

CHAPTER V: TRANSPORTATION AND CIRCULATION



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5.1 TRANSPORTATION/CIRCULATION CONCEPTS

Context

This chapter sets forth the policies for the transportation and circulation systems within the Placer Vineyards Specific Plan Area (Plan Area) with the goal of providing a variety of circulation choices in a safe and efficient manner. Placer Vineyards is designed to accommodate a diverse range of transportation modes—roadways, street corridors, and open space trails—for automobiles, emergency vehicles, buses, and other transit services, and bikeways and paths that accommodate pedestrians, bikers, and equestrians.

Roadway layouts for the Plan Area and their cross section designs are also presented in this chapter. A summary of projected roadway volumes of streets affected by the project and their level of service conditions at major intersections is analyzed in Section 4.7, “Transportation,” in the Placer Vineyards EIR. The proposed intersection designs for Placer Vineyard’s roadways are provided in Appendix C of this document. Pedestrian and bike circulation policies and development standards for travel via on-and off-street trails and their corresponding cross sections are also contained in this chapter. For streetscape corridor and landscape design guidelines, refer to Chapter VI, “Community Design.”

5.2 EXISTING TRANSPORTATION CONTEXT

Regional Highways and Roadways

Three major regional highways and two main arterial roadways provide access into the Plan Area as indicated in Figure 5.1. Major regional highways include State Routes (SRs) 99 and 65 and Interstate 80 (I-80). The thoroughfare streets (identified as major arterial streets in the Placer County General Plan) include Base Line Road, which connects to Sutter County and the City of Roseville and Watt Avenue, which connects south to Sacramento County.

Located approximately 4 miles west of the Plan Area, SR 99, a 4-lane highway that runs north-south from the Central Valley (i.e., Chico and Bakersfield) into Sutter County. SR 99 is heavily traveled by trucks between these destinations.

4 miles east of the Plan Area is I-80, an 8-lane freeway that extends from the San Francisco Bay Area to Nevada and on to the East Coast. I-80 is the primary east-west freeway running through the Sacramento Valley region. SR 99 and I-80 both provide access south to downtown Sacramento, a regional employment center for area residents.

SR 65, generally a north-south road, is located about 5 miles northeast of the Plan Area and provides access from I-80 to SR 70. The highway begins as a 4-lane road in Rocklin and narrows to 2 lanes just north of Twelve Bridges Drive in Lincoln.

Base Line Road is a thoroughfare street running east-west on the northern border of the Plan Area connecting SR 99 and I80. Base Line Road originates in Roseville as a commercial main street, becomes Riego Road as it crosses into Sutter County, and intersects with SR 99.

Watt Avenue is a thoroughfare street running north-south through the Plan Area. Watt Avenue terminates at Base Line Road on the northern border of the Plan Area, extends south into Sacramento County, and provides access to I-80.

Local Roadways

Local roadways providing access in and around the Plan Area include Fiddymt Road and Walerga Road.

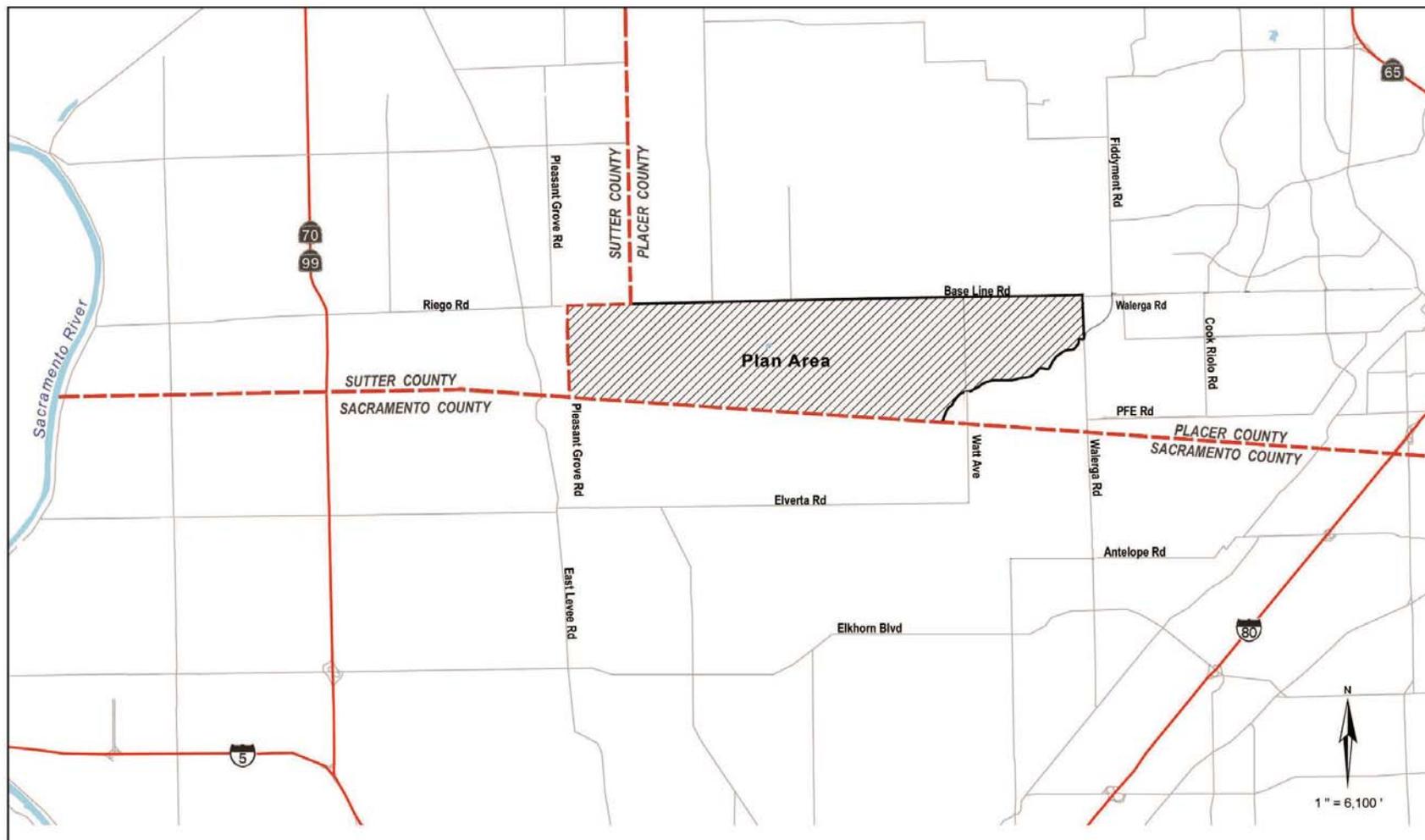
Fiddymt Road is a 2-lane undivided rural roadway that runs north from Base Line Road to Moore Road. It is the primary access road serving the surrounding residential developments.

Walerga Road is a 2-lane undivided rural roadway that extends from Roseville Road in Sacramento County and terminates at Base Line Road. Walerga Road provides access between the Antelope area and Roseville.

Several minor rural roadways also provide access to the Plan Area. Locust and Pleasant Grove Roads are 2-lane rural roadways of varying width and shoulder distances. They provide access within the Plan Area from Elverta Road to the south in Sacramento County up to Base Line Road. Palladay Road, Tanwood Road, Dyer Lane, and Colburn Street are minor rural roads that currently provide private access to properties within the Plan Area.



Figure 5.1 - Local and Regional Roadways



Source: Quad Knopf, 2005

5.3 TRANSPORTATION AND CIRCULATION ANALYSIS

Placer County’s traffic model was used to determine the ability of the proposed circulation system to accommodate the anticipated traffic from the Plan Area. This model includes anticipated build-out of the Specific Plan plus development outside of the Plan Area.

Goal 5.1 Create and maintain a balanced, multi-modal transportation system that provides for the efficient and safe movement of people, goods, and services.

Policy 5.1 Level of Service Standards.
Within the boundaries of the Specific Plan Area and on its boundaries, the Placer Vineyards roadway system will be developed and managed to accommodate a Level of Service (LOS) D. Outside the Specific Plan Area, roadways shall conform to General Plan Standards that require the County to develop and maintain a minimum LOS “C” for rural and urban/suburban roadways, except within ½ mile of state highways where the standard shall be LOS “D,” or as provided in Policy 5.2.

Policy 5.2 Exceptions to General Plan Level of Service Standards.
The County will allow exceptions to these LOS standards where it finds that the improvements or other measures required to achieve the LOS standards are unacceptable based on established criteria. In allowing any exception to the standards, the County shall consider the following factors:

1. *The number of hours per day that the intersection or roadway segment would operate at conditions worse than the standard*
2. *The ability of the required improvement to significantly reduce peak hour delay and improve traffic operations*
3. *The right-of-way needs and the physical impacts on the surrounding properties*
4. *The visual aesthetics of the required improvement and its impact on community identity and characters*
5. *Environmental impacts, including air quality and noise impacts*
6. *Construction and right-of-way acquisition costs*
7. *The impacts on general safety*
8. *The impacts of the required construction phasing and traffic maintenance*
9. *The impacts on quality of life as perceived by residents*

10. Consideration of other environmental, social, or economic factors on which the County may base findings to allow an exceedance of the standards

Exceptions to the standards will be allowed only after all feasible measures and options are explored, including alternative forms of transportation.

5.3.1 PLAN AREA ROADWAY CIRCULATION

The new roadway circulation system for Placer Vineyards is based on a grid pattern of streets that organizes and provides access into the Plan Area. The Plan Area will be served by a network of public streets organized as a system of thoroughfares, arterials, major collectors, collectors, and local streets, as indicated in Figure 5.2.

Goal 5.2 Provide a complete network of transportation improvements including thoroughfares, arterials, collector, and local roadways.

Goal 5.3 Locate roadways, wherever possible, adjacent to open space, public facilities, and multi-family residential and commercial uses to minimize the need for sound walls.

Goal 5.4 Minimize street widths, orient homes to front on low-volume collector streets, and provide landscape corridors that improve the streetscape environment.

Goal 5.5 Minimize traffic congestion in Placer Vineyards by discouraging regional thru-traffic on collector and local residential streets.

Policy 5.3 Roadway System
The roadway system shall comply with Figure 5.2, the street sections in Figure 5.3, and the policies and design guidelines presented in this chapter and in Chapter VI, “Community Design.” Figure 5.2 is intended to be a guide to internal roadway traffic needs. As each area is developed, additional roundabouts or traffic signals may be added in the future, as determined necessary by the County for traffic flow and traffic calming. Local streets providing property access are not indicated in Figure 5.2.

Policy 5.4 Street Section Design
The project shall dedicate rights-of-way of sufficient width to accommodate all future anticipated lanes, including auxiliary lanes, and intersection widening for dual left-turn lanes and free right-turn lanes. Refer also to Chapter VI, “Community Design,” for more specific landscape and streetscape design guidelines and to Appendix C for traffic intersection designs.

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1. *The landscape rights-of-way and parkways of all streets shall be dedicated at the same time as street rights-of-way.*
2. *The roadway measurements indicated in Figure 5.3 are measured to the back of the curb.*
3. *Thoroughfares: Base Line Road and Watt Avenue.*
The General Plan describes thoroughfares as major arterial streets designed to carry high volumes of thru-traffic with limited travel delay. Base Line Road and Watt Avenue shall be designed as thoroughfares with on-street bike lanes adjacent to 50-foot landscape corridors and meandering bike and pedestrian trails. They shall also include a 20 foot-wide landscape median on Watt Avenue and a 14 foot wide landscape median on Base Line Road. Drive-through breaks shall be provided at intervals along the roadway with medians at a spacing to be determined by the Department of Public Works in consultation with the California Department of Forestry. The County will maintain all median landscaping with funding provided by a County Services CFD.

Base Line Road is projected to become 6 lanes divided by a raised median. Figure 5.3, Section A, illustrates the proposed street sections for Base Line Road. At ultimate build-out, Watt Avenue is anticipated to be 6 to 8 lanes with 2 lanes dedicated for bus rapid transit (BRT) right-of-way. Figure 5.3, Section B, illustrates the core and ultimate build-out street sections for Watt Avenue with and without the BRT system.

Thoroughfares will provide limited access at the locations indicated in Figure 5.2. No new connections shall be allowed on thoroughfare roads in addition to those shown in Figure 5.2, unless it can be shown that the new connection will benefit overall traffic flows. Access points shall be coordinated with the County to prevent driveways with parking along thoroughfare streets.

4. *Arterials: Dyer Lane and 16th Street.*
Arterial streets are high-volume streets with limited, controlled intersections. Their proposed street sections are illustrated in Figure 5.3, Sections D and E. Local and collector streets feed arterial streets to provide linkages between neighborhoods and major retail and employment centers. Arterial streets shall be designed to be 4-lane divided streets with 14-foot medians, on-street bike lanes, and 35-foot landscape corridors with a separated, multi-use trail. Drive-through breaks shall be provided at intervals along the roadway with medians at a spacing to be determined by the Department of Public Works in consultation with the California Department of Forestry. The County will maintain all median landscaping with funding provided by a County Services CFD.

Arterials will provide limited access with minimum intersection spacing at approximately every 1/4 mile (1,200 feet). Right-in and right-out access points without median breaks may be provided at a minimum spacing of 600 feet. To the extent possible, the street alignment for Dyer Lane shall be designed to avoid removing and/or disturbing the existing oak trees on Dyer Lane.

5. *Major Collector Streets: Palladay Road, Tamwood Avenue, and 14th Street.*
Major collector streets carry moderate traffic volumes. Major collector street sections are illustrated in Figure 5.3, Section F. Major collector streets provide access to individual development areas, neighborhoods, schools, parks, and other community amenities. Major collector streets are generally characterized as 2-lane roadways with on-street bike lanes, parallel parking, and separated tree lined sidewalks. The minimum distance from intersections to driveways shall be 600 feet or a distance determined appropriate by the County for safe access and traffic flow.
6. *Collector Streets*
Collector streets carry light to moderate traffic volumes. Collector street sections are illustrated in Figure 5.3, Sections G, H, TC1, and TC2. Collector streets provide access to individual development areas, neighborhoods, schools, parks, and other community amenities. Collector streets are generally characterized as 2-lane roadways with on-street bike lanes, parallel parking, and separated tree-lined sidewalks. On collector streets located adjacent to a neighborhood commercial development, the minimum distance from intersections to driveways shall be 300 feet or a distance determined appropriate by the County for safe access and traffic flow. The minimum distance from intersections to driveways to residential developments on a collector street may be less than 300 feet if determined appropriate by the County for safe access and traffic flow.
7. *Commercial Streets*
Commercial streets serve parcels within the commercial, business park, power center, and town center areas. They typically do not include Class II bike lanes. Standards for commercial streets not included in the town center are shown in Figure 5.3, Section C. Standards and street sections for the town center commercial streets are provided in Figures 6.9 through 6.11 of Chapter VI, "Community Design."
8. *Local Streets*
Local streets are not located or shown in the circulation diagram. They provide access to neighborhoods within the Plan Area and include non-residential and residential streets. Local streets are low traffic volume, 2-lane roadways with parallel parking, separated sidewalks, and tree-lined landscape parkways. Local streets will be determined in conjunction with specific site development at

the time of tentative map submittal. Section for residential streets and cul-de-sacs are provided in Figure 5.3, Sections R1, R2, R3, R5, and R6.

9. Residential Alleys

Residential alleys, as shown in Figure 5.3, Section R4 shall be designed to the following standards:

- a. *Residential alleys are encouraged to be continuous through a block. However, if dead end alleys are allowed they shall be no more than 150 feet long and shall provide visibility from one end of the alley to the other.*
- b. *Landscaping shall be provided, consistent with Policy 6.6-4.*

Policy 5.5 Private Local Streets.

Private local streets will be allowed within a development site subject to the review and approval of the County. Where access is to be provided by private local streets, the private street easement width can be less than 40 feet but cannot be less than the roadway dimensions (from back of curb to back of curb) shown on the street sections in Figure 5.3. Setbacks for private streets shall be measured from the back of the sidewalk. 12.5 feet wide public utilities easements (PUE) shall be provided adjacent to the private road for the benefit of utility companies serving the development. Exceptions to the 12.5 feet wide PUE may be granted upon approval by utility providers, if such easements are not needed.

Private streets shall be created as either a private roadway, public utility and emergency access easement, or as a separate parcel to be owned and maintained by a private entity, such as a Homeowner’s Association. Placer County or a CSA will not accept the dedication or maintenance of private streets.

Policy 5.6 Locust Road Circulation Study.

Prior to approval of improvement plans for any Phased Improvement to be constructed as part of the first Development Phase approved by the County, the Developer and/ or Development Group shall fund a study to be undertaken by the County to identify and review the feasibility of alternatives to retaining Locust Road as a through roadway between Base Line Road and West Town Center Drive. The study shall be funded by developers as provided in the Development Agreement. Any such study shall:

- 1. *Review the impacts upon the roadway systems in the Specific Plan and adjacent jurisdictions and identify the need for new or additional infrastructure, if any;*
- 2. *Examine the application of strategies contained in the County’s Neighborhood Traffic Management Program and evaluate their effectiveness at addressing residents’ concerns;*

- 3. *Include an analysis of the necessary amendments to the Specific Plan, the County General Plan, and/ or the Dry Creek West Placer Community Plan to implement any such alternatives;*
- 4. *Identify the costs associated with any such alternatives; and*
- 5. *Specify compliance with the California Environmental Quality Act and any other applicable legal requirements.*

The County shall utilize the study to determine whether modifications to Locust Road are in the best interests of the County. The developers acknowledge that modifications to this Plan, the Plan Area roadway system, and required infrastructure, including the Backbone infrastructure, as the County may determine is necessary to effectuate the intent of this policy, may be required.

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Roadway Design Guidelines

Roadways shall be designed according to the following guidelines:

1. Roads shall be designed for their dual roles as vehicular and non-vehicular transportation corridors with landscape berms or open space parkways, containing bicycle and pedestrian trails.
2. Local roadways shall be located to facilitate local circulation and shall discourage regional thru-traffic. Regional thru-traffic shall be concentrated on Base Line Road and Watt Avenue.
3. Thoroughfares, Base Line Road and Watt Avenue, shall be located at the perimeter of major development areas.
4. A finer grain network of connector streets shall be located to provide convenient access to all land use parcels.
5. East-west connector streets shall generally provide through connections between and through land use areas while north-south connector streets may be more discontinuous, terminating at parks, open space, and neighborhood entries.
6. Multiple points of access to development areas are encouraged, to maximize the number of streets that carry traffic and the distribution of traffic loads from each development area.
7. Neighborhoods should be designed with internal connecting streets to encourage a more open and accessible network for residents and improve the distribution of traffic throughout the roadway network. However, cul-de-sac roads are not excluded within residential areas as long as they are not excessively used.



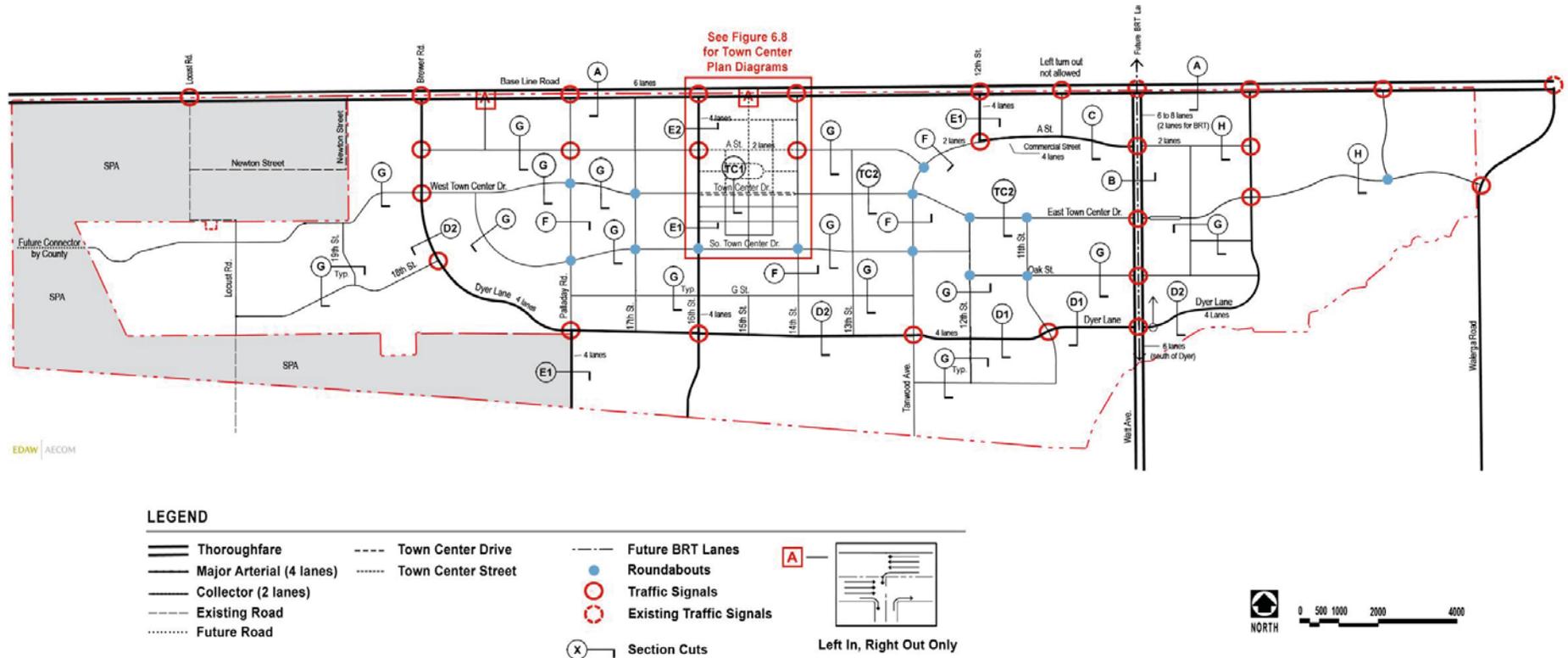
A street designed for both vehicular and non-vehicular transportation modes



A continuous arterial street designed to provide access to neighborhood development

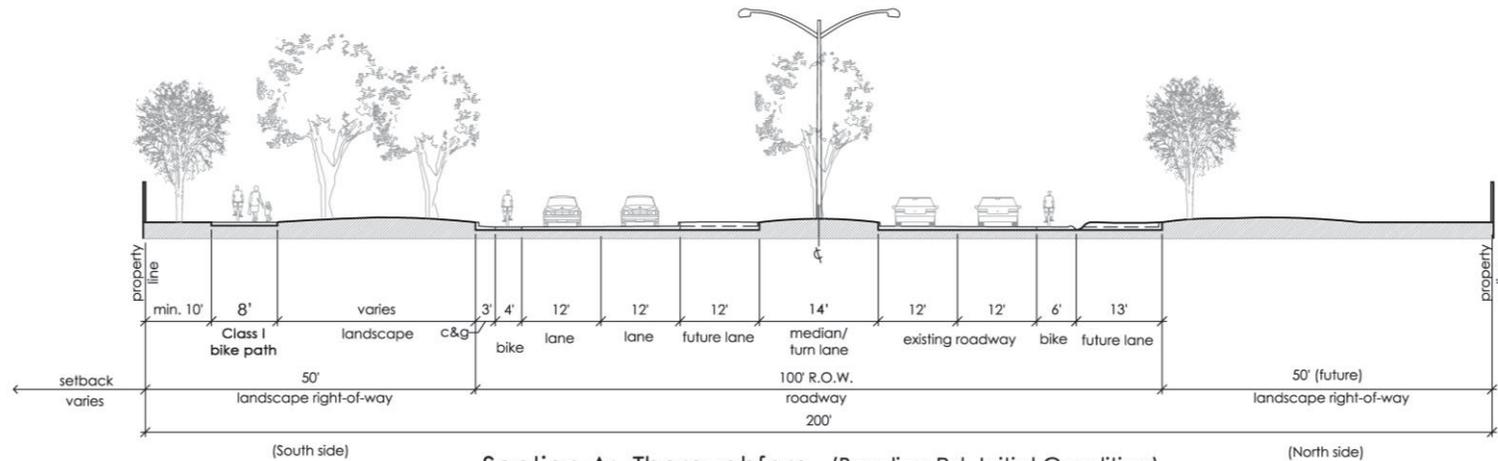
8. Development areas and commercial sites shall be interconnected to allow for internal circulation and minimize impacts on adjacent arterial roadways.
9. Cul-de-sac roads should be no greater than 800 feet in length.
10. Streetscapes shall be designed in accordance with the design guidelines found in Chapter VI, "Community Design."

Figure 5.2 – Roadway Circulation Diagram



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Figure 5.3 - Roadway Sections – Thoroughfare (Base Line Road)



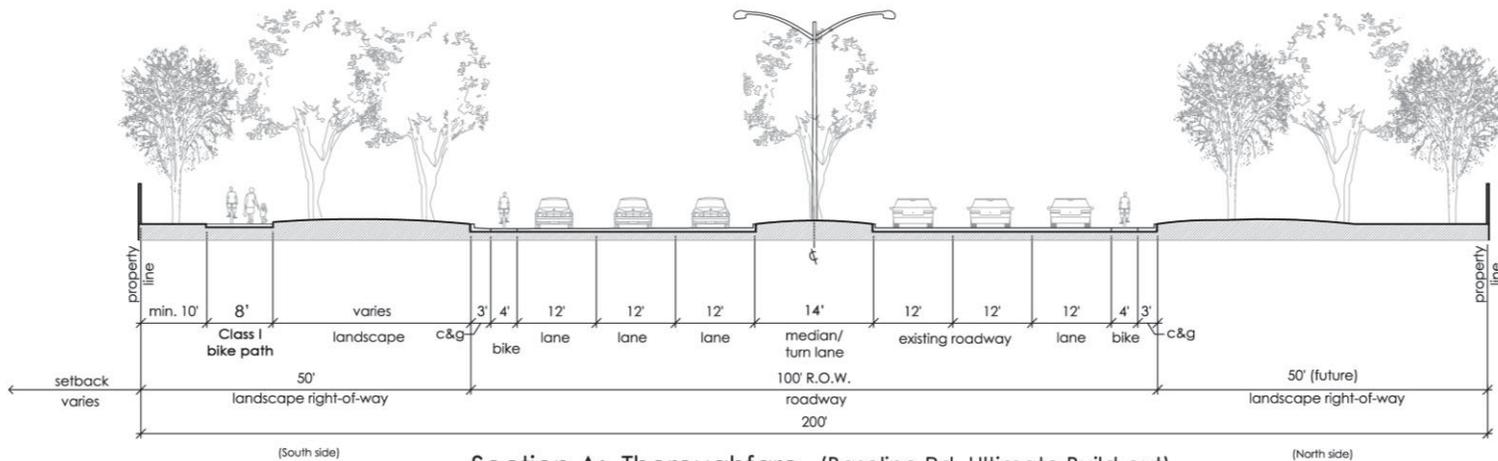
Section A: Thoroughfare (Baseline Rd.-Initial Condition)

LEGEND

landscape	landscaping	bike	bike lane
lane	driving lane	c&g	curb and gutter
R.O.W.	right-of-way	min.	minimum

Notes:

- (1) Backbone infrastructure system



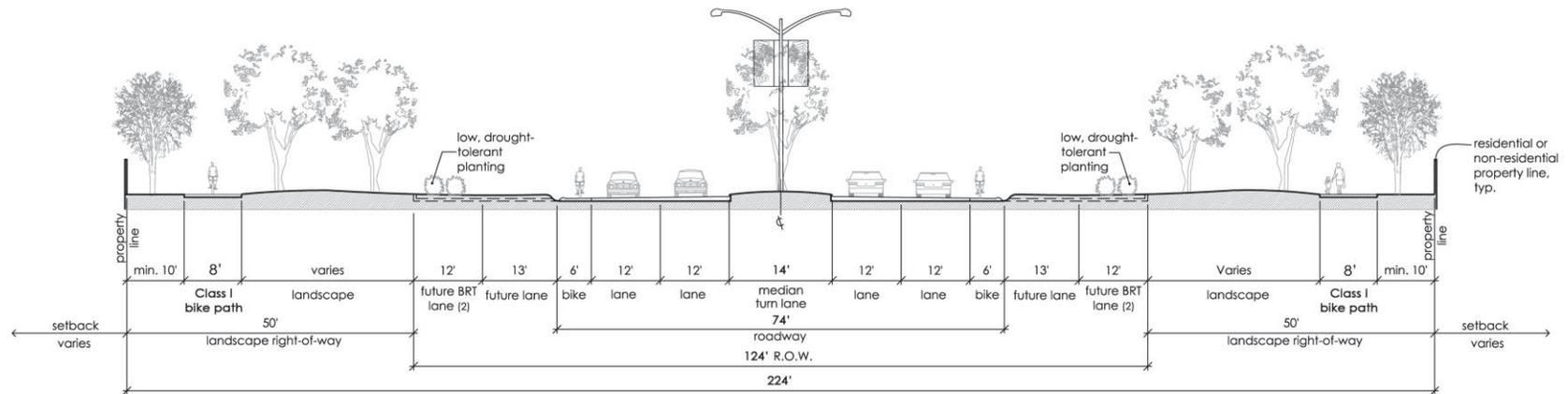
Section A: Thoroughfare (Baseline Rd.-Ultimate Build-out)

Notes:

- (1) Plan Area build-out condition

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Figure 5.3 - Roadway Sections – Thoroughfare (Watt Avenue Phase 1 and 2)



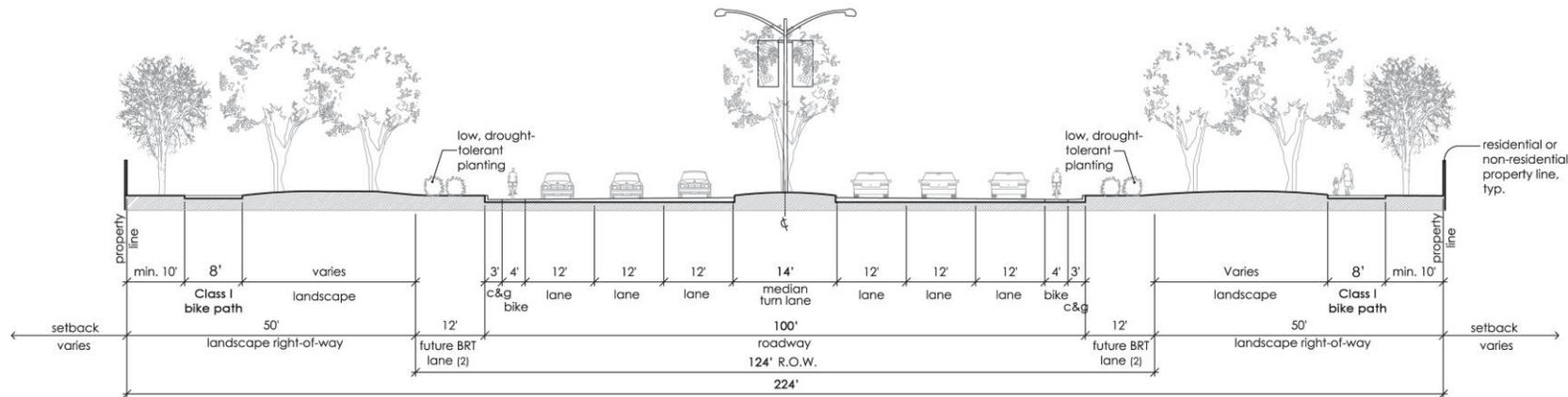
Section B: Thoroughfare (Watt Ave.-Phase 1)

LEGEND

landscape	landscaping	bike	bike lane	c&g	curb and gutter
lane	driving lane	BRT	bus rapid transit		
R.O.W.	right-of-way	min.	minimum		

Notes:

- (1) Backbone infrastructure system
- (2) Location of transit to be determined in the future

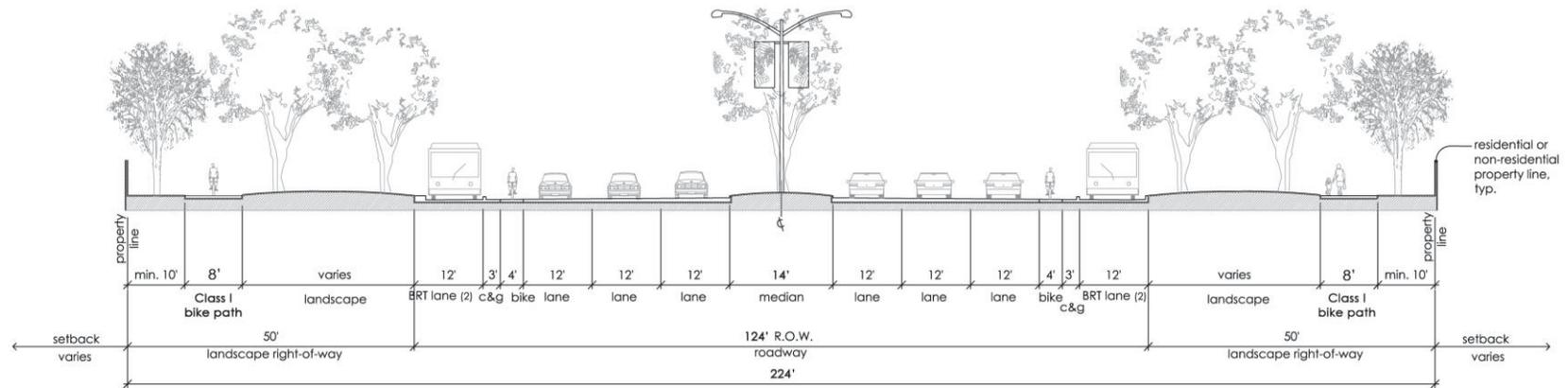


Section B: Thoroughfare (Watt Ave.-Phase 2)

Notes:

- (1) Plan Area build-out condition with transit R.O.W. reserved
- (2) Location of transit to be determined in the future

Figure 5.3 - Roadway Sections – Thoroughfare (Watt Avenue Phase 3)



Section B: Thoroughfare (Watt Ave.-Phase 3)

LEGEND

landscape	landscaping	bike	bike lane	c&g	curb and gutter
lane	driving lane	BRT	bus rapid transit		
R.O.W.	right-of-way	min.	minimum		

Notes:

- (1) Ultimate build-out condition with BRT transit
- (2) Location of transit to be determined in the future

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Figure 5.3 - Roadway Sections – Commercial Street

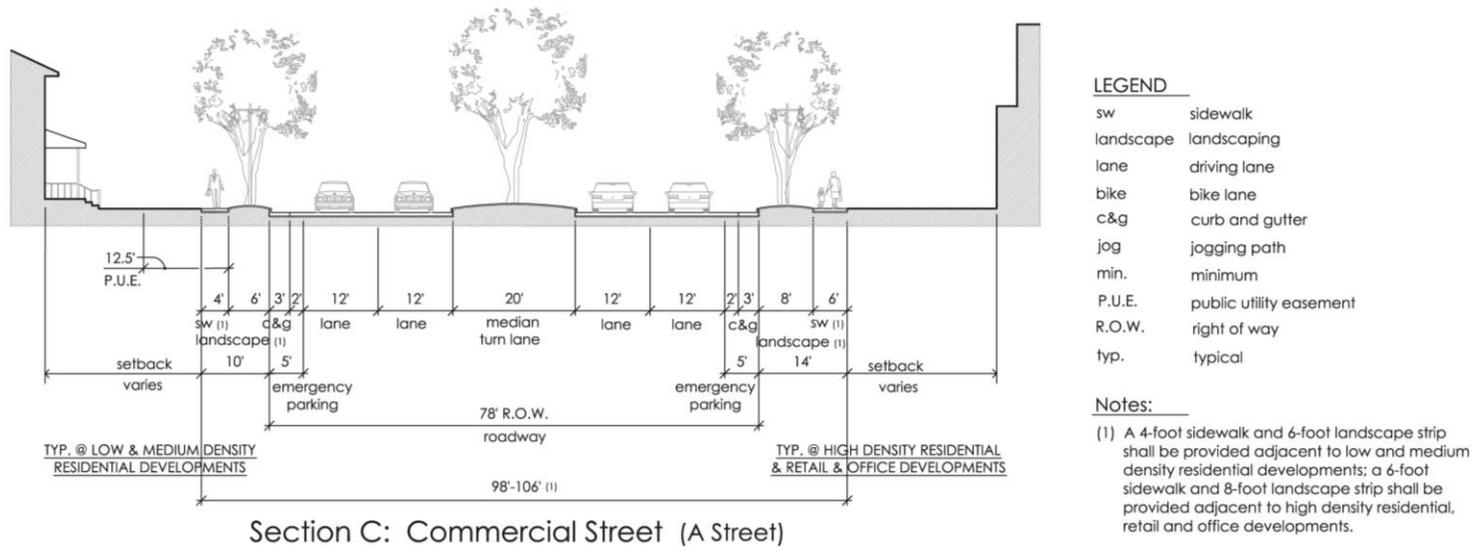


Figure 5.3 - Roadway Sections – Major Arterial Street (Dyer Lane)

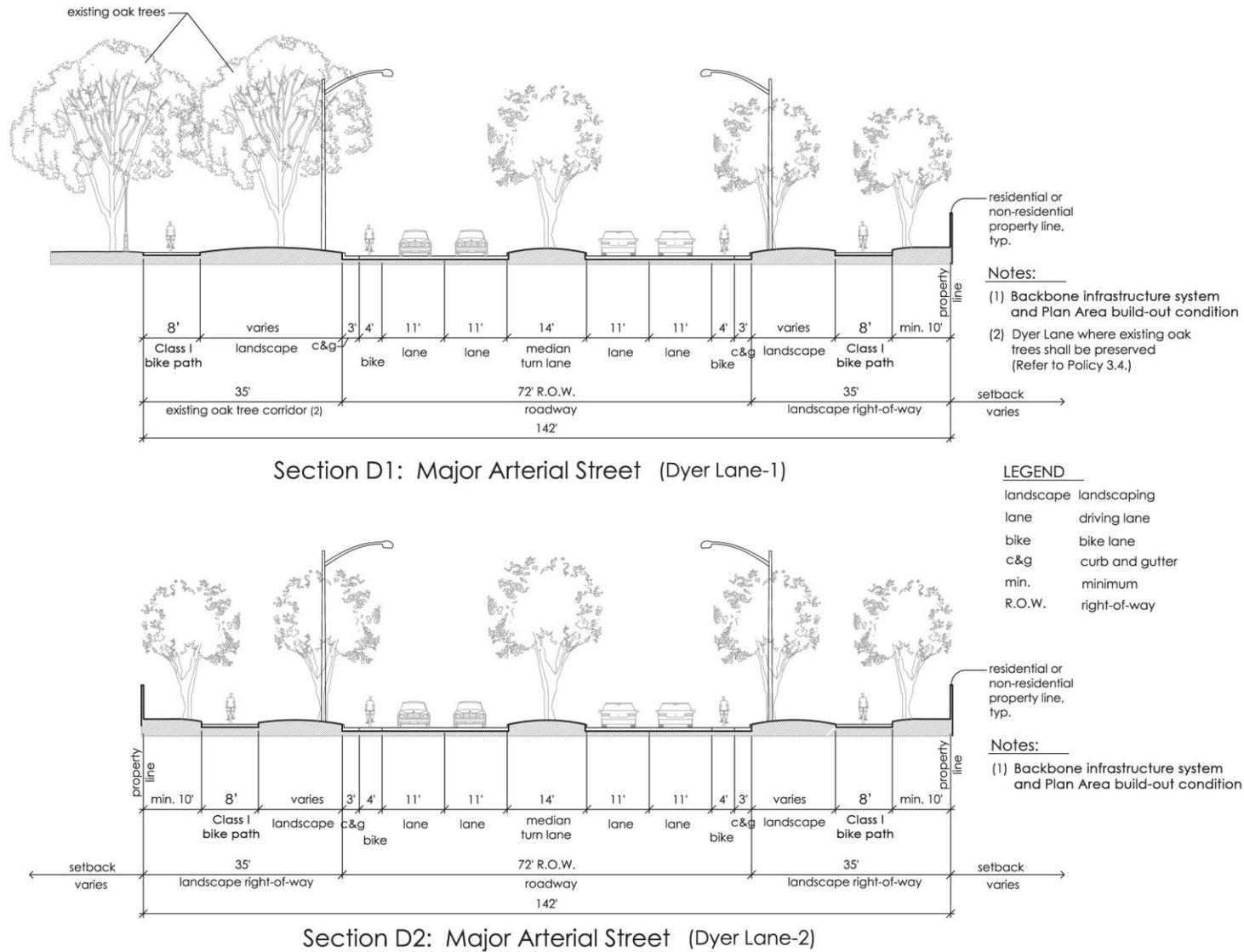
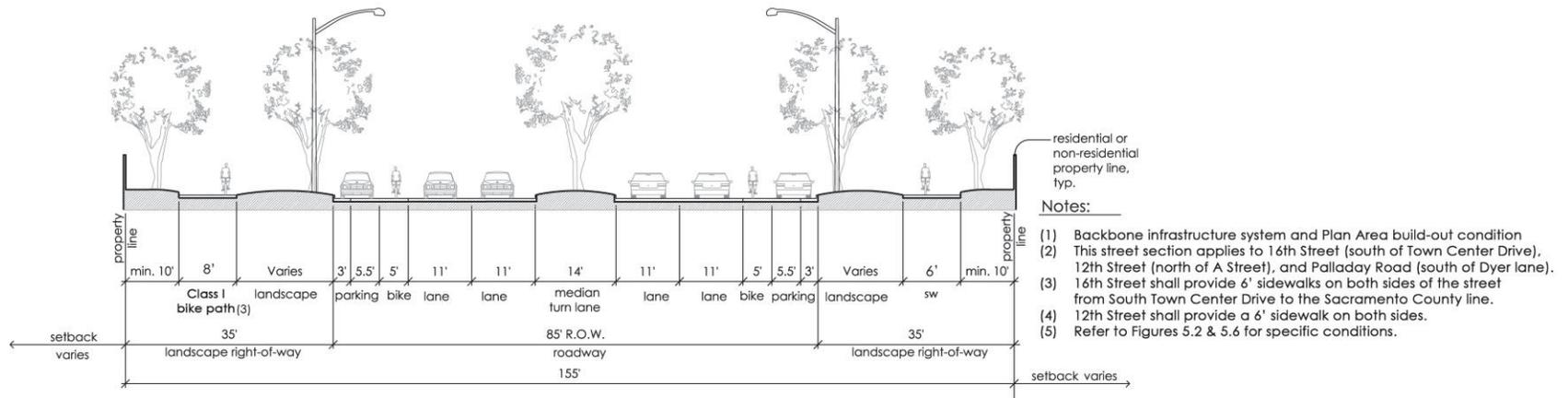


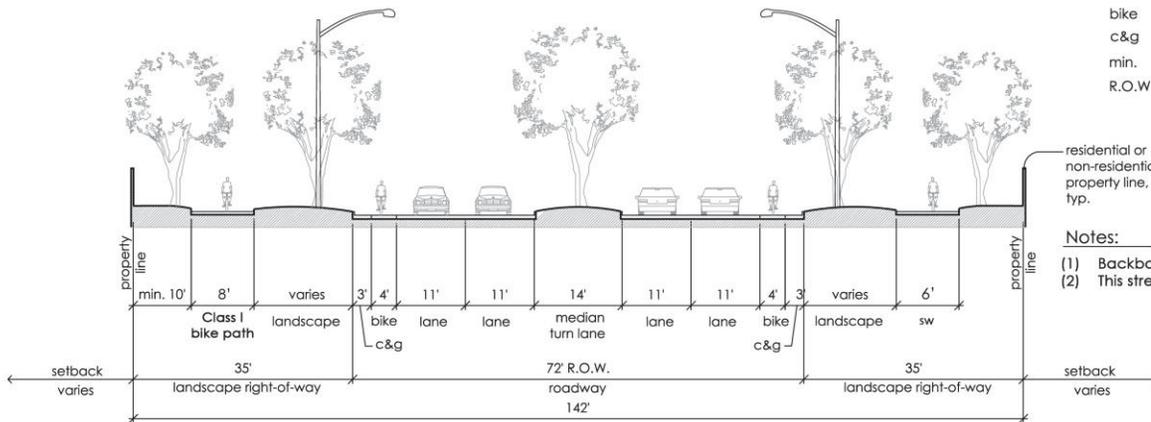
Figure 5.3 - Roadway Sections – Major Arterial Street (16th Street)



Section E1: Major Arterial Streets
(16th Street-South, 12th Street-North, Palladay Road-South)

LEGEND

landscape	landscaping
lane	driving lane
bike	bike lane
c&g	curb and gutter
min.	minimum
R.O.W.	right-of-way



Section E2: Major Arterial Street (16th Street-North)

Figure 5.3 - Roadway Sections – Major Collector Street

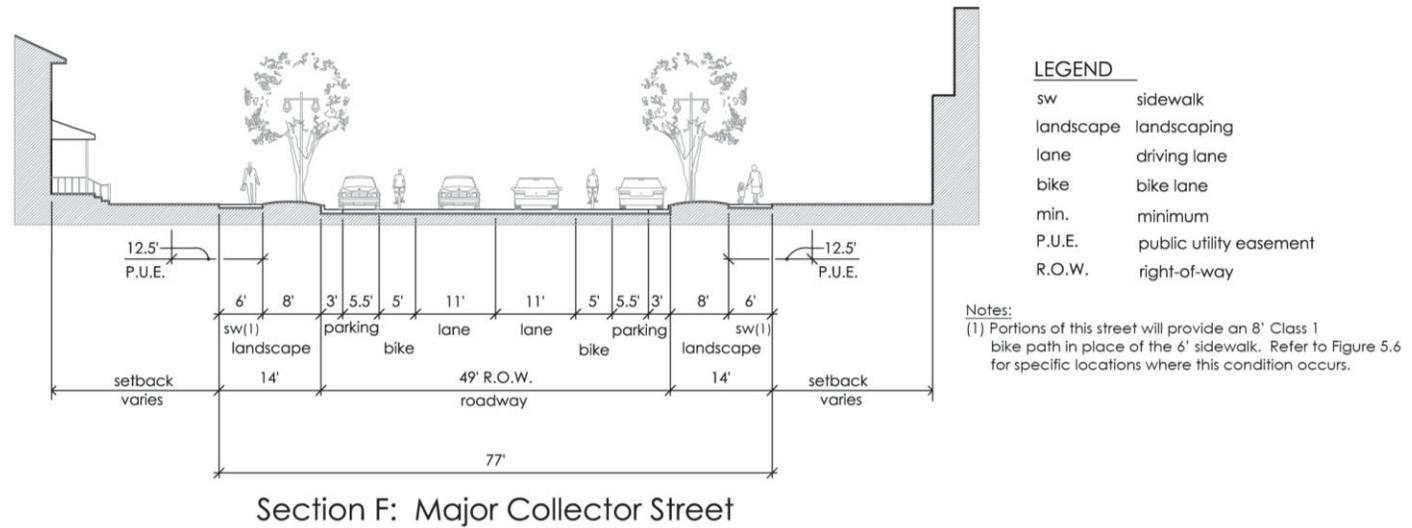
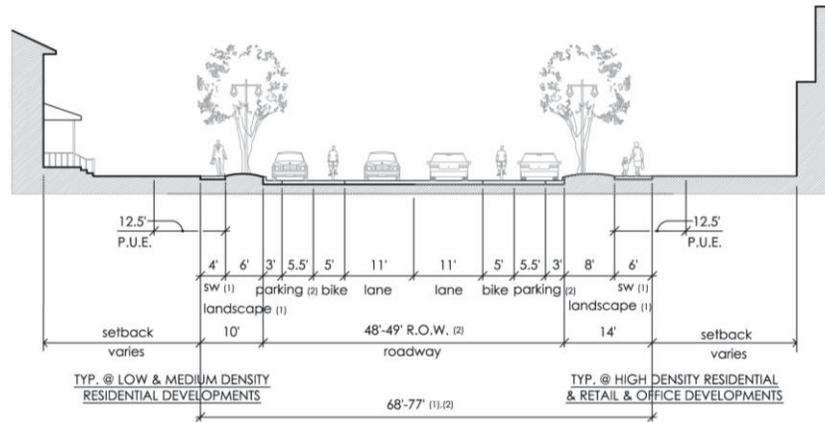
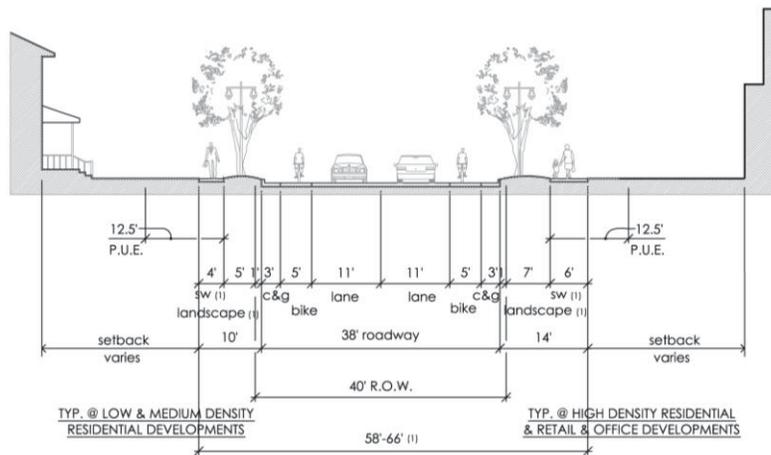


Figure 5.3 - Roadway Sections – Collector Street



Section G: Collector Street



Section H: Collector Street

Notes:

- (1) A 4-foot sidewalk and 6-foot landscape strip shall be provided adjacent to low and medium density residential developments; a 6-foot sidewalk and 8-foot landscape strip shall be provided adjacent to high density residential, retail and office developments. Portions of this street will provide an 8' Class 1 bike path in place of the sidewalk. Refer to Figure 5.6 for specific locations where this condition occurs.
- (2) Rolled curbs may be allowed subject to County review. Parallel parking lanes shall be 8-feet wide to back of curb at rolled curbs and shall be 8.5-feet wide to back of curb at vertical curbs.

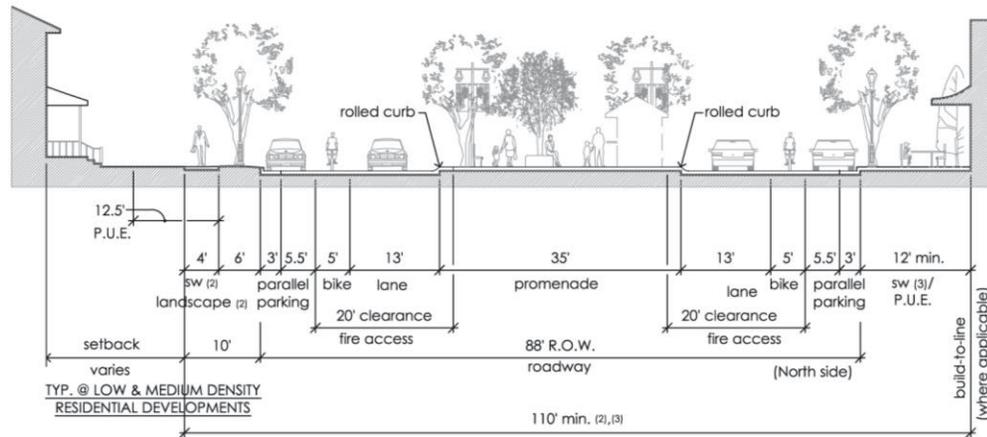
LEGEND

sw	sidewalk
landscape	landscaping
lane	driving lane
bike	bike lane
c&g	curb and gutter
min.	minimum
P.U.E.	public utility easement
R.O.W.	right-of-way
typ.	typical

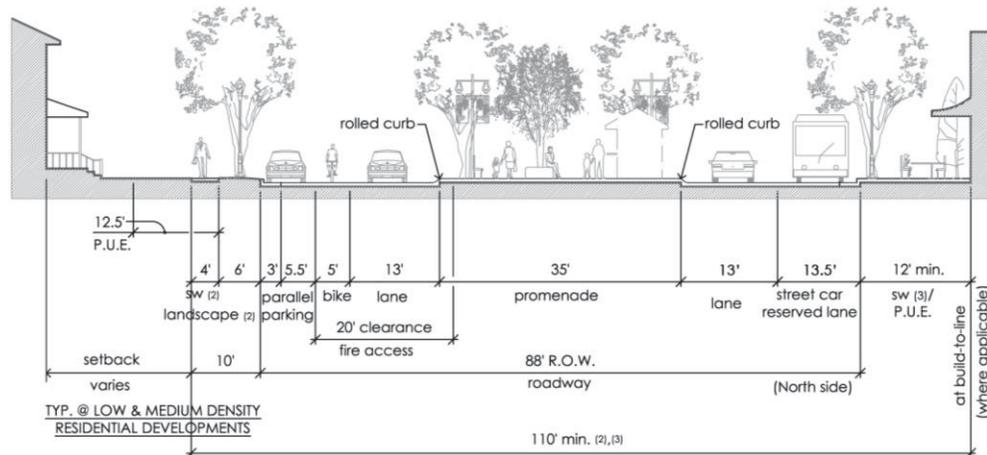
Notes:

- (1) A 4-foot sidewalk and 6-foot landscape strip shall be provided adjacent to low and medium density residential developments; a 6-foot sidewalk and 8-foot landscape strip shall be provided adjacent to high density residential, retail and office developments. Portions of this street will provide an 8' Class 1 bike path in place of the sidewalk. Refer to Figure 5.6 for specific locations where this condition occurs.

Figure 5.3 - Roadway Sections – Town Center Drive



Section TC1: Town Center Drive (Initial Condition)



Section TC1: Town Center Drive (Build-out)
Elevation

Notes:

- (1) Plan Area initial condition or condition without streetcar
- (2) A 4-foot sidewalk and 6-foot landscape strip shall be provided adjacent to low and medium density residential developments; a 6-foot sidewalk and 8-foot landscape strip shall be provided adjacent to high density residential, retail and office developments.
- (3) The minimum overall sidewalk width in the Town Center shall be 12 feet with a preferred width of 16 feet. Sidewalks fronting retail and office developments shall maintain a minimum 6-foot wide clearance for pedestrian traffic. Also refer to Policy 6.29, "Town Center Sidewalks."

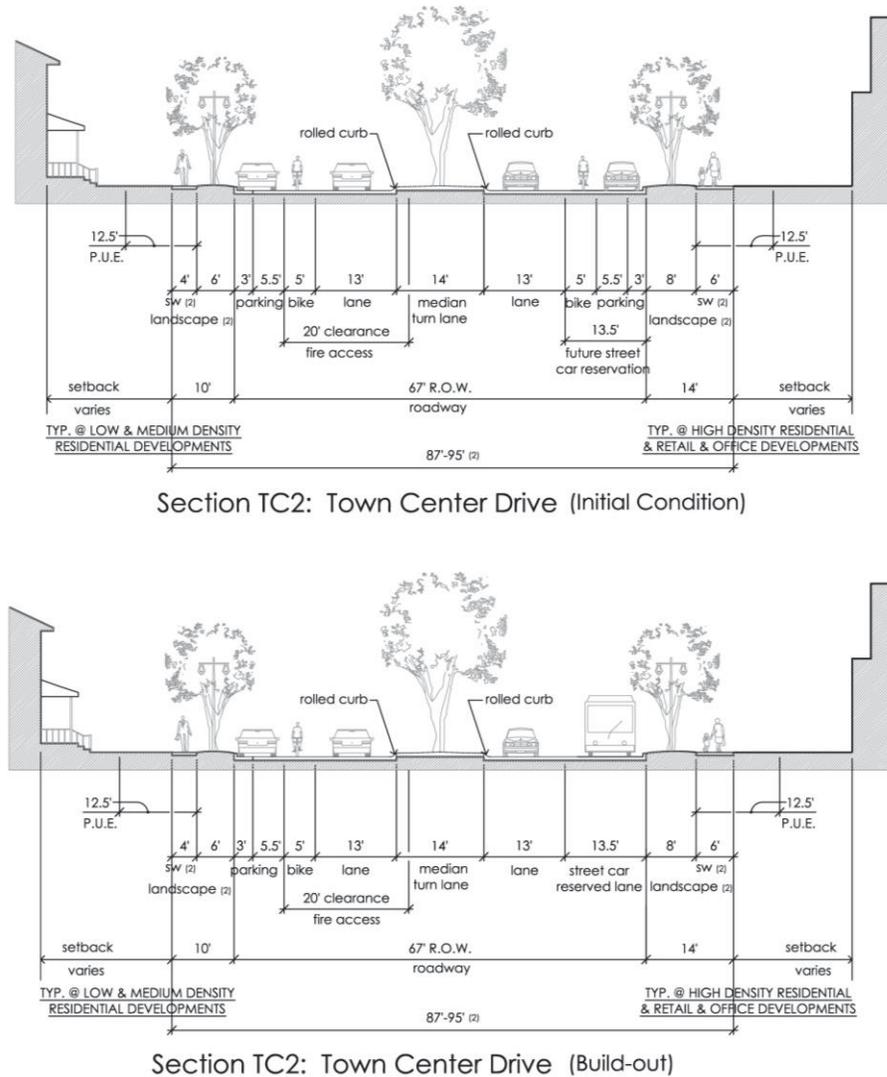
LEGEND

sw	sidewalk
landscape	landscaping
lane	driving lane
bike	bike lane
min.	minimum
P.U.E.	public utility easement
R.O.W.	right-of-way
typ.	typical

Notes:

- (1) Plan Area build out condition with streetcar
- (2) A 4-foot sidewalk and 6-foot landscape strip shall be provided adjacent to low and medium density residential developments; a 6-foot sidewalk and 8-foot landscape strip shall be provided adjacent to high density residential, retail and office developments.
- (3) Sidewalks fronting retail and office developments shall maintain a minimum 6-foot wide clearance for pedestrian traffic. Also refer to Policy 6.29, "Town Center Sidewalks."

Figure 5.3 - Roadway Sections – East Town Center Drive



Notes:

(1) Plan Area initial condition or condition without streetcar

(2) A 4-foot sidewalk and 6-foot landscape strip shall be provided adjacent to low and medium density residential developments; a 6-foot sidewalk and 8-foot landscape strip shall be provided adjacent to high density residential, retail and office developments.

Portions of this street will provide an 8' Class 1 bike path in place of the sidewalk. Refer to Figure 5.6 for specific locations where this condition occurs.

LEGEND

sw	sidewalk
landscape	landscaping
lane	driving lane
bike	bike lane
min.	minimum
P.U.E.	public utility easement
R.O.W.	right-of-way
typ.	typical

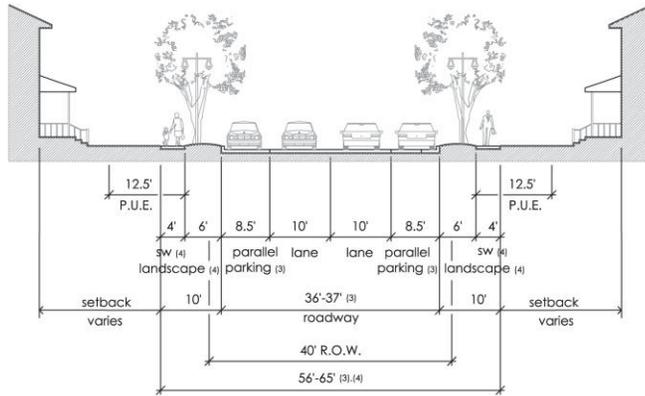
Notes:

(1) Plan Area initial condition or condition with streetcar

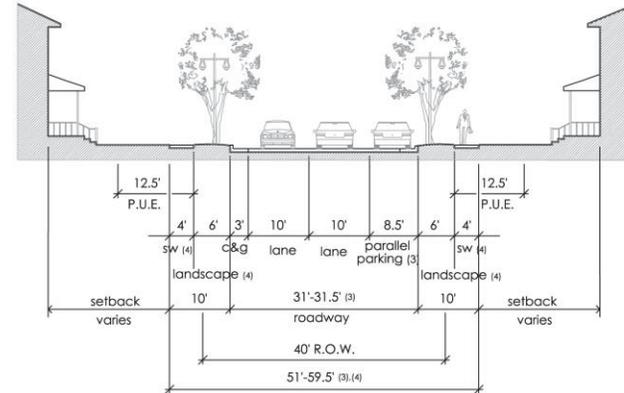
(2) A 4-foot sidewalk and 6-foot landscape strip shall be provided adjacent to low and medium density residential developments; a 6-foot sidewalk and 8-foot landscape strip shall be provided adjacent to high density residential, retail and office developments.

Portions of this street will provide an 8' Class 1 bike path in place of the sidewalk. Refer to Figure 5.6 for specific locations where this condition occurs.

Figure 5.3 - Roadway Sections – Residential Streets



Section R1: Residential Street- Type A⁽⁵⁾
Parking on Both Sides



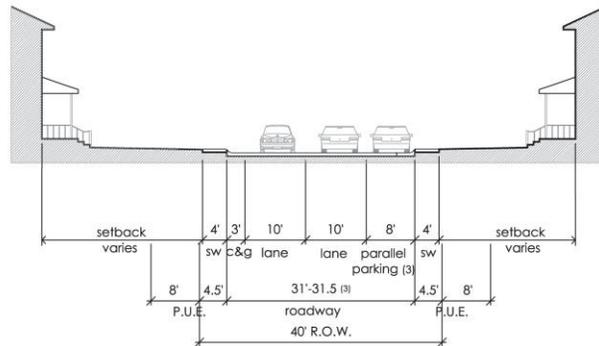
Section R2: Residential Street- Type B^{(2),(5)}
Parking on One Side

LEGEND

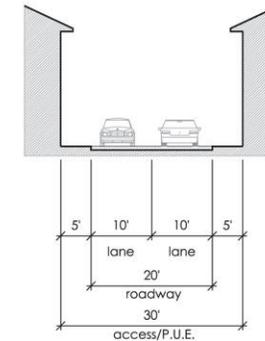
sw	sidewalk	bike	bike lane	c&g	curb and gutter
landscape	landscaping	P.U.E.	public utility easement		
lane	driving lane	R.O.W.	right-of-way		

Notes:

- (1) A min. 12.5-foot P.U.E. is required adjacent to R.O.W. for all residential streets with exceptions provided upon approval by utility providers.
- (2) Parallel parking shall be provided only on one side of the street for single loaded street conditions, streets adjacent to open space and loop roads. (Refer to Section R2).
- (3) Rolled curbs may be allowed subject to County review. Parallel parking lanes shall be 8-feet wide to back of curb at rolled curbs and shall be 8.5-feet wide to back of curb at vertical curbs.
- (4) A 4-foot sidewalk and 6-foot landscape strip shall be provided adjacent to low and medium density residential developments; a 6-foot sidewalk and 8-foot landscape strip shall be provided adjacent to high density residential, retail and office developments.
- (5) Private residential streets may have a road easement width that is less than 40' but shall not have a roadway width (back of curb to back of curb) that is less than the roadway widths for residential sections R1-R4.

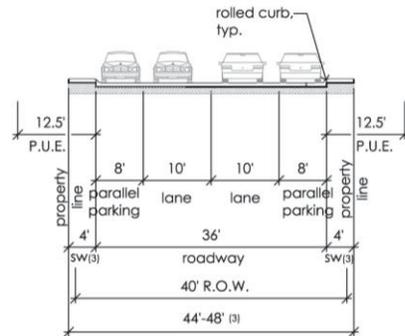


Section R3: Residential Cul-de-Sac Street⁽⁵⁾
(Ten Units or Less)

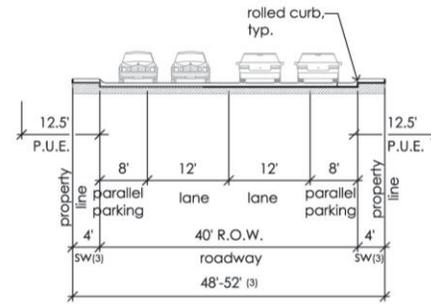


Section R4: Residential Alley

Figure 5.3 - Roadway Sections – Residential Street



Section R5: Internal Residential Street
(In Age-Restricted Community)



Section R6: Internal Residential Street
(In Age-Restricted Community)
(At High Volume Locations)

LEGEND

sw	sidewalk	c&g	curb and gutter
landscape	landscaping	P.U.E.	public utility easement
lane	driving lane	R.O.W.	right-of-way

Notes:

- (1) A min. 12.5-foot P.U.E. is required adjacent to R.O.W. for all residential streets with exceptions provided upon approval by utility providers.
- (2) Parallel parking shall be provided only on one side of the street for single loaded street conditions, streets adjacent to open space and loop roads. (Refer to Section R2).
- (3) A 4-foot sidewalk shall be provided adjacent to low and medium density residential developments; a 6-foot sidewalk shall be provided adjacent to high density residential, retail and office developments.

5.3.2 TRANSPORTATION IMPROVEMENTS

Regional circulation improvements are identified by the Placer, Sacramento, and Sutter County General Plans and the latest version of the *Metropolitan Transportation Plan/Sustainable Communities Strategies*, prepared by SACOG. Planned improvements include expansions to regional roadways, local roadways, regional transit systems, and trail systems needed to accommodate growth anticipated to occur in this region. These facilities will provide capacity to the surrounding local and regional developments. A number of local and off-site intersection improvements will be constructed as part of the Placer Vineyards development to accommodate cumulative traffic levels.

Policy 5.7 Regional Transportation Improvements.

Relative to the traffic impacts generated by the project: The Placer Vineyards Development Agreement ensures that the project will pay for its fair share of transportation improvements.

Policy 5.8 Off-site Transportation Improvements.

Placer Vineyards shall provide traffic signals and off-site intersection improvements, in conjunction with development in the Plan Area at the following locations:

1. Riego Road and East Natomas Road
2. Riego Road and Pleasant Grove Road
3. Base Line Road and Pleasant Grove Road
4. Watt Avenue and PFE Road

Policy 5.9 On-site Transportation Improvements.

The Placer Vineyards development shall fund and construct all transportation network improvements, including roadway design, traffic signalization, and traffic calming, necessary to support the new development when and as they are needed.

Policy 5.10 Concurrency.

Roadway improvements shall be constructed to coincide with the demands of new development as required to satisfy minimum level of service standards, asset by this Specific Plan.

Policy 5.11 Local Intersection Improvements.

Placer Vineyards shall provide local intersection improvements as guided by Figure 5.2.

1. *Signalized intersections for the thoroughfares, Base Line Road and Watt Avenue, are provided in Figure 5.2 at the following locations:*
 - a. *On Base Line Road, signalized intersections shall be located on Locust Road, Dyer Lane (west), Palladay Road, 16th Street, 14th Street, 12th Street, Tanwood Avenue, Watt Avenue, Dyer Lane (east), and Park Street.*
 - b. *On Watt Avenue, signalized intersections shall be provided at ‘A’ Street, Town Center Drive (east), Oak Street, and Dyer Lane.*
 - c. *On Dyer Lane, signalized intersections shall be provided at ‘A’ Street (east and west), Town Center Drive (east and west), 18th Street, Palladay Road, 16th Street, Tanwood Avenue, and 11th Street.*
 - d. *For commercial developments on ‘A’ Street, signalized intersections shall be provided at Palladay Road, 16th Street, 14th Street, and 12th Street.*
2. *Base Line Road and Watt Avenue intersections shall be planned and designed to accommodate the needs of thru-traffic. This will include traffic synchronization and intersection designs that favor through movements and minimize conflict points. This may also include additional turning lanes or other special features, such as pedestrian amenities that highlight intersection crossings.*
3. *Roundabouts shall be located along the major east-west collector streets and lower volume traffic streets, focused at the intersections of residential neighborhoods.*
4. *Roundabouts shall be considered as an alternative, where all-way stops or traffic signals are indicated in the future (i.e., project build-out).*
5. *The County shall also reserve the right during the large lot or small lot tentative map process to require additional traffic signals or roundabouts, as determined to be necessary for traffic flow or safety.*
6. *The County shall also reserve the right to modify the minimum distance from a street intersection to a development driveway, as determined to be necessary for the traffic flow or safety of a specific site condition.*

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Policy 5.12 Access within the Development Site.

Primary access to development will be avoided on high-volume arterial and thoroughfare roadways, and instead will be provided on collector or neighborhood streets and shall comply with the following standards:

- 1. Thoroughfares shall provide limited access. No driveways shall be permitted on Base Line Road or Watt Avenue. Access to properties fronting on Base Line Road shall be provided mainly from A Street and to a lesser extent from the roads that connect A Street to Base Line Road. Access to parcels from these connector roads shall be located at sufficient distance from Base Line Roads so as not to impede the flow of traffic or create safety issues.*
- 2. Access to development sites from thoroughfares and arterials allowing for left turns into and out of the sites shall be limited to the identified signalized intersections in the Placer Vineyards Specific Plan, unless otherwise required under future development patterns.*
- 3. Minor right-turn-in and right-turn-out access points may be permitted by the County upon further detailed review and analysis of potential traffic and circulation impacts.*
- 4. See Figure 6.17 in Chapter 6, "Community Design," for conceptual site access designs for neighborhood commercial sites on high-volume roadways.*

Policy 5.13 Minimizing Barriers to Access.

The circulation and site plans for individual developments proposed within the Plan Area shall minimize barriers to access by pedestrians, the disabled, and cyclists. Handicap ramps shall be incorporated into the design of all intersections and bicycle racks shall be located convenient to all retail, office, and civic sites.

Policy 5.14 Fire and Emergency Access.

All new development shall be coordinated with the local fire department to ensure that adequate emergency access is provided to all development areas and that emergency access routes are designed to the specification of the Placer County Fire Department.

Policy 5.15 Sound Walls.

Use of sound walls is discouraged. Where sound walls are required because of noise levels and traffic volumes on major streets, screen landscaping and mounding should be provided to minimize their visual impact and create a more attractive streetscape. Refer to Section 4.10 for additional policies related to noise levels and to Section 6.4.3 for wall, fence, and screening techniques and design guidelines.

5.3.3 TRAFFIC CALMING DESIGNS

Policy 5.16 Traffic Calming Roadway Design.

Use of traffic calming roadway design techniques in the design of residential streets and intersections is required. Techniques may include corner bulb-outs at intersections, traffic circles and rotaries, chokers, chicanes, etc. See the chart below and Figure 5.4 for recommended traffic calming designs. In all cases, traffic calming devices shall not restrict access by emergency vehicles or limit emergency response time below the required level of service standard.

A. Narrowing and Horizontal Devices

Traffic Calming Device	Description	Application
<p style="text-align: center;">Neckdown/Bulb-out</p>  <p>Source: ITE pedestrian bicycle council</p>	<p>Neckdowns/bulb-outs shorten the crossing distance of intersections and decrease the curb radii, reducing turning vehicle speeds.</p>	<p>Neckdowns/bulb-outs can be used at intersections or midblock locations on most roadway types where the expected average daily traffic is less than 20,000 vehicles per day and the posted speed limit is 35 mph or less.</p>
<p style="text-align: center;">Two-lane choker</p>  <p>Source: ITE pedestrian bicycle council</p>	<p>2-lane chokers are midblock curb extensions that narrow a street. Chokers leave the street cross section with 2 lanes that are narrower than the normal cross section.</p>	<p>2-lane chokers should be used at midblock locations only on most roadway types where the expected average daily traffic is less than 20,000 vehicles per day and the posted speed limit is 35 mph or less.</p>

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A. Narrowing and Horizontal Devices

Traffic Calming Device	Description	Application
<p>One-lane choker</p>  <p>Source: www.pedbikeimages.org/ City of Portland Office of Transportation</p>	<p>One-lane chokers narrow the roadway width so that there is only enough width to allow travel in one direction at a time. They operate similarly to one-lane bridges, where cars approaching on one side must wait until all traffic in the other direction has cleared before proceeding.</p>	<p>The example provided is the entryway into a residential development. One-lane chokers should be used at midblock locations only on lower order residential streets where the expected average daily traffic is less than 3,000 vehicles per day and the posted speed limit is 30 mph or less.</p>
<p>Center Island Narrowing</p>  <p>Source: www.pedbikeimages.org/ City of Portland Office of Transportation</p>	<p>These raised islands located along the centerline of a street narrow the travel lanes at that location. They can also be used at intersections to provide refuge for pedestrians when fitted with a gap for pedestrians to walk through.</p>	<p>Center island narrowings can be used on most roadway types where the expected average daily traffic is less than 20,000 vehicles per day and the posted speed limit is 35 mph or less.</p>
<p>Chicane</p>  <p>Source: www.pedbikeimages.org/ City of Portland Office of Transportation</p>	<p>These curb extensions alternate from one side of the street to the other, forming S-shaped curves. Chicanes can also be created by alternating on-street parking between one side of the road and the other</p>	<p>Chicanes should be used at midblock locations only. Application where the expected average daily traffic is less than 5,000 vehicles per day and the posted speed limit is 35 mph or less is appropriate.</p>

A. Narrowing and Horizontal Devices

Traffic Calming Device	Description	Application
<p>Lateral Shift</p>  <p>Source: www.pedbikeimages.org/</p>	<p>These are curb extensions or other physical shifts of the roadway on otherwise straight streets that cause deflection.</p>	<p>Lateral shifts should be used at midblock locations only. Application where the expected average daily traffic is less than 5,000 vehicles per day and the posted speed limit is 35 mph or less is appropriate.</p>
<p>Traffic Circle</p>  <p>Source: www.pedbikeimages.org/</p>	<p>Traffic circles are raised islands, placed in intersections, around which traffic circulates. Stop signs or yield signs can be used as traffic controls at the approaches of the traffic circle. Circles prevent drivers from speeding through intersections by impeding the straight-through movement and forcing drivers to slow down to yield.</p>	<p>Traffic circles should be used at low volume residential intersections. The combined intersection volume should not exceed 10,000 vehicles per day.</p>
<p>Roundabout</p>  <p>Source: www.pedbikeimages.org/</p>	<p>Roundabouts are typically larger than neighborhood traffic circles and are used on higher volume streets to allocate right-of-way among competing movements. They have splitter islands to channel approaching traffic to the right, and do not have stop signs.</p>	<p>Single-lane roundabouts can be used at intersections where collector streets intersect. The combined intersection volume should not exceed 16,000 vehicles per day. A single lane roundabout may also be used in place of a traffic signal.</p> <p>Refer to Figure 5.4 for a typical roundabout design prototype for Placer Vineyards.</p>

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B. Vertical Devices

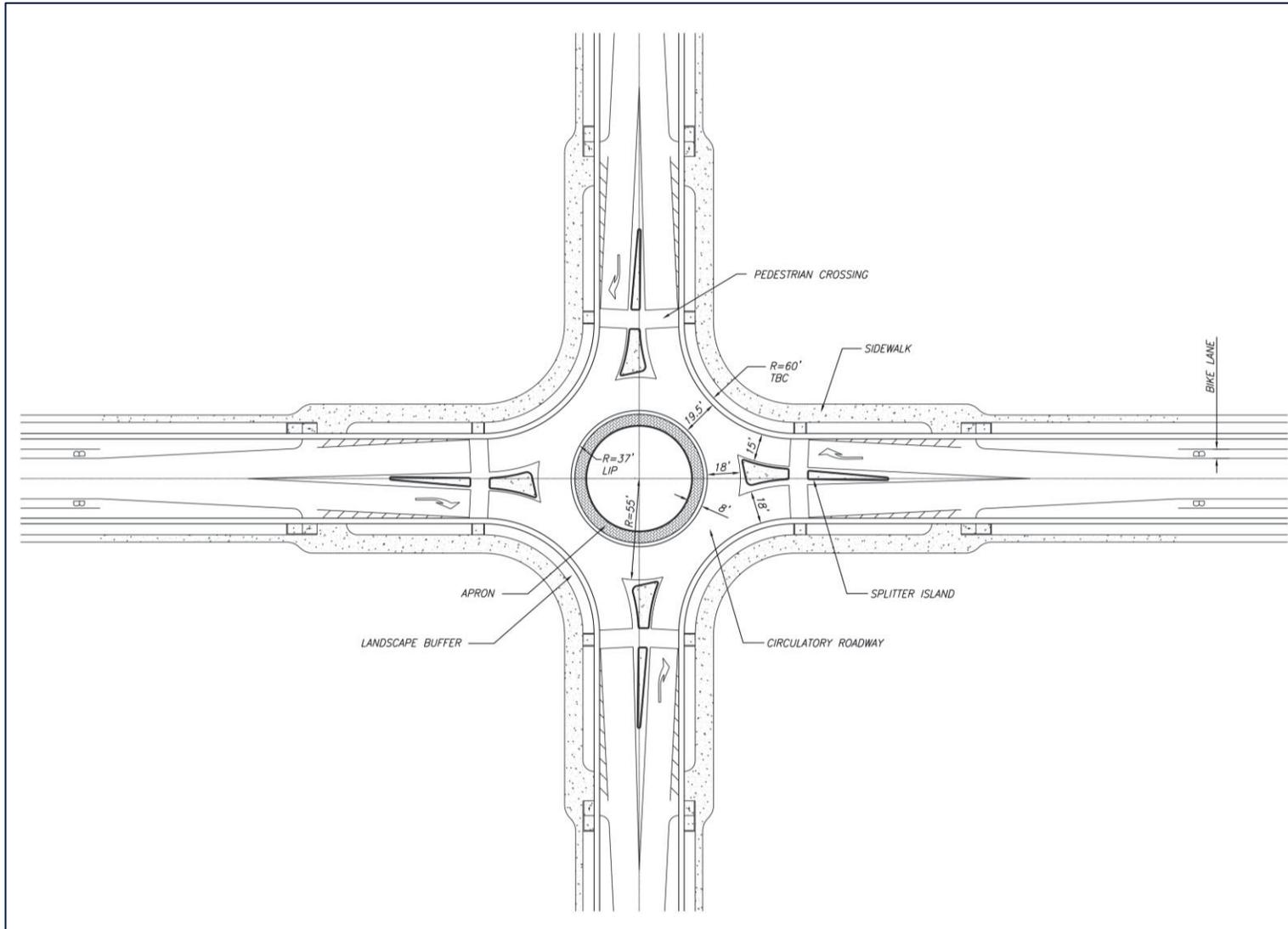
Traffic Calming Device	Description	Application
<p>Textured Pavement</p>  <p>Source: www.pedbikeimages.org/ Dan Burden</p>	<p>Textured colored pavement includes the use of stamped pavement (asphalt) or alternate paving materials to create an uneven surface for vehicles to traverse. It alerts drivers to a change in surroundings or emphasizes other traffic calming devices.</p>	<p>Textured pavement can be used at intersections, midblock locations, or driveways. This treatment can be applied to most roadway types, but should be limited in residential areas due to the noise created.</p>

C. Volume Control Devices

Traffic Calming Device	Description	Application
<p>Median Barrier</p> 	<p>These raised islands are located along the centerline of a street that continues through an intersection to block through movement at a cross street.</p>	<p>Median barriers are similar to center island narrowing but are used at intersection locations to prohibit certain turning movements. They can be used on most roadway types where the expected average daily traffic is less than 5,000 vehicles per day.</p>
<p>Forced Turn Island</p> 	<p>These raised islands prohibit certain movements on approaches to an intersection.</p>	<p>Forced turn islands channelize and/or restrict certain movements at an intersection. This treatment can be applied to most roadway types where the expected average daily traffic is less than 5,000 vehicles per day.</p>

Source: Fehr and Peers 2005

Figure 5.4 - Typical Roundabout Design



5.3.4 TRANSIT SYSTEM

The Plan Area will include systems and facilities to promote public transit use, including dedicated bus rapid transit lanes on Watt Avenue from Base Line Road to the southern limits of the Plan Area, a site for a transit center with bus turnouts, and provisions for future, local bus service on local roadways with bus turnouts and stops appropriately spaced. The transit system is more fully described in the approved Transit Master Plan.

An internal transit system shall be planned and implemented as the project is constructed. An Americans with Disabilities Act (ADA) dial-a-ride service will be provided. A fixed-route internal service will be provided that connects the village centers with the town center and other areas as deemed appropriate. Figure 5.5 shows the potential location of bus stops and the potential circulation routes for the public transit systems serving Placer Vineyards. Commuter service will be provided to downtown Sacramento. The transit center, proposed in the east village center along Watt Avenue, will serve as a major transfer point between regional and local transit service.

Goal 5.6 Promote public transit systems as an alternative means of transportation to reduce traffic congestion.

Policy 5.17 Bus Rapid Transit System.

A public transit system and dedication of right-of-way corridors for future bus rapid transit with a feeder bus network shall be provided along Watt Avenue from Base Line Road to the Dyer Lane intersection just north of Dry Creek.

Policy 5.18 Streetcar Right-of-Way.

Dedication of rights-of-way for a future street car system shall be provided along the north side of Town Center Drive, extending from the transit center on Watt Avenue to the town center, ending at 16th Street.

Policy 5.19 Multi-modal Transit Center.

A transit center site is located on Town Center Drive to serve as a transfer point for regional and local transit services. The transit center site shall be of sufficient size to accommodate all future anticipated uses. It will include covered shelters, bus staging areas, park-and-ride lots, and bicycle storage facilities.

Policy 5.20 Transit Service and Facilities

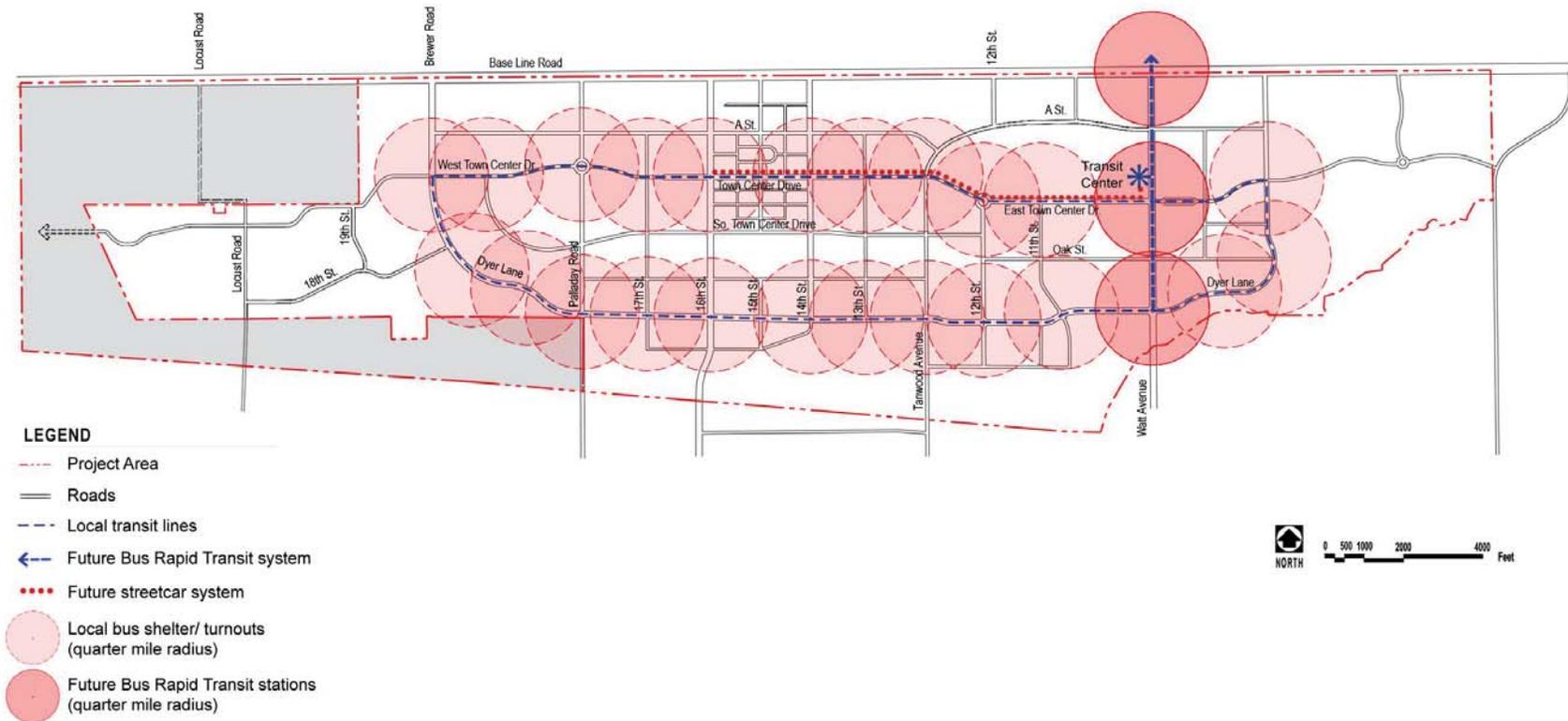
Placer Vineyards shall participate in regional service with connection to light rail transit on Watt Avenue in Sacramento County, Regional University, Galleria Mall, and other regional centers. As each parcel is developed, provisions for bus stops, turnouts, shelters, park-and-ride lots, bike lockers, lighting, and other transit-support facilities will be examined and constructed.

Policy 5.21 Provision of Park-and-Ride Lots.

Park-and-ride lots shall be established and maintained at the town center and transit center at the east village center. The majority of the park-and-ride spaces shall be accommodated in the transit center where a majority of local and regional commute trips will be concentrated. A minimum of 50 spaces shall be provided in the town center, established as shared parking. Other smaller park-and-ride lots are encouraged to be established as a shared parking use incorporated into the overall parking design of other commercial and office centers or adjacent to public transit.

In total, a minimum of 193 parking spaces shall be distributed between the park-and-ride lots. More park-and-ride lots should be provided, especially adjacent to neighborhood activity centers, transit routes, and major transit corridors to encourage ride sharing, promote use of public transit, and reduce air pollution.

Figure 5.5 - Public Transit Concept



5.3.5 BIKE AND PEDESTRIAN CIRCULATION

The Specific Plan includes three basic types of bikeways:¹

Class I Bike Paths:

Off-street bike paths are completely separated from traveled roadways and are for the exclusive use of cyclists and pedestrians

Class II Bike Lanes:

Signed and delineated on-street lanes designed for one-way use of bicycles. Class II bike lanes are typically located along the shoulder or gutter in a widened portion of the street.

Class III Bike Routes:

Non-designated, on-street routes along local public streets where cyclists do not have a delineated lane and must share the roadway with motorists.

Class I Bike Paths:

The proposed off-street bikeway system for Placer Vineyards provides more than 35.1 miles of Class I bike paths, located within open space and landscape corridors along thoroughfares and arterial streets. Class I bike paths adjacent to roadways with Class II bike lanes shall be hard paved with a minimum width of 8 feet. The Class I bike path along the Dry Creek corridor shall be 12 feet in width with a 2-foot-wide decomposed granite jogging path on one side of the hard surface paving. All other Class I bike paths shall be 10 feet in width. The locations of Class I bike paths are indicated in Figure 5.6, “Class I Bike Paths and Multi-Purpose Trails Diagram,” and the roadway sections in Figure 5.3.

Off-site trail dedications may be requested in

association with tentative subdivision maps if it is determined by County staff that such linkages are crucial in the ability to complete major trail segments.

Class II Bike Lanes

Class II bike lanes will be located within the right-of-way of arterial, major collector, and collector streets. Bike lanes shall be designated with a white, painted stripe on the roadway. Street signs shall indicate the location of bike lanes and major destination points.

Class III Bike Routes:

Class III bike routes will be located on existing traffic lanes with low traffic volumes. These streets will connect to Class II bike lanes and Class I bike paths.

Goal 5.7 Provide a system of on-and off-street bikeway and multi-purpose trails that connect to destinations within the Plan Area and to the regional trail network.

Policy 5.22 Class I Bike Paths & Multi-Purpose Trails System.

Class I Bike Paths and Multi-Purpose Trails shall be provided as identified by Figure 5.6, “Class I Bike Paths and Multi-Purpose Trails Diagram.”

Policy 5.23 Class I Bike Paths and Multi-Purpose Trails.

Class I bike paths and multi-purpose trails shall offer a variety of experiences, including connections within and between parks and other public open space lands or to schools, and connections to regional trails and transit facilities within and outside of the Plan Area.



Class I Bike Path



Class II Bike Lane



Class III Bike Route

¹ Specific Plan bikeway types are consistent with the Placer County Bikeway/Trails Master Plan, Section E of the Dry Creek Community Plan and the CalTrans Highway Design Manual.

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Policy 5.24 Provision of Class I Bike Paths and Multi-Purpose Trails.

Private developers shall incorporate Class I bike paths and multi-purpose trail routes that are within their proposed tentative maps as identified in the Class I Bike Paths and Multi-Purpose Trails diagram (see Figure 5.6). Placer Vineyards Class I bike paths and multi-purpose trails shall conform to the following standards:

1. In the Dry Creek corridor only, Class I bicycle paths shall be 12-foot wide hard surface paving with a 2-foot-wide decomposed granite path on one side of the paving. Class I bike paths adjacent to roadways with Class II bike lanes shall be hard paved with a minimum width of 8 feet. In all other areas, Class I bike paths shall be 10 feet wide with hard surface paving.
2. In open space areas, natural surface (gravel, earth) multi-purpose trails may be set a minimum of 10 feet off the hard surface paved trail (for activities such as equestrian riding and mountain biking).
3. Informational signs will be placed throughout the trail system (e.g., “2.4 miles to town center”).
4. Class I Bike Paths and Multi-Purpose Trails will be setback a minimum of 10 feet from residences.
5. Class I Bike Paths and Multi-Purpose Trails will be setback a minimum of 25 feet from preserved or reconstructed wetlands, whenever possible.
6. Collapsible bollards or other similar devices approved by the County will be placed at entries to restrict vehicular access where trails and streets intersect.
7. Class I Bike Paths and Multi-Purpose Trail crossings of drainageways will occur at appropriate intervals.
8. Traffic calming methods and signage shall be used to enhance the safety of the trail systems where they cross major or collector streets.
9. A Class I bike path crossing shall be provided under the Watt Avenue bridge within the Dry Creek corridor.
10. As depicted on Figure 5.6, a Class I bike path shall also be provided on the east side of the Dry Creek bridge and along Watt Avenue, extending to the Placer/Sacramento County line. The Class I bike path on the east side of the bridge will be separated from traffic by a railing.

Policy 5.25 Construction of Class I Bike Path & Multi-Purpose Trail Improvements.

Class I Bike path and multi-purpose trail improvements are planned to connect Morgan Creek to Gibson Ranch Park. Land owners shall design and construct

Class I bike path and multi-purpose trail improvements within the open space portions of their property, according to the following standards and provisions of the Development Agreement.

1. In conjunction with the construction of a backbone roadway system, a set of backbone trails adjacent to these roadways, as described in Section 9.3 and the Public Facilities Financing Plan, shall be constructed at the same time that the backbone roadways are constructed.
2. Landowners shall install sections of the trail when they install subdivision improvements within the parcels adjacent to the open space. Trail connections to the backbone trails shall be included as part of the subdivision improvements.
3. Class I bike path sections shall be constructed and improved according to Figure 5.6, “Class I Bike Paths & Multi-Purpose Trails Diagram.” Class I Bike paths shall be designed in accordance with the County’s design standards for off-street bike paths and the guidelines provided in the Specific Plan.
4. Landowners shall proceed to complete the construction of Class I bike path improvements at the same time that they install and complete the balance of the subdivision improvements for the parcel(s) adjacent to the open space.
5. Landowners shall be responsible for all costs associated with the design and construction of Class I bike path and multi-purpose trail improvements, including the costs of preparing required plans and drawings and obtaining all required permits.
6. Upon completion of Class I bike path and multi-purpose trail improvements by the landowner, the County and/or the Park District² shall accept the dedication of the Class I bike paths and multi-purpose trails and applicable open space area and assume ownership and maintenance of these facilities, provided that the cost of maintenance shall be funded by a Park Services CFD.

Policy 5.26 Fire Trails/Access through Open Space.

Fire access routes shall be integrated into the open space trails system and shall comply with Placer County Fire Department standards.

1. Class I bike paths and multi-purpose trails shall include design features that minimize barriers to emergency response, such as knock-down bollards for emergency access at trailheads.

² The Development Agreement specifies the required steps for the formation of the Park District.

2. *Rolled curb access points shall be provided in open space areas. Open space access points shall be provided at each cul-de-sac that abuts an open space and spaced every 1,000 feet along streets adjacent to open space areas. These access points shall be identified with signage and painted red curbs. Emergency access easements shall be provided for each emergency access area.*

Policy 5.27 Roadway Crossings in Utility Corridors.

Roadway crossings shall be minimized through utility corridors to reduce the fragmentation of trails and open space.

Policy 5.28 Provision for Multi-Purpose Trails.

Multi-purpose trails are located in the open space buffer areas adjacent to the SPA and next to the Placer/ Sacramento County line, as indicated in Figure 5.6, "Class I Bike Paths and Multi-Purpose Trails Diagram." The multi-purpose trails planned adjacent to the SPA will be separated from the Placer Vineyards development area with landscape berms (refer to Figures 7.10-7.14 for plans and sections of the berms and buffers next to the SPA). The multi-purpose trails planned in the open space buffer areas along the Placer/ Sacramento County line, shall connect to the facilities at Gibson Ranch Park and link into the multi-purpose trail system proposed along the south side of Dry Creek, as directed by the Dry Creek/ West Placer Community Plan.

Figure 5.6 - Class I Bike Paths and Multi-Purpose Trails Diagram

