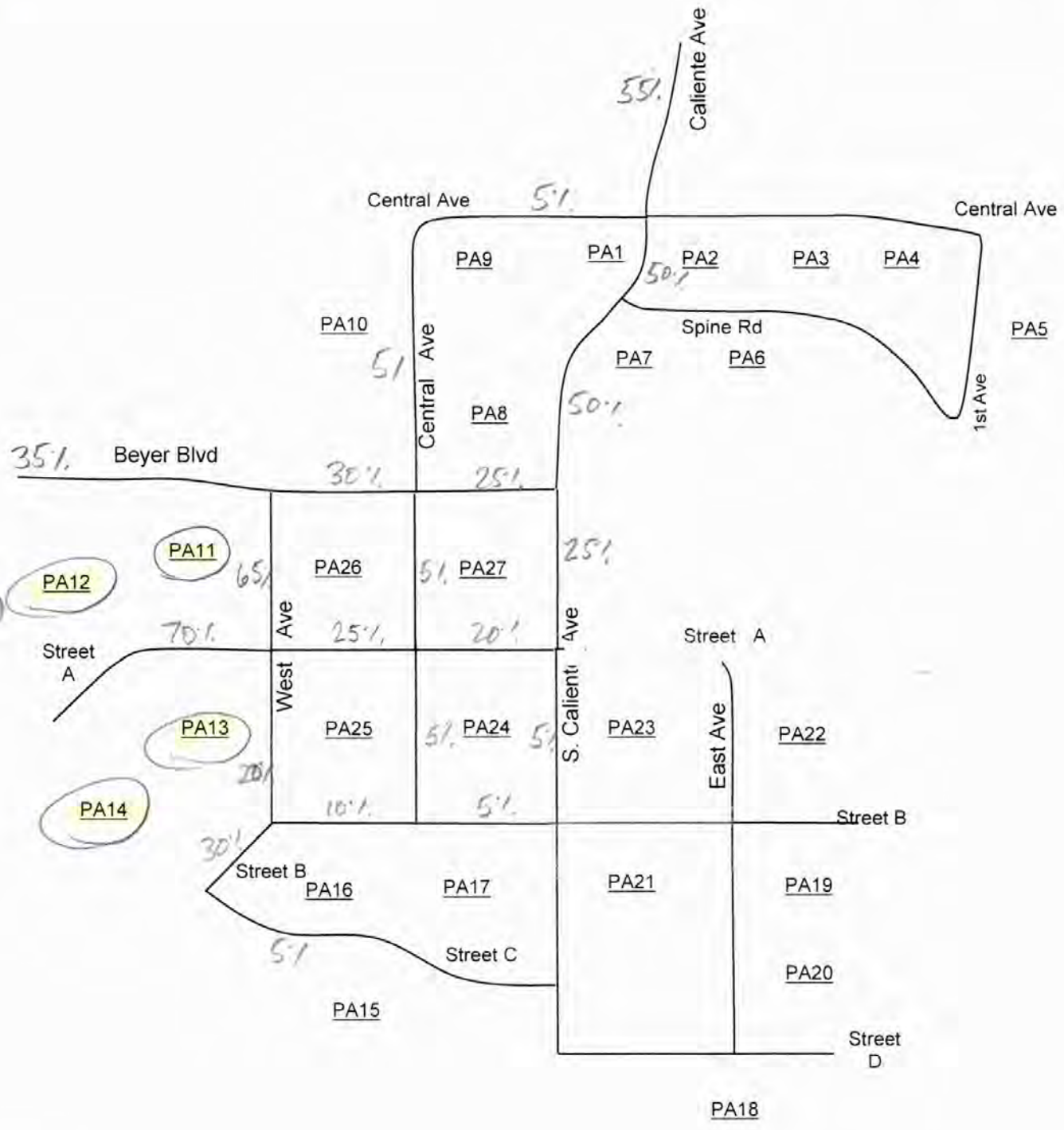
PA 8, 9, & 10

225 DU SF
107 DU MF<20
282 DU MF>20



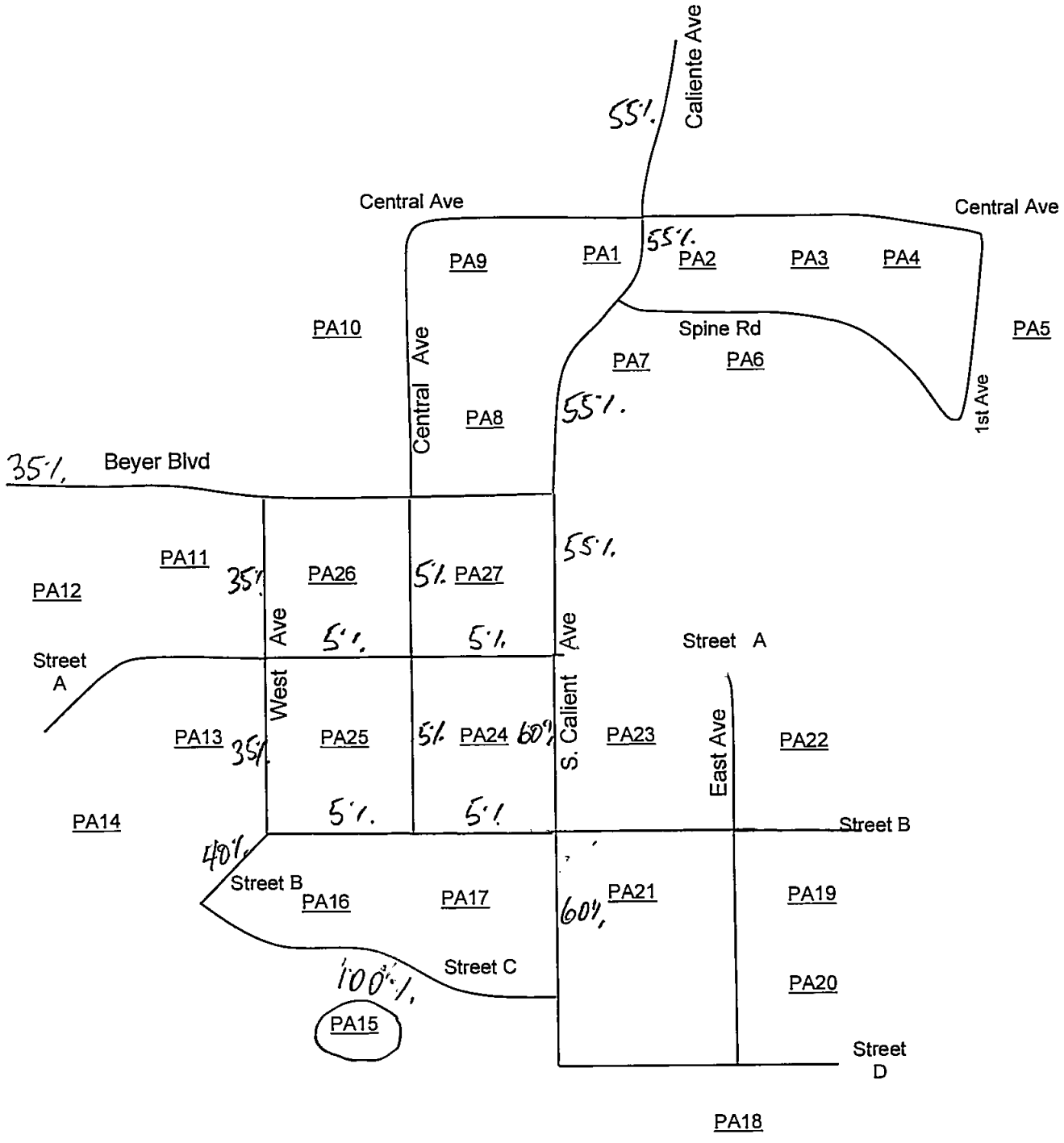
PA 11, 12, 13 & 14

318 DU SF
383 DU MF <20



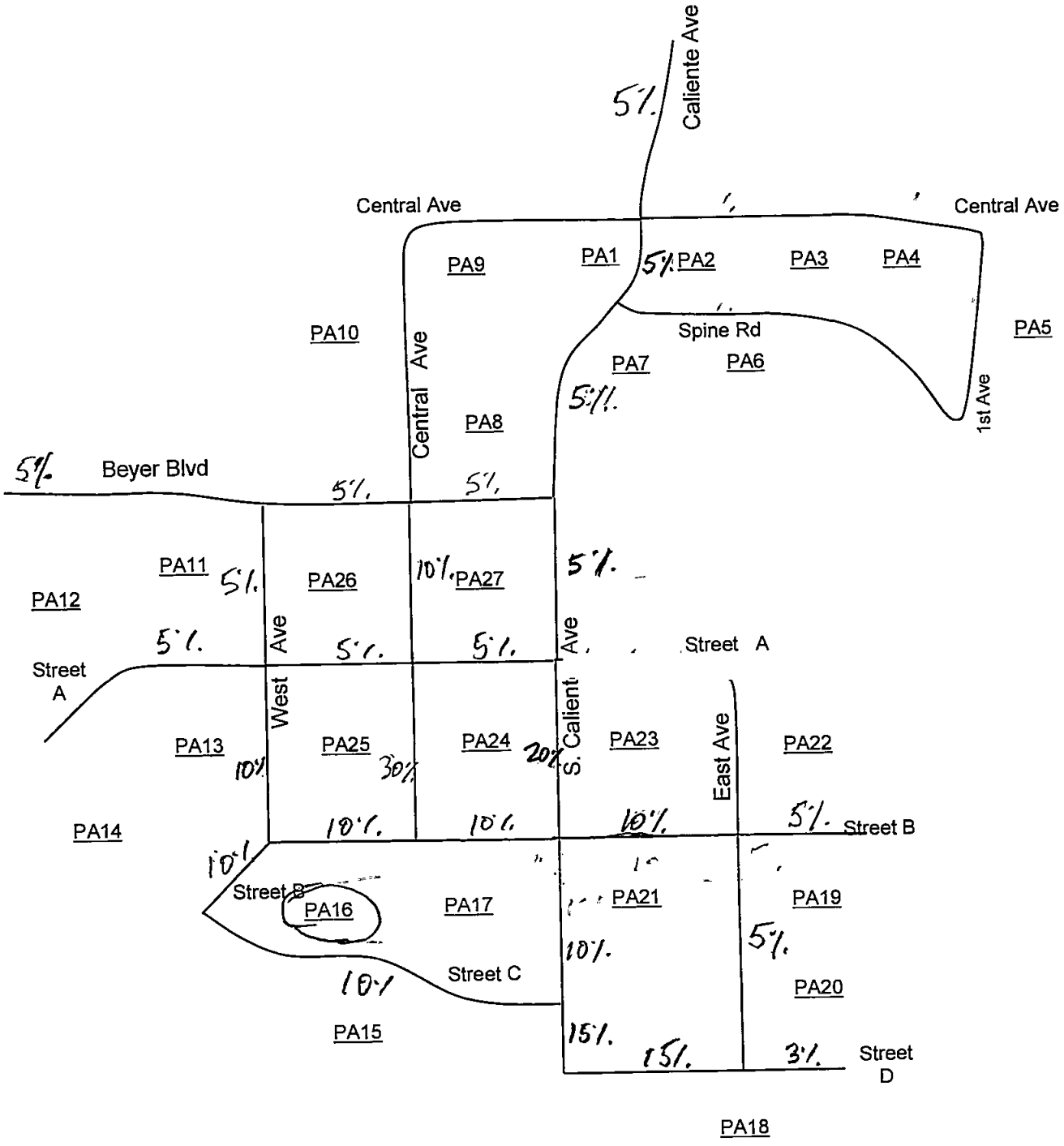
PA 15

243 DU
SF



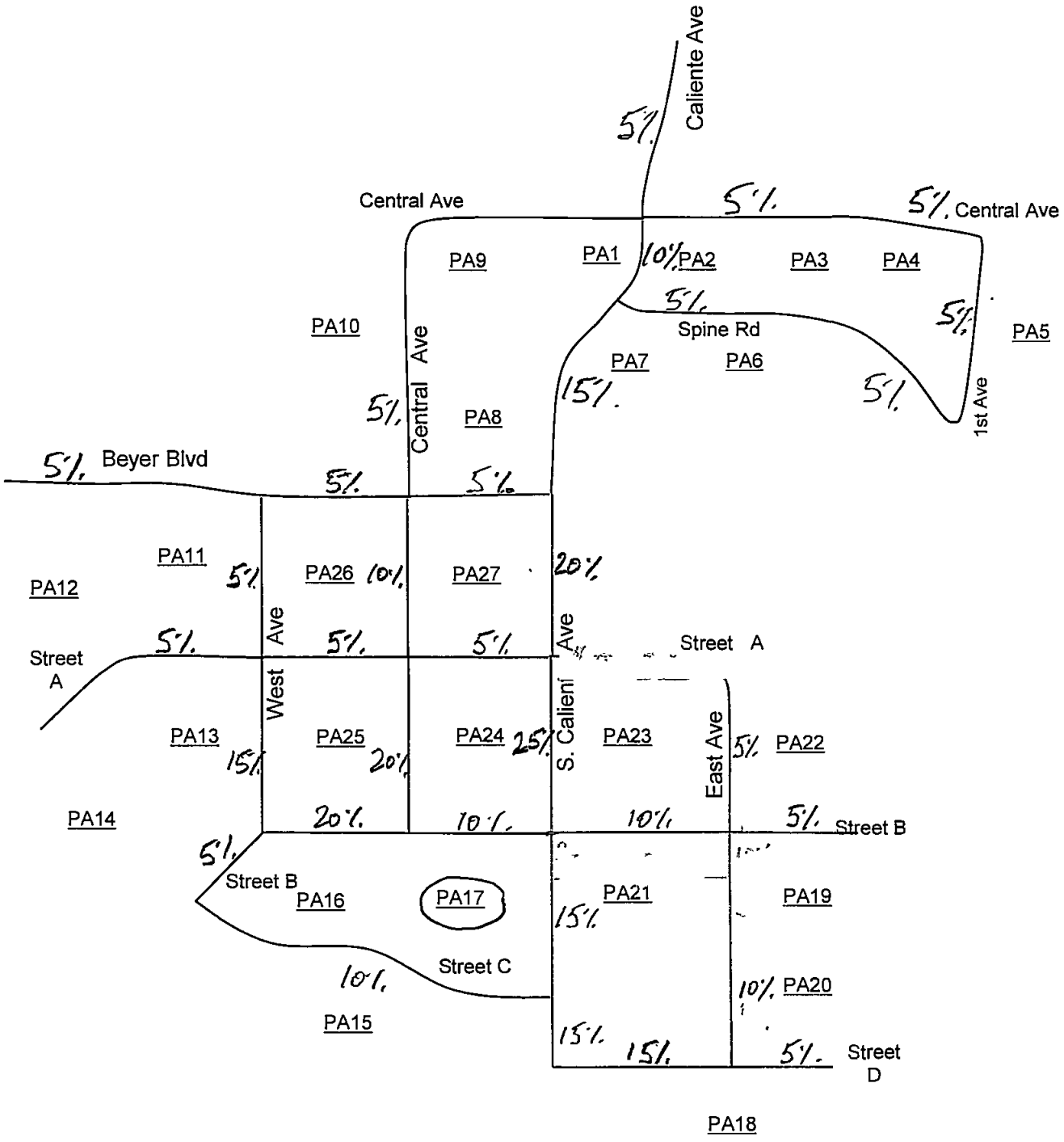
PA 16

SCHOOL


Caliente Ave
5%
Central Ave
Central Ave
PA9
PA1
5%
PA2
PA3
PA4
PA10
Central Ave
Spine Rd
PA5
PA7
PA6
1st Ave
5%
PA8
5%
Beyer Blvd
5%
5%
5%
PA11
5%
PA26
10%
PA27
5%
PA12
5%
5%
5%
Ave
Street A
Ave
Street A
West
S. Caliente
East Ave
PA13
10%
PA25
30%
PA24
20%
PA23
PA22
PA14
10%
10%
10%
10%
5%
Street B
10%
Street B
PA16
PA17
PA21
PA19
10%
5%
Street C
10%
PA20
PA15
15%
15%
3%
Street D
PA18

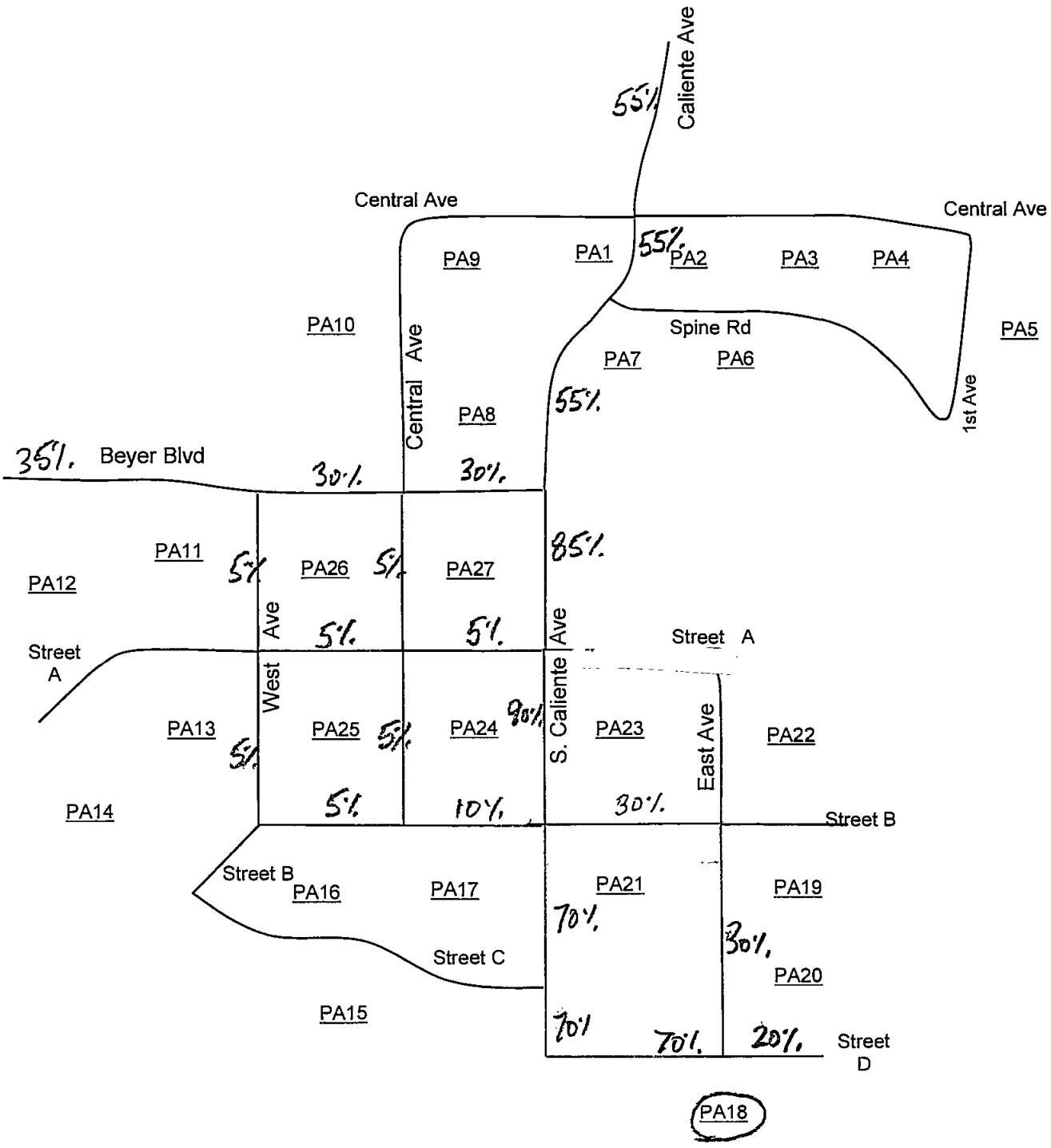
PA 17

PARK


Caliente Ave
5%
Central Ave
5%
5%
Central Ave
PA9
PA1
10%
PA2
PA3
PA4
PA10
5%
Spine Rd
5%
PA5
Central Ave
PA7
PA6
15%
5%
1st Ave
5%
PA8
5%
Beyer Blvd
5%
5%
PA11
PA12
5%
PA26
10%
PA27
20%
Street A
5%
5%
5%
Street A
West Ave
S. Calienl Ave
PA13
PA25
PA24
PA23
East Ave
15%
20%
25%
5%
PA22
PA14
20%
10%
10%
5%
Street B
5%
Street B
PA16
PA17
PA21
PA19
15%
Street C
10%
10%
PA20
PA15
15%
15%
5%
Street D
PA18

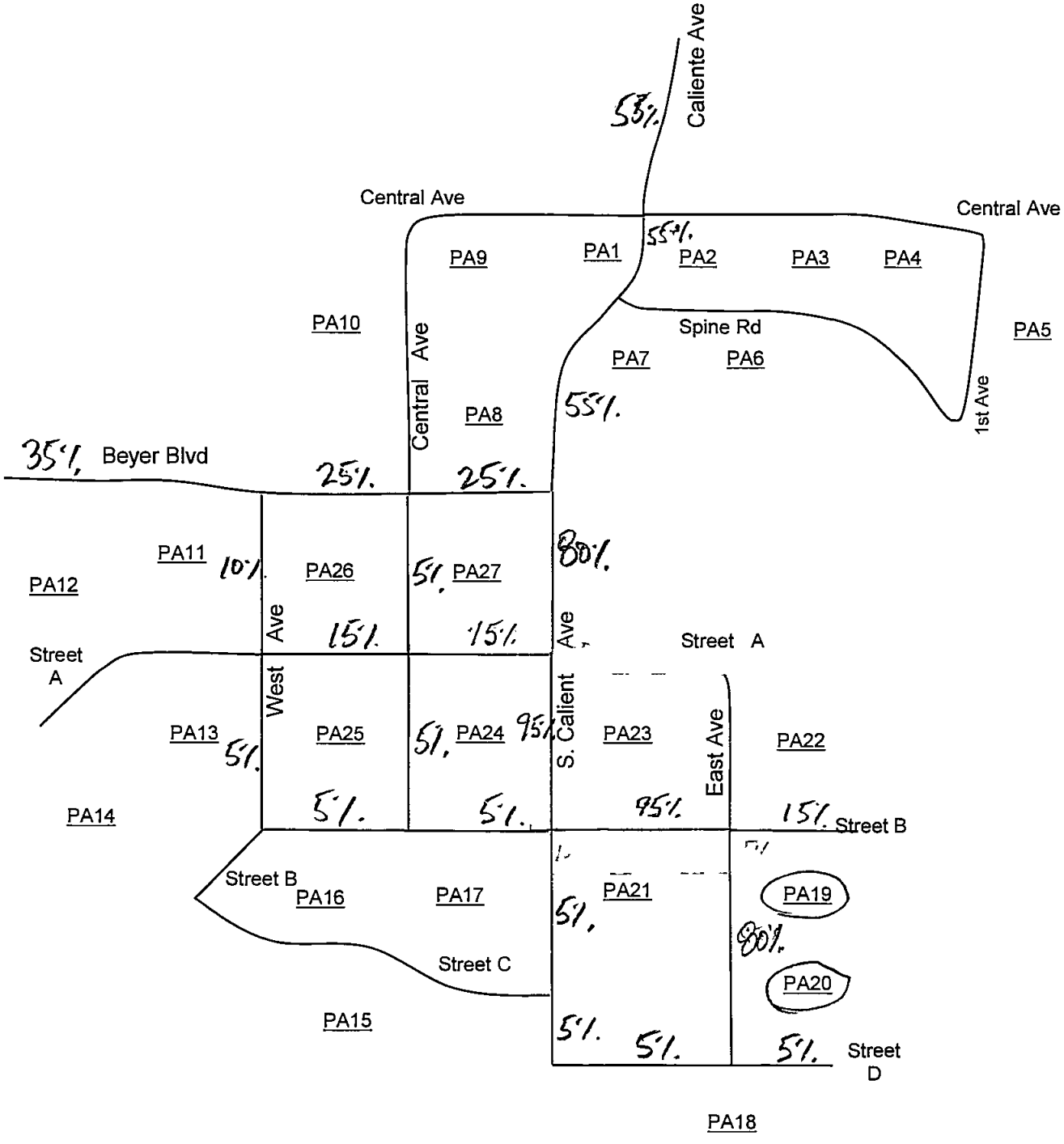
PA 18

238 DU SF



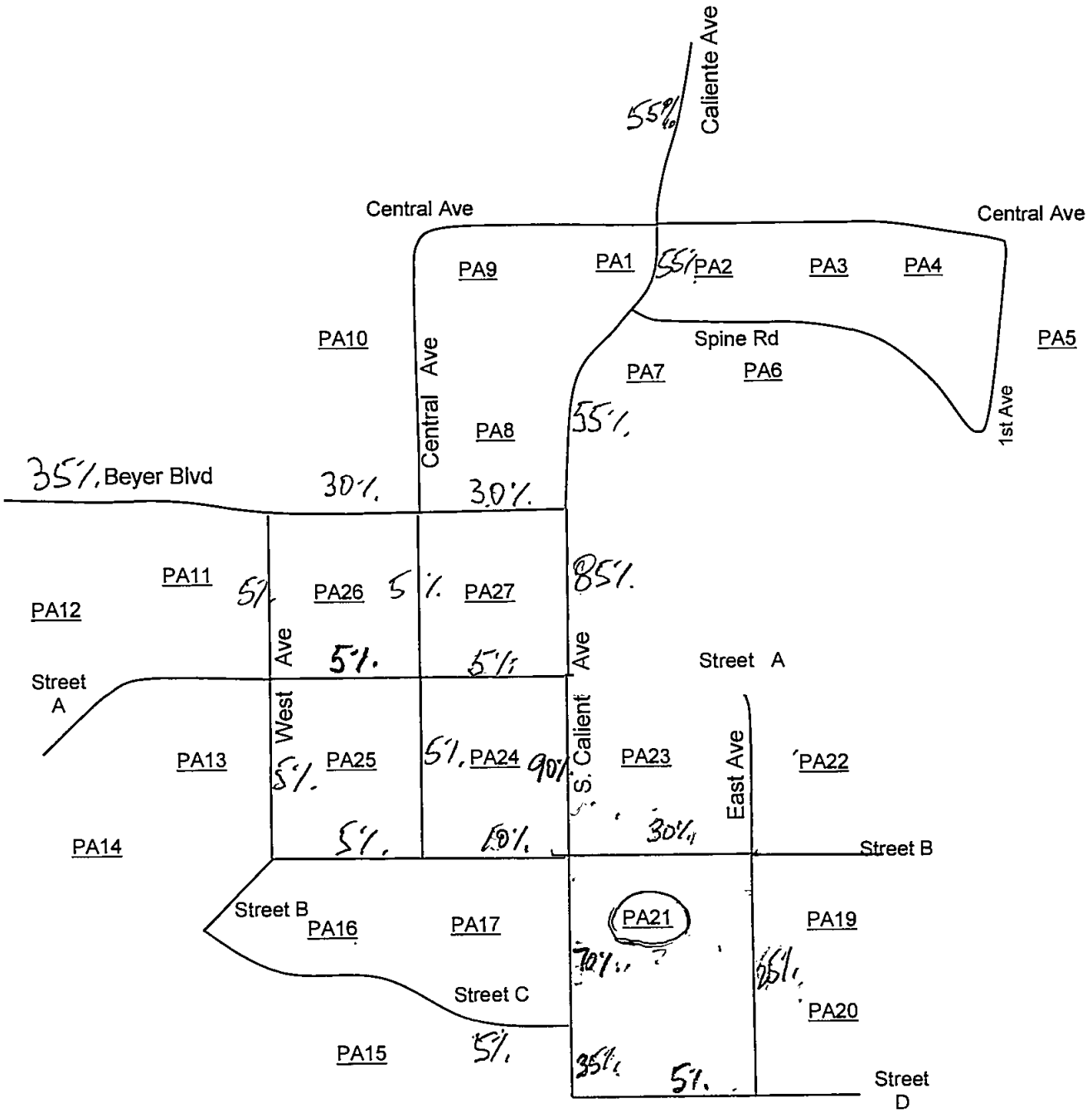
PA 19 & 20

134 DU SF
237 DU MF < 20



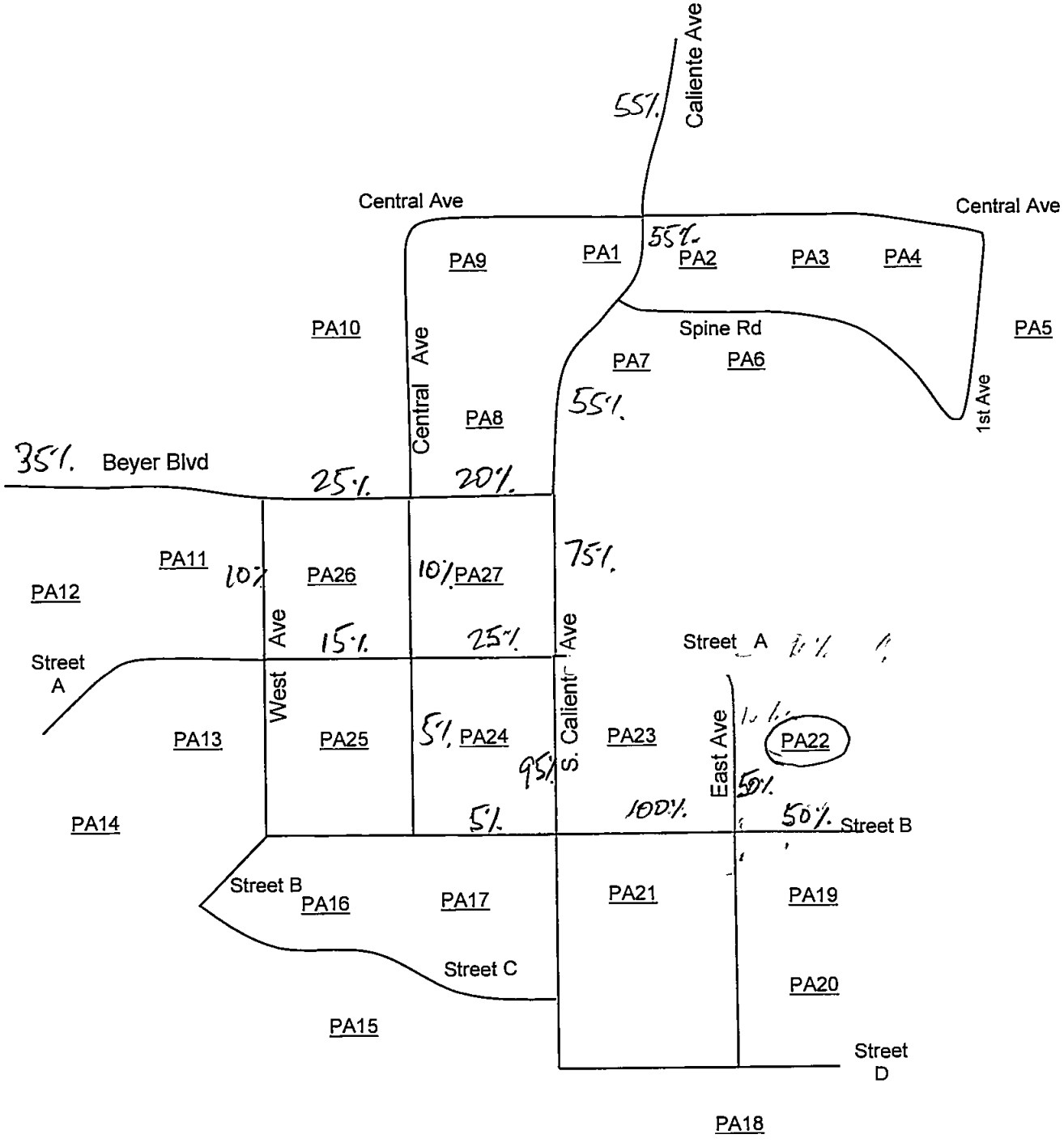
~~266 DU MF~~
306 DU MF

PA 21.



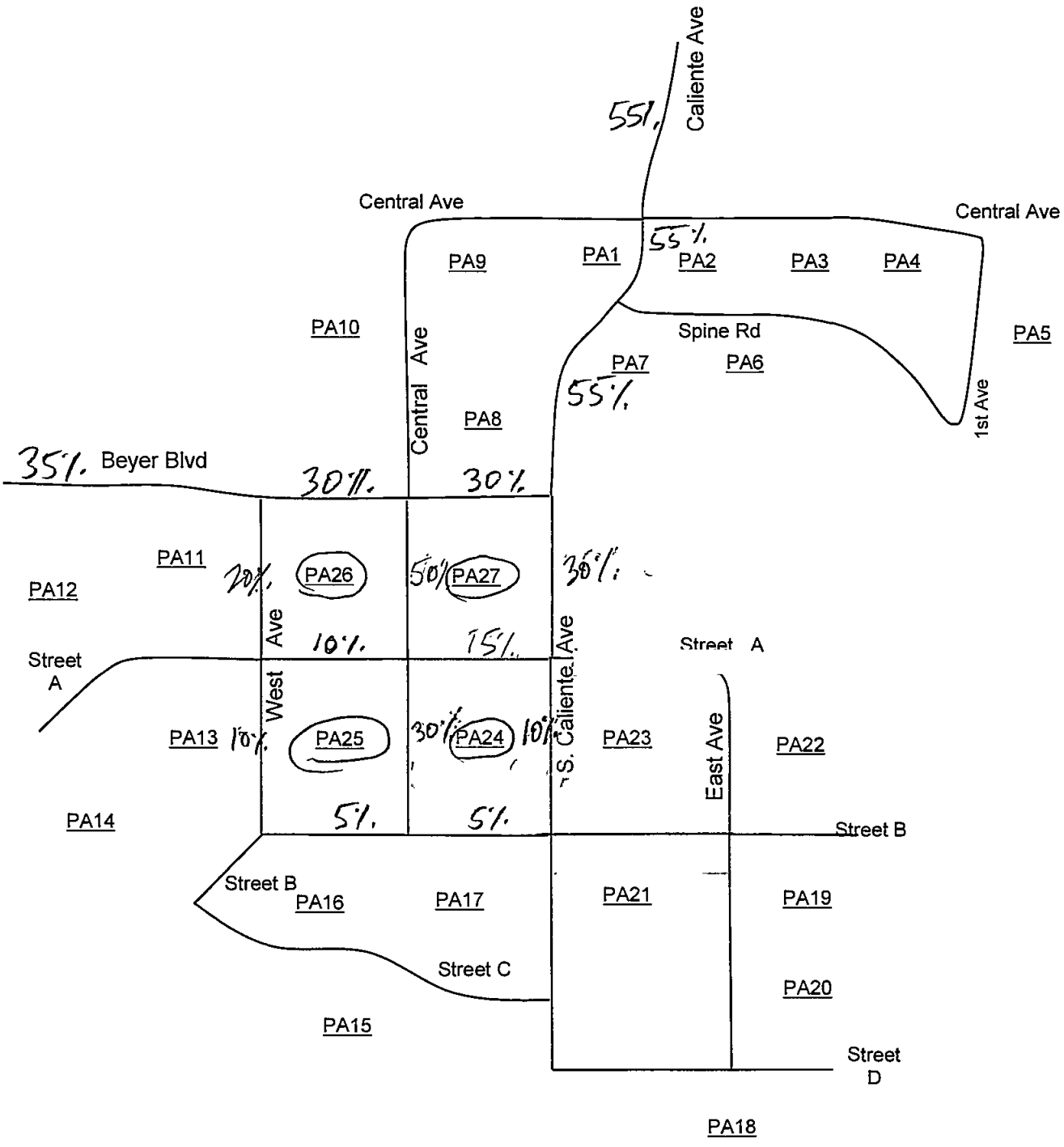
PA 22

267 DU
MF
< 20



PA 24, 25, 26, & 27
RESIDENTIAL

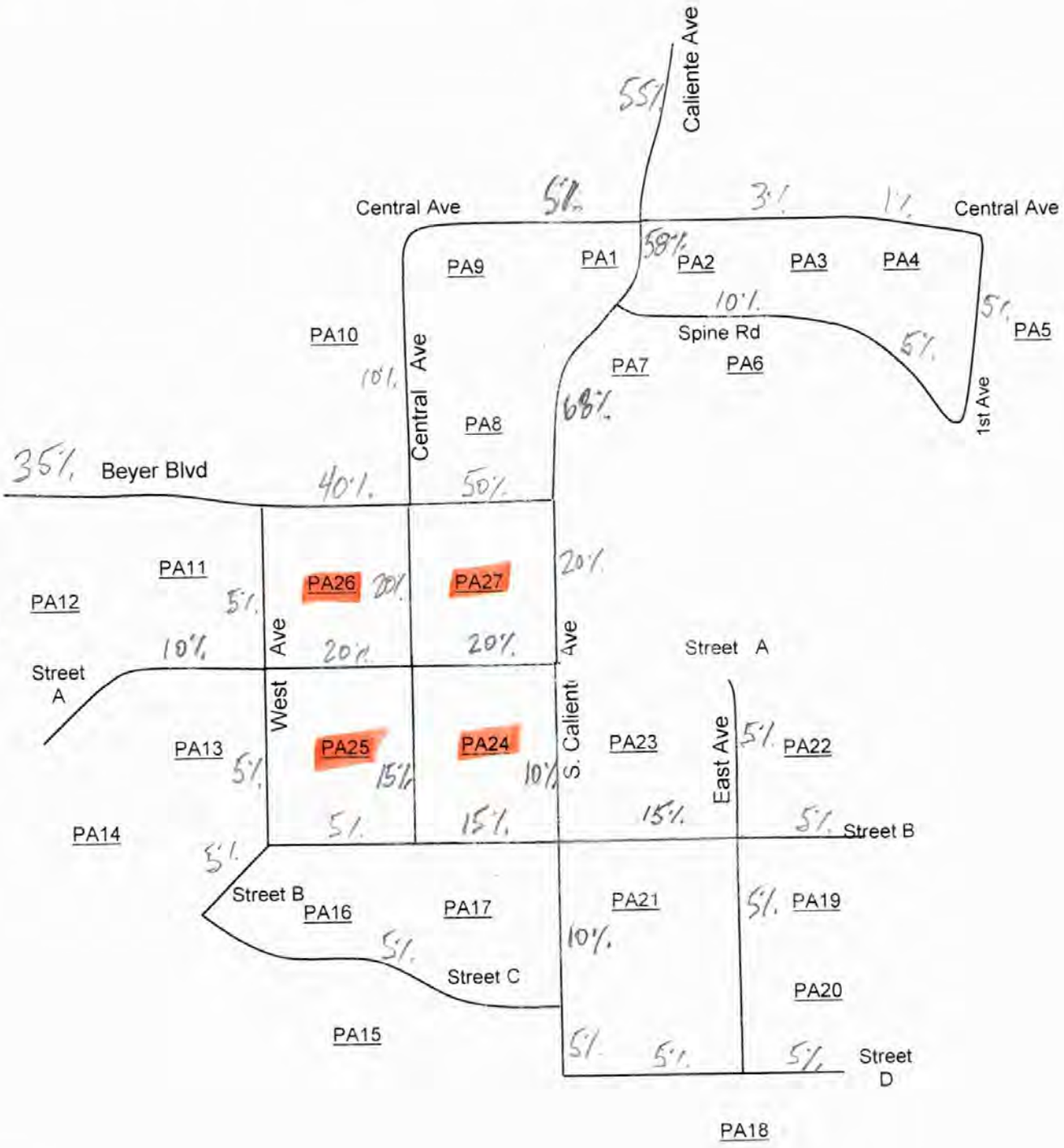
1,187 DU
MF
720



PA 24, 25, 26, & 27

COMMERCIAL ALLOWED

175,000 SF



Southwest Village

Planning Areas and Land Uses

	PA	1	PA	2&3	PA	4	PA	5	PA	6&7	PA	7	PA	8	PA	9	PA	10	PA	11	PA	12	PA	13	PA	14	PA	15
Land Use & TG	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**
Single Family																		225				137				181		243
MultiFamily<20		120				211		608		264						107				190				193				
MultiFamily>20														282														
Park (Acers)				7.6																								
School (students)												Students 668																
TG Single Family		0		0		0		0		0		0		0		0		2,250		0		1,370		0		1,810		2,430
TG MF<20		960		0		1,688		4,864		2,112		0		0		856		0		1,520		0		1,544		0		0
TG MF>20		0		0		0		0		0		0		1,692		0		0		0		0		0		0		0
TG Commercial		0		0		0		0		0		0		0		0		0		0		0		0		0		0
TG Sch/Pk				380								1,937																
TG TOTAL		**960**		**380**		**1,688**		**4,864**		**2,112**		**1,937**		**1,692**		**856**		**2,250**		**1,520**		**1,370**		**1,544**		**1,810**		**2,430**

Beyer Blvd	**Rounded Total ADT**	**Distribution and Assignment**																											
Enright Dr to West Ave	***28,100****	35%	336	10%	38	35%	591	35%	1,702	35%	739	5%	97	35%	592	35%	300	35%	788	35%	532	35%	480	35%	540	35%	634	35%	851
West Ave to Central Ave	***28,100****	35%	336	15%	57	35%	591	35%	1,702	35%	739	10%	194	40%	677	40%	342	40%	900	30%	456	30%	411	30%	463	30%	543		0
Central Ave to Caliente Ave	***28,100****	35%	336	20%	76	35%	591	35%	1,702	40%	845	15%	291	10%	169	10%	86	10%	225	25%	380	25%	343	25%	386	25%	453		0
Caliente Ave																													
Airway Rd to Central Ave	***36,900****	55%	528	10%	38	55%	928	55%	2,675	55%	1,162	5%	97	55%	931	55%	471	55%	1,238	55%	836	55%	754	55%	849	55%	996	55%	1,337
Central Ave to Spine Rd	***29,200****	40%	384	5%	19	10%	169	10%	486	55%	1,162	25%	484	15%	254	15%	128	15%	338	50%	760	50%	685	50%	772	50%	905	55%	1,337
Spine Rd to Beyer Blvd	***29,200****	40%	384	65%	247	40%	675	40%	1,946	45%	950	45%	872	15%	254	15%	128	15%	338	50%	760	50%	685	50%	772	50%	905	55%	1,337
Beyer Blvd to Street A	**17,500**	5%	48	45%	171	5%	84	5%	243	5%	106	30%	581	5%	85	5%	43	5%	113	25%	380	25%	343	25%	386	25%	453	55%	1,337
Street A to Street B	**14,200**	5%	48	30%	114	3%	51	3%	146	3%	63		0	2%	34	2%	17	2%	45	5%	76	5%	69	5%	77	5%	91	60%	1,458
Street B to Street C	**6,800**	5%	48	10%	38	2%	34	2%	97	2%	42		0	1%	17	1%	9	1%	23		0		0		0		0	60%	1,458
Street C to Street D	**3,000**	1%	10	5%	19		0		0		0		0		0		0		0		0		0		0		0	0%	0
Central Ave																													
West of 1st Ave	**6,000**		0	5%	19	60%	1,013	60%	2,918		0	5%	97		0		0		0		0		0		0		0		0
East of Caliente Ave	**7,200**		0	20%	76	60%	1,013	60%	2,918		0	10%	194		0		0		0		0		0		0		0		0
West of Caliente Ave	**3,900**	20%	192	10%	38	5%	84	5%	243		0	10%	194	40%	677	40%	342	40%	900	5%	76	5%	69	5%	77	5%	91		0
North of Beyer Blvd	**4,500**	20%	192	10%	38	5%	84	5%	243		0	10%	194	45%	761	45%	385	45%	1,013	5%	76	5%	69	5%	77	5%	91		0
Beyer Blvd to Street A	**7,700**	5%	48	5%	19	5%	84	5%	243	5%	106	5%	97	5%	85	5%	43	5%	113	5%	76	5%	69	5%	77	5%	91	5%	122
Street A to Street B	**5,500**	2%	19	5%	19	2%	34	2%	97	2%	42		0	2%	34	2%	17	2%	45	5%	76	5%	69	5%	77	5%	91	5%	122
East Ave																													
Street A to Street B	**1,700**		0		0		0		0		0		0		0		0		0		0		0		0		0		0
Street B to Street D	**4,700**		0	10%	38		0		0		0		0		0		0		0		0		0		0		0		0
Spine Rd																													
West Half	**8,200**		0	80%	304	40%	675	40%	1,946	100%	2,112	100%	1,937		0		0		0		0		0		0		0		0
East Half	**3,200**		0	10%	38	30%	506	30%	1,459		0	30%	581		0		0		0		0		0		0		0		0
Street A																													
West of West Ave	**5,800**		0	15%	57		0		0		0		0		0		0		0	70%	1,064	70%	959	70%	1,081	70%	1,267		0
West Ave to Central Ave	**6,300**		0	10%	38	1%	17	1%	49	1%	21		0	3%	51	3%	26	3%	68	25%	380	25%	343	25%	386	25%	453	5%	122
Central Ave to Caliente Ave	**6,600**	2%	19	15%	57	1%	17	1%	49	1%	21		0	3%	51	3%	26	3%	68	20%	304	20%	274	20%	309	20%	362	5%	122
Street B																													
Street C to West Ave	**3,700**	1%	10	5%	19		0		0		0		0		0		0		0	30%	456	30%	411	30%	463	30%	543	40%	972
West Ave to Central Ave	**2,600**	2%	19	5%	19	1%	17	1%	49	1%	21		0	1%	17	1%	9	1%	23	10%	152	10%	137	10%	154	10%	181	5%	122
Central Ave to S. Caliente Ave	**3,800**	2%	19	5%	19	1%	17	1%	49	1%	21		0	1%	17	1%	9	1%	23	5%	76	5%	69	5%	77	5%	91	5%	122
S. Caliente Ave to East Ave	**8,800**		0	15%	57		0		0		0		0		0		0		0		0		0		0		0		0
East of East Ave	**2,300**		0	5%	19		0		0		0		0		0		0		0		0		0		0		0		0
Street C																													
West Ave to S. Caliente Ave	**4,000**	1%	10	5%	19	1%	17	1%	49	1%	21		0	1%	17	1%	9	1%	23	5%	76	5%	69	5%	77	5%	91	100%	2,430
Street D																													
S. Caliente Ave to East Ave	**2,900**		0	4%	15		0		0		0		0		0		0		0		0		0		0		0		0
East of East Ave	**1,300**		0	1%	4		0		0		0		0		0		0		0		0		0		0		0		0
West Ave																													
Beyer Blvd to Street A	**7,900**		0	5%	19		0		0		0		0		0		0		0	65%	988	65%	891	65%	1,004	65%	1,177	35%	851
Street A to Street B	**4,100**		0	5%	19		0		0		0		0		0		0		0	20%	304	20%	274	20%	309	20%	362	35%	851
1st Ave																													
Central Ave to Spine Rd	**4,100**		0	5%	19	50%	844	50%	2,432		0	10%	194		0		0		0		0		0		0		0		0

*** From SYCPU Horizon Year Volumes**

Southwest Village — **Planning Areas and Land Uses**

	PA 16		PA 17		PA 18		PA 19		PA 20		PA 21		PA 22		PA 23		PA 24		PA 25		PA 26		PA 27		PA 24-27 Commercial		Adjacent cumulative on north edge of SWV
Land Use & TG	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	%	**ADT**	
Single Family						238				134																	
MultiFamily<20								237				306		267													
MultiFamily>20																		352		365		251		219			
Park (Acers)				10.5											Open												
School (students)	Students	600													Space												
TG Single Family		0		0		2,380		0		1,340		0		0		0		0		0		0		0		0	
TG MF<20		0		0		0		1,896		0		2,448		2,136		0		0		0		0		0		0	
TG MF>20		0		0		0		0		0		0		0		0		2,112		2,190		1,506		1,314		0	
TG Commercial		0		0		0		0		0		0		0		0		0		0		0		0		12,250	
TG Sch/Pk		1,740		525																							
TG TOTAL		**1,740**		**525**		**2,380**		**1,896**		**1,340**		**2,448**		**2,136**		**0**		**2,112**		**2,190**		**1,506**		**1,314**		**12,250**	
Beyer Blvd																											
Enright Dr to West Ave	5%	87	5%	26	35%	833	35%	664	35%	469	35%	857	35%	748		0	35%	739	35%	767	35%	527	35%	460	35%	4,288	
West Ave to Central Ave	5%	87	5%	26	30%	714	25%	474	25%	335	30%	734	25%	534		0	30%	634	30%	657	30%	452	30%	394	40%	4,900	
Central Ave to Caliente Ave	5%	87	5%	26	30%	714	25%	474	25%	335	30%	734	20%	427		0	30%	634	30%	657	30%	452	30%	394	50%	6,125	
Caliente Ave																											
Airway Rd to Central Ave	5%	87	5%	26	55%	1,309	55%	1,043	55%	737	55%	1,346	55%	1,175		0	55%	1,162	55%	1,205	55%	828	55%	723	55%	6,738	
Central Ave to Spine Rd	5%	87	10%	53	55%	1,309	55%	1,043	55%	737	55%	1,346	55%	1,175		0	55%	1,162	55%	1,205	55%	828	55%	723	58%	7,105	
Spine Rd to Beyer Blvd	5%	87	15%	79	55%	1,309	55%	1,043	55%	737	55%	1,346	55%	1,175		0	55%	1,162	55%	1,205	55%	828	55%	723	68%	8,330	
Beyer Blvd to Street A	5%	87	20%	105	85%	2,023	80%	1,517	80%	1,072	85%	2,081	75%	1,602		0	30%	634	30%	657	30%	452	30%	394	20%	2,450	
Street A to Street B	20%	348	25%	131	90%	2,142	95%	1,801	95%	1,273	90%	2,203	95%	2,029		0	10%	211	10%	219	10%	151	10%	131	10%	1,225	
Street B to Street C	10%	174	15%	79	70%	1,666	5%	95	5%	67	70%	1,714		0		0		0		0		0		0	10%	1,225	
Street C to Street D	15%	261	15%	79	40%	952	5%	95	5%	67	35%	857		0		0		0		0		0		0	5%	613	
Central Ave																											
West of 1st Ave		0	5%	26		0		0		0		0		0		0		0		0		0		0	1%	123	1,800
East of Caliente Ave		0	5%	26		0		0		0		0		0		0		0		0		0		0	3%	368	2,565
West of Caliente Ave		0		0		0		0		0		0		0		0		0		0		0		0	5%	613	285
North of Beyer Blvd		0	5%	26		0		0		0		0		0		0		0		0		0		0	10%	1,225	
Beyer Blvd to Street A	10%	174	10%	53		0	5%	95	5%	67		0		0		0	50%	1,056	50%	1,095	50%	753	50%	657	20%	2,450	
Street A to Street B	30%	522	20%	105		0	5%	95	5%	67		0		0		0	30%	634	30%	657	30%	452	30%	394	15%	1,838	
East Ave																											
Street A to Street B		0	5%	26		0		0		0		0	50%	1,068		0		0		0		0		0	5%	613	
Street B to Street D	5%	87	10%	53	30%	714	80%	1,517	80%	1,072	25%	612		0		0		0		0		0		0	5%	613	
Spine Rd																											
West Half		0	5%	26		0		0		0		0		0		0		0		0		0		0	10%	1,225	
East Half		0	5%	26		0		0		0		0		0		0		0		0		0		0	5%	613	
Street A																											
West of West Ave	5%	87	5%	26		0		0		0		0		0		0		0		0		0		0	10%	1,225	
West Ave to Central Ave	5%	87	5%	26	5%	119	15%	284	15%	201	5%	122	15%	320		0	10%	211	10%	219	10%	151	10%	131	20%	2,450	
Central Ave to Caliente Ave	5%	87	5%	26	5%	119	15%	284	15%	201	5%	122	25%	534		0	15%	317	15%	329	15%	226	15%	197	20%	2,450	
Street B																											
Street C to West Ave	10%	174	5%	26		0		0		0		0		0		0		0		0		0		0	5%	613	
West Ave to Central Ave	10%	174	20%	105	5%	119	5%	95	5%	67	5%	122		0		0	5%	106	5%	110	5%	75	5%	66	5%	613	
Central Ave to S. Caliente Ave	10%	174	10%	53	10%	238	5%	95	5%	67	10%	245	5%	107		0	5%	106	5%	110	5%	75	5%	66	15%	1,838	
S. Caliente Ave to East Ave	10%	174	10%	53	30%	714	95%	1,801	95%	1,273	30%	734	100%	2,136		0		0		0		0		0	15%	1,838	
East of East Ave	5%	87	5%	26		0	15%	284	15%	201		0	50%	1,068		0		0		0		0		0	5%	613	
Street C																											
West Ave to S. Caliente Ave	10%	174	10%	53	5%	119		0		0	5%	122		0		0		0		0		0		0	5%	613	
Street D																											
S. Caliente Ave to East Ave	15%	261	15%	79	70%	1,666	5%	95	5%	67	5%	122		0		0		0		0		0		0	5%	613	
East of East Ave	3%	52	5%	26	20%	476	5%	95	5%	67		0		0		0		0		0		0		0	5%	613	
West Ave																											
Beyer Blvd to Street A	5%	87	5%	26	5%	119	10%	190	10%	134	5%	122	10%	214		0	20%	422	20%	438	20%	301	20%	263	5%	613	
Street A to Street B	10%	174	15%	79	5%	119	5%	95	5%	67	5%	122		0		0	10%	211	10%	219	10%	151	10%	131	5%	613	
1st Ave																											
Central Ave to Spine Rd		0	5%	26		0		0		0		0		0		0		0		0		0		0	5%	613	

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