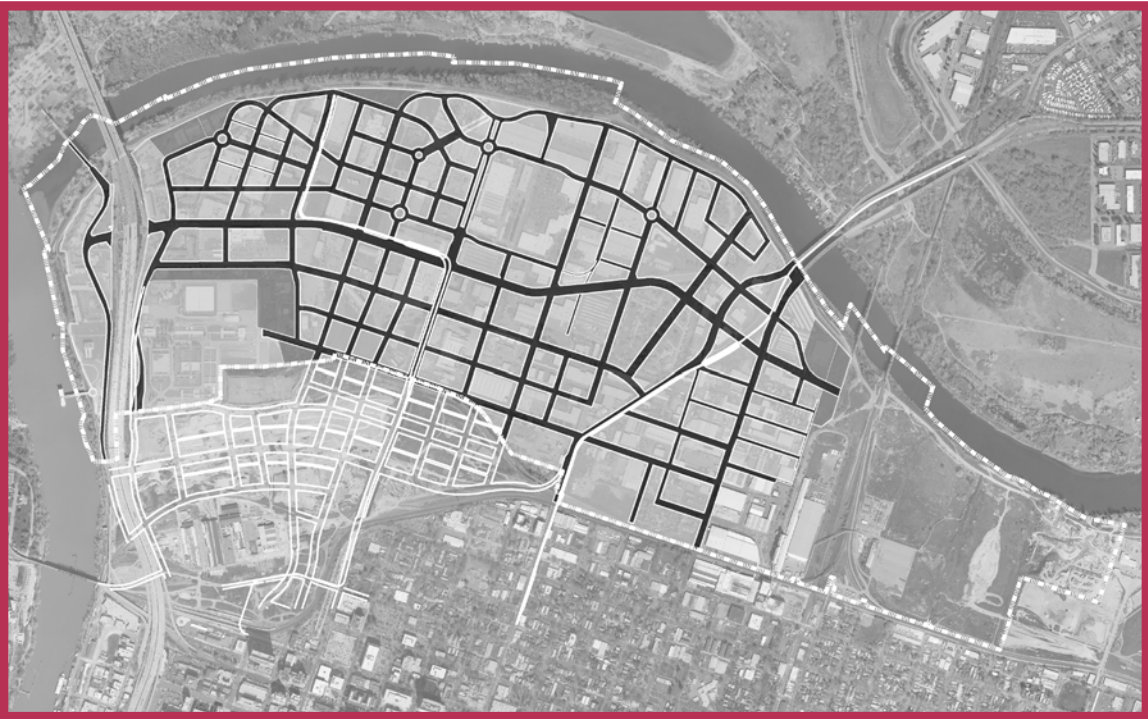

Chapter 3: Public Realm Guidelines



Section 6 - Chapter 3 Table of Contents

A. Introduction	3-1
B. Place Making	3-3
B.1. Rivers Trails	3-4
B.1. Rivers Trails (continued).....	3-5
B.2. North 7th Street and Richards Boulevard.....	3-6
B.3. Sequoia Promenade.....	3-8
B.4. Bikeway Boulevard	3-10
B.5. Transit Centers	3-11
C. River District Streets	3-13
Pedestrian Priority Streets	3-16
Balanced Streets	3-25
Vehicle Intensive Streets.....	3-32
Greenway Street	3-39
Transit Integrated Streets	3-41
Alleys	3-51
Alleys: Commerical Service Alleys.....	3-52
Alleys: Shared-Use Alleys	3-53
Alleys: Commercial District Pedestrian Alleys.....	3-54
Alleys: Residential District Alleys.....	3-56
2. On-Street Parking.....	3-58
3. Intersections.....	3-61
3. Protected View Corridors	3-62
D. Pedestrian Realm.....	3-63

Section 6 - Chapter 3 Table of Contents (continued)

D.1. Sidewalks	3-65
D.2. Sidewalk Paving	3-68
D.3.a Street Furnishings and Amenities - General Guidelines.....	3-70
D.3.b - Street Furnishings and Amenities - Bicycle Racks	3-71
D.3.c Street Furnishings and Amenities - Transit Stops	3-73
D.3.d Street Furnishings and Amenities - Street Lighting	3-74
D.3.e Street Furnishings and Amenities - Other	3-76
D.4 Riverfront Promenades, Trails and Bikeways	3-79
E. Landscape	3-80
E.1. General Landscaping Guidelines	3-82
E.2. Street Tree Guidelines	3-84
E.3. Tree Planting Guidelines.....	3-86
F. Small Public Places.....	3-87
G. Public Art.....	3-89

A. Introduction

The Public Realm includes publicly-owned street rights-of-way, alleys, plazas, squares, courtyards, parks, trails and bikeways. The quality and success of the private realm to facilitate safe and enjoyable people places requires a commitment to a vision for vibrant public spaces. The urban design guidance for the Public Realm is complemented with the more architectural guidelines in Chapter 4: The Private Realm. These two chapters work together and contribute to the Framework and Concepts in Chapter 2 for the transformation of River District into a mix of live, work and play environments in a unique area of the Central City.

In the past, little attention has been given to public facilities beyond utilitarian service to light industrial uses in the River District. Township 9 was the first adopted plan in the district to focus on high standards for public facilities which serve to create a quality public realm experience. The intent of the Public Realm Guidelines is to support the implementation of the Principles shared by both the River District Specific Plan and Township 9 for a strong pedestrian based circulation network that balances the vehicular capacity needs, yet insures that streets and public ways are conducive to a strong pedestrian environment.

The public realm plays a critical role in the district's function, serving several inter-related and overlapping roles, described below.

Circulation and Access. The public rights-of-way provide for circulation within and through the River District, and access to individual buildings, businesses and sites. The public realm accommodates various travel modes including automobiles, delivery trucks, buses, taxis, trains, street cars, motorcycle, bicycles, and pedestrians.

The River District Specific Plan and these Guidelines plan for a robust network of pedestrian and bicycle routes that will connect a network of parks and open spaces within the street grid. Visual navigation from the interior streets to the riverfront will be accomplished through specific paving, native landscaping, and signage.

Development Framework. The Public Realm is the

forum where the value attributed to civic engagement is expressed. In this manner, it is the foyer, or entry to the private realm, of individual buildings and developments.

Public Open Space. The River District presents a great asset with its proximity to vast resources of public open space along the American and Sacramento Rivers. The American River Parkway is a regional treasure of nature trails, bikeways and boating opportunities in a scenic watershed. The River District Specific Plan builds upon these assets with plans to link the riverfront with the Central City's urban parks and new parks identified in the River District and the Railyards. The River District Specific Plan proposes a number of public parks, plazas and "green streets" to foster community life in the places where the public meet, interact, and linger.

Visual Character. While buildings provide important visual elements, the design of the public realm is critical in establishing the River District's visual context and overall character. The physical design and character of the public realm contribute a great deal to its identity and perceptual qualities of the area.

To accommodate diverse and sometimes competing functions, the public realm is generally understood to be made up of two distinct components: the "Travelway Realm" which accommodates vehicular circulation, and the "Pedestrian Realm" which accommodates pedestrian circulation.

The Travelway zone generally includes the area of the public right-of-way within the curb-to-curb cross-section of the street occupied by travel lanes, parking lanes, and any medians, traffic circles, etc. that occur between the curbs (See Figure 3.1). The Pedestrian zone generally includes the outer portions of the right-of-way that flank the street, including sidewalks and any adjoining plazas and parks. For more detailed discussion of the "Travelway" zone and the "Pedestrian" zone, please consult the Central Core Design Guidelines Chapter 3, Public Realm for further elaboration.

Chapter 3 sets for a series of principles and guidelines that

follow from the urban design goals and vision presented in Chapter 2-Framework of the River District. Chapter 3 will guide development of the Public Realm that will be implemented by both the private developer, through off-site improvements, and various City departments that improve and maintain the various components of the public realm as outlined in this chapter.

The focus of this chapter is to provide guidance to implementation of urban design, landscape architecture, and transportation facilities in a manner that creates a distinctive environment for the River District and create places that will remain in the consciousness of all who pass through the River District and be recognizable and identified as a unique place in the City and the greater region.

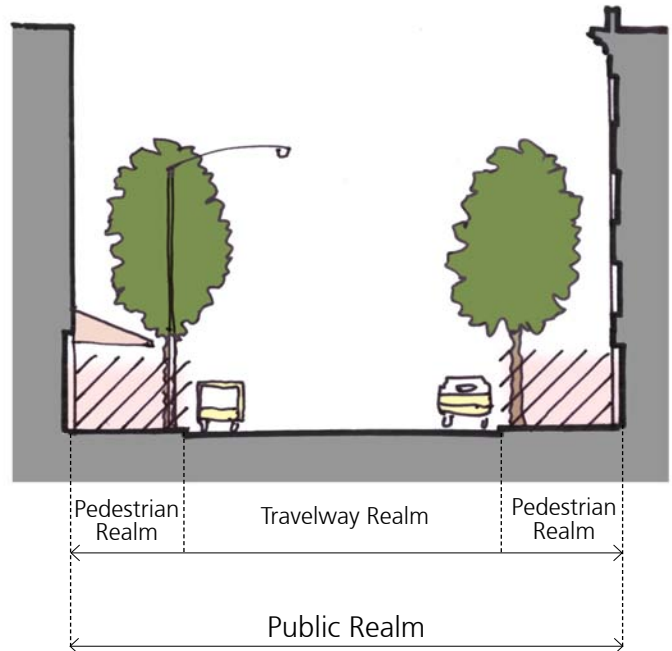


Figure 3.1. The Public Realm has two components: the Pedestrian Realm and the Travelway Realm.

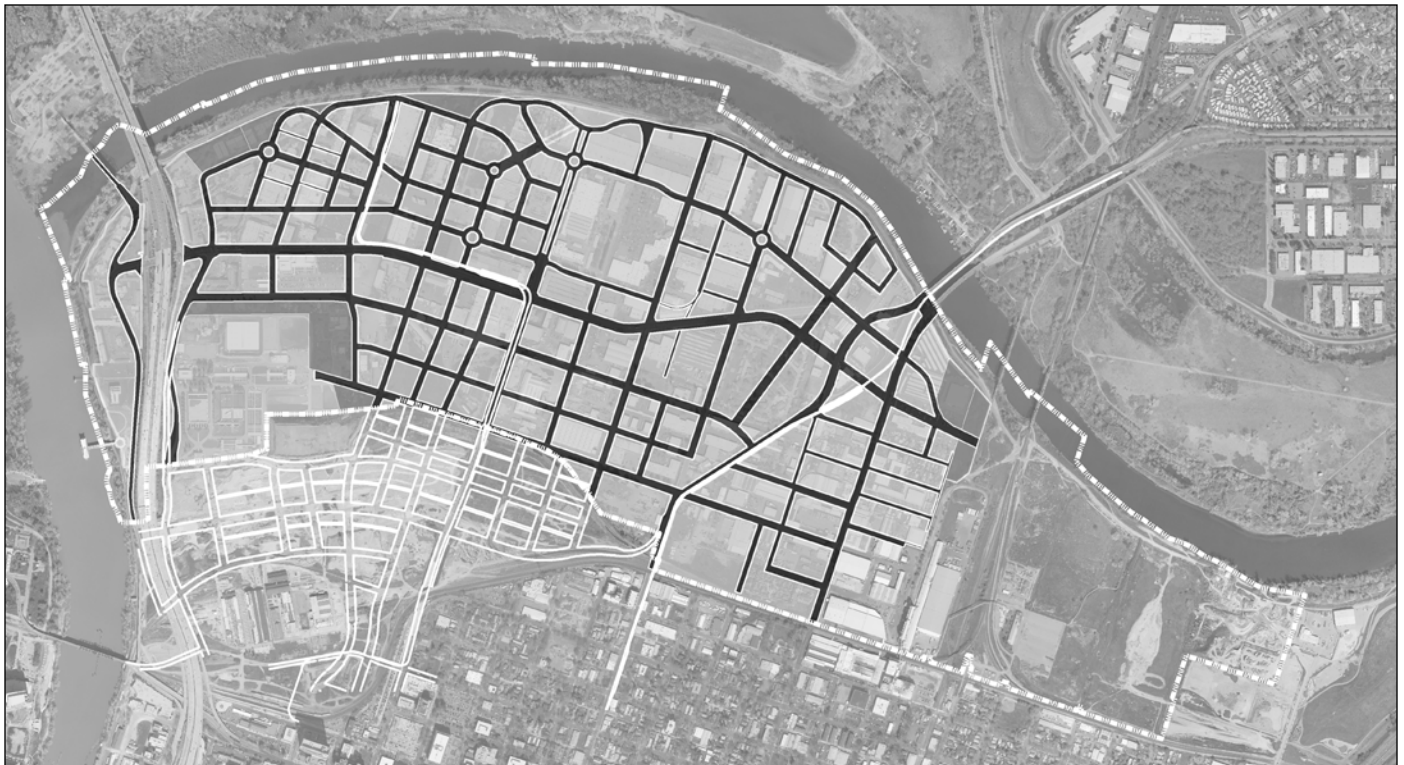


Figure 3.2. The Public Realm network of streets and open space is a critical element for the successful development of the River District.

B. Place Making

Place making is the art of making places for people where human activity, safety, comfort and sensory enjoyment are the priorities for the design of the built environment. Placemaking is informed by characteristics which build on the context of a particular place, its climate, its ecology, its history, and its cultural traditions. These essential characteristics shape the design responses to a particular locale, within a larger context of a city or region.

The River District has many characteristics that will inspire the creation of meaningful and intriguing Place Making. A unique factor that sets it apart from the remainder of the Central City is the expansive river edges that are never more than a 20 minute walk from any point in the district. Existing spatial characteristics define distinct areas and neighborhoods within the District (see Chapter 2 for descriptions) which will serve to shape the designer's response in the creation of buildings, plazas, and parks, that further reinforce the distinctiveness of the area.

Street sections in this chapter set a framework for a majority of the public realm in the District. Identity can be created through the use of smaller street cross sections for local interior streets and by the identification of river connecting streets with landscaping, signage and markings. The use of round-abouts to control traffic in areas of the District will also create small civic gestures in the street rights-of-way and enhance the public experience.

The following section highlights areas which attention to Place Making can make a distinctive influence on the livable qualities of the District.

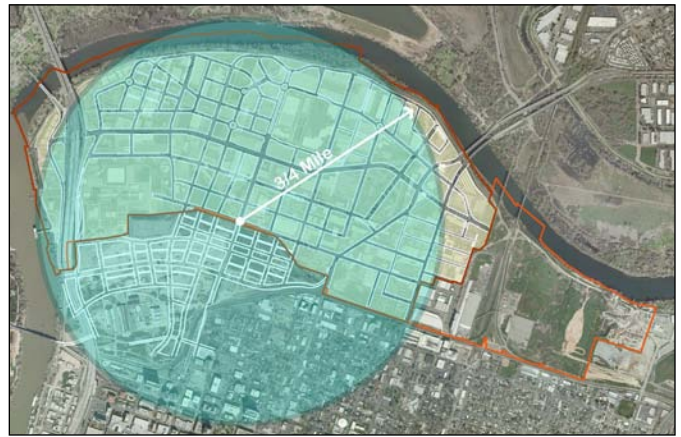


Figure 3.3 The American River is never more than a 20 minute walk from any point in the District.

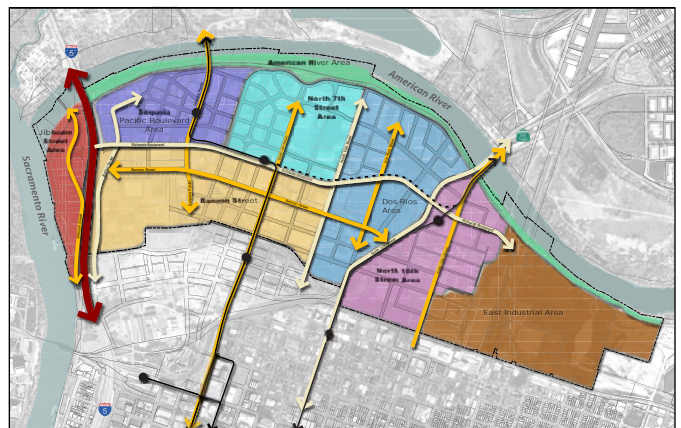


Figure 3.4. The River District enjoys areas of particular form and expression which should be exploited for individual character and neighborhood identity.

B. Place Making

B.1. Rivers Trails

Principle: The Sacramento and American Rivers shall be accessible throughout the District and designed to attract a diversity uses complimentary to each specific place in the District.

Sacramento enjoys a unique naturally occurring confluence of the American and Sacramento Rivers, two major California waterways forming the northern and western edge of the River District. Due to the need for flood protection, the levee embankments are a barrier to the full enjoyment of these rivers. The few existing public access points to view and engage the rivers are very popular destinations for boating and swimming and demonstrate a public desire for increased access to the water's edge.

The first stage implementation of the Two Rivers Trail, a public bicycle and jogging trail, is planned to mature into a signature element identifying the River District. The River District Specific Plan is a vision for the riverfront to provide destinations for parks, open space and public activities along the riverfront at 5-10 minute walking intervals located to correspond with streets terminating at Riverfront Drive. This combination of parks and natural areas with complimentary program elements will create a multi-dimensional experience along the river edges for outdoor enjoyment and recreation.

Along the length of the trail, its character will transition from an active urban waterfront promenade along the Sacramento River to a bikeway and defined walking path

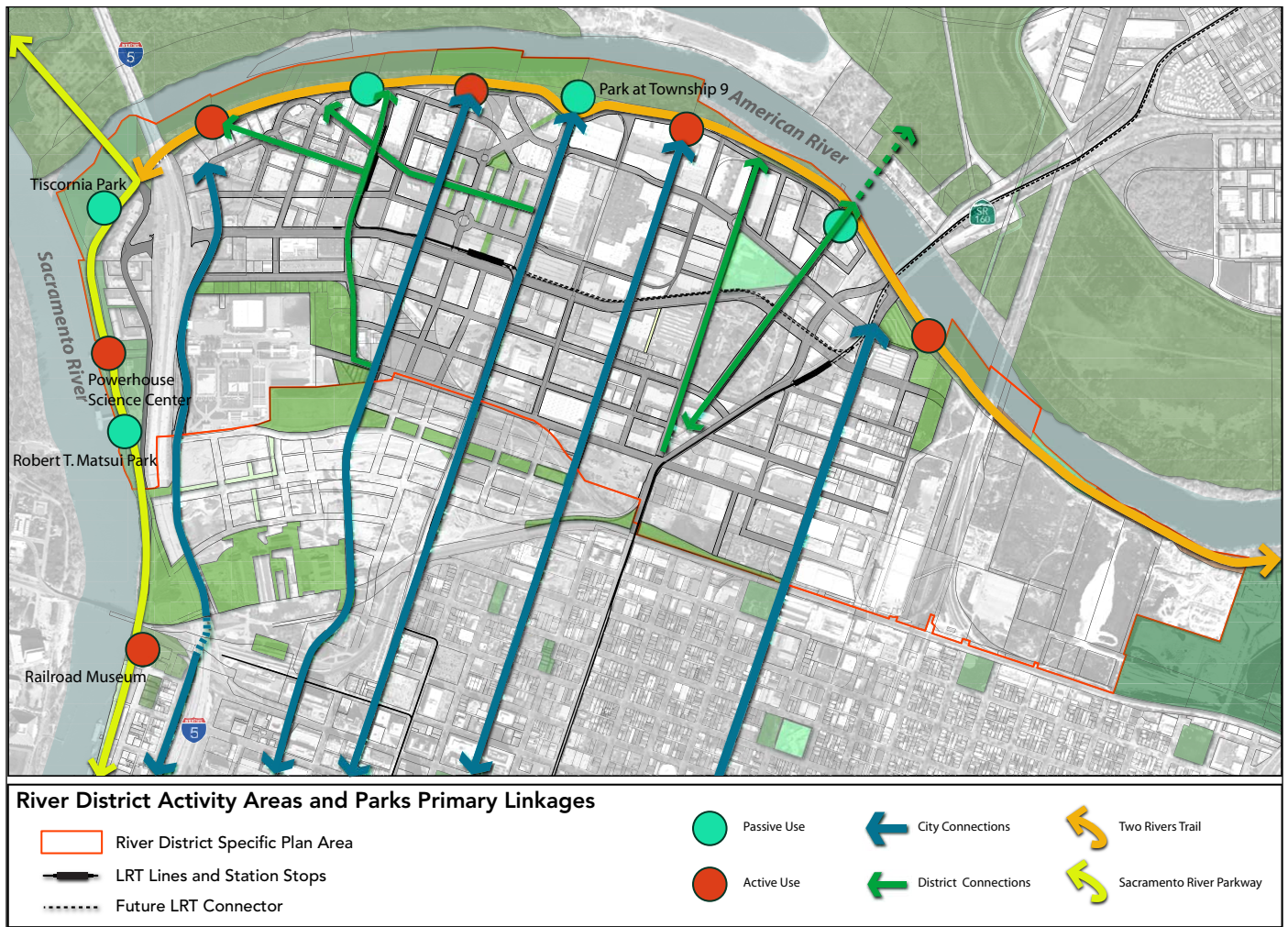


Figure 3.5. Access to the American River will be possible from Downtown with new connections through the Railyards that terminate at the river edge where future uses which are spaced at 10-minute walking intervals along the trail.

B. Place Making

B.1. Rivers Trails (continued)

as it turns and progresses eastward along the scenic area of the American River Parkway.

Possible program elements for active uses along the Two Rivers Trail include a boathouse for rental of human-powered water craft, bicycle rentals, a nature center, aquarium and other cultural institutions which have a relationship to Sacramento’s river history.

Creating an identifiable place for this waterfront trail will require particular attention to construction materials and detailing, including way-finding and signage on and off trail. While a consistent theme is desirable, variation of architectural elements should be encouraged to work in concert with the particular locations in the district and the programming of the site.



Figure 3.6. Signage is a critical element in creating an identifiable place and providing clear communication of surrounding context and mobility choices.



Figure 3.7 Boathouse on the Harlem River, New York. Floating facilities bridged from the levee crown can offer paddle-craft opportunities for exploring the river.



Figure 3.8. Riverfront Promenade south of the Tower Bridge provides a pleasant urban waterfront pedestrian experience in the downtown extending to the Docks Area. Extension of the Riverfront Promenade to Jibbom Street Bridge will complete the urban waterfront experience.



Figure 3.9. Two Rivers Trail along the Sacramento River in the District. This area will receive increased traffic with the development of the Powerhouse Science Center.



Figure 3.10. Pedal car rentals along pedestrian bike trail in Monterey, CA serve as an example of creative alternative mobility choices for experiencing our riverfronts.

B. Place Making

B.2. North 7th Street and Richards Boulevard

Principle: Buildings on the four corners of Richards Boulevard and North 7th Street shall reflect the importance of this prominent junction with public plazas and distinctive architectural forms.

The intersection of the two principle streets in the River District, North 7th Street and Richards Boulevard, occurs at the center of the district and directly north from the main artery linking the American River to Downtown through the Railyards. This important crossing is deserving of great architecture and vibrant public streetscapes.

The future development of highrise office and mixed-use projects at this intersection should strive to create a sense of distinctiveness and place. Formal design responses which should mark the skyline and distinguish it as the center of the district and create a vibrant intersection for people despite the expected intensity of vehicular and

transit traffic.

To create spatial distinction for the intersection, buildings shall recede from the corner with distinct public plazas set at the corners of each block of the 7th and Richards intersection. The plazas should be a minimum of 6,000 sf to satisfy the open space requirement for office buildings under the Zoning Code (see Office open space requirements in the River District SPD).

The massing at the four corners should accentuate height adjacent to each entry plaza and be of high architectural distinction. The use of quality masonry materials that relate to the former buildings in the immediate area are preferred. Building systems and form should be designed appropriately for the importance of this location.

The Township 9 Light Rail Station design adheres to the

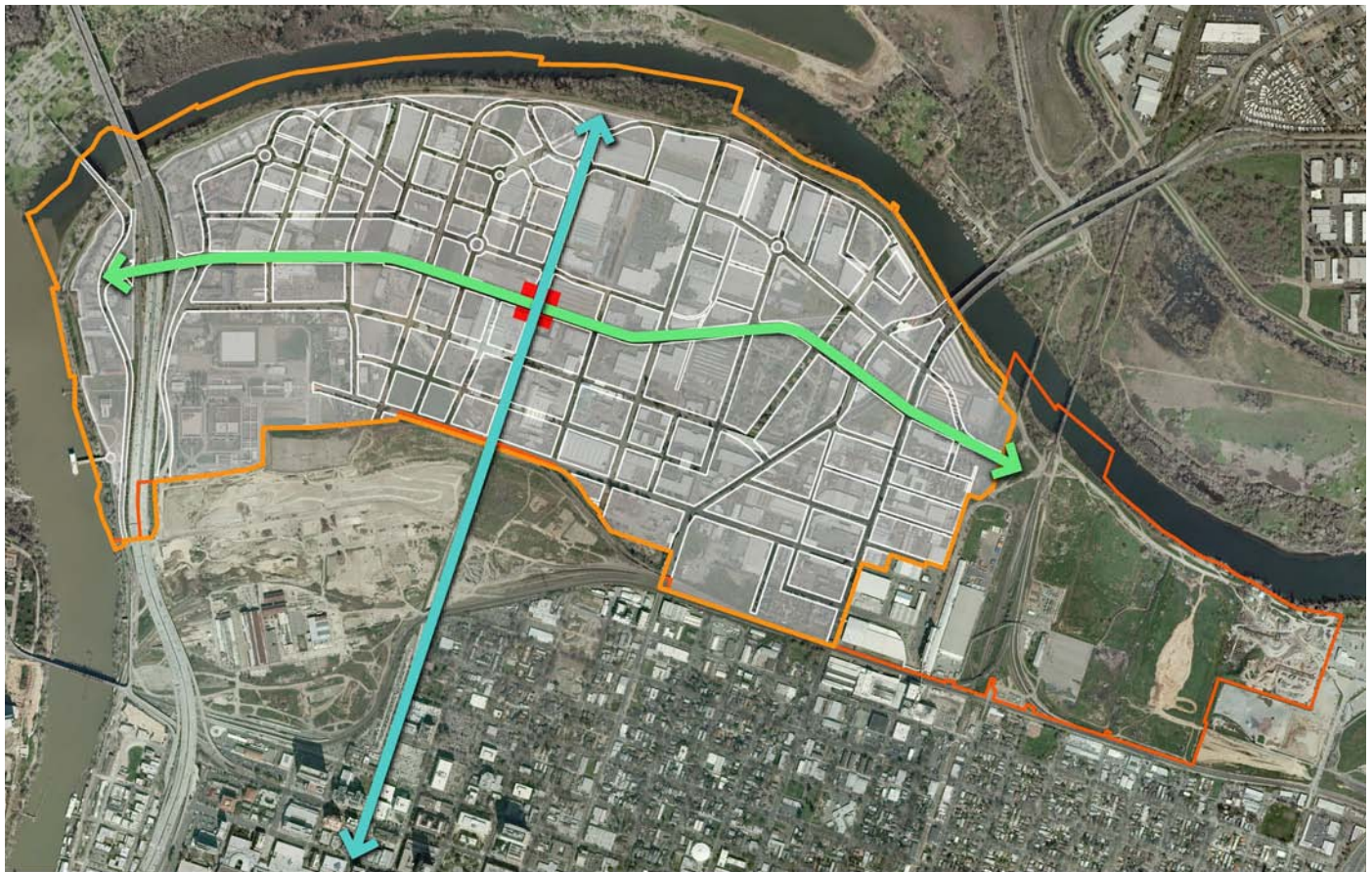


Figure 3.11. The Intersection of North 7th Street and Richards Boulevard is the central location of the River District Specific Plan Area and the focus of early redevelopment efforts. The importance of this intersection should be distinctive in urban design and architectural character.

B. Place Making

B.2. North 7th Street and Richards Boulevard (continued)

open corner on the northwest block with future development set back from the corner. This first transit stop in the River District provides a strong precedent for how these four corners can evolve. The Township 9 station design is of its place: historically referenced form and articulation which will dignify the history and significance of the former Bercut-Richards Cannery.

Plaza spaces are of little benefit if they are not designed for creating active places for people to congregate, relax, and conduct daily business. Plazas shall be fronted with retail and convenience uses under the guidelines set forth under Chapter 4 -Private Realm Street wall articulation and Small Public Spaces.



Figure 3.12. Township 9 Station Interior (Vrilakas Architects)



Figure 3.13. Township 9 Station aerial view of corner from 7th and Richards (Vrilakas Architects)



Figure 3.14. Three-dimensional studies of Four Corners (City of Sacramento Urban Design Group)

B. Place Making

B.3. Sequoia Promenade

Principle: The Sequoia Pedestrian Promenade shall be the principal street for transit-oriented mobility between the Sequoia Transit Station, and the American River Parkway and Two Rivers Trail.

Anchored by the Sequoia Transit Station and plaza on the west end, and an anticipated regional active program facility, such as a combination boating rowing facility and bike rental facility along the parkway at the west end, the pedestrian Promenade will be developed as a pedestrian oriented street in the classic tradition with ground floor frontage consisting of small retail shop fronts and restaurant and café uses comprising the ground floor street frontage.

Pedestrian streets are successful when there is a high resident population on and surrounding the streets and are at the center of a populated area with many access points to the street. Therefore, the location of the Sequoia Promenade in the center of the Sequoia Pacific Boulevard Area, it will be the focal point. The buildings which front the street will require upper floors to consist primarily of residential uses with some office space and small boutique hotel rooms with views onto the street. Residential units should provide operable windows and private balconies which overlook the street, providing ‘eyes on the street’ at all times.

The requirement for a high percentage of residential use will be a strong contributor for the success of this Sequoia Promenade to maintain an active pedestrian character into the night hours. The anchor of the light rail station at the terminus of the promenade will connect this neighborhood to Downtown and can become a vibrant destination center.

Servicing and drop-offs to the Sequoia Promenade will be facilitated by the north-south through streets that connect to Signature Street and through to Richards Boulevard. With two blocks of mixed use development on either side of the Promenade axis, pedestrian movement will flow though and channel along the pedestrian street.



Figure 3.15. Church Street, Burlington, Vermont is successful as a pedestrian street with through traffic and the intersecting streets (Cooltown Studios).



Figure 3.16. New York City Department of Transportation has initiated a program to make the city’s streets more pedestrian friendly. Times Square has been established as a pedestrian only.



Figure 3.17. As part of a city initiative to create pedestrian only plazas and pedestrian streets, the street at the San Francisco Mint is now a successful pedestrian plaza.

B. Place Making

B.3. Sequoia Promenade (continued)



Figure 3.18. This cross section perspective view shows the dominate pedestrian streetscape with provision for delineated vehicular way separated with a four inch high curb for cyclists, peddle cabs, and other light vehicles that can mix with crossing pedestian movements. These design elements will contribute to a unique and identifiable urban place which can support community venues and local festivals.



Figure 3.19. Sequoia Promenade at the center of the transit village neighborhood area surrounded by the American River Parkway and offices fronting Richards Boulevard.

B. Place Making

B.4. Bikeway Boulevard

Principle: The Bikeway Boulevard shall be a destination place in the River District that forms a central pedestrian scaled space for the Dos Rios Area.

Bikeway Boulevard results from a commitment to create unique opportunities for non-vehicular mobility that can enrich the culture and character of the River District in the Central City.

An abandoned rail spur between North 10th and Dos Rios Streets will form the main link of the Bikeway. The route will connect Alkali and Mansion Flats neighborhoods through a 10th Street undercrossing at the east end of the Railyards Parks Blocks, an area designed for highrise residential towers. This bicycle and pedestrian route will link to the Two Rivers Trail midway between Riverfront Park at the end of North 7th Street and the future pedestrian-bike bridge extending from new Street W planned through the redeveloped Twin Rivers Housing development.

The Bikeway Boulevard section is a non-vehicular route in an area defined by an eclectic mix of vacant land and warehouse uses that provide great opportunity for

start-up businesses and residential infill. The Boulevard will allow large floor plate warehouses the ability to create shopfronts and restaurants fronting a tree-lined parkway with small streets feeding into the Boulevard for servicing and drop off.



Figure 3.20. Locational signage that directs cyclists to transit hubs and destinations are important to identify the Bikeway in the urban landscape and encourage recreational and commuter use as a means of navigating the city.



Figure 3.21. Concept Rendering Bikeway Boulevard (City of Sacramento Urban Design Group)

B. Place Making

B.5. Transit Centers

Principle: Transit Centers shall be designed for efficient movement of people in and around the station with quality public space amenities which create an inviting place for shopping, leisure, and dining.

The River District has been designated for significant improvements in non-vehicular transit facilities that will create a backbone network of rail and bus service for the district with regional connections. Investment in the expansion of light rail transit and future bus route improvements have been anticipated in the structure of the RDSP. Transit oriented development centered around light rail stations and transit corridors along principal bus routes are a hallmark of this plan for creating sustainable and complete neighborhoods.

Pedestrian movement is of paramount concern around transit stations. Passengers accessing trains or transferring between transport modes require a pedestrian circulation system and streetscape elements design that facilitates efficient movement of pedestrians. Streets and sidewalks shall be designed to anticipate high pedestrian volumes at peak hours in these locations.

Urban Design strategies for transit corridors will promote the highest level of pedestrian design for streetscapes with generous sidewalk widths and the minimization of encroachments and barriers to the safe and comfortable flow of people.

Signage for way-finding and transit modal transfers shall be prominent and clearly identifiable for the transit user.

Public plazas at transit stations are a desirable amenity for transit users and serve as public meeting areas and destinations for shopping, dining, and leisure.

Retail and service use storefronts shall be transparent and provide multiple entryways wherever possible (see Chapter 4, Private Realm).

Township 9 Light Rail Station

The Township 9 Station has been designed for two-way light rail service with accommodation for bus transfer and vehicular drop-off. The open design with reuse of roof

trusses from the Richards-Bercut Cannery, that formerly occupied the site, and use of masonry columns with industrial sash window screens work together in creating a distinctive station and memorable public place.



Figure 3.22. Township 9 Station from 7th Street. (Vrilakas Architects)

Sequoia Light Rail Station and Plaza

The Sequoia Light Rail Station is centered on a 400 feet long block between two flanking streets. The center of the Sequoia Station presents a view from Street 9 (Pedestrian Promenade) and the Two Rivers Trail. Therefore it will enjoy strong visual presence from three streets aligning to the station and be the gateway station in the District along the Green Line to the Airport. The block fronting the station is designated to contain a large public plaza with retail frontage surrounding the plaza and the transit station closing the western edge of the plaza (see



Figure 3.23. Aerial view of Sequoia Station at the intersection with Sequoia Promenade. The axis of the promenade should continue through the station with the architecture creating a defined public space (City of Sacramento Urban Design Group).

B. Place Making

Figure 3.23). This plaza will enjoy sun access, but allowable building heights and step backs will provide shade opportunities for summer sun. The Sequoia Station Plaza shall be designed for security, comfort, and public interaction, to create a vibrant outdoor space.

Dos Rios Light Rail Station

The Dos Rios Light Rail Station will be a central hub for the eastern portion of the plan area and serve both the Dos Rios and North 16th Street Areas. The location of the station within the block grid affords an opportunity for an intensive transit development integrated into surrounding mixed use development.

This block should contain significant programmatic uses to serve transit users, nearby residents and those using the station to access the riverfront trails and the North 16th Street Historic District.

San Diego’s American Plaza is a good model for how the site could be organized to make it a meaningful public place and viable economically. With the realignment of North 12th Street as proposed in the Specific Plan and the location of the LRT line, the resulting irregularly shaped site will be advantageous for an integrated program of uses combining private and public resources into a significant gateway project along the Blue Line for the District and the Central City.



Figure 3.25. San Diego American Plaza Trolley Station integrates public light rail system into the privately developed 34-story highrise and the San Diego Museum of Contemporary Art. The museum is a focal point of the transit station.



Figure 3.24. The irregular site at the future Dos Rios Light Rail Station is an opportunity for an integrated program of public and private development which can serve the local community and be a regional destination and gateway project in the northeast area (see Figures 3.25 and 3.25).

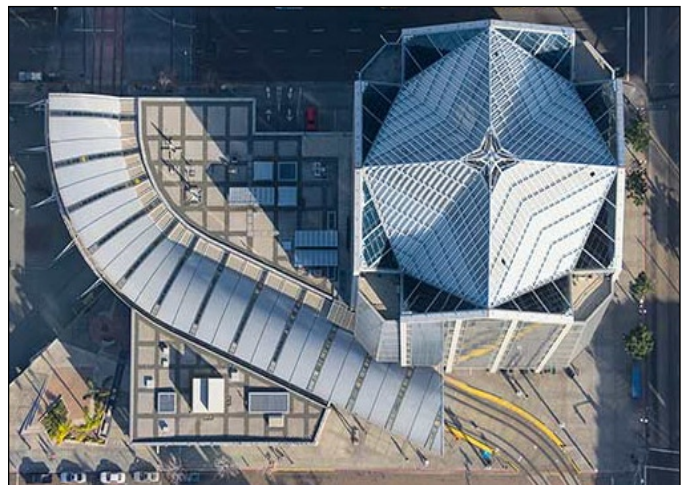


Figure 3.26. Aerial view of American Plaza (San Diego, CA) illustrates the unique integration of the light rail station and the architectural program on the site. A large public plaza connects the tower entrance and the light rail station.

C. River District Streets

Whereas the historic Sutter Grid platted a consistent 80 foot wide grid for the majority of the Central City subsequent street infrastructure has taken more liberty by varying street widths to accommodate specific needs. Most recently, the Railyards Specific Plan and Township 9 in the River District each adopted a variety of street sections which provided unique spatial characteristics to sub-districts within their respective plan areas. The River District Specific Plan carries forward this spatially driven philosophy and couples design with the pragmatics of integrating with an existing street network and infrastructure while transitioning to the streets of these two development areas.

The River District Specific Plan has strived to integrate a modulated grid to tie Township 9 into the larger Central City network building on the pattern of streets that sweep to the levee and back to the interior grid. These connections will also facilitate pedestrian commuters to and from the new California Highway Patrol Headquarters at Continental Plaza and other State government projects nearby.

The street grid of the Railyards sets the grid spacing at North B Street for streets west of North 7th Street. There is a discontinuity of the grid in the blocks east of North 7th Street with Street N in the River District Plan following the abandoned rail spur line which continues north of Richards Boulevard, to Signature Street.

As outlined in Chapter 2 - Framework, the Guiding Principles for the RDSP and the Goals and Concepts for urban design set a priority for pedestrian mobility and bicycle connectivity in a district that carries significant regional vehicular capacity. To accomplishing these goals and principles under such demand, the River District Specific Plan created a robust network of alleys, local streets and integrated arterials that service a variety of needs.

Also the priority given to maximizing the accessibility to the river trails and the overall bike network, many streets are designed for on-street bike lanes as well as many of street trails, including an abandoned rail spur that will

serve as a Bicycle Boulevard for safe and convenient access for commuters and recreational riders in the district (See Figure 3-27 for the Bicycle Circulation routes).

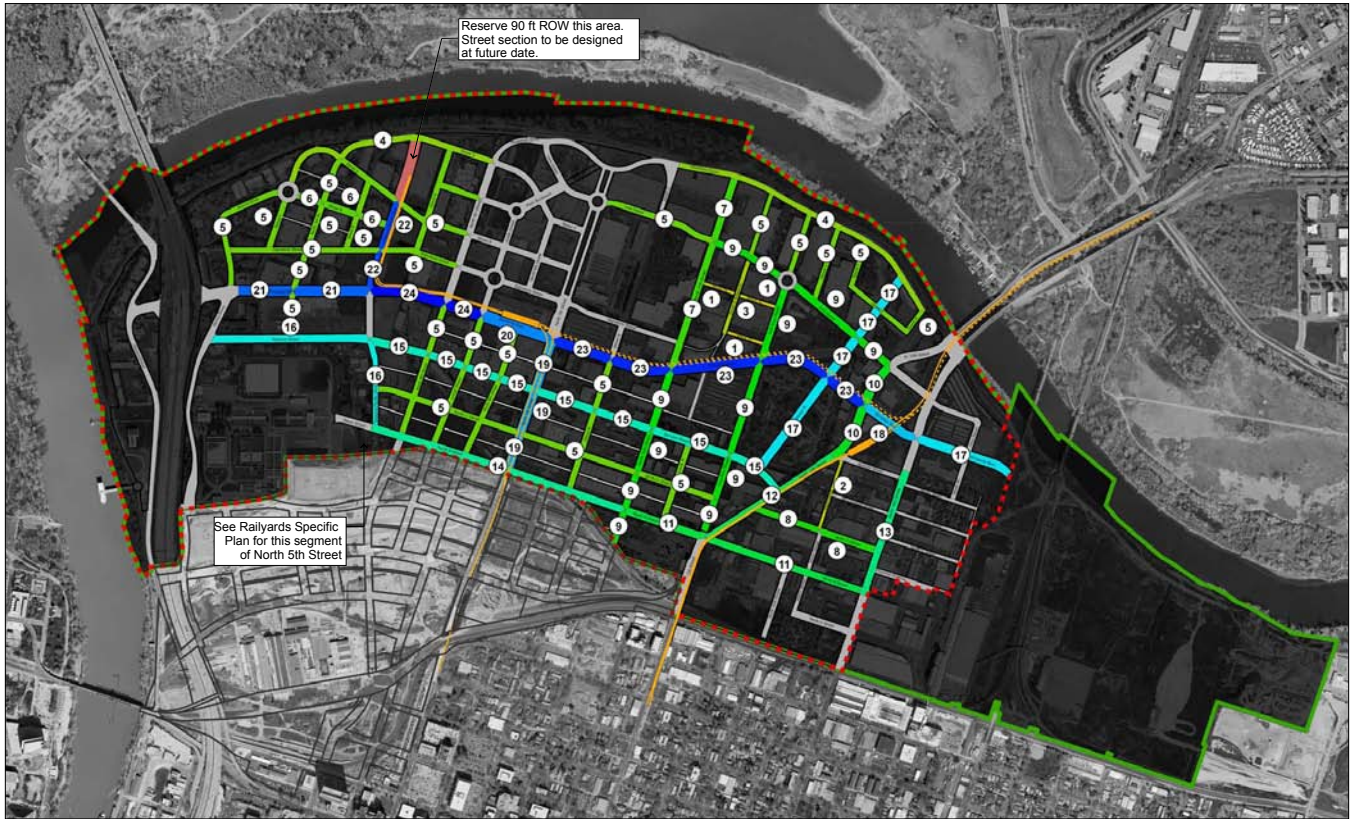
Furthermore, Green Street principles for rainwater capture and filtering are integrated into streets which have the added benefit of aesthetic enhancement the streetscape, even where traffic volume is high. These Low-Impact Development measures (LID) which are pending State requirements for point-source treatment of water runoff and have been integrated into the utilities drainage models for the River District Specific Plan.

The twenty-four street sections that are illustrated in this document are organized below under the following divisions:

- Pedestrian Priority Streets
- Balanced Streets
- Vehicle Intensive Streets
- Green Street
- Transit Integrated Streets

A numeric key to all the street sections is provided on the following page.

C. River District Streets



- | | |
|---|---|
| <p>Section 1: 40 Foot Mews (Streets 7a, 7b, Street 10)</p> <p>Section 2: Ahern Street</p> <p>Section 3: Bicycle Boulevard (Street S)</p> <p>Section 4: Riverfront Drive and Street 3 (west of N. 5th St)</p> <p>Section 5: Standard 2-lane Local Street</p> <p>Section 6: Sequoia Promenade (Street 9)</p> <p>Section 7: North 10th Street (north of Richards Boulevard)</p> <p>Section 8: North C Street (N. 12th St to N. 16th St)</p> <p>Section 9: Dos Rios, North 10th Street (south of Richards), Vine Street (N. 10th St to N. 12th St)</p> <p>Section 10: North 12th Street (Vine Street to Sproule Street)</p> <p>Section 11: North B Street (N. 10th Street to N. 16th Street)</p> <p>Section 12: North 12th Street (south of Sproule Street)</p> <p>Section 13: North 16th Street (North B Street to Sproule Street)</p> <p>Section 14: North B Street (Bannon St to N. 10th St)</p> | <p>Section 15: Bannon Street (Sequoia Pacific Boulevard to N. 12th Street)</p> <p>Section 16: Bannon Street (West of Sequoia Pacific) / Sequoia Pacific Blvd (North B Street to Bannon Street)</p> <p>Section 17: Street W & Richards Boulevard East of 16th Street (similar)</p> <p>Section 18: Richards Boulevard (N. 12th - N. 16th)</p> <p>Section 19: North 7th Street (North B Street to Richards Boulevard)</p> <p>Section 20: Richards Boulevard (at Township 9 Transit Station)</p> <p>Section 21: Richards Boulevard (Sequoia Pacific to Bercut Street)</p> <p>Section 22: Sequoia Pacific Boulevard (at transit station)</p> <p>Section 23: Richards Boulevard (North 7th Street to North 12th Street)</p> <p>Section 24: Richards Boulevard (Sequoia Pacific to Judah Street)</p> |
|---|---|

For large format drawings, refer to the River District Specific Plan

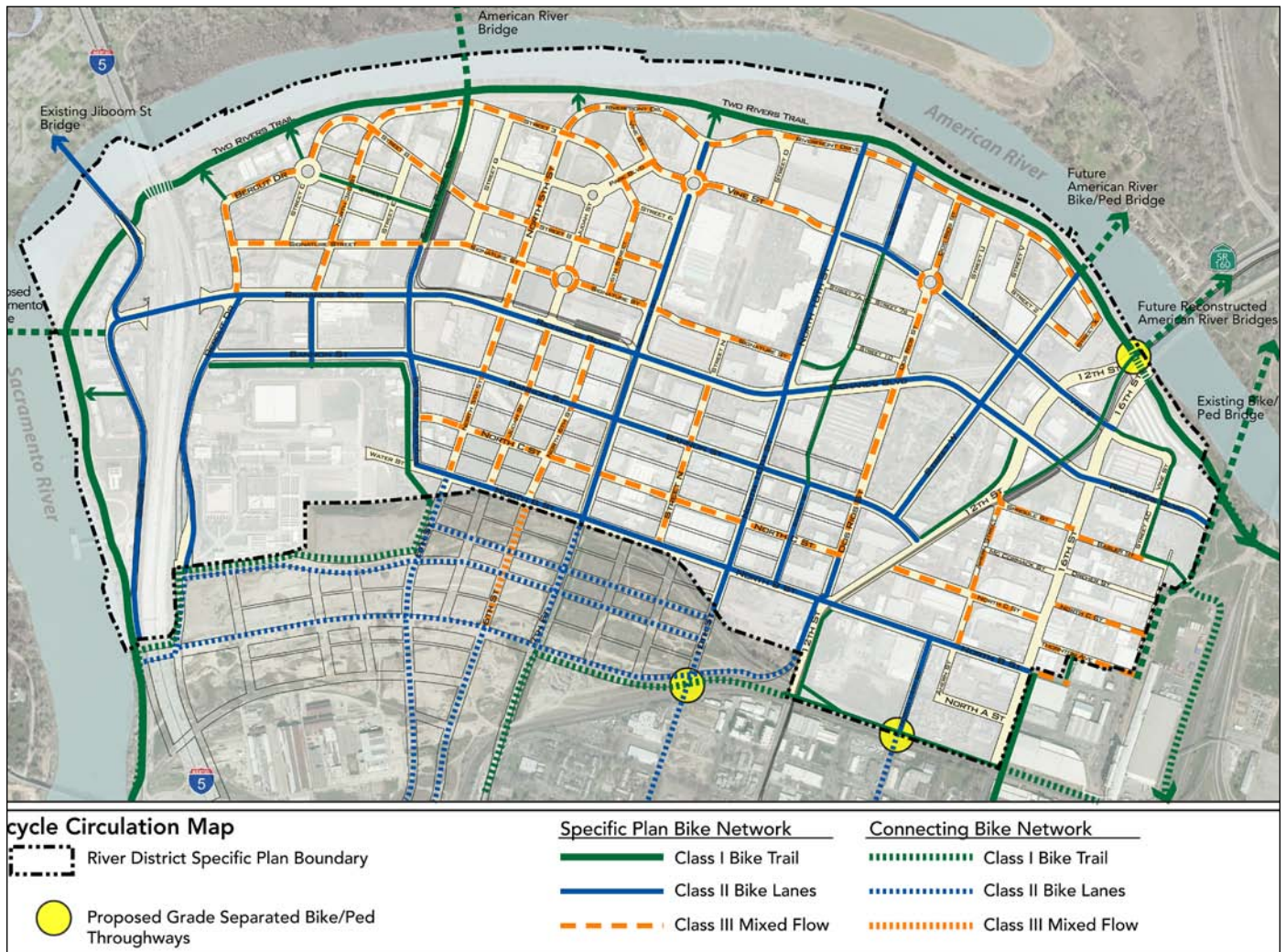


Figure 3.27. Bicycle circulation map for River District Specific Plan Area.

C. River District Streets

Pedestrian Priority Streets

Pedestrian Priority Streets are characterized by a predominant Pedestrian Realm or where the Travelway is designed to slow vehicular movement.

Section 1: 40 Foot Mews (Streets 7a, 7b, Street 10)

The narrowest street section in the district, the 40 Foot Mews is a non-through street for vehicular access to properties fronting the street. The Mews are designed to terminate at the Boulevard with removable bollards to allow service and emergency vehicle access a throughway to the Bicycle Boulevard. These linkages service the adjacent buildings but should be considered opportunities to create unique places in the District (See Figure 3.28).

This street section type offers many opportunities to create non-vehicular linkages from Dos Rios Street into the Bicycle Boulevard with an eclectic blend of circulation alternatives and street program and vending opportunities.

Material choices of street pavers or will enhance the pedestrian nature of the street.

Section 2: Ahern Street

Ahern Street is the principle north-south street in the North 16th Street Area and provides a slow traffic environment in contrast with the heavily impacted North 16th Street. The existing narrow and un-improved rights-of-way are to be modestly expanded to accommodate minimal sidewalk facilities and a single side parking aisle. With narrow travel lanes, on-street parking and mixed flow bicycle use allowed, Ahern will be a slow speed street for vehicles, servicing local businesses to and from North 12th Street.

Material choices of street pavers or will enhance the pedestrian nature of the street and compliment the adjacent historic district.

Section 3: Bicycle Boulevard (Street 5)

The Bicycle Boulevard will be a unique linear space in the Central City extending connection to the American



Figure 3.28. Example of limited vehicular street with bike lanes which could exemplify the travelway and pedestrian way separation of the 40 foot Mews street section. Note the small cafe plaza on the left.

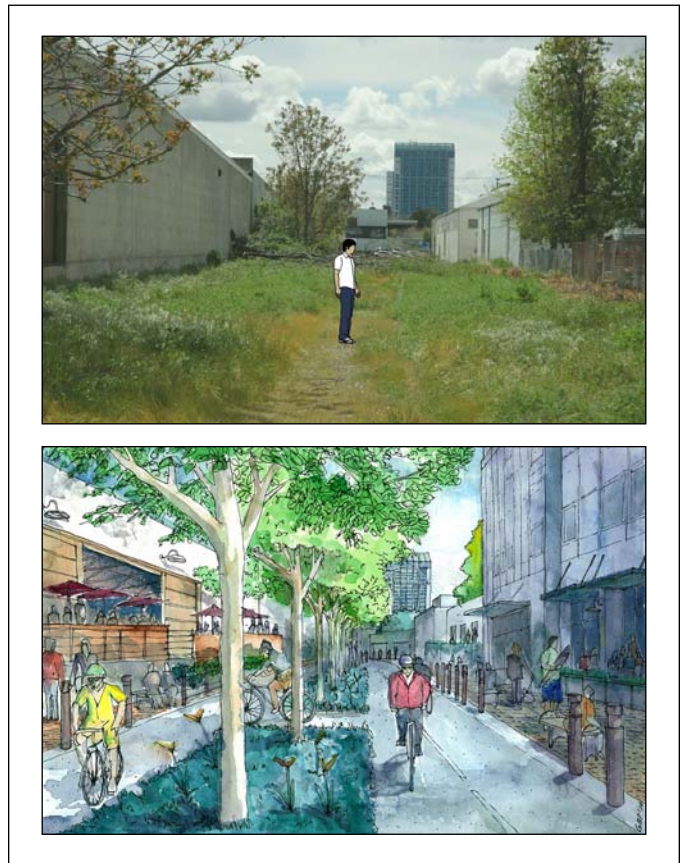


Figure 3.29. Bicycle Boulevard. Top view of existing abandoned rail spur, bottom rendering of boulevard concept.

River. With connection to North 10th Street which will extend south through the Railyards and into Downtown passing the civic core, K Street, R Street and terminating at Broadway, the Bicycle Boulevard will act as a unique gateway to the Two Rivers bike trail. With its alignment inbound one block from two major streets accessible from the Mews, development of an interior focused streetscape fronting the boulevard will create an urban destination for retail and shops in a non-vehicular environment.

Material choices of street pavers for the pedestrian pathway with recycled rubber-tire asphalt for the bikeway will help define and demarcate the bikeway from the pedestrian.

Section 4: Riverfront Drive

Township 9 will implement the first phase of Riverfront Drive along the levee. The cross section for the Riverfront Drive in the Township 9 development is designed with a ground plane raised to meet the height of the levee (See Figure 3.30). Township 9’s large development area will utilize on-site fill to create the extensive berm to the levee crown. Other development along the river levee may not be able to feasibly berm to the levee crest, but whenever possible, this strategy should be encouraged.

The RDSP extends Riverfront Drive westerly and easterly along the levee. The cross-sections for these new areas does not make elevation of the Drive mandatory. Nevertheless, the raising of the road is encouraged where feasible. Designers shall note that where Riverfront Drive is implemented at existing grade, without fill, particular restrictions will apply and requirements should be verified for current standards from all governing agencies.

Section 5: Standard 2-lane Local Street

The standard local street section in the River District is 68 feet wide with two vehicular lanes and two aisles of parking. Standard 16 foot sidewalks flank the limited travel-way providing ample pedestrian movement along these neighborhood streets.



Figure 3.30. Berming behind levee at Township 9, allows parking garages built on existing grade with new fill graded to surround parking with elevated ground plane.



Figure 3.31. Riverfront Drive is a prime festival street with its proximity to the river encouraging the staging of special events and street closures for skating and other activities.

Section 6: Sequoia Promenade (Street 9)

The Sequoia Promenade is designed as a pedestrian and bike only street with a four inch curb which defines a travelway in the center for limited vehicular occupancy and as the primary route for cyclists and pedi-cabs. The generous sidewalk areas cater to street cafes and other street furnishings while providing groups of pedestrians ample space to stroll without constraint.

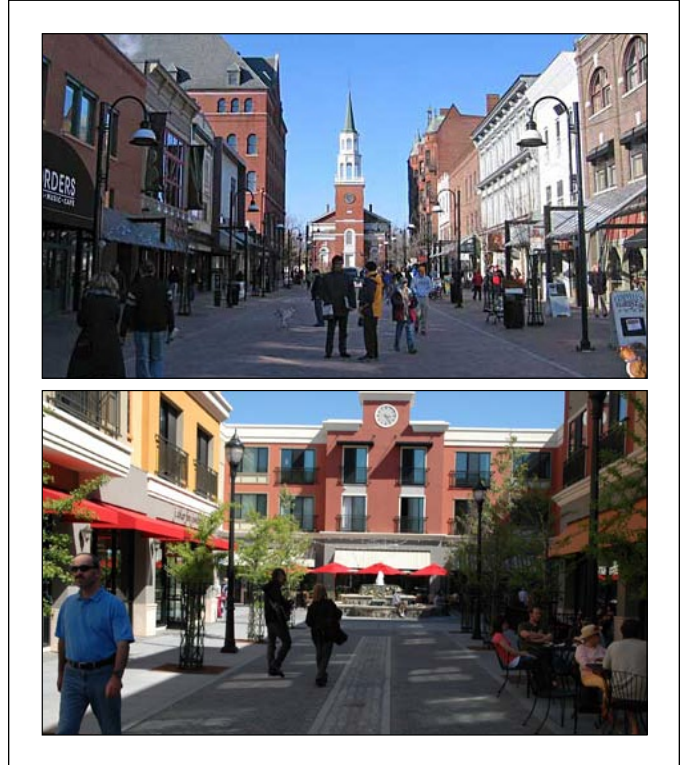
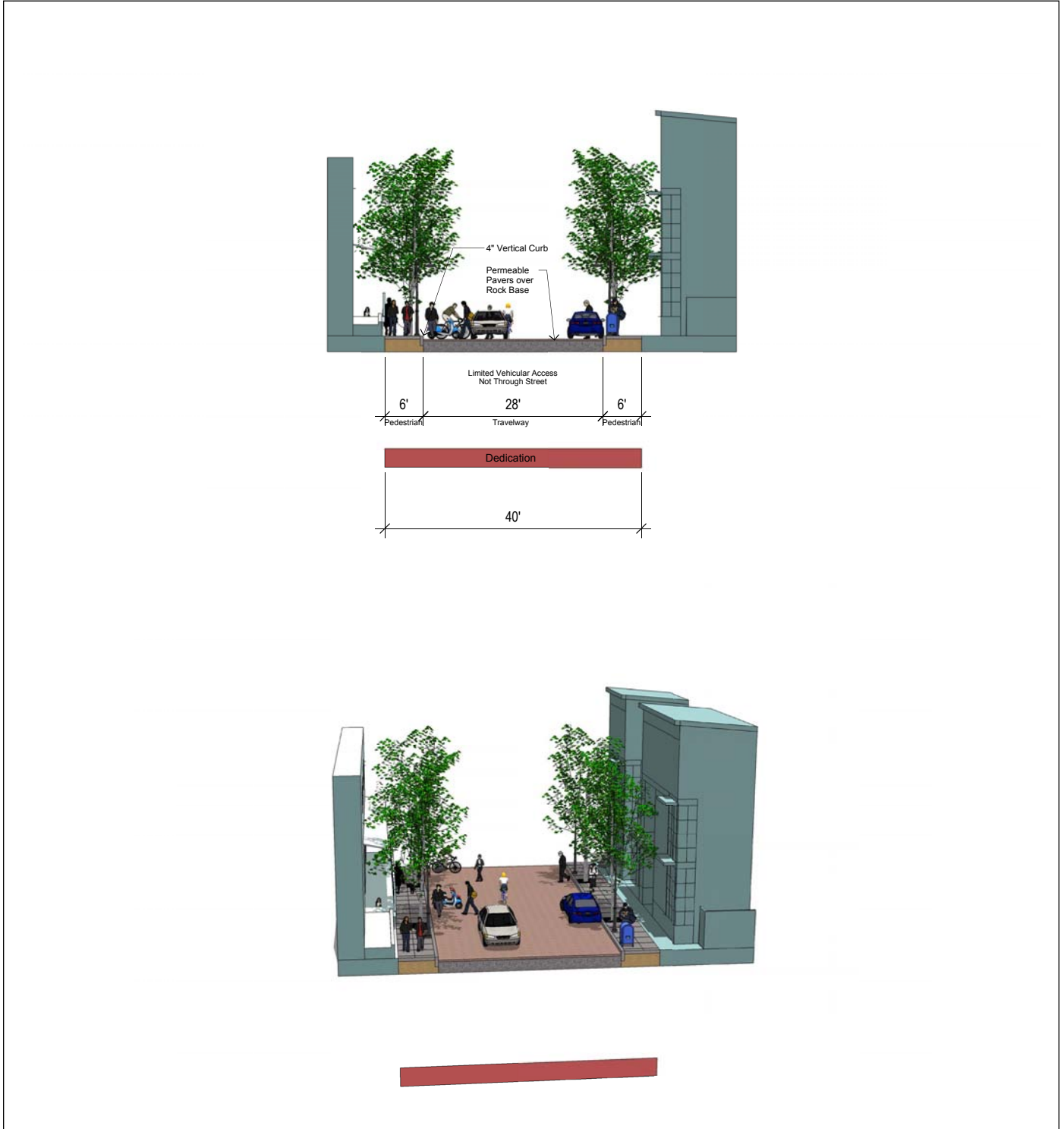


Figure 3.32. Pedestrian Streets, old and new. Top: Burlington, Vermont. Bottom: Petaluma, California.

C. River District Streets

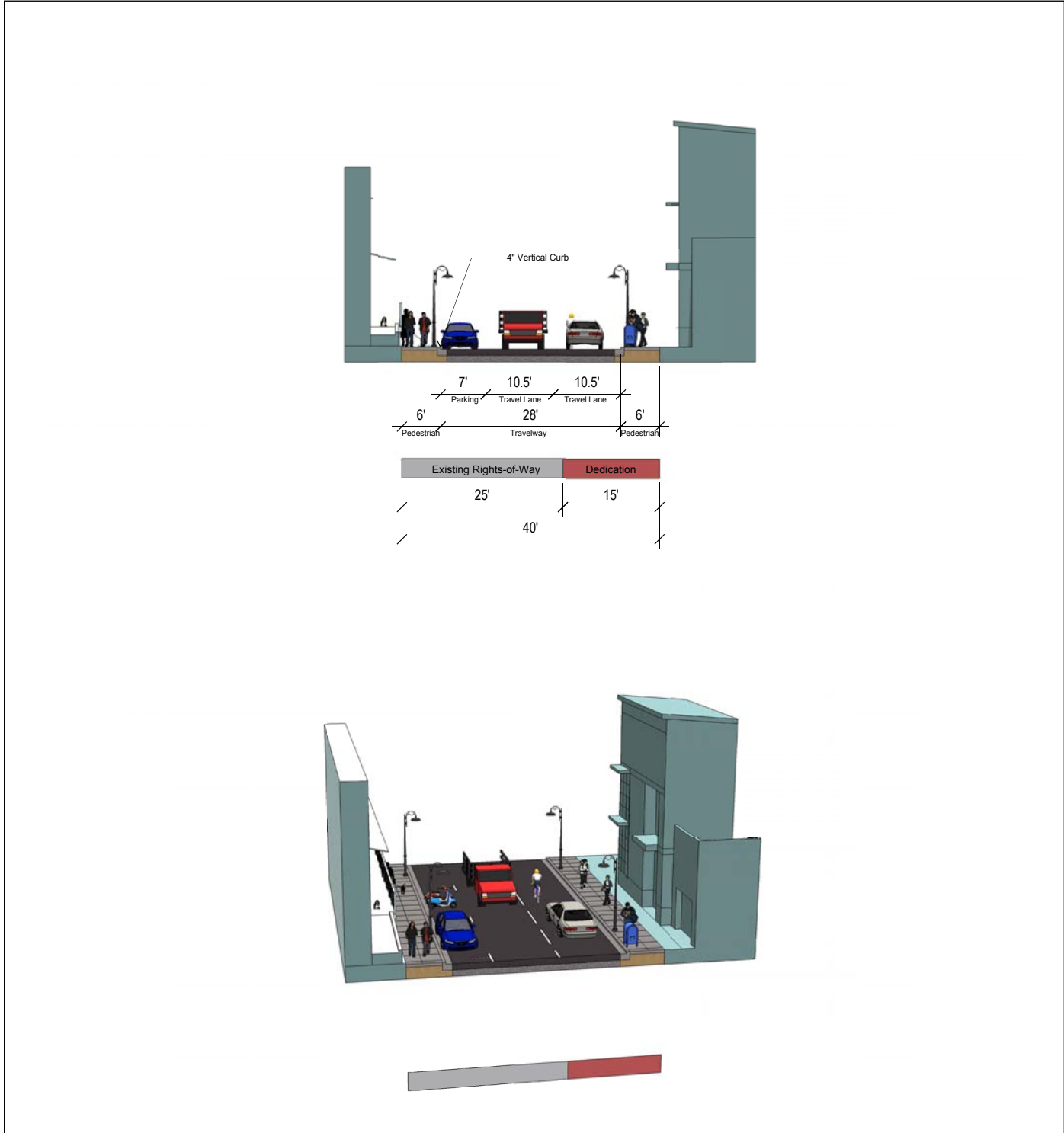


Section 1: 40 Foot Mews (Streets 7a, 7b, Street 10)

Looking West

For large format drawings, refer to the River District Specific Plan

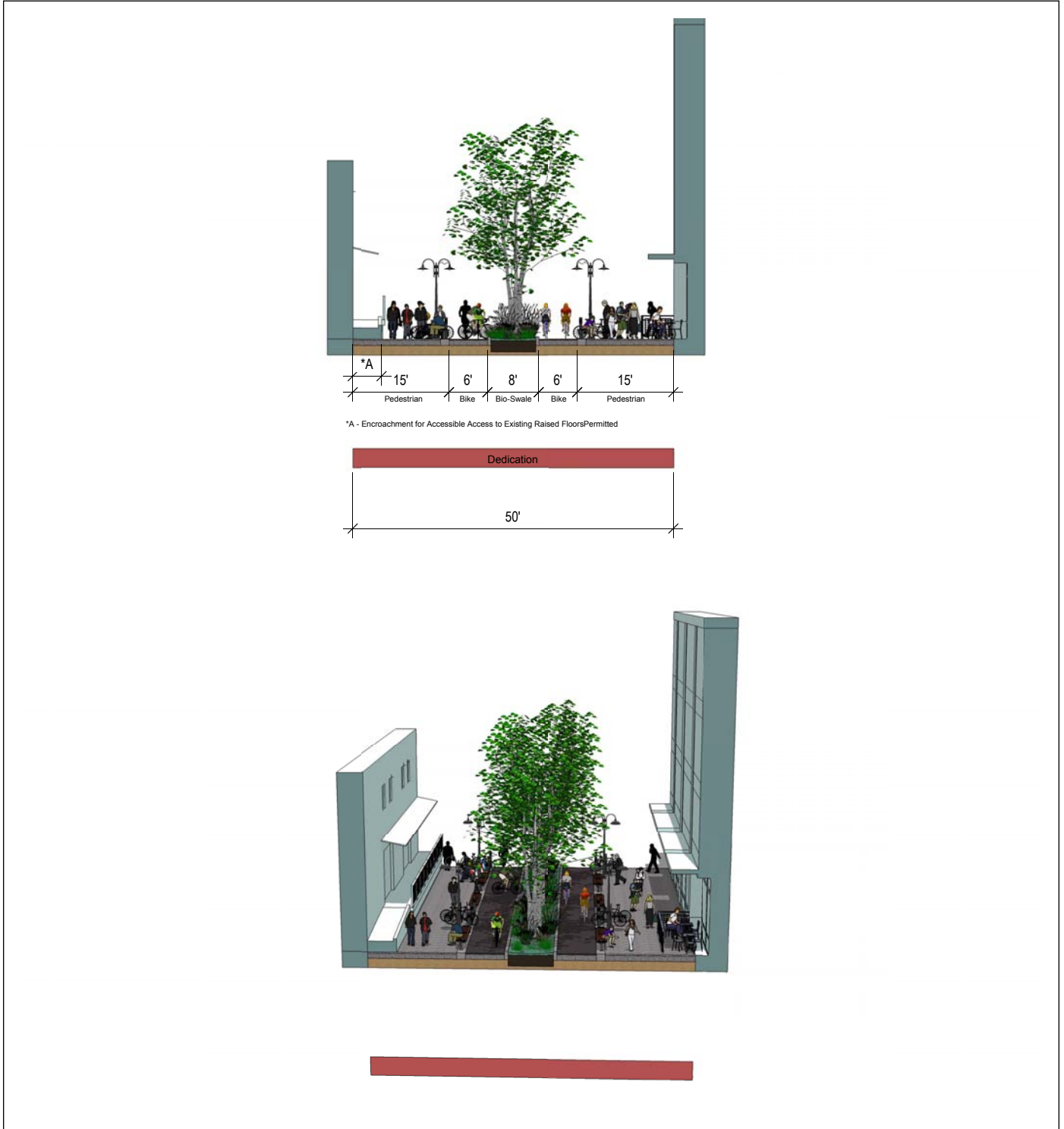
C. River District Streets



Section 2: Ahern Street
Looking North

For large format drawings, refer to the River District Specific Plan

C. River District Streets

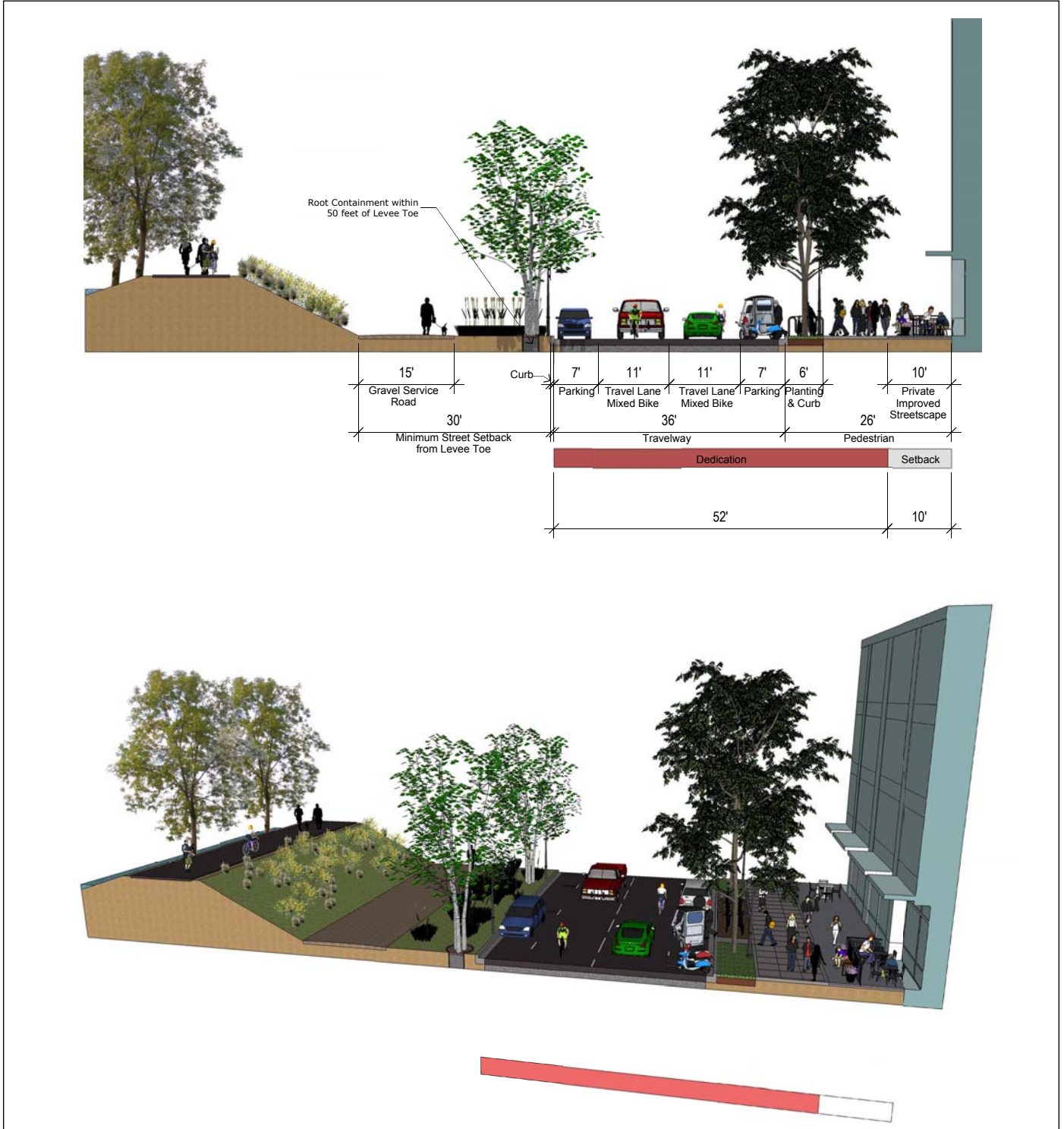


Section 3: Bicycle Boulevard (Street S)

Looking South

For large format drawings, refer to the River District Specific Plan

C. River District Streets

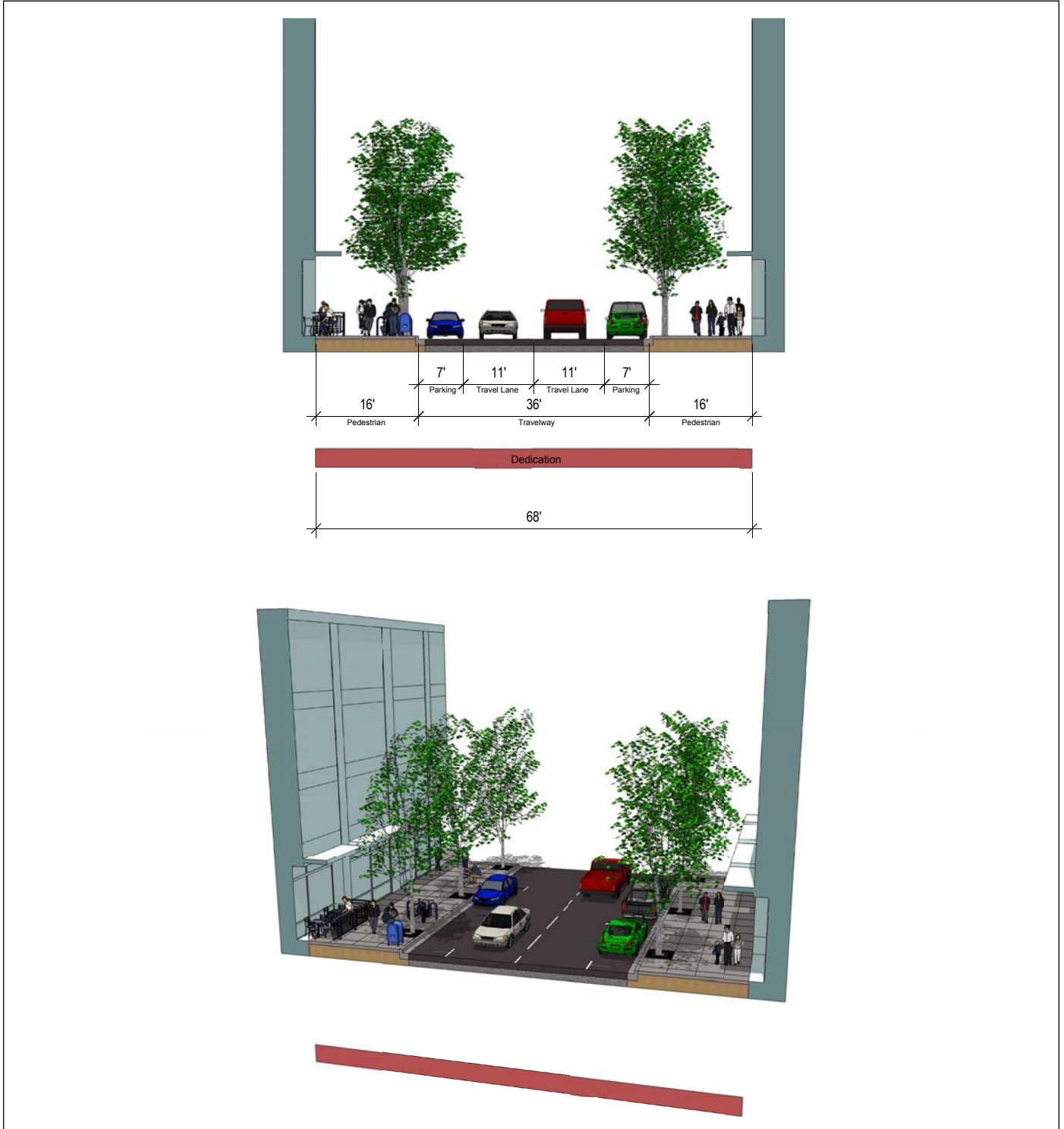


Section 4: Riverfront Drive

Looking East

For large format drawings, refer to the River District Specific Plan

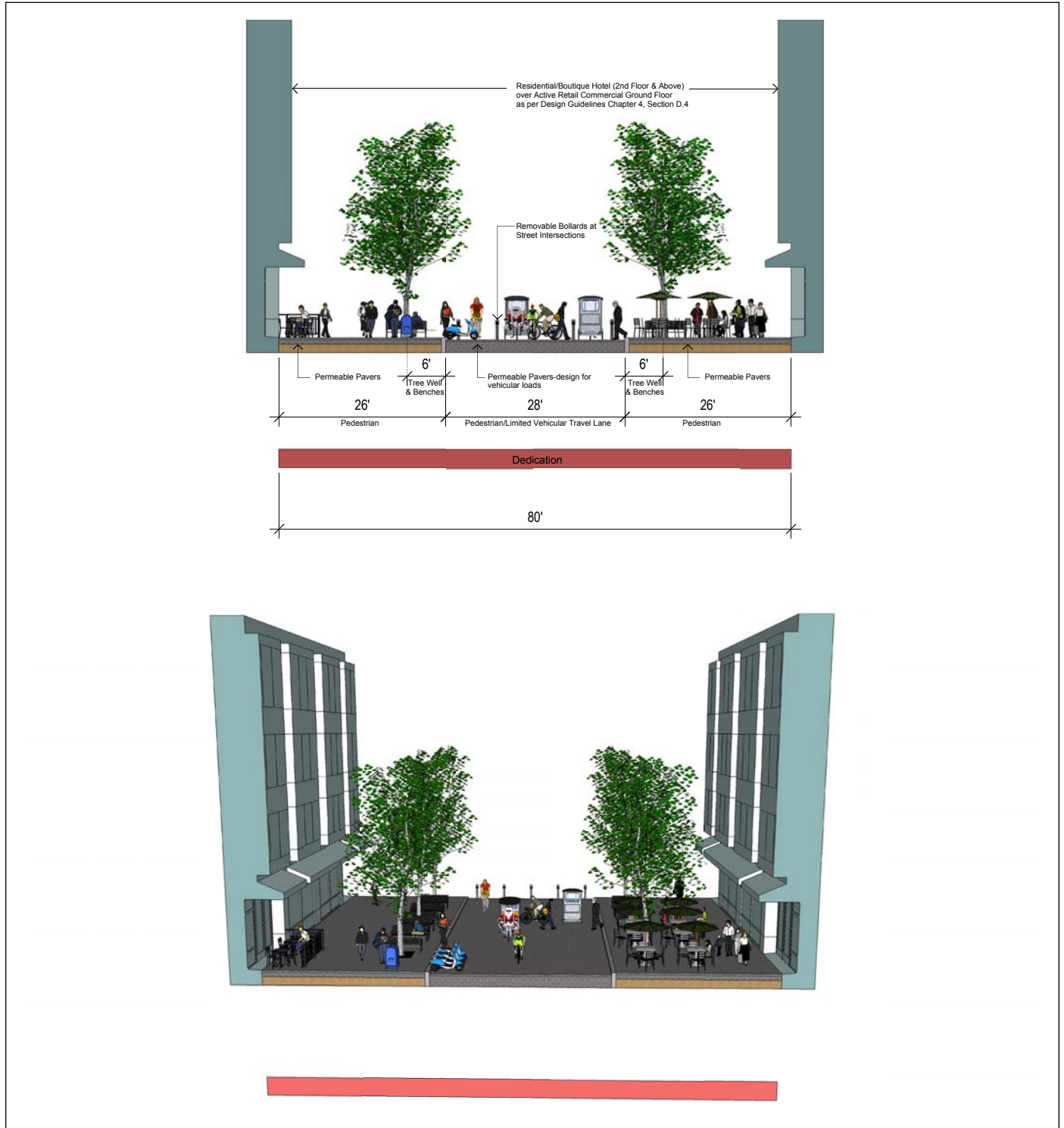
C. River District Streets



Section 5: Standard 2-lane Local Street
Non-Directional

For large format drawings, refer to the River District Specific Plan

C. River District Streets



Section 6: Sequoia Promenade (Street 9)

Non-Directional

For large format drawings, refer to the River District Specific Plan

C. River District Streets

Balanced Streets

Balanced Streets are typically the standard 80 feet wide rights-of-way typical of the historic street grid. They provide pedestrian sidewalks from 12 to 16 feet wide with parking and bicycle lanes as a rule. They provide a balance of travelway requirements for moving modest traffic volumes while providing a comfortable non-auto mobility network.

Section 7: North 10th Street (north of Richards Boulevard)

This section of North 10th Street largely services both the State Lottery site on its western edge, and scattered large single story warehouses on the east with average front setbacks of 25 feet that are used for vehicle parking and commercial loading. As the area transitions and more infill projects build to the front property line, a need for on-street parking will require improvements in the public way, Back-in diagonal parking on the east side will maximize street parking and provide visibility to cyclists in the bike lane.

Section 8: North C Street (Ahern to 16th Street)

North C Street, west of Ahern, is within the North 16th Street Historic District and is characterized by elevated loading docks and sparse tree canopies. Improvements proposed to the Public Realm shall in this section shall need to consider the defining features of the district before making specific recommendations, including the placement of trees.

Section 9: Dos Rios, North 10th Street (south of Richards), Vine Street

This street section will front a variety of uses, some more defined and others transitional. As implemented for Dos Rios Street, the center median is preferred along the frontage of the Twin Rivers Community to enhance the residential character of the street and can serve as a bioswale LID for runoff collection. Where this section is implemented at North 10th Street and at Vine Street, the center median may be in conflict with truck movements servicing loading areas.



Figure 3.33. The Public Realm and Private Realm blend together at the gutter line along the east side of North 10th Street. Re-zoning of properties in this area allows buildings to build to the front property line which will require street improvements to accommodate additional parking demand.



Figure 3.34. North C Street, west of Ahern, is within the North 16th Street Historic District and is characterized by elevated loading docks and sparse tree canopies.



Figure 3.35. Active warehouse facilities may conflict with center median improvements for Street Section 9, requiring phased improvements or the elimination of the median, depending on the needs of the surrounding uses.

C. River District Streets

Section 10: North 12th Street (Vine Street to Sproule Street)

North 12th Street is a one-way, multi-lane street entering the River District and the along the alignment of State Route 160 which has become a Sacramento Street upon entering the Central City. The view of Downtown from this vantage point is dramatic, and opportunities to signal a gateway into the River District and Central City should be implemented.

The River District Specific Plan calls for the realignment of North 12th and Richards Boulevard to spread the heavy traffic load into a couplet of streets and avoid the congestion of the existing intersection. In this section of North 12th Street can accommodate standard 16 foot sidewalks along the new blocks created by this realignment, however, the traffic load prohibit bike lanes and street parking in this section.

Section 11: North B Street (North 10th Street to North 16th Street)

North B Street between North 10th Street and North 16th Street is a primary east-west artery with long block fronts and few intersections. The 80 foot rights-of-way must accommodate four traffic lanes and allow for bike lanes to connect through through the southern edge of the district. Many older warehouses exist in this area and encroachments of loading docks may occur. It is desirable to maintain loading docks and provide accessible means to buildings in the historic district. Therefore, the 13 foot sidewalks outlined in this section may have existing encroachments that will narrow the pedestrian way. Where sidewalks are reduced, a minimum of 6 foot standard clearance shall be maintained.

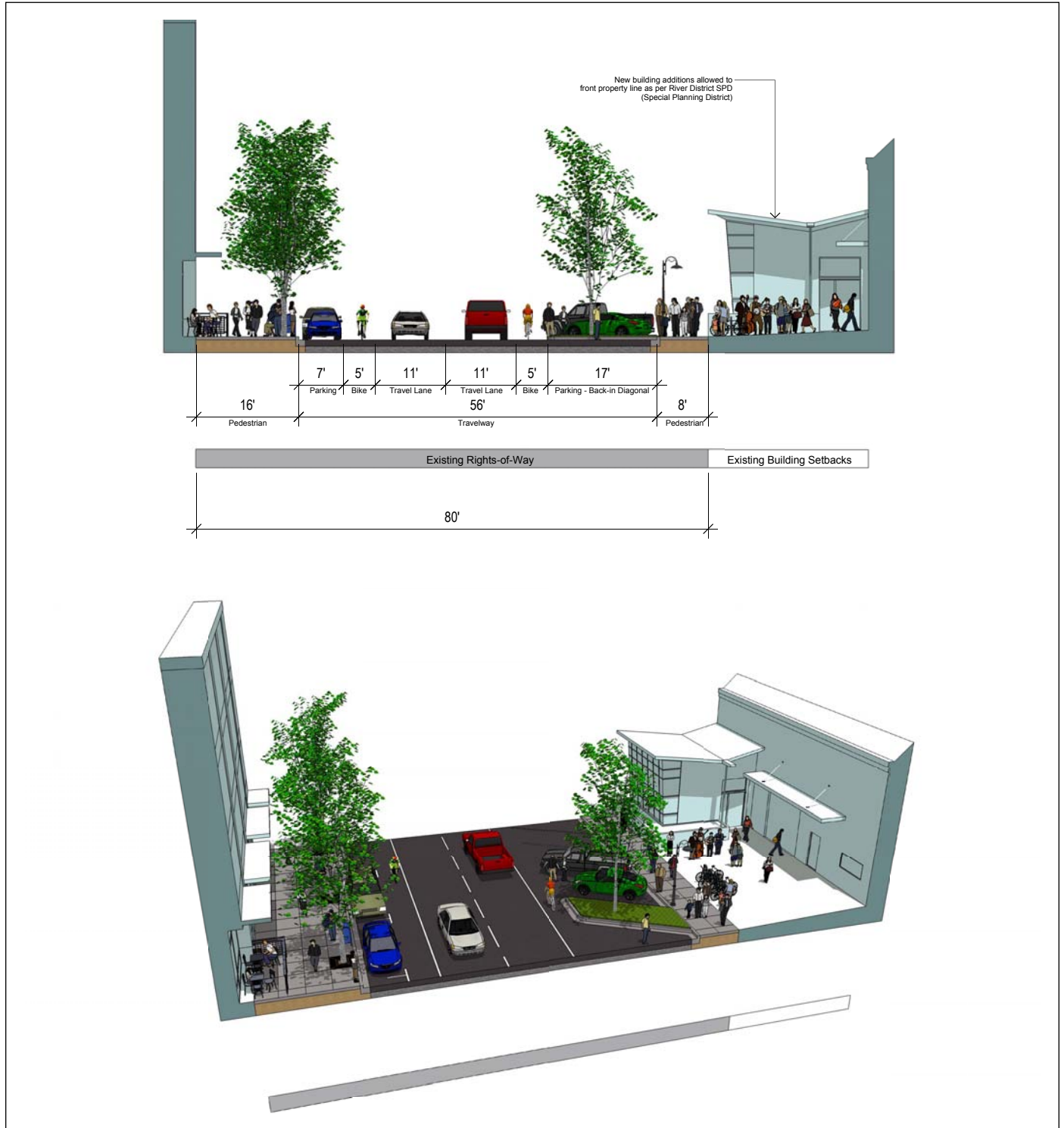


Figure 3.36. Taken from the Highway 160 bridge, this photo shows the dramatic skyline view to downtown. The realignment of North 12th Street will improve vehicular and pedestrian movement in this area.



Figure 3.37. North B Street, east of Ahern, showing existing loading docks which may encroach into the public way. The brick facade of the General Produce building is within the North 16th Street Historic District.

C. River District Streets



Section 7: North 10th Street (north of Richards Boulevard)

Looking North

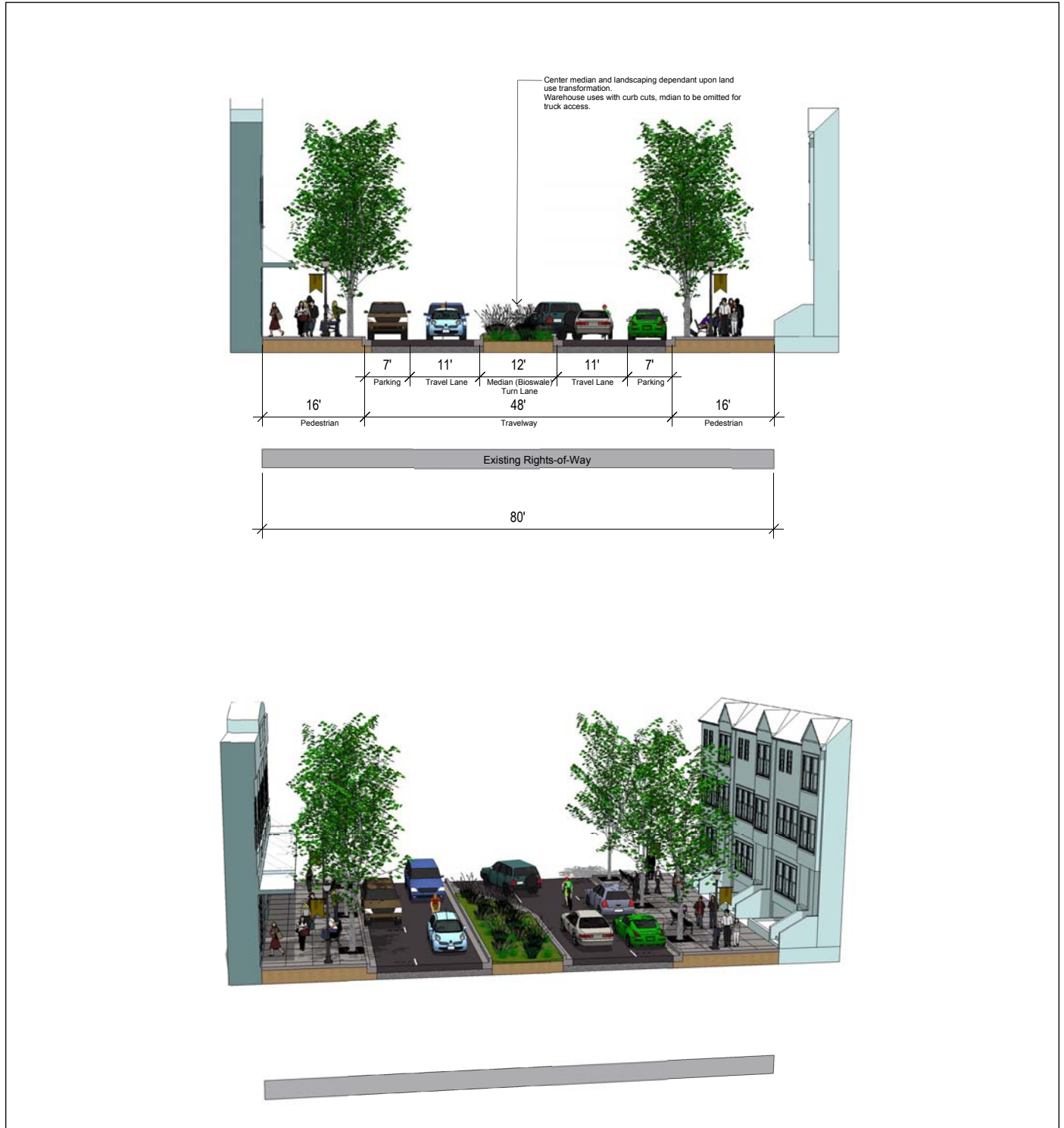
For large format drawings, refer to the River District Specific Plan

C. River District Streets



For large format drawings, refer to the River District Specific Plan

C. River District Streets



Section 9: Dos Rios, North 10th Street (south of Richards), Vine Street

Looking North

For large format drawings, refer to the River District Specific Plan

C. River District Streets



Section 10: 12th Street (Vine Street to Sproule Street)
Non-Directional

For large format drawings, refer to the River District Specific Plan

C. River District Streets



Section 11: North B Street (10th Street to 16th Street)

Looking East

For large format drawings, refer to the River District Specific Plan

Vehicle Intensive Streets

Vehicle Intensive Streets have rights-of-way 80 feet and wider, carrying large volumes of traffic where conditions and clearances require either the elimination of transportation modes, or the acquisition of rights-of-way to accommodate multiple facilities and thereby adhere to the Guiding Principles of the Specific Plan and Urban Design Goals by providing a balance between vehicular and pedestrian movement.

Section 12: North 12th Street (south of Sproule Street)

This section of North 12th Street will remain in its present alignment. Light rail is in mixed flow lanes on the east and, without station stops, trains travel at vehicular speed limits in this area. Pedestrian facilities between the rail tracks and existing building fronts are severely impacted by utility infrastructure and utility boxes. Relocation of facilities in this section would improve pedestrian mobility.

Section 13: North 16th Street (North B Street to Sproule Street)

North 16th Street was once a small corridor of street fronting businesses along the former State Highway. Few walk-in businesses survive in this area with poor parking facilities and uninviting streetscape. Reconstruction of the pedestrian sidewalks and drainage facilities will enhance the streetscape for pedestrian-oriented retail. Critical to the success of walk-in business will be the implementation of parallel street parking. New street trees with smaller canopies appropriate for the sidewalk, installed with tree grates, will benefit the pedestrian environment.

Section 14: North B Street (Bannon St to North 10th St)

As the westerly section of North B Street is predicted to carry robust traffic volumes. As a street that is anticipated to see highrise residential development flanking both sides of North B Street, the street section will require additional width to provide adequate sidewalk widths for pedestrian comfort. Improvements along the south side of North B Street will require the removal of the existing levee



Figure 3.38. Many impairments are presented to the pedestrian on the east side of North 12th Street.



Figure 3.39. Light rail train passes through the future Dos Rios Station area.

embankment that encroaches into North B Street and prohibits north-south streets connecting to North B Street from the Railyards.

Section 15: *Bannon Street (Sequoia Pacific Boulevard to 12th Street)*

Bannon Street is predicted to convey moderate to high volumes of east-west traffic as an alternate route to Richards Boulevard. Zoning in this area can accommodate ground floor retail and the segment between Sequoia Pacific Boulevard and North 7th Street is anticipated to be a local serving retail corridor within the mixture of uses targeted in this 12 block area.

Section 16: *Bannon Street (West of Sequoia Pacific) / Sequoia Pacific Blvd (North B Street to Bannon Street)*

Bannon Street and Sequoia Pacific Boulevard each form the perimeter of a proposed 10-acre park in this area. This 3-lane street section will convey significant traffic volumes in each direction and will also serve pedestrian and bike movement along the park and conveying people to a proposed future bridge across the American River. Each alignment will require additional rights-of-way to provide for bike lanes and sidewalks. Bannon Street in this area could see additional traffic volume and require additional lanes, pending the re-design of the Richards/Interstate 5 interchange.



Figure 3.40. Sidewalks along North 16th Street have uneven surfaces and under-utilized laneways which could be converted to parking uses with the reconstruction of sidewalks.

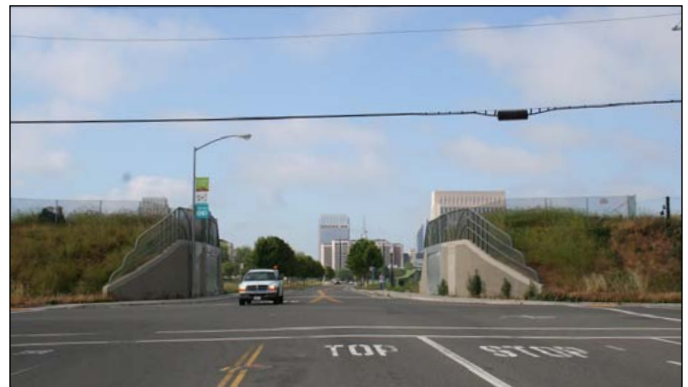
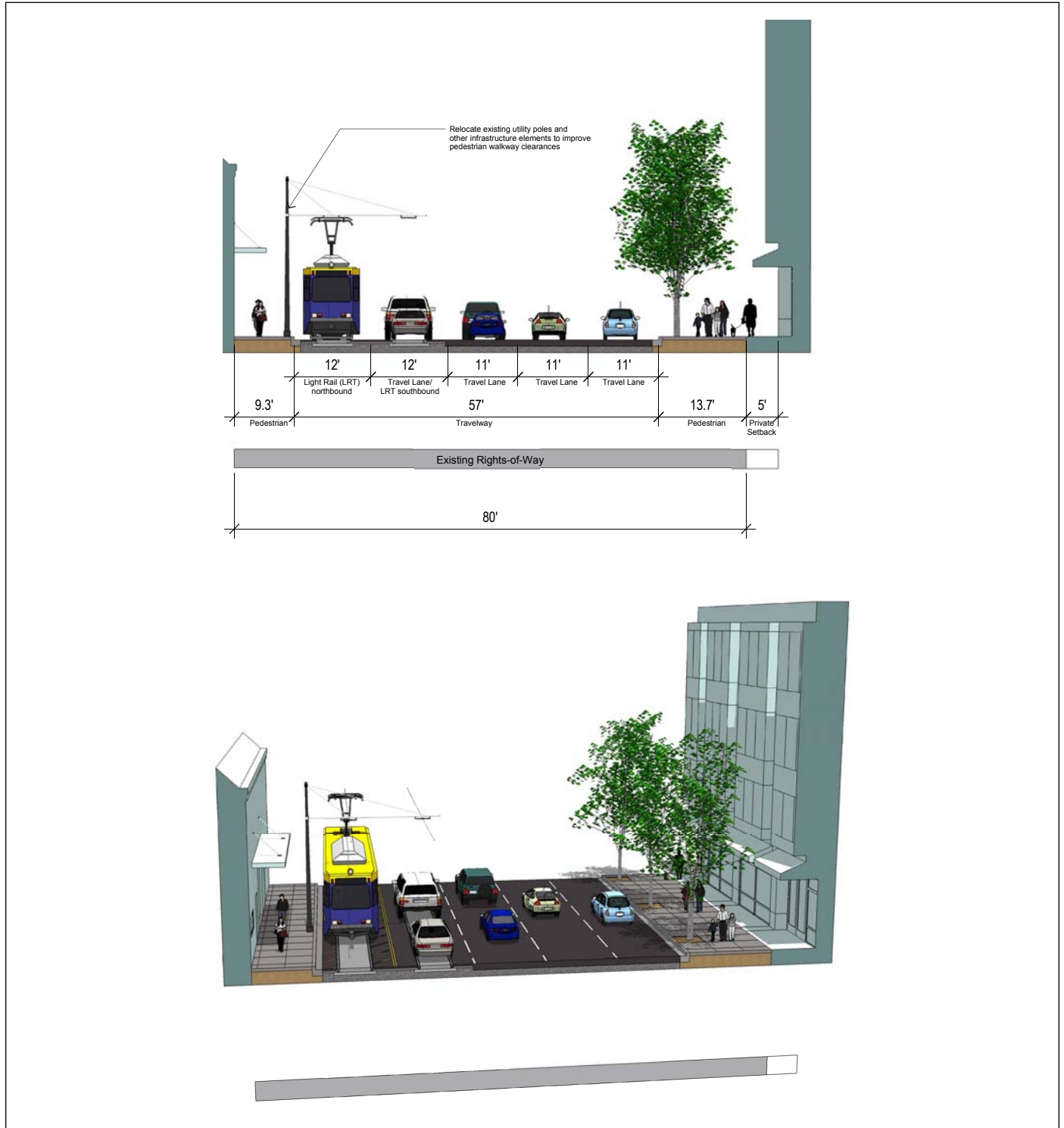


Figure 3.41. The secondary levee as seen from North 7th Street with flood gates installed in the embankment. This levee infrastructure is planned for future replacement with new grading in the Railyards plan area. With the removal of the levee that encroaches into North B Street, multiple north-south streets will connect the Railyards to the River District.

C. River District Streets



Section 12: 12th Street (south of Sproule Street)

Looking South

For large format drawings, refer to the River District Specific Plan

C. River District Streets

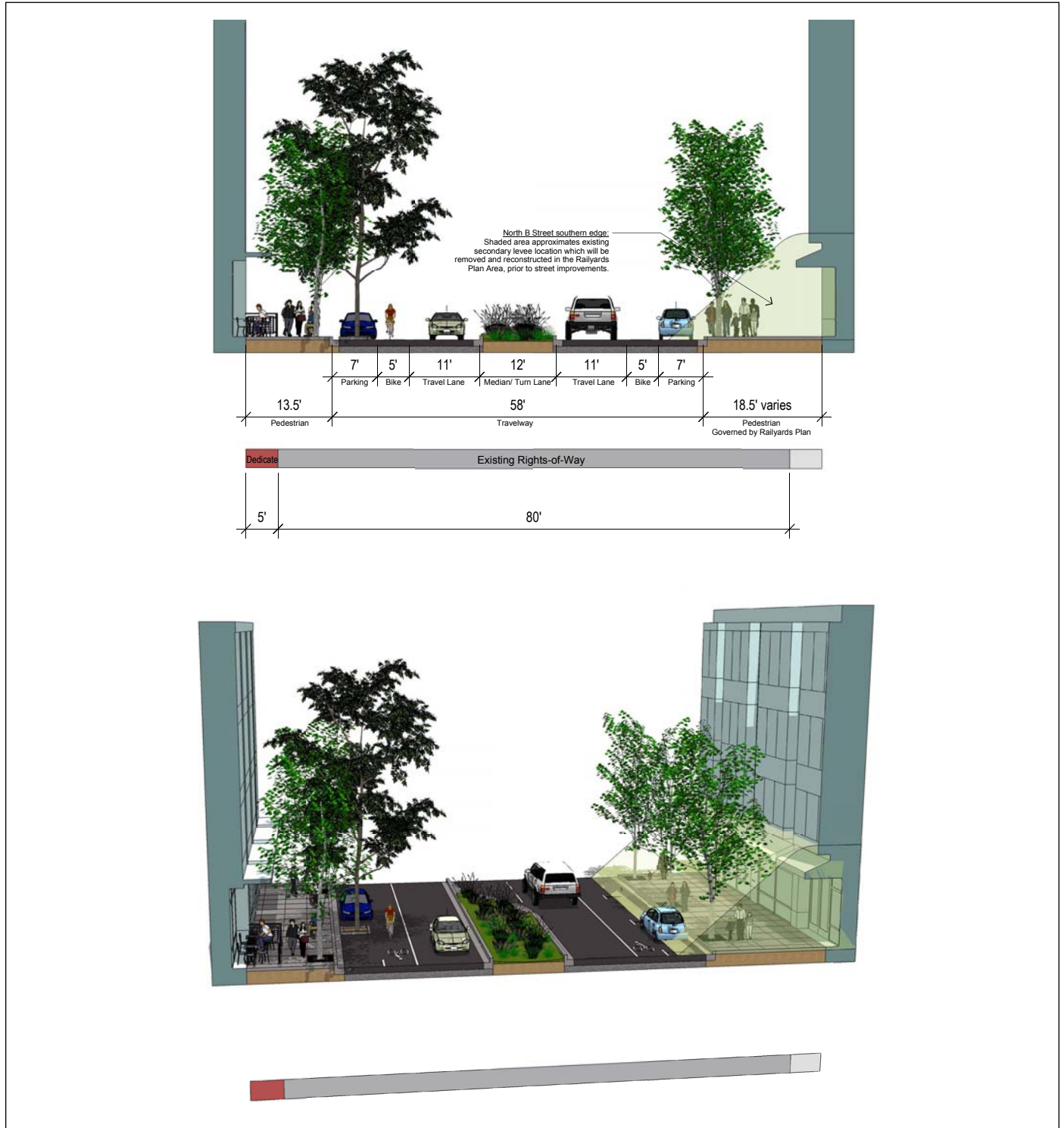


Section 13: 16th Street (North B Street to Sproule Street)

Looking North

For large format drawings, refer to the River District Specific Plan

C. River District Streets

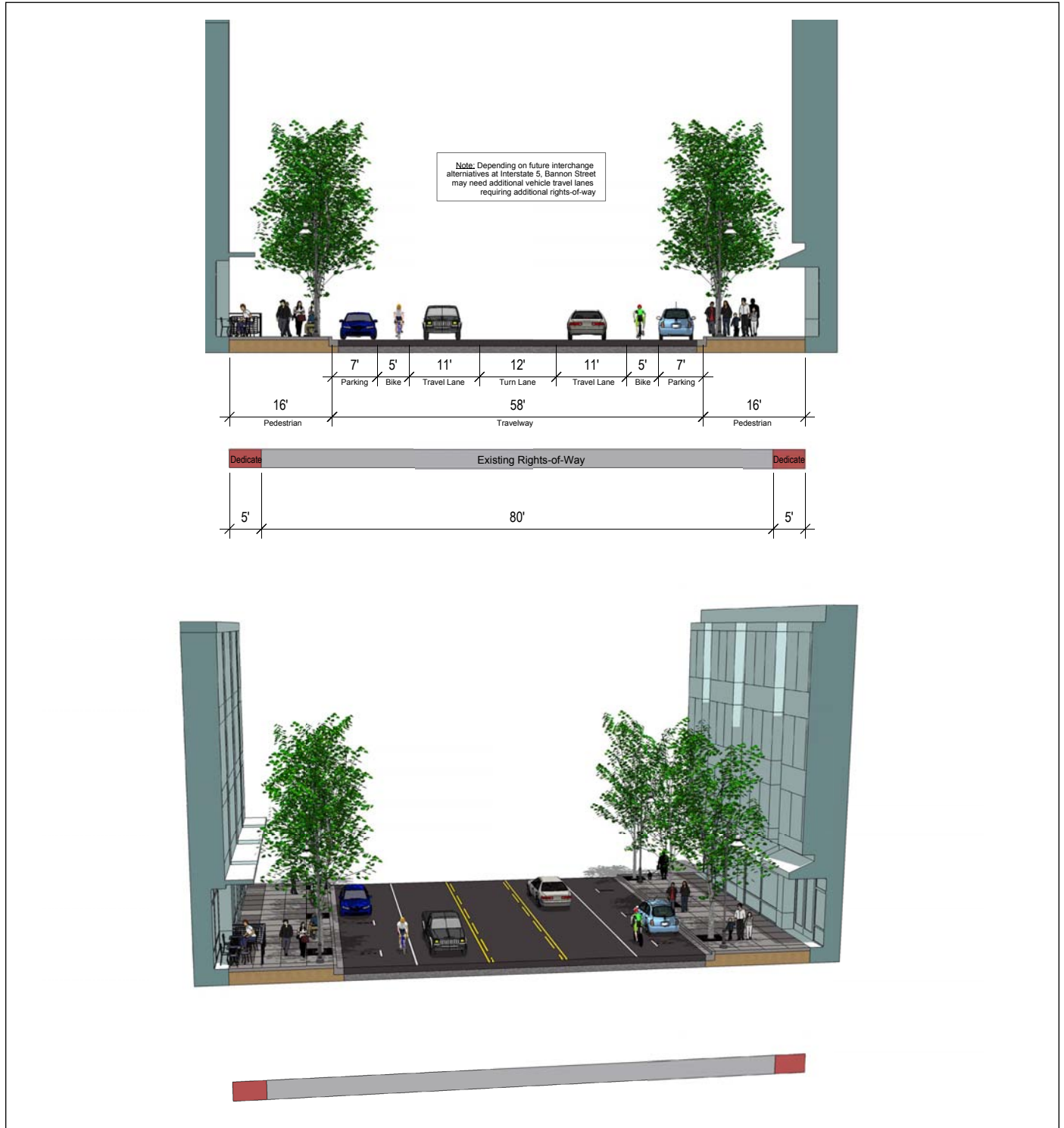


Section 14: North B Street (Bannon St to 10th St)

Looking West at North B Street

For large format drawings, refer to the River District Specific Plan

C. River District Streets

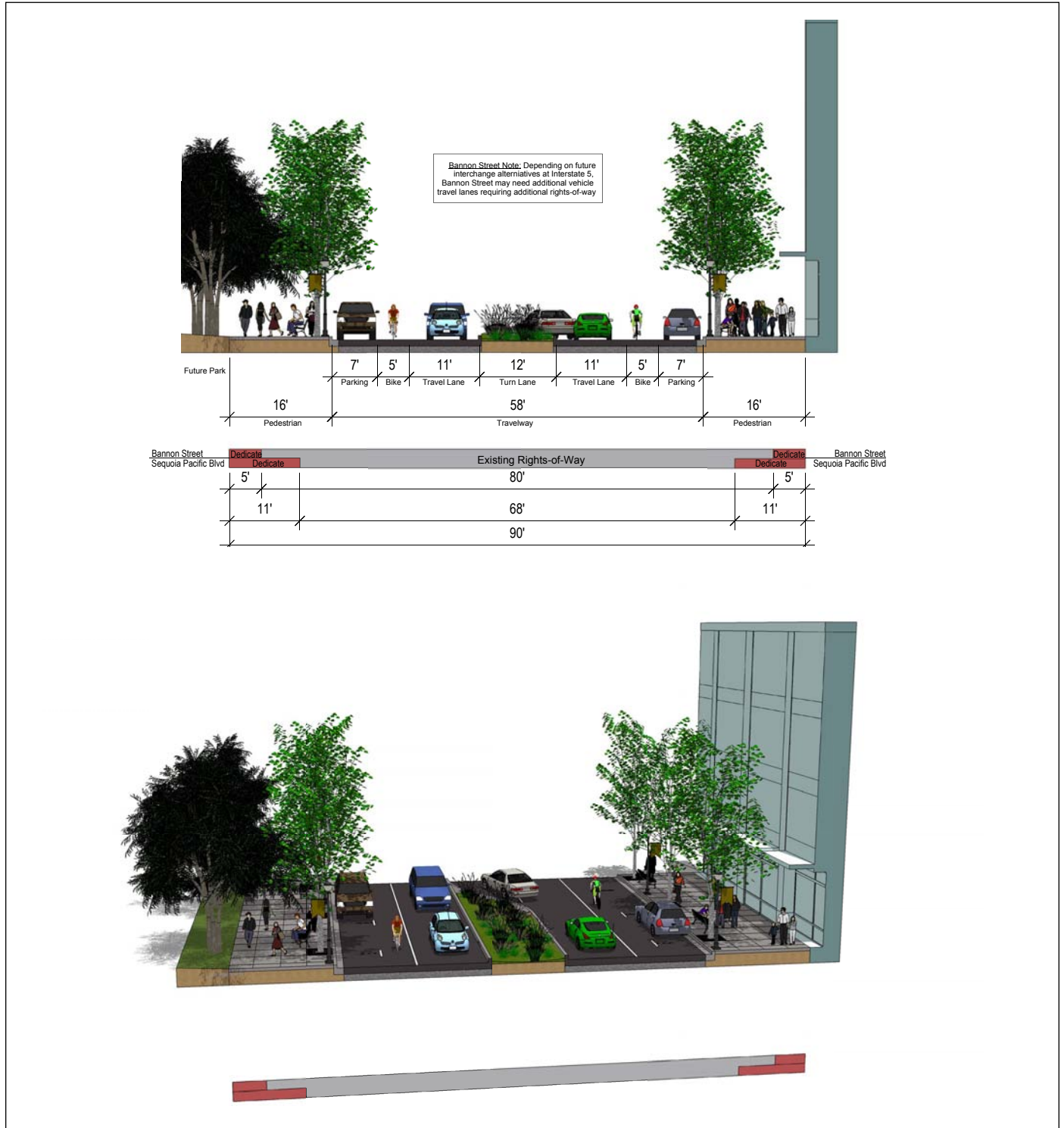


Section 15: Bannon Street (Sequoia Pacific Street to 12th Street)

Non-Directional

For large format drawings, refer to the River District Specific Plan

C. River District Streets



Section 16: Bannon Street (West of Sequoia Pacific) / Sequoia Pacific Blvd (North B Street to Bannon Street)
 Looking West / Looking North For large format drawings, refer to the River District Specific Plan

Greenway Street

Section 17: Street W & Richards Boulevard East of 16th Street (similar)

This street section is designed as a gateway promenade street exhibiting a greenway that filters runoff and provides a central path for joggers and power-walkers. The design of Street W, promenade will be from the future pedestrian/bicycle bridge crossing the American River to a future extension of Bannon Street. The future redevelopment of the Twin Rivers housing community to a more urban housing typology anticipates raised residential row-house units lining the street, set back from the sidewalk with front steps to individual units. This will encourage strong activation and visual presence to the street.

This street section is also planned for the eastern segment of Richards Boulevard and could be extended eastward with future development into the East Industrial Area.



Figure 3.43. The existing low-density Twin Rivers Community will see future redevelopment that replaces the single family and two story townhomes with aggregated units and additional common park space centered on a new promenade street.

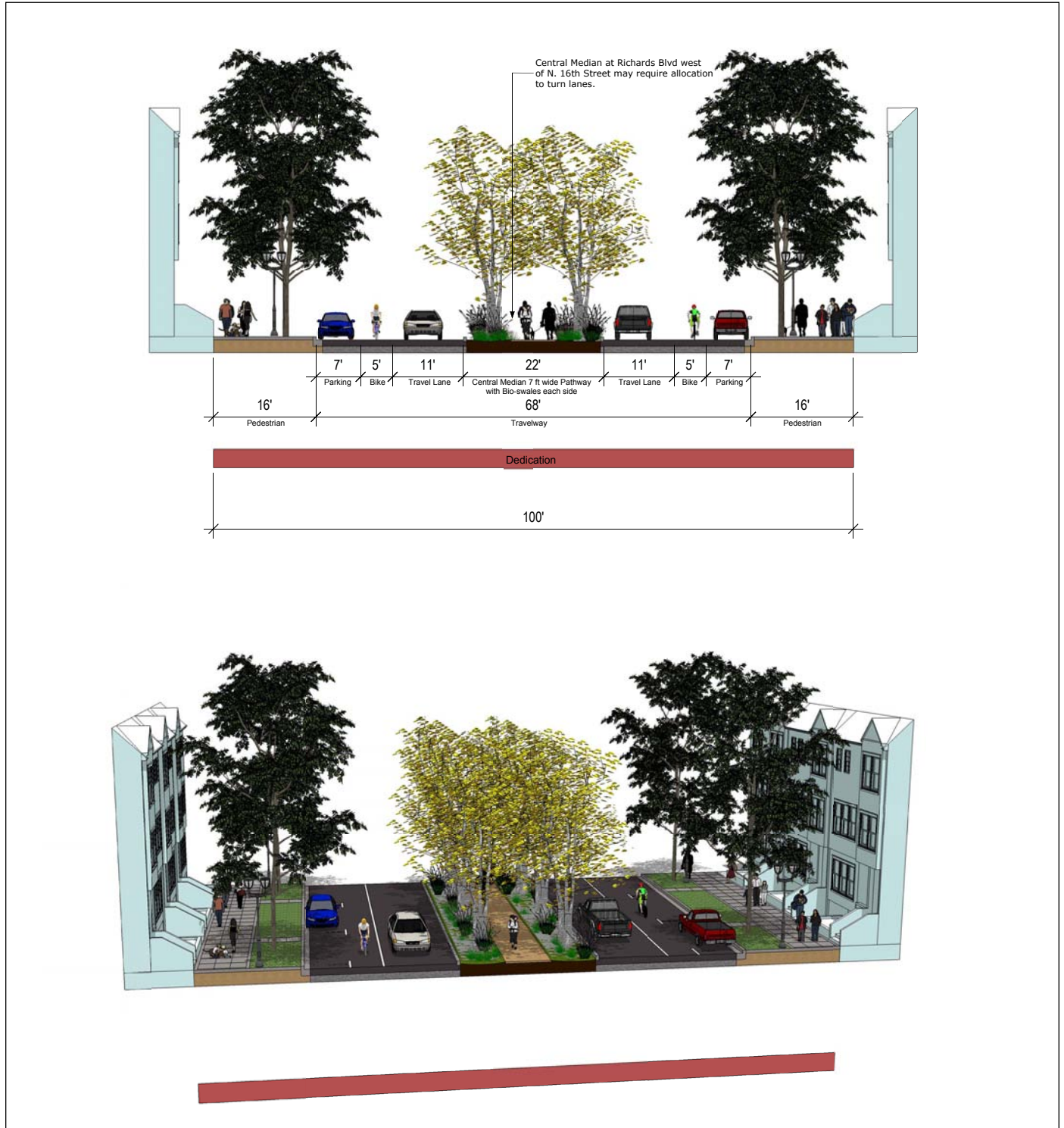


Figure 3.44. Bioswales provide valuable function to filter runoff and mitigate surges of runoff in peak rain events. They also provide aesthetic enhancement to the public way.



Figure 3.42. Top photos illustrate rowhouse type housing with front porches and steps fronting the street. Lower photo example of central median pedestrian promenade in Philadelphia, PA.

C. River District Streets



Section 17: Street W & Richards Boulevard East of 16th Street (similar)

Looking North

For large format drawings, refer to the River District Specific Plan

Transit Integrated Streets

This series of street sections are specific to Richards Boulevard and the segments of North 7th Street between North B Street and Richards Boulevard and Sequoia Pacific Boulevard at the proposed Sequoia Station on the Green Line. Richards Boulevard, as the main east-west conveyor of vehicular traffic through the District, will undergo a transformation from a predominantly single-use roadway to a more complete street for pedestrians, cyclists, and walk-in storefronts. With the future extension of Richards Boulevard east of 16th Street and close to the river, Richards Boulevard becomes a north cross link through the District. Additionally, Richards will see a future connecting line between the Blue Line on 12th Street to the Green Line at 7th and Richards.

Section 18: Richards Boulevard (12th - 16th)

This cross section of Richards Boulevard must accommodate large commute traffic volumes in the transition to Highway 160 between the two one-way couplets that connect Richards Boulevard. City Standard sidewalks of 16 feet for the Central City will provide sufficient width for pedestrian mobility in these segments, however, the intersection requirements will create wide street crossing distances and multiple dedicated turn lanes will be required to transition traffic.

Section 19: North 7th Street (North B Street to Richards Boulevard)

The segment of North 7th Street in this document has had travelway improvements put in place for light rail facilities and bike lanes; however, subsequent implementation of sidewalk improvements will require additional rights-of-way to accommodate adequate sidewalk widths. Where possible, central landscape medians are encouraged.

Section 20: Richards Boulevard (at Township 9 Transit Station)

Sited between North 5th Street and Judah Street, this street segment will comprise a multitude of transit modes and facilities. Flanking the north side of Richards Blvd, the Regional Transit Township 9 light rail station will reserve a



Figure 3.45. The Township 9 Station on the north side of Richards Boulevard will accommodate drop-off and pick-up in a turnout lane at the center of the station (Vrilakas Architects).

C. River District Streets

drop-off lane for passengers to the station along with bike lanes on both sides of the boulevard.

The south side of Richards Boulevard improvements will implement parallel parking and bike lanes with sidewalks scaled for pedestrian retail and support service pedestrian needs.

The central median shall be designed for water quality filtration media and planted with high-crown trees. Turn pockets will be kept to minimum lengths in order to maximize the median lengths.

Section 21: Richards Boulevard (Sequoia Pacific to Bercut Street)

The segment between Richards Boulevard interchange and Sequoia Pacific is subject to the anticipated roadway improvements for the interchange at Interstate 5 to accommodate future needs. The intention is to maximize pedestrian connectivity through the interchange to connect pedestrians and cyclists in the Jibboom Area with improved sidewalks and lighting and Class II bike lanes. A minimum of seven lanes are planned for this segment, requiring the consideration of a pedestrian refuge island in the central median when improvements are designed.

Section 22: Sequoia Pacific Boulevard (at transit station)

This segment of Sequoia Pacific Boulevard is designed in anticipation of a future multimodal bridge spanning the American River as modeled in the SACOG (Sacramento Area Council of Governments) Metropolitan Transportation Plan 2035, adopted in 2008. This street section contains a 400 foot long transit station situated between two flanking streets. The station is designed for outboard boarding where one platform is contiguous with the public sidewalk and the west platform is screened from the travelway with pedestrian connections at each end and from a midway axial alignment with the Sequoia Promenade (Section 6). Two-way Class I bike lanes are aligned and separated on the west side of the street segment. Section B.5 of this Chapter outlines the desirability of a large open plaza to be incorporated in future private development



Figure 3.46. Light rail curb-side stations in downtown Portland, Oregon provide passenger amenities with generous sidewalk widths for passenger waiting and pedestrian throughway. Note projecting awnings from buildings that provide additional shelter for passengers.

on the east side of the station to establish a strong retail and pedestrian environment serving as a destination space.

Section 23: Richards Boulevard (North 7th Street to North 12th Street)

The future light rail line connector from North 12th Street to the Township 9 Station will flank the north side of the Richards travelway, leaving a 14 foot sidewalk to access storefronts along this artery. Bike lanes and a single aisle of parking on the south side of the street will transform Richards to a multi-modal street and facilitate new infill development fronting the boulevard.

Section 24: Richards Boulevard (Sequoia Pacific to Judah Street)

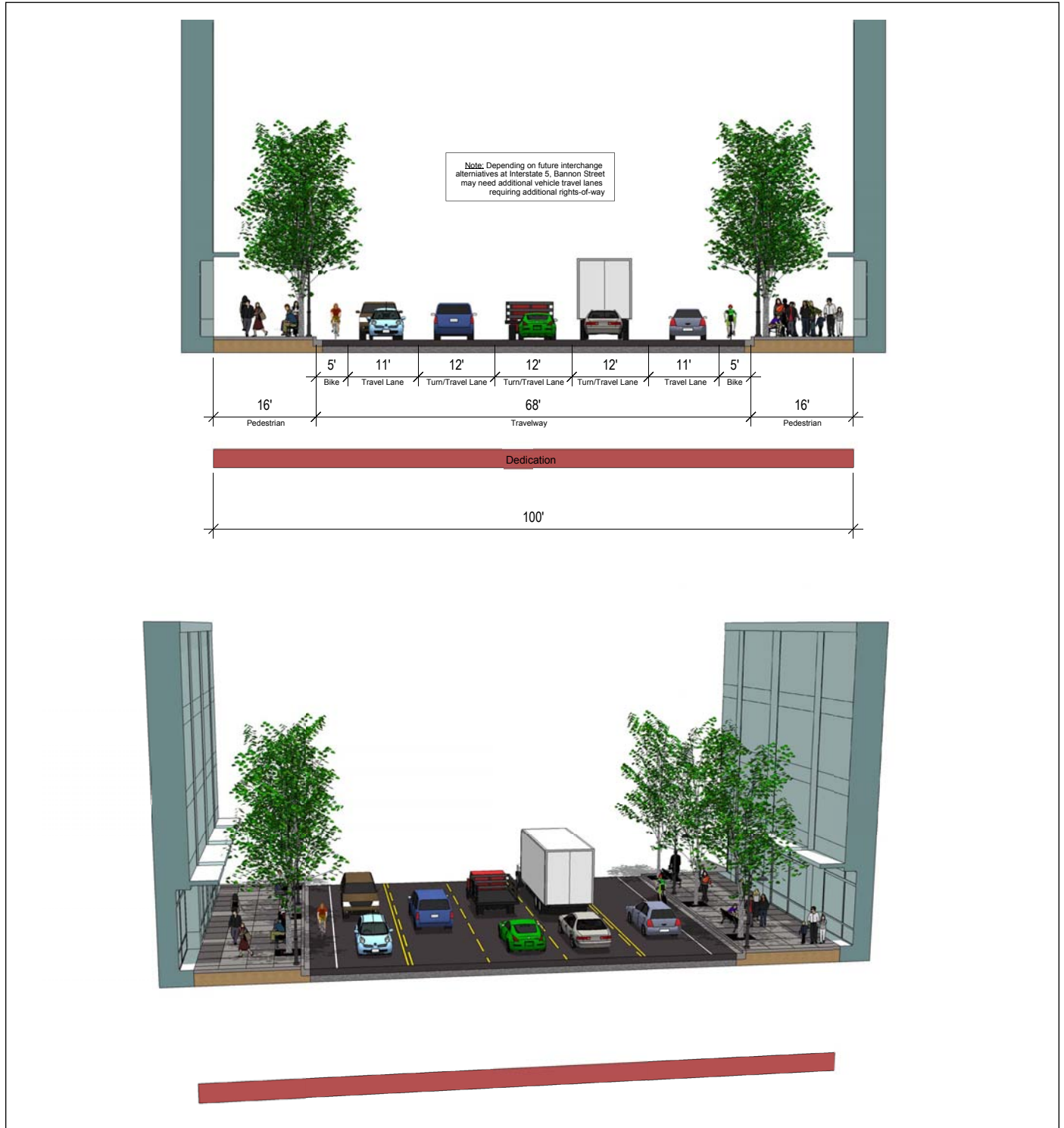
This segment is a transition from Section 20 at the Township 9 Light Rail Station. This section reserves additional rights-of-way for light rail facilities west of the station and implements storm runoff drainage area as required by the City Department of Utilities drainage model. This drainage area is design to also provide a pedestrian way for joggers and visually contains the scale of the overall street section with an alle` of redwood trees that are common in the Sequoia Boulevard Area.

On the south edge of Richards Boulevard, beginning with the first parcel east of the Greyhound site, the south face of the boulevard will be widened to implement parallel parking lanes and the Central City standard width sidewalks to activate the street frontage as far east as Dos Rios Street.



Figure 3.47. Downtown San Jose integrates light rail directly along the pedestrian way, separated with trees and light standards. This condition is similar to the Richards Boulevard section between North 7th Street and North 12th Street.

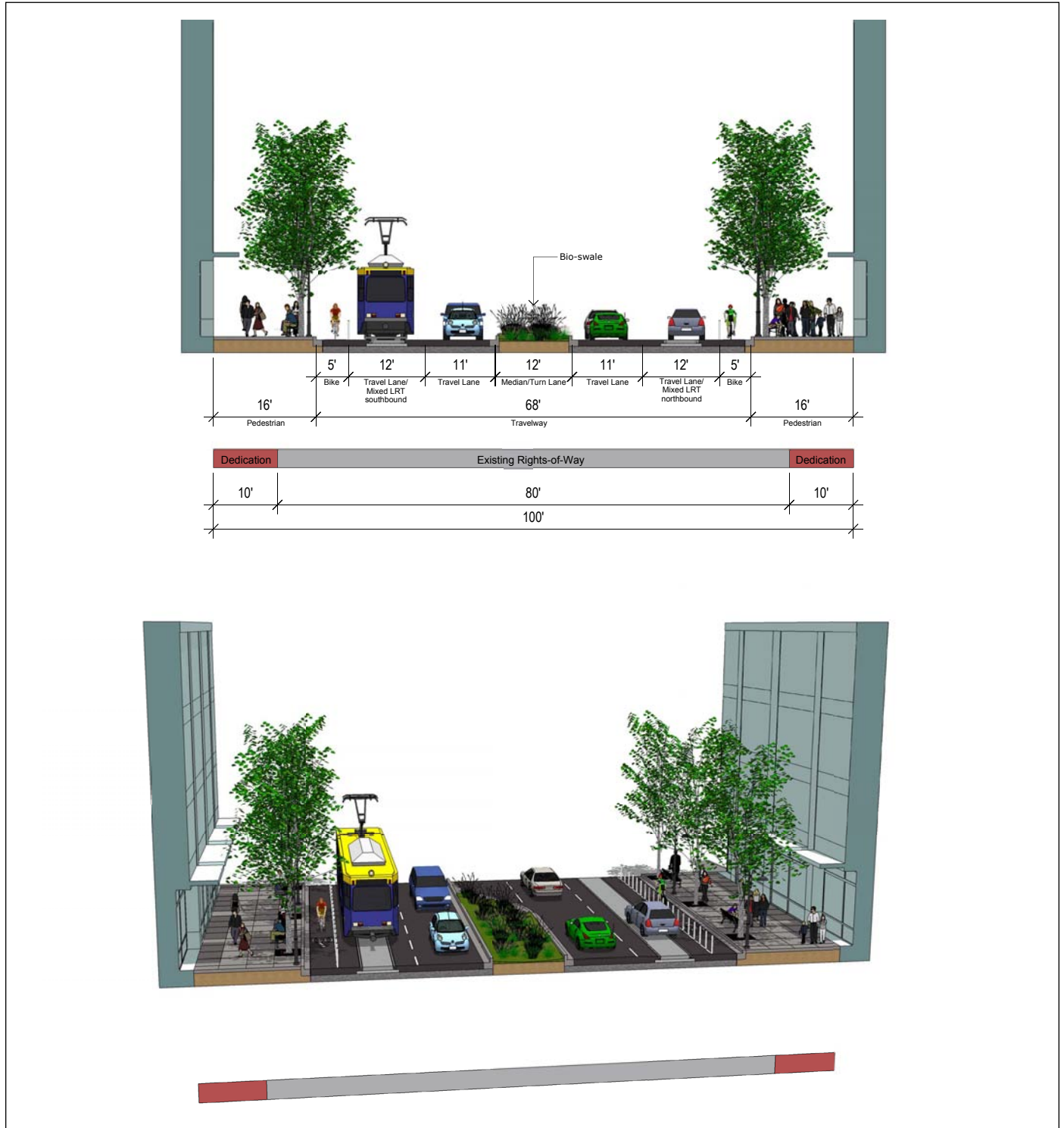
C. River District Streets



Section 18: Richards Boulevard (12th - 16th)
Non-Directional

For large format drawings, refer to the River District Specific Plan

C. River District Streets

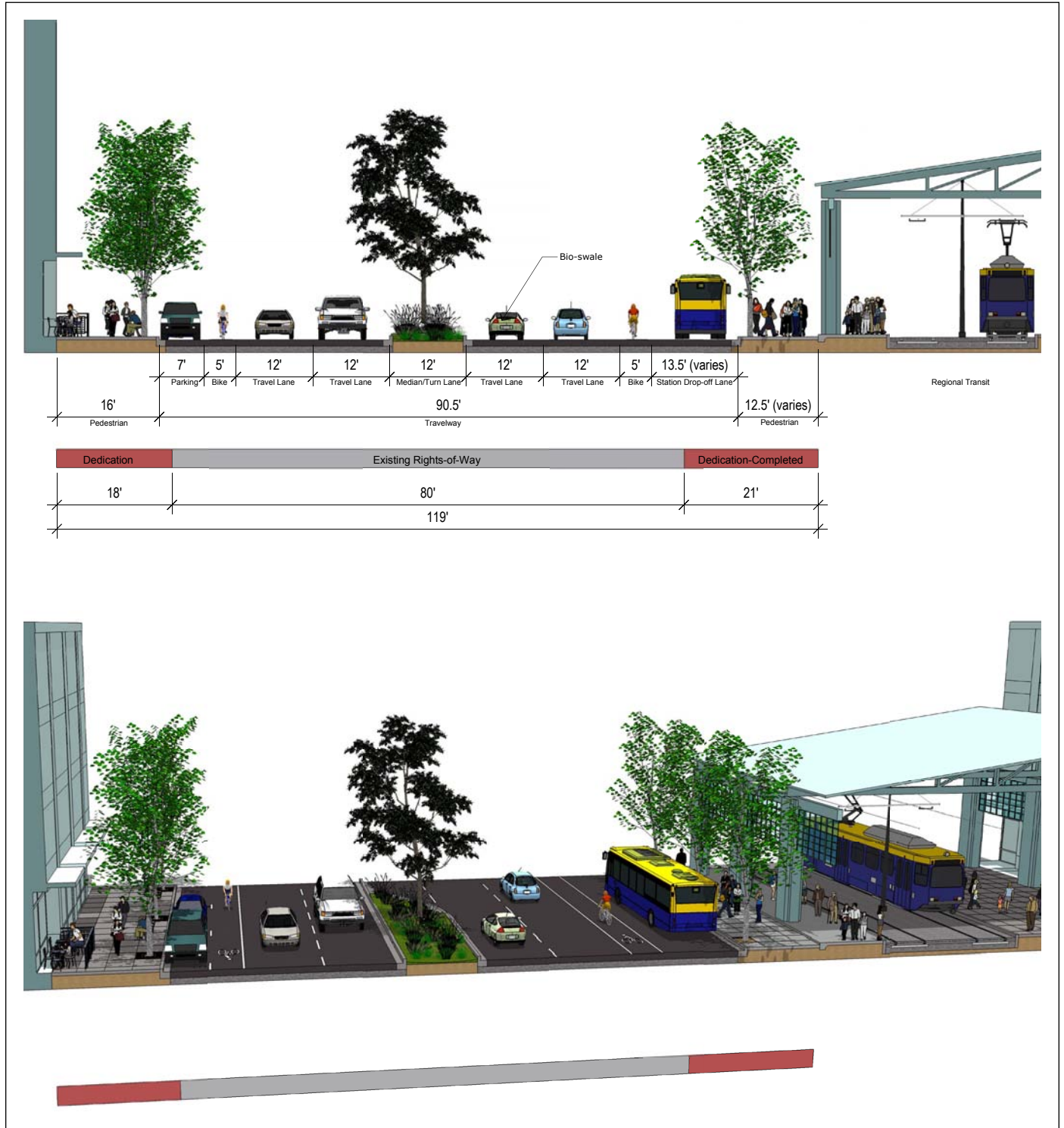


Section 19: North 7th Street (North B Street to Richards Boulevard)

Looking North

For large format drawings, refer to the River District Specific Plan

C. River District Streets

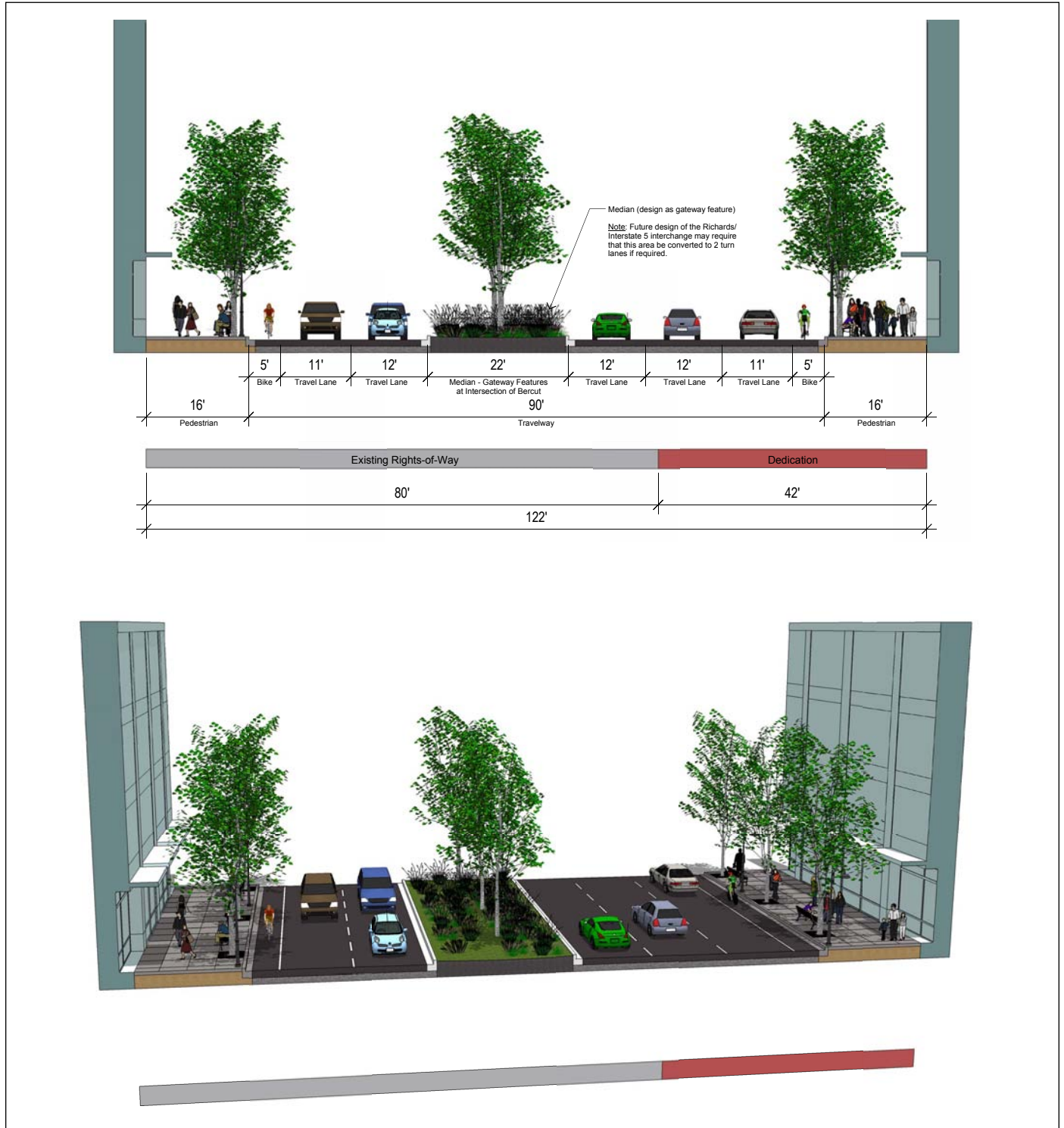


Section 20: Richards Boulevard (at Township 9 Transit Station)

Looking West

For large format drawings, refer to the River District Specific Plan

C. River District Streets

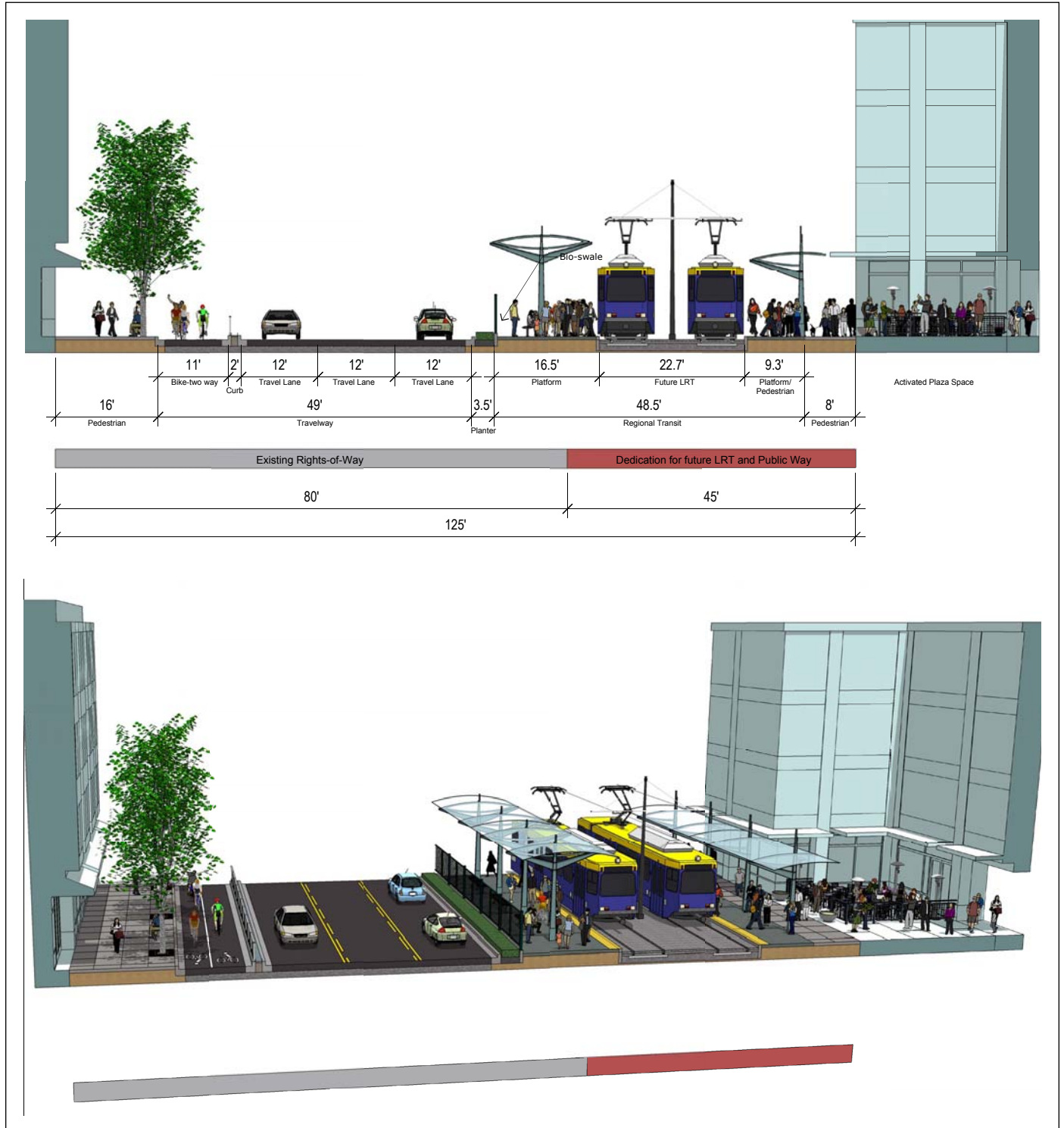


Section 21: Richards Boulevard (Sequoia Pacific to Bercut Street)

Looking West

For large format drawings, refer to the River District Specific Plan

C. River District Streets

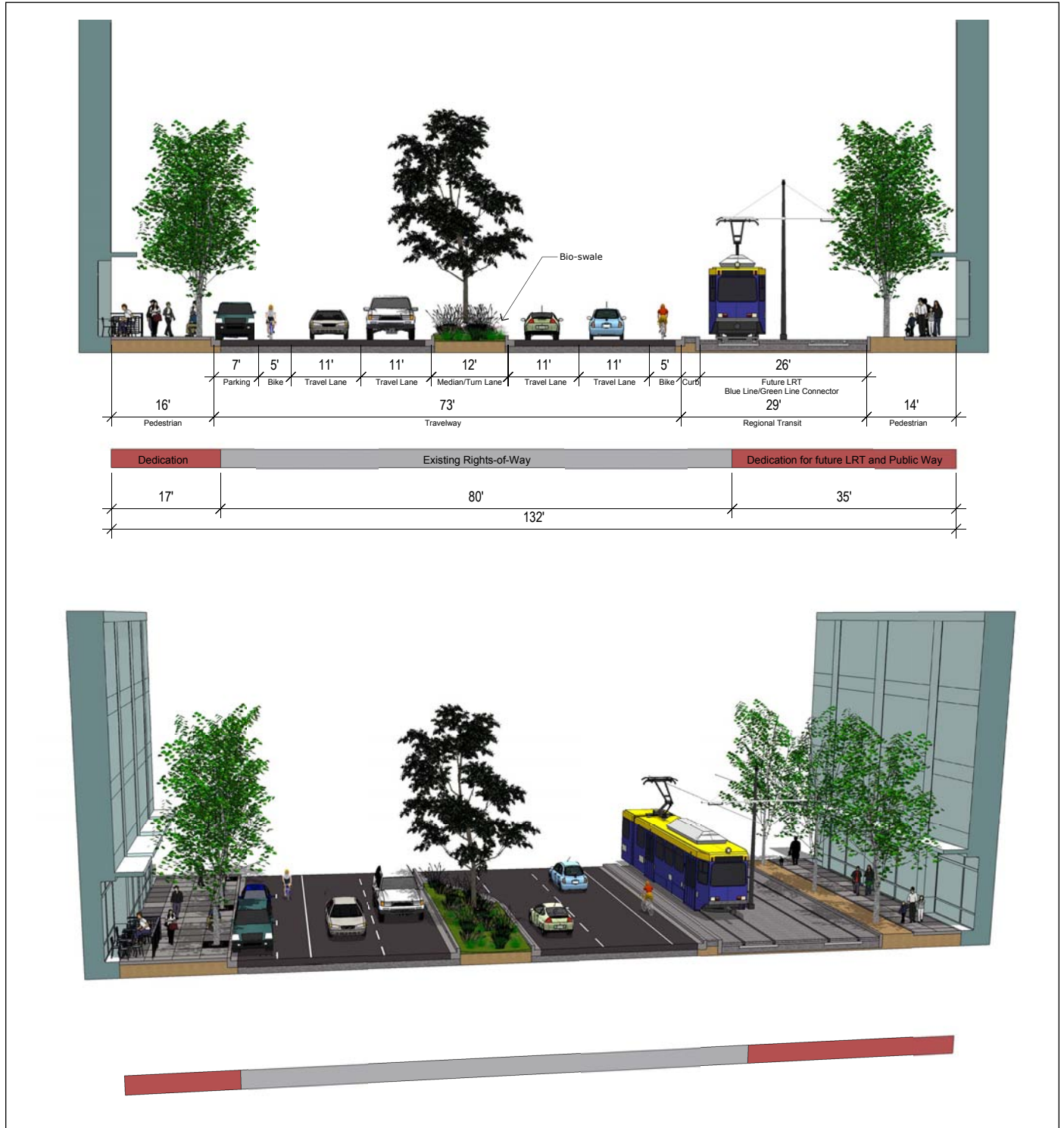


Section 22: Sequoia Pacific Boulevard (at transit station)

Looking North

For large format drawings, refer to the River District Specific Plan

C. River District Streets

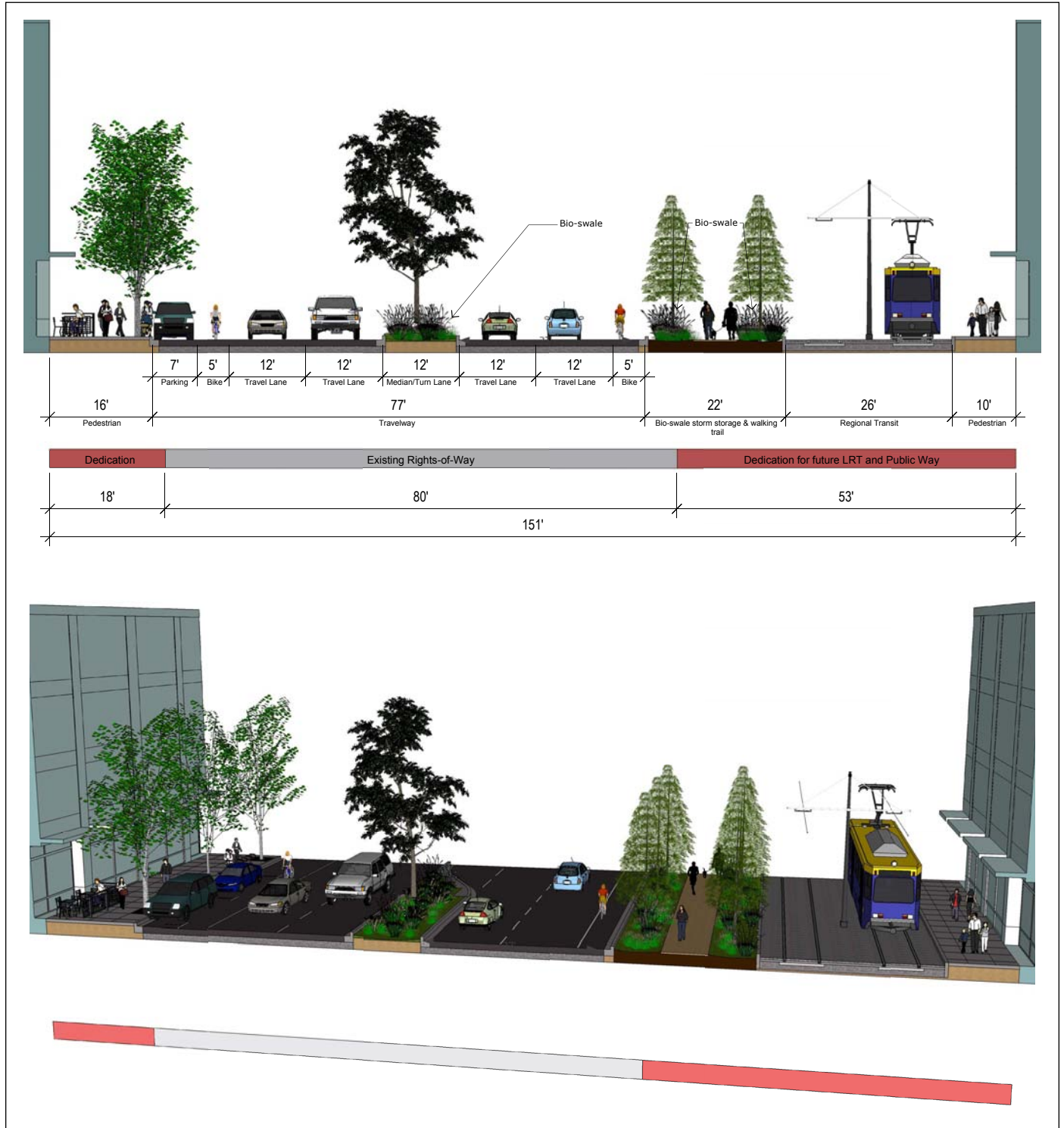


Section 23: Richards Boulevard (North 7th Street to North 12th Street)

Looking West

For large format drawings, refer to the River District Specific Plan

C. River District Streets



Section 24: Richards Boulevard (Sequoia Pacific to Judah Street)

Looking West

For large format drawings, refer to the River District Specific Plan

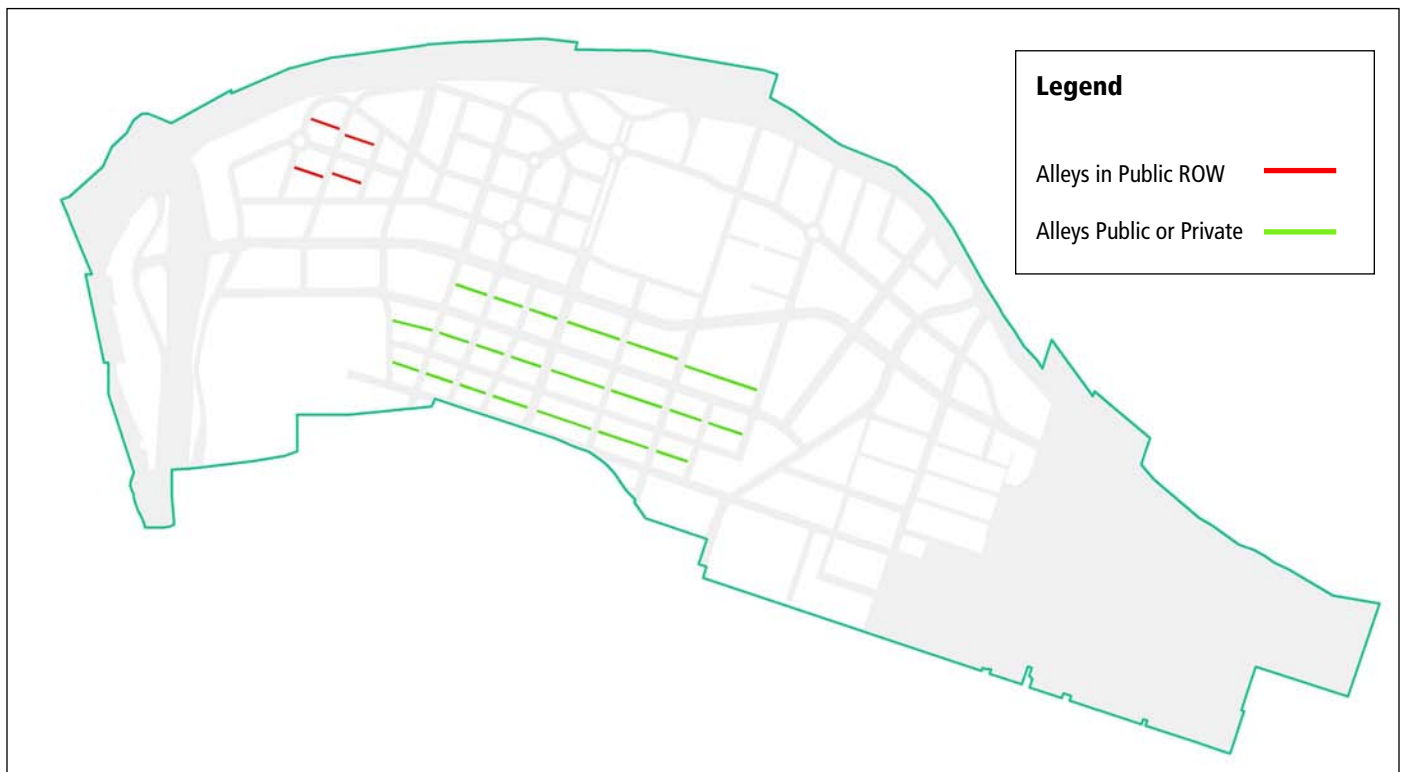
C. River District Streets

Alleys

Sacramento's Central City has experienced an awakening to the economic and social value for multi-functioning alleys. The urban design plan for the River District holds the first opportunity to construct new alleys which can be designed for multiple functions, both as the needed commercial vehicular service ways and pedestrian public access accommodations to make these new alleys social and economic resources for the District.

Other areas in the Central City are constrained with existing buildout to the 20 foot rear alley easement and little accommodation for waste disposal onsite of the private realm, resulting in noxious trash dumpsters in the public way.

The River District has the opportunity with new constructed alleys to allow more flexibility in the use and requirements for multi-modal access. The ability to construct alleys with new development areas allows the ability to underground all electrical and communication utilities, thereby eliminating the need for setbacks for utility clearances along transmission lines and new development can accommodate waste and recycling facilities on-site.



C. River District Streets

Alleys: Commerical Service Alleys

PRINCIPLE: Commercial service alleys in the River District shall be designed for shared use as building service and vehicular access with accomodation for pedestrian-oriented uses.

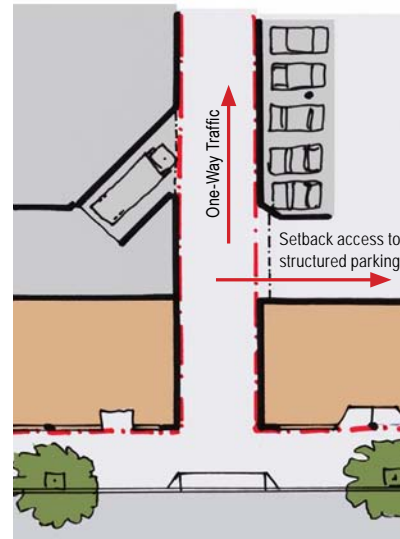
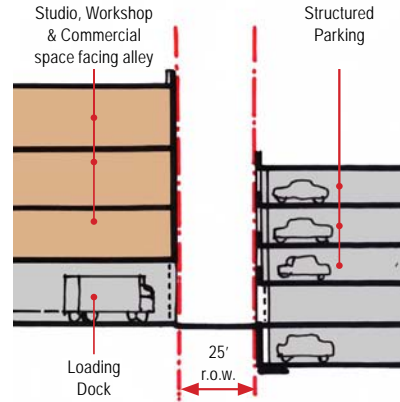
Alleys in commercial districts should be used to provide access to parking and service areas for commercial buildings, reducing the need for garage entrances and curb cuts along street frontages.

The accompanying drawings show two potential conditions for a commercial alley. The left side is an example of a loading dock and on the right a structured parking garage.

Recommendations

1. All loading and service areas must be screened and gated for security, and should be on-parcel, keeping the right-of-way (r.o.w.) clear.
2. Trash bins and skips shall be screened from view at all times and may not intrude into the alley rights-of-way (r.o.w.).
3. Angled loading docks are recommended for large vehicle turning.
4. Alleys should have one-way vehicle circulation.
5. Sidewalks are not required in alleys.
6. Pedestrian oriented uses should wrap from the street frontage onto the alley whenever feasible.

Street Type: Alley



Alley in Central Core provides multi-use opportunities

C. River District Streets

Alleys: Shared-Use Alleys

PRINCIPLE: Alleys can function as shared-use environments that are primarily pedestrian in character, but where cars are tolerated.

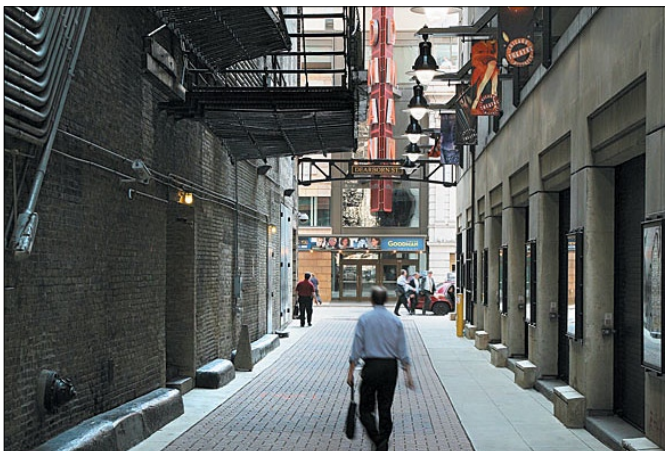
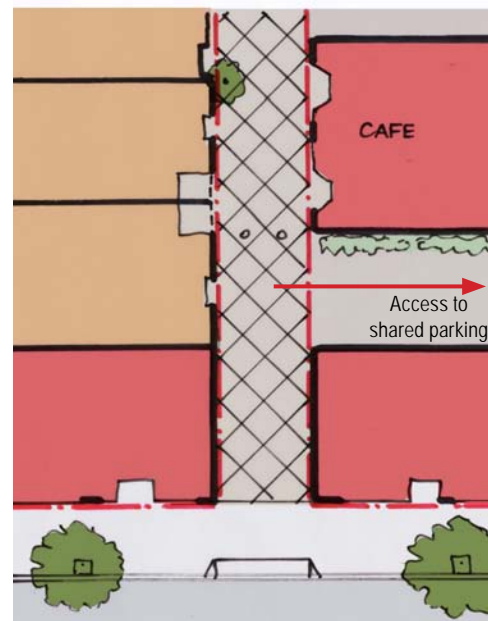
At locations in the River District where urban life and intensity are high, alleys can function as shared-use environments that are more pedestrian than vehicular in character. Similar to Dutch “woonerfs,” these alleys are designed as shared environments—primarily for pedestrian activity and children’s play areas, but also accommodating limited car use and access. The detailing and materials used in the alley right-of-way should clearly signify the space as more “paseo” than “street.” These shared-use alleys can accommodate outdoor cafés and vendors.

The accompanying drawings show a mid-block alley with cafes and studio spaces on either side. Removable bollards define the end of the vehicle access zone. Garage access would need to be from the rear of any buildings facing the alley.

Recommendations

1. Trash bins and skips must be screened from view at all times and may not intrude into the alley right of way.
2. Alleys should have one-way vehicle circulation.
3. Alleys should have paving materials that are conducive for both vehicular and pedestrian activity. Where possible, the paving should be designed to attenuate stormwater flows, e.g. with the use of porous paving material and retention systems.

Street Type: Alley



Alleys provide a unique scale and visual interest to the street network



Dutch “woonerf”

C. River District Streets

Alleys: Commercial District Pedestrian Alleys

PRINCIPLE: Some alleys in the commercial district shall be redesigned as retail-lined passage areas of intense pedestrian use and activity—with only limited service and emergency vehicle use.

In the River District, there is an opportunity for some alleys in the commercial district to be developed as pedestrian passages, suitable for retail activity. They should support mid-block pedestrian paths and the potential for small-scale retail activity such as cafes, bars and coffee shops with outdoor seating. Limited vehicle and service activities would be allowed during off-peak hours. These alleys must provide access for emergency vehicles and not exceed ADA cross slope maximums.

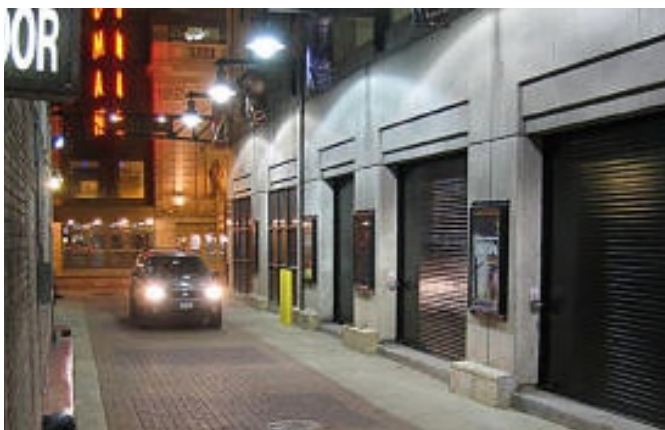
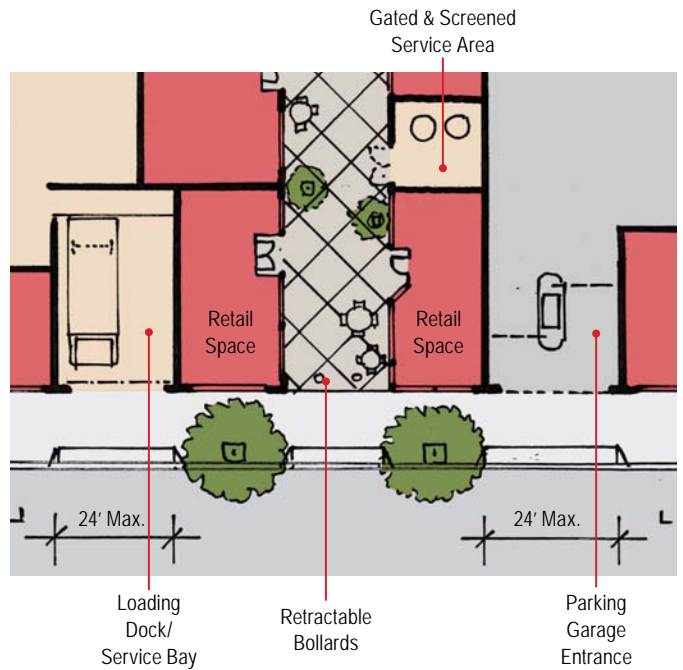
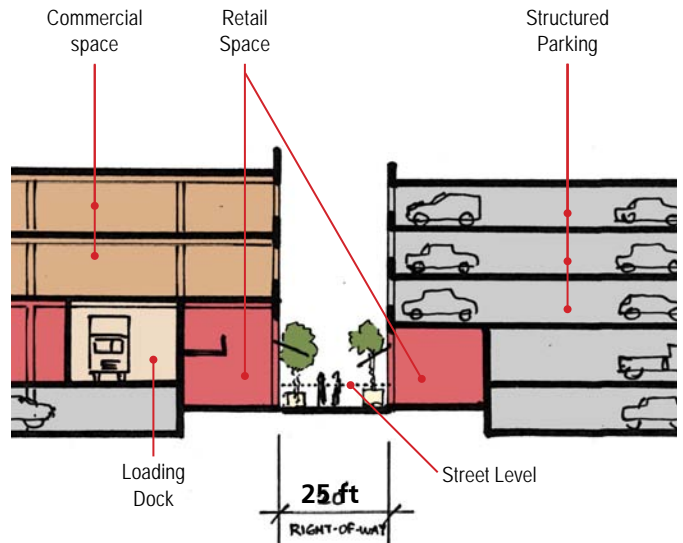
The accompanying drawings at right shows two potential conditions for a commercial district pedestrian alley:

The left side of the drawings illustrate a commercial building, with ground floor retail at the corner and a service/loading area facing the adjoining numbered-street.

The right side of the drawings illustrate commercial buildings with upper level and basement parking and the potential of a ground level retail/bar or café space facing the alley. Unlike commercial service alleys, garage access would need to be from the north-south streets only in order to avoid conflict with pedestrian activities on the alley. In some instances where strong north/south vehicular movement occurs, garage access from the east-west streets may be allowed.

In both cases, in order to minimize the impact of loading and service areas and garage entrances facing the street, the maximum width of opening would be limited to 24 feet. Three curb cuts would be the maximum allowed per

Street Type: Alley



Chicago's commercial district alley with permeable paving.



Hardware Lane, Melbourne. Retail uses front onto this narrow pedestrian lane, a model for the redevelopment of Sacramento's central city alleys.

C. River District Streets

Alleys: Commercial District Pedestrian Alleys (continued)

side of block.

The alley should be paved as a pedestrian space with structural load-bearing unit pavers from building face to building face without curbs. Area drains should be located in the center of the alley.

Recommendations

1. All loading and service areas must be screened and gated for security, and should be on-parcel, keeping the right-of-way (r.o.w.) clear.
2. Sidewalks and curbs are not recommended, unless verified per current regulations.
3. Alleys should have paving materials that are conducive to both pedestrian and vehicular activity, e.g. unit pavers, from building face to building face. Where possible, the paving should be designed to attenuate stormwater flows, e.g. with the use of porous paving material and retention systems.
4. Area drains should be located in the center of the alley.
5. The maximum width of opening of loading/service areas and garage entrances facing the alley/street should be limited to 24 feet, with a maximum of three curb cuts per side of block.
6. The alley should have retractable bollards to prevent service vehicle access during hours of retail/restaurant use.
7. Cross-slopes of paving should be ADA compliant
8. Garbage locations and collection should be coordinated to eliminate nuisances of smell and unsightliness.
9. Trash bins must be screened from view at all times and may not intrude into the alley thoroughway.



San Francisco's Beldon Place. Alley that is restricted to pedestrian activity during peak / business hours.



Residential and commercial office enjoy alley access with pedestrian amenities. Note light bridge connection to parking in background.



Shallow depth cafe can be incorporated into parking garage.

C. River District Streets

Alleys: Residential District Alleys

PRINCIPLE: Alleys in residential districts should perform as minor streets, providing a traffic-calmed, pedestrian scaled environment providing frontage access to residential units and/or vehicle access to garages and service areas.

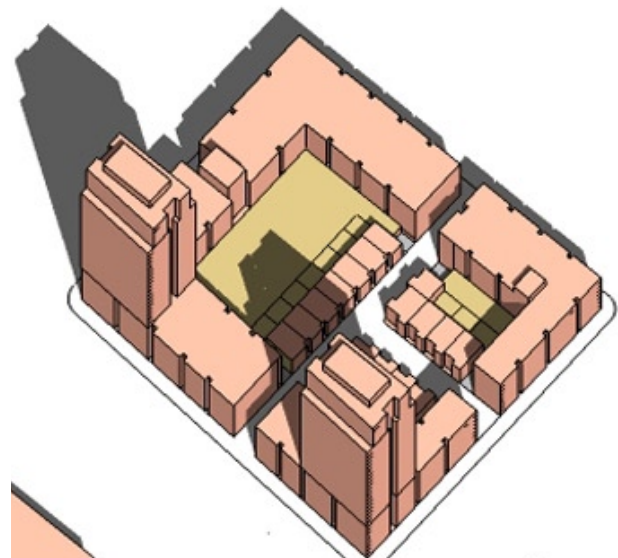
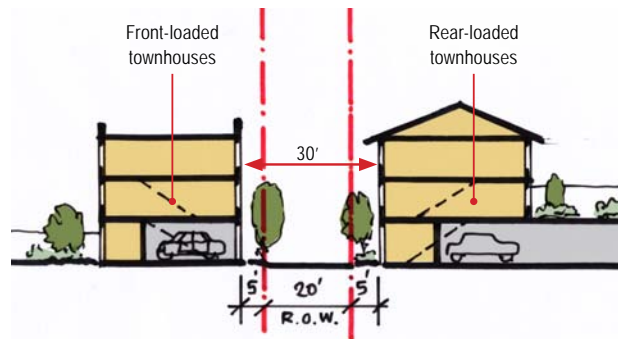
In residential districts, alleys can perform the functions of a minor street, providing a pedestrian scaled environment for both secondary residential units and mid-block facing units. In addition, alleys can provide a traffic-calmed environment for vehicle access to garages and service areas.

The accompanying drawings show two potential conditions for a residential alley:

The left side of the drawings illustrate front-loaded townhouses with their garages facing the alley. The townhouses are required to be set back 5 feet from the alley right-of-way in order to permit adequate maneuvering space for vehicles entering individual garages.

The right side of the drawings illustrate rear-loaded townhouses with their garages accessed from a shared alley. Townhouses may also face the alley with their open space on the second level above the podium level. They require a 5 foot setback in order to allow adequate daylighting to both sides of the alley and to allow a planting zone in the setback.

Street Type: Alley



Urban blocks with variety and scale of residential development conducive to shared use alleys.

C. River District Streets

Alleys: Residential District Alleys (continued)

Recommendations

1. Residential development along alleys should be set back 5' from the r.o.w., to facilitate the provision of adequate daylighting, landscaping, and privacy.
2. Alleys should have paving materials that are conducive for both vehicular and pedestrian activity. Rougher paving texture should be used to slow vehicle speeds. Where possible, the paving should be designed to attenuate stormwater flows, e.g. with the use of porous paving material and retention systems.
3. Trash bins must be screened from view and may not intrude into the alley right of way.
4. Sidewalks are not necessary. However, a 4-inch curb can be used to delineate the pedestrian realm.
5. Cross-slopes of paving and surface finishes should be ADA compliant.
6. Irrigated landscape elements should be encouraged within private property adjacent to alley right-of-way.
7. Parcels with units extending from street to alley should have their vehicular access from the alley, in order to minimize the number of curb-cuts along the street and reduce conflicts in the pedestrian zone.



Townhouses front alley near 10th and T Streets



Japanese "shared street"



As a component of residential alleys, retractable bollards can limit vehicular access to alleys with electronic coding

C. River District Streets

2. On-Street Parking

PRINCIPLE: Provide on-street parking as a means of enhancing access to adjacent uses, buffering pedestrians from moving traffic, and increasing activity on the street.

Rationale:

On-street parking is an important component of a successful River District that offers benefits to visitors, merchants, and residents, because it:

- A. Supports local economic activity of merchants by providing convenient customer access to storefronts;
- B. Supports residential neighborhoods by providing convenient guest parking;
- C. Accommodates on-street loading and unloading of delivery trucks to local commercial retail uses and residential uses;
- D. Reduces development costs for small businesses by decreasing demand for onsite parking;
- E. Enhances pedestrian comfort by providing a physical buffer between public sidewalks and moving vehicular traffic;
- F. Calms (i.e., slows) traffic by alerting motorists that driving speeds should be reduced, in response to increased street-side activity related to on-street parking (e.g., vehicle turning movements, opening car doors, etc.);
- G. Enhances pedestrian activity on the street by creating foot traffic between parked cars and commercial destinations.

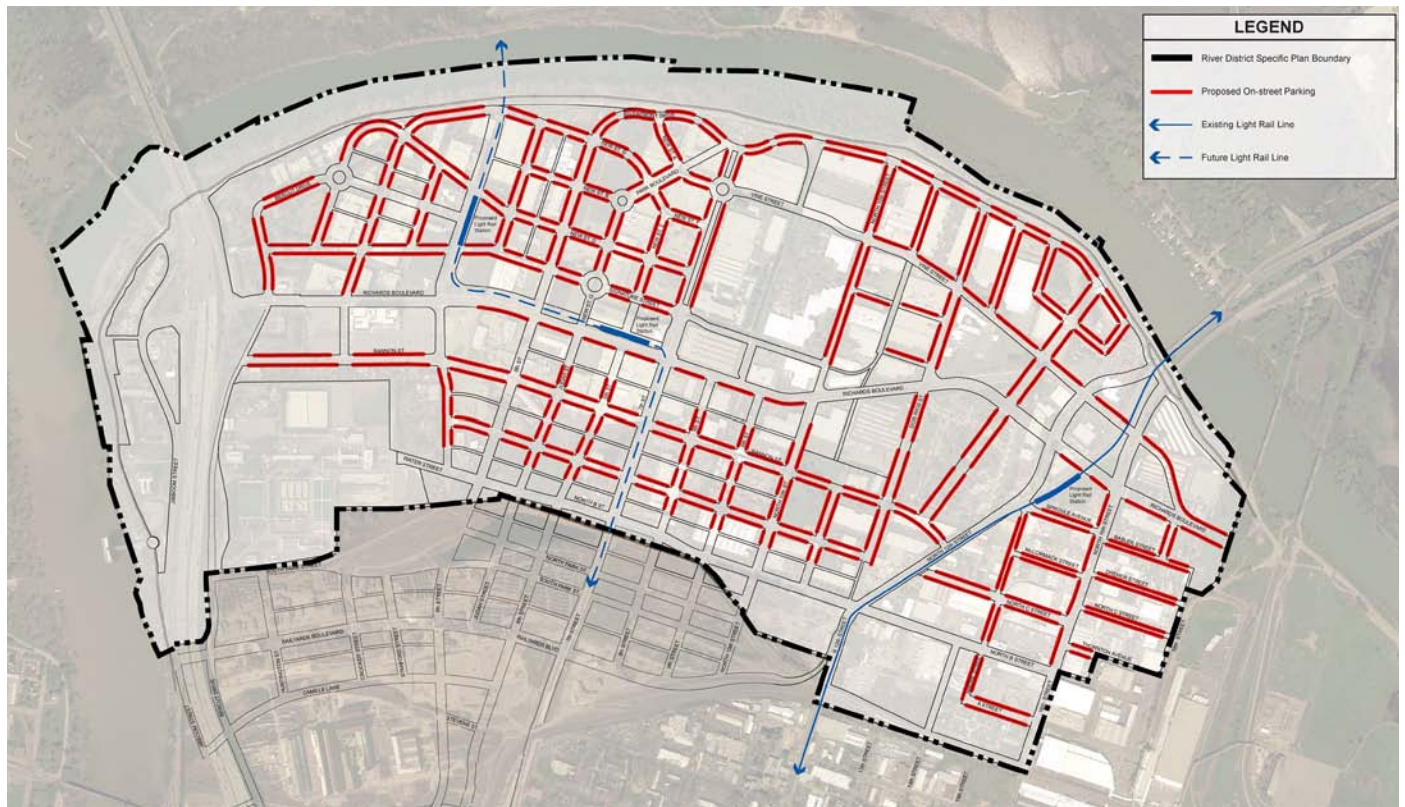


Diagram of anticipated street parking within the River District Specific Plan.

C. River District Streets

2. On-Street Parking (continued)

Guidelines

1. **On-street Parking.** To the extent feasible, on-street parking should be provided on streets to support adjacent uses and enhance pedestrian safety and activity.
2. **Curb Cuts.** Curb cuts should be avoided to the extent possible. The use of alleys to access on-site parking should be promoted where not in conflict with activated pedestrian alleys, in order to maximize the curb side available for on-street parking. For options, see Chapter 3. B. Travelway Realm, Alleys: Commercial District pedestrian Alleys.
3. **Intermittent Parking Zones.** Where traffic capacity needs to be balanced with on-street parking, consider using the curb lane for parking during off-peak periods and for traffic during peak periods. This strategy may allow for the narrowing of some arterial and collector street cross-sections (i.e., lane removal) where it is desirable to provide wider pedestrian zones and off-peak traffic volumes do not require three travel lanes.
4. **Parking Orientation.** On-street parking should be primarily parallel parking on high-volume arterial and collector streets. Angled parking may be used on lower-speed and lower-volume commercially-oriented collector and local streets, particularly on retail main streets.
5. **Back-in Angled Parking.** Back-in angled parking is generally more favorable for bicyclists, easier for loading of packages, and can provide a traffic-calming effect. Reverse (back-in) angled parking requires a wider edge zone in the roadside due to the longer overhang at the rear of most vehicles. This extra width can be compensated by the narrow travel lane needed adjacent to parking for maneuvering.
6. **Bicycles and Angled Parking.** Avoid marking bicycle lanes in conjunction with front-in angled parking. Rather, provide a striped area, without bike lane markings, six feet in width between angled parking and the travel lane on streets heavily used by bicyclists. Bicycle lane markings may be used in conjunc-



Back-in angled parking provides for convenient loading and unloading and is safer for bicyclists (28th St. between R St. and U St.)



Parallel parking works better on narrower streets.

- tion with back-in angled parking
7. **Metered Parking.** Use metered parking to provide reasonable short-term parking for retail customers and visitors while discouraging long-term resident and employee parking.
8. **Parking Space Widths.** Parking space widths should be dependent on the land use context and thoroughfare type, and the anticipated frequency of parking turnover. The preferred width of a parallel on-street parking lane is 7 feet.
9. **Taxi-Cab Stands.** Locate taxi-cab curb space in strategic high-use areas (e.g. hotels, convention center, Greyhound Station). Taxi queue areas should have

C. River District Streets

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synergy with transit services, wherever possible.

10. Motorcycle and Scooter Parking. Convenient on-street motorcycle parking should be provided to encourage motorcycle and scooter use. Ample on-street motorcycle and scooter parking should be provided within the River District in prominent, well-lit locations as close as possible to main entrances of buildings, Motorcycle parking bays should be striped perpendicular to the sidewalk in the on-street vehicular parking zone.

C. River District Streets

3. Intersections

PRINCIPLE: Design streets to accommodate safe and convenient pedestrian crossings.

Rationale

Street intersections are the places in the River District where the Travelway and Pedestrian Realms overlap. As these areas are shared by pedestrian, vehicular and in many areas, bicycle traffic, intersections have the potential for conflict. In order to reduce potential conflict and ensure pedestrian safety, it is important that pedestrian crossings be designed as an integral and critical component of the street system that accommodates vehicular, bicycle and pedestrian circulation.

The design of pedestrian crossings should announce to motorists the potential presence of pedestrians in the travelway. Free movement of pedestrians from block to block is an essential element of all successful urban areas and should be supported by the design of safe and attractive pedestrian crossings. Pedestrian crossings are sectors of the public right-of-way that are intended to be shared by vehicles and pedestrians, and need to be designed as such.

Refer also to Central City Urban Design Guidelines, Section 3, Central Core, and the Sacramento Pedestrian Master Plan (2006) and its appendices for further guidance. Any crosswalk application should comply with the City's Pedestrian Safety Guidelines.



Provide curb ramps at all intersections.



Special paving treatments and pedestrian-activated crossing lights alert drivers to the presence of pedestrians.



Curb extensions expand the pedestrian realm, slow traffic and reduce pedestrian crossing distances.



Traffic calming measures, such as crosswalk refuges, make streets more pedestrian friendly.

C. River District Streets

3. Protected View Corridors

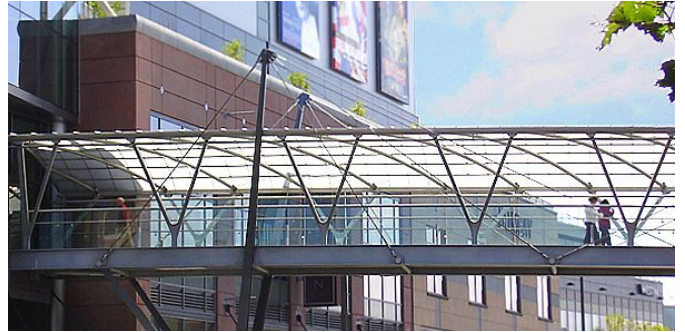
PRINCIPLE: View corridors and spatial continuity of streets should be protected by avoiding obstructions over the public rights-of-way.

Rationale

Sacramento, with its beautiful landscaping and landmark buildings, offers a variety of views and vistas. Protecting views of landmarks and the spatial continuity of streets is essential. Second level walkways, construction over streets, and lowering of roadways damage streets in a variety of ways. Besides disturbing retail continuity by not supporting street-level activities, they block views that make Sacramento unique among California cities.

Guidelines

1. Second level pedestrian bridges across public streets should not be allowed unless for special circumstances where high pedestrian use can be demonstrated to be in conflict with the traffic flow patterns that would endanger public safety.
2. With the exception of public alleys, construction or intrusion of private or public development over public streets and rights-of-way should not be permitted.
3. Development over public alleys shall be limited to 15 percent of the length of the alley.



When necessitated, pedestrian bridgeways that are open with light covering allow through views and help maintain openness of the public realm are preferable solutions for overhead crossings.



An example of an enclosed pedestrian bridge over a public plaza that has a high ratio of glass and fits into the architectural compositions of adjacent buildings.

D. Pedestrian Realm

The Pedestrian Realm guidelines are intended to promote more walkability by improving pedestrian safety, convenience, and comfort. The guidelines build upon recent city efforts, including the City’s Pedestrian-Friendly Street Design Standards (2004) and Pedestrian Master Plan (2006), that strive to make Sacramento a model pedestrian-friendly city—in short, the “Walking Capital.” These guidelines implement the recommendations of these two pedestrian documents.

The guidelines focus on improving the attractiveness and effectiveness of pedestrian networks in order to encourage walking as a realistic mode of transportation. As such, they recommend design strategies for enhancing the physical safety, comfort, and convenience of the pedestrian environment as well as the aesthetic character and quality of the pedestrian experience.

The guidelines are intended to reclaim City streets for pedestrians, creating true multi-modal transportation routes that safely and effectively balance the circulation needs of vehicular and pedestrian traffic, while also acknowledging the public streetscape’s role as the “stage” or “living room” on which the life of the community plays out.

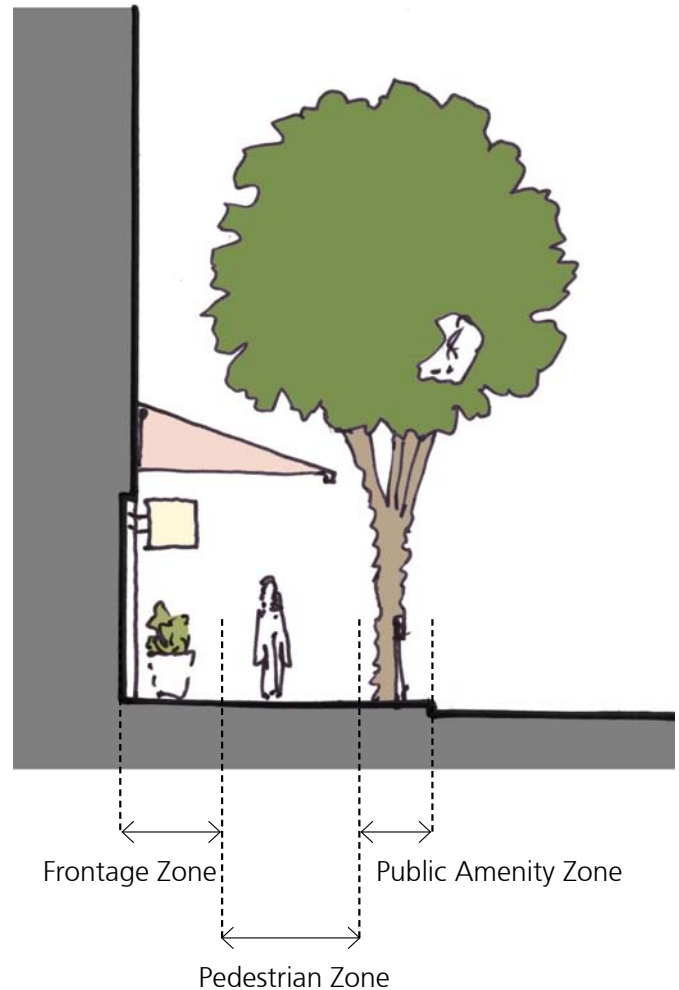
The pedestrian realm serves several functions—circulation facility, social space, and amenity zone—and must accommodate numerous features and facilities to support these functions. For purposes of these guidelines, the pedestrian realm has been subdivided into three zones: the pedestrian zone, the amenity zone, and the frontage zone (see diagram). Each zone plays a slightly different role in the pedestrian realm and has different design requirements. The following discussion further describes each zone and the guidelines have been organized by zone to clarify the differences.

The three zones generally occur on both sides of the street and consist of the following:

Pedestrian Zone

The pedestrian zone is the middle section of the sidewalk, and is flanked by the frontage zone and the public amenity zone. Its primary function is to accommodate the efficient movement of pedestrians. As such, it needs to provide an unobstructed, linear sidewalk space that is free of street furniture, street trees, planters, and other vertical

Pedestrian Realm



The pedestrian realm serves several functions: circulation, social space, and public amenities.

D. Pedestrian Realm - (continued)

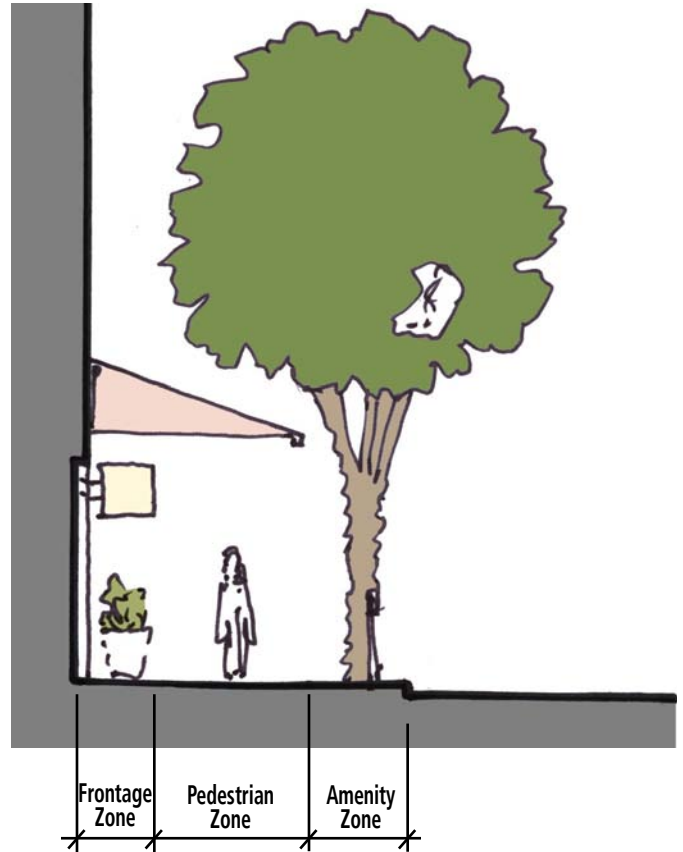
elements such as light poles, fire hydrants and transit facilities, and be wide enough to accommodate projected volumes of pedestrian traffic.

Public Amenity Zone

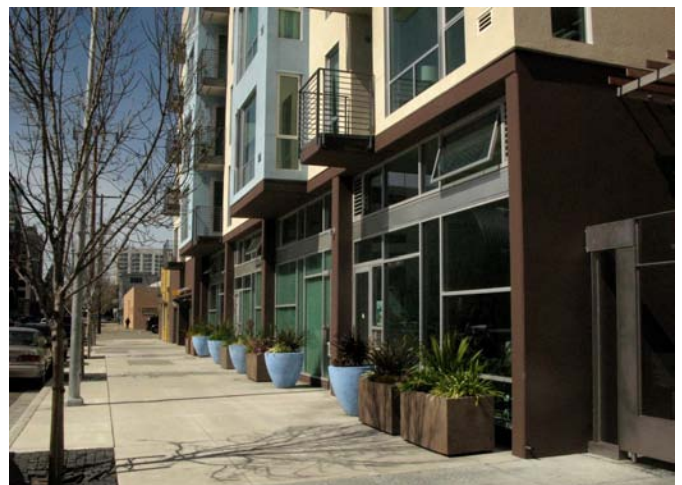
The public amenity zone is the section of sidewalk that adjoins the street and buffers pedestrians from the adjacent roadway. This zone is the appropriate location for the majority of the public facilities and streetscape amenities that enhance and serve the pedestrian zone, including features such as street trees, landscaping, street lights, transit stops, parking meters, fire hydrants, benches, news racks, and other street furniture and amenities.

Frontage Zone

The frontage zone forms the outer edge of the public right-of-way and typically is defined by a building façade, landscaping, fence, wall, plaza, or park (or, in less desirable, interim conditions, a surface parking lot). It functions as the interface between the public right-of-way and adjoining uses. As such, the design of this zone should be responsive to and support the adjoining use, which, depending on context, may mean providing a clear zone for store entrances, a “slow” zone for retail displays and window shopping, or a furnished zone for outdoor dining.



Sidewalks with adequate width accommodate vendors and maintain clear pedestrian zone for unimpeded pedestrian mobility.



Functional Zones are clearly delineated in this new sidewalk installation.

C. Pedestrian Realm

D.1. Sidewalks

PRINCIPLE: Dedicate adequate space within the public street right-of-way to allow the sidewalk to be organized into three distinct zones that: facilitate safe, comfortable pedestrian movement (Pedestrian Zone); support the vitality & function of adjoining uses (Frontage Zone); and provide the amenities & facilities that promote social interaction (Public Amenity Zone).

Rationale

Sidewalks are the primary areas within the public street right-of-way reserved specifically for pedestrian use. They also serve as the interface between buildings and uses of the private realm and the vehicular travelway, providing both connections and buffers. As such, the design of the sidewalk and the elements within it are critical to the creation of an active, pedestrian-friendly environment, which in turn is essential to establishing and maintaining the River District as a successful commercial and cultural center and vibrant residential neighborhood.

Guidelines

General Functional Requirements

1. Sidewalk Widths. Sidewalk widths shall be commensurate with the level of pedestrian activity desired for the specific street frontage. Whereas sixteen (16) feet is the typical sidewalk width in the Central City, high activity areas (such as transit stops) should have sidewalk widths of 20 feet or more. Sidewalk widths in the River District should not be less than 8 feet unless existing right-of-way preclude them.
2. Clearance. Ensure that a minimum sidewalk width for pedestrian through-traffic is not obstructed with street furniture, utility poles, traffic signs, trees, etc. Streetscape amenities generally should be located in the Public Amenity Zone to maintain a clear walking zone.
3. Width Proportions. The Pedestrian Zone should comprise at least 50% of the sidewalk width (i.e., 8 feet for the standard 16-foot sidewalk), but never be less than 6 feet, whichever is greater.

Pedestrian Zone

1. Minimum Vertical Clearance. The Pedestrian Zone should maintain a minimum vertical height clearance of 96" (i.e., 8'0"), clear of overhanging tree limbs, protruding fixtures such as awnings, signs, or other horizontal obstruction.
2. Curb Extensions. Curb extensions at "necked-down" intersections are encouraged as a means of expanding the pedestrian zone where pedestrians are likely to congregate while waiting for transit or to cross the street.
3. Functional Zone Priorities. The widths of the sidewalk functional zones should vary in response to context, but sidewalk width should be distributed amongst the 3 zones according to the following priorities: pedestrian (highest), amenity (middle), frontage (lowest). See guidelines for each zone for minimum allowable widths.
4. Transitions. To ensure pedestrian safety and smooth flow of traffic, transitions in the width of the Pedestrian Zone should not be abrupt and should be signaled by some sort of transitional element.

Frontage Zone

1. Private Furnishings. Private furnishings permitted in the frontage zone may include seating and tables,



The sidewalk opposite Chavez Plaza was widened specifically to encourage pedestrian activity.

D.1. Sidewalks (continued)

- merchandise displays, planters, art, and portable signage as allowed under the City's Sign Ordinance (e.g., menu stand).
2. **Decorative Elements.** On streets with commercial frontages, businesses are encouraged to provide decorative elements (e.g., landscaping, potted plants, etc.) that activate the public streetscape, visually enhance the building frontage, identify building entrances, and generally engage the public realm, without constricting the flow of pedestrian traffic.
 3. **Sidewalk Cafes.** Sidewalk cafes are encouraged within the frontage zone as a use that activates and energizes the public realm.
 4. **Extension into Amenity Zone.** In certain situations sidewalk cafes and other commercial activities may be allowed to extend into the amenity zone rather than the frontage zone, or where extra wide sidewalks occur in both the frontage and amenity zones. Such use will require special findings to ensure such use and facilities enhance the overall quality of the public realm and do not impede pedestrian traffic or conflict with access to on-street parking.
 5. **Vertical Clearance.** Awnings, canopies, and umbrellas used within the frontage zone should provide adequate vertical clearance so they do not infringe upon the pedestrian travel zone.
 6. **Delineating Sidewalk Cafes.** Sidewalk cafes that have more formal dining facilities (i.e., offer waiter service to their tables) or more than a single row of tables should provide a decorative element, such as a railing, rope divider, etc., that delineates the café from pedestrian travel zone, a state requirement for serving alcohol. Such delineation is not required for less formal eateries such as cafes, coffee shops, and sandwich shops that have a single row of chairs and tables.
 7. **Permitting.** All private use of the frontage zone should be required to obtain an encroachment permit and be maintained to established standards.
 8. **Width.** The minimum frontage zone width is 1.5 feet. A frontage zone is not needed if the sidewalk corridor is adjacent to a landscaped space.

9. **Constrained Frontage Zones.** In the event there is insufficient right-of-way width, the frontage zone can be reduced to augment widths of the walkway and amenity zones. If there is insufficient frontage zone space to accommodate private uses such as cafes and sidewalk displays, additional area should be taken from the private realm rather than constrain the function or character of the walkway and amenity zones. In all cases, a direct path should be provided for pedestrians and the disabled.
10. **Plumbing and Mechanical Utilities of Buildings.** Buildings should be designed to minimize the occurrence and mitigate the visual impact of plumbing and



A well-used Frontage Zone brings shop wares onto the sidewalk. Dan Burden photo.

mechanical utilities within the Public Realm.

Amenity Zone

1. **Location.** Public utilities and street furniture generally should be consolidated in the Public Amenities Zone to keep them from becoming obstacles in the Pedestrian Zone. This includes, but is not limited to street trees, planting strips, street furniture, bicycle parking, utility poles, signal poles, signal and electrical cabinets, signs, fire hydrants, etc.
2. **Width Proportions.** The Public Amenity Zone should comprise at least 35% of the sidewalk width (i.e., 6.5 feet for the standard 16-foot sidewalk), but never be less than 30%, or 4 feet, whichever is greater.
3. **Distribution and Concentration.** Whereas the function

D.1. Sidewalks (continued)

- of features such as light standards, street trees, and parking meters requires an even distribution along the length of a street, street furniture should generally be located in high activity areas where people can be expected to congregate, such as transit stops, major building entrances, plazas, and retail and entertainment zones.
4. **Opportunities at Intersections.** The Public Amenity Zones at intersections, particularly where they have been expanded by necked down intersections, are ideal locations for streetscape elements that serve high levels of pedestrian traffic, such as transit shelters, informational kiosks, and news racks. Benches and seating areas should typically be located in mid-block locations where there is less potential conflict with pedestrian traffic flow.
 5. **Consolidate Parking Meters and News Racks.** In order to reduce clutter within the amenity zone, facilitate on-street parking, the City may install multi-space and pay-and-display parking meters.
 6. **Setback from Curb.** To the degree feasible, elements within the Public Amenity Zone should be setback at least 3 feet from the face of the street curb to avoid conflict with on-street parking (e.g. car doors, passenger loading, etc.), but no less than 1.5 feet.
 7. **Location of Utilities.** Where practical, handholes, vaults, and other utility access points should be located out of the sidewalk area, and in the private parcel area. Above ground utility boxes, control panels, etc. should be discouraged or located outside of the pedestrian realm of the sidewalk zone, and should have a standardized color where possible.
 8. **Undergrounding of Utilities.** In order to reduce conflict with pedestrian movement and improve the aesthetic character of the public realm, utilities should be undergrounded whenever feasible, particularly on major and commercial streets. Undergrounding projects should maximize space available for street tree planting.
 9. **Unified Design Identity.** Provide a continuity of streetscape features along the length of a street. At a district scale, coordinated design, type, color and material of street furniture and utility boxes contrib-

ute to a sense of community identity, and reflect and strengthen the local character.

10. **Stormwater Management.** The use of permeable or porous pavement and landscape designed to treat and attenuate stormwater flow in the amenity zone is encouraged whenever feasible as a means of reducing stormwater runoff rates and volumes.
11. **ADA Clearance at Bus Stops.** Maintain 5 foot. x 8 foot. clear areas at bus stops for boarding of wheelchair users.
12. **Tree Planting.** See City tree planting guidelines for additional information and guidance on street tree planting.



Amenities such as comfortable benches, trees and planting compliment the shopping experience. Dan Burden photo.



Urban stormwater management, in Amenity Zone, such as these planters and permeable pavement attenuate and treat stormwater flow.

C. Pedestrian Realm

D.2. Sidewalk Paving

PRINCIPLE: The pedestrian environment and the quality of the pedestrian experience shall be further enhanced, defined and made legible through the use of coordinated, attractive, and high-quality paving surfaces.

Rationale

The character and consistency of the paving of public sidewalks contributes greatly to streetscape identity and the quality of the pedestrian realm. Inconsistent use of paving materials and patterns becomes a source of visual clutter and appears as a lack of pride and clarity about the role of the public realm, and a lack of commitment to a quality pedestrian environment. A coordinated, high quality paving scheme can introduce pedestrian-friendly qualities such as human scale, connectivity, and coherence to the public realm. A consistent use of paving material, color, pattern and finish, provides visual cues that help define the public realm and contribute to ease of pedestrian access and safety.

While paving can be a highly distinctive design element, the first priority should be on establishing a consistent design vocabulary that visually unifies River District streets and establishes a pleasing and interconnected pedestrian realm. Only secondarily should paving be used to distinguish individual uses and sites, or establish a specific theme, as highlighted herein.



Sidewalk paving should be divided into a grid that fits the typical 16 foot wide sidewalk.

Guidelines

1. **Materials.** Sidewalks generally should be paved with grey Portland concrete with a broom, salt etched or light sand-blasted, finish.
2. **Decorative Paving -- Restrictions.** In order to maintain a consistent character to the streetscape, decorative paving for building entrances, plazas, etc., generally should be restricted to the private realm, and not extend across the public sidewalk. The Pedestrian Street in the Sequoia Area is an exception.
3. **Decorative Paving -- Allowances.** Limited decorative paving or elements will be allowed within the frontage and walkway zones as long as such improvements:
 - » Are less than 16 square feet in area (i.e., less than one 4' x 4' pavement module);
 - » Are unique elements that contribute to the character and identity of the streetscape (e.g., private identity logos/emblems, historical plaques/markers, public art, etc.); and
 - » Have design review approval.
4. **Alternative Paving Materials.** Alternative paving materials (e.g., unit pavers, porous pavement, etc.) may be allowed in the amenity zone, particularly if they reduce stormwater runoff and enhance street tree health and viability. Such materials will still be required to conform to the paving pattern established by the 2-foot grid.
5. **Special Districts.** In instances where there is a desire to establish a distinct identity for a street or district, other higher quality paving materials, such as stone pavers, may be used for the public sidewalk as long as there is consistent application for no less than the perimeter of a half block (i.e., the paving treatment should wrap around the block from alley to alley).
6. **Accessibility and Safety.** The design and composition of sidewalk paving must maintain smooth and level surfaces that meet universal accessibility requirements, and have a non-slippery surface when wet.
7. **Sustainable Materials.** Using quality materials and installation to ensure long use and avoid fre-

C. Pedestrian Realm

D.2. Sidewalk Paving (continued)

quent replacement is the most sustainable practice. Recycled and/or locally-sourced paving materials should be specified whenever feasible in order to minimize resource depletion and energy to transport. For example, using fly ash - a material that is pre-consumer recycled content - as a substitute for portland cement in concrete.

- 8. Stormwater Management. The use of permeable or porous pavement in the amenity zone is encouraged whenever feasible as a means of reducing stormwater runoff rates and volumes and increasing water volume to the root zone of street trees.
- 9. Park Circute Streets. The River District Specific Plan designates particular streets which form a circuit of park linkages connecting parks in the River District and the Railyards. These streets should be denoted with graphic indicators which indicate a particular pathway. (See examples on this page).
- 10. River Streets. Similar to the Park Loop Streets, directional indicators for streets which lead directly to the river should be incorporated into the sidewalk patterning. See diagram in B. - River District Streets.



Decorative paving or elements are allowed within the public amenity zone, but limited within the frontage and pedestrian zones.



Sometimes the sidewalk zones are clearly and formally defined.



Sidewalk graphic form along West El Camino in South Natomas.



The Freedom Trail in Boston is demarcated in the paving with a line of brick pavers. A similar paving system can be implemented to denote routes for Park Links and River Streets

C. Pedestrian Realm

D.3.a Street Furnishings and Amenities - General Guidelines

PRINCIPLE: Public street life shall be supported by providing quality facilities and amenities in the public streetscape that create an attractive and comfortable environment for people to congregate.

Rationale

As the “living room” for community life in the River District, it is important that the pedestrian realm be appropriately furnished. In order to transform the public streetscape from mere transportation facility to vibrant public open space it is important to add facilities and amenities that: allow people to stop and linger, provide services and information, and engage and delight the senses.

Streetscape amenities such as benches and seating areas, kiosks, news stands, news racks, drinking fountains, water features, bike racks, transit facilities, rest rooms, trash receptacles, and public art all help to animate the pedestrian realm, support public use, and contribute to the social and economic vitality of the River District.

Streetscape furnishings also have much to do with establishing the character and identity of an area. Their quality, durability, and location all influence the perception and use of an area. Streetscape furniture also includes both public and private furnishings. The public furnishings are the elements that provide continuity and predictability from block to block, while private furnishings generally contribute variety to the streetscape with their focus being on enriching and enlivening a particular building or use.

1. General Guidelines

- A. Variety. Public streetscape furnishings should include a variety of amenities and selection of materials that add to the excitement and vitality of River District.
- B. Unified Design Identity. Street furnishings should provide a continuity of streetscape features along the length of a street. At a district scale, coordinated design, type, color and material of street furniture contributes to a sense of community identity, and reflects and strengthens the local character of the River District.
- C. Context. Street furniture should strengthen sense of place by utilizing design, materials, and colors that best complement the context of existing buildings and landscape.

- D. Accessibility. Street furniture needs to be designed for universal access and to facilitate use by those of all ages and abilities.
- E. Seating. As much formal and informal seating as possible should be provided to increase the number of opportunities for people to socialize and spend leisure time outdoors along public streets.
- F. See Public Amenity Zone section for additional information.

2. Location

- A. Pedestrian Activity Areas. Street furniture and other amenities such as trash receptacles, kiosks, public telephones, newsstands, should be located in conjunction with active pedestrian areas such as intersections, key building entries, public parks and plazas, bus stops, important intersections and pedestrian streets.
- B. Public Amenity Zone. Street furniture and other amenities will be located predominantly in the public amenity zone to unambiguously indicate public use and maintain a clear zone for walking. If public amenities are located in the frontage zone adjacent to private property, they should be designed in such a way that they do not preclude public use.

C. Pedestrian Realm

D.3.b - Street Furnishings and Amenities - Bicycle Racks

PRINCIPLE: Bicycle use shall be supported by providing ample bicycle parking that is both secure and conveniently located.

Rationale

Bicycle use is a convenient, non-polluting means of transportation that can play a significant role in creating a less automobile-dependent River District. The flatness of Sacramento's terrain and the highly inter-connected street system both support cycling as a viable way to move around the city.

However, bicycles, like cars and people, need to have facilities that support them if they are going to be widely used. Such facilities include travelway realm facilities such as bike lanes, pedestrian realm facilities such as bicycle parking, and private realm facilities such as indoor showers and changing rooms. Of the three, provision of secure bicycle parking may be the most critical factor in supporting bicycle travel. Once cyclists reach their destination, they must be able to leave their bicycles without fear of theft. Similarly, bicycle parking needs to be convenient to cyclists' destinations or it will discourage use.

While a good percentage of parking for regular bicycle commuters should be provided in buildings and parking structures (see Private Realm parking guidelines), it is also important to provide short-term bicycle parking in the public right-of-way. The design of the public realm should

consider bicycle parking a fundamental design element that needs to be integrated with those needed for pedestrians, cars, and transit. While in some instances it may be appropriate to locate bicycle parking in the parking aisle of the street, in most instances bicycle parking should be located within the public amenity zone of the sidewalk.

Bicycles racks, however, by their nature, are somewhat awkward elements, physically and visually, to integrate into the limited space provided in the public amenity zone. If poorly located, bicycle parking can interfere with pedestrians, clutter the sidewalk, detract visually, or simply not be used.

Guidelines

1. Distribution. Bicycle parking within the public sidewalk generally should be accommodated with a number of smaller racks distributed along the length of a block, rather than one or two large concentrations of bike racks.
2. Adequate Clearance. Bicycle racks should be located so that parked bicycles do not block the travel path of pedestrians or infringe upon seating areas. In addition, racks should be located at least 24' to 30' from the curb to accommodate ingress and egress to parked vehicles.
3. Convenience. Ideally, short-term bicycle parking should be located within 50 feet of building entrances. Where a building has more than one main entrance, the parking must be distributed to serve all buildings or main entrances.
4. Weather Protection. Shelters should be considered for larger parking areas where long-term bicycle parking is expected (e.g. light rail stations). If more than 10 short-term spaces are required, at least 50% should be covered.
5. Visibility. Bicycle racks should be located in prominent locations within the public amenity zone that



Expanded sidewalk with bicycle parking.

C. Pedestrian Realm

D.3.b- Street Furnishings and Amenities - Bicycle Racks (continued)

are clearly visible to cyclists from the street and from adjoining buildings and public spaces. Placement in view of doors and windows will ensure adequate surveillance from building occupants and visitors. Avoid locating bicycle parking in isolated areas, dark locations, or garage recesses.

6. Traffic Calming. Due to the space required for bicycle parking, curb extensions are good locations to site bicycle racks, as long as the facilities do not interfere with pedestrian circulation. Providing space for bicycle parking should be considered a design criterion when designing curb extensions.
7. On-Street Parking. As cycling popularity increases in the future, on-street vehicle parking spaces may be converted to bicycle parking in locations where space in the public amenity/furnishings zone of the sidewalk is crowded or insufficient to meet demand.
8. Secure Rack Design. Bike racks should be designed to allow the bicyclist to secure the bicycle frame to the device at two points of contact. Appropriate bicycle rack designs include the inverted U, the ribbon type rack, or the corkscrew.
9. Bicycle Cargo. At destinations where people may anticipate carrying more items, such as public libraries, grocery stores and train stations, consider space needs for recumbent bicycles and bikes with trailers.



Prominently located bicycle racks on sidewalk bulb-out.



Bicycle racks can serve as an attractive design feature.



Bicycle racks as sculptural element.

C. Pedestrian Realm

D.3.c Street Furnishings and Amenities - Transit Stops

PRINCIPLE: The use of transit shall be supported by providing attractive, comfortable, and highly functional transit stops.

Rationale

In order to encourage and support community use of transit, it is imperative that transit service and facilities reflect a care and quality that conveys its importance to implementing the vision for the River District and the City's Smart Growth and Sustainability goals. In general, people will only leave their cars for transit if the experience is a pleasant and rewarding one.

Transit facilities, including shelters, trash receptacles, maps and schedules, etc. should convey a high quality character. As major elements of the public streetscape there is the opportunity for transit stops to become more than just utilitarian infrastructure. Instead, they can become symbols and attractive physical manifestations of Sacramento's commitment to a more sustainable, transit-friendly future.

Guidelines:

1. Schedule Information. All transit stops should be prominently signed and all pertinent route and schedule information, including major connecting services, should be posted.
2. Shelters and Seating. Transit shelters should be provided at heavily used transit stops; all stops should provide seating and shade.
3. Shade. Adequate shade must be provided to protect transit user from the sun. This can be achieved with either trees or a shelter, or at heavily used stops, both.
4. Architectural Design. Transit shelters should be designed to provide protection from sun, wind, and rain. Transit shelters and other amenities should be distinctive through strong architectural design that reflects the character of the district.
5. Amenities. Amenities such as Global Positioning System (GPS)-based real-time arrival information, ticket machines, nighttime lighting, and trash receptacles should be provided.
6. Sustainability. Transit shelters should be designed to promote transit and energy efficiency by incorporating features such as solar panels, LED lights, etc.



Attractive transit facilities, such as comfortable shelters with posted route information, encourage transit use.

C. Pedestrian Realm

D.3.d Street Furnishings and Amenities - Street Lighting

PRINCIPLE: Lighting shall be provided to create a safe and attractive setting for the community's nighttime use of the public realm.

Rationale

Frequently, street lighting is designed with the sole purpose to prevent certain adverse situations (e.g., crime, accidents, etc.) from occurring, rather than also create an attractive and inviting public environment. The tendency is for lighting design of the public realm to be influenced more by fiscal expediency and vehicular circulation issues than by a clear vision for a high quality pedestrian environment. As a result, street lighting too often consists of tall, widely spaced light standards that are out of scale with the pedestrian environment, and produce a uniform, overly bright illumination that drains the public realm of visual interest and drama. Typical of this type of lighting is the "cobra head" style light standard. At 28 feet – 6 inches in height, these light standards indiscriminately illuminate the public realm, typically with more emphasis on lighting the street than the sidewalk.

Ideally, street lighting needs to meet multiple objectives. In addition to ensuring that public safety and security criteria are met, street lighting should be designed to create a comfortable and attractive pedestrian environment. To this end, street lighting should be scaled to the pedestrian, with light fixtures that are more closely spaced and mounted closer to the sidewalk. Such lighting contributes to a human-scaled spatial definition of the streetscape, separating pedestrians from street traffic and providing for increased security and visibility. Pedestrian-scaled lighting can act both as a functional deterrent to unwanted activity and also as a stimulus to extend the active hours of street use. The design of light fixtures and the quality of the illumination add visual interest to the streetscape and contribute to the overall character of the street.

Guidelines

1. Light Standards/Poles and Fixtures

- A. Unified Design Identity. A single consistent style and size of pole and fixture should be used within a given district or street to create a unifying scheme of illumination that is appropriate to the scale of the street and the level and character of nighttime activity. Pole and fixture design should be coordinated with other
- B. Armature for Banners and Other Features. Light poles should include armature that allows for the hanging of banners or other amenities (e.g., hanging flower baskets, artwork, etc.)
- C. Height of Light Fixtures. The height of light fixtures generally should be kept low to promote a pedestrian scale to the public realm and to minimize light spill to adjoining properties. In active and more intimately scaled pedestrian zones pole-mounted fixtures should not exceed twelve (12) to fifteen (15) feet in height from grade to light source. On larger streets, at major intersections, a mounting height of up to eighteen (18) feet may be acceptable.
- D. Spacing. Generally, shorter light standards should be more closely spaced to provide appropriate levels of illumination. In lower activity areas where lower lighting levels are acceptable, closer spacing may not be necessary.
- E. Location in the Amenity Zone. Light standards should



Pedestrian-scaled lighting on retail streets enhances and encourages nighttime street life.

street furniture and amenities to establish an attractive and unified design character.

C. Pedestrian Realm

D.3.d Street Furnishings and Amenities - Street Lighting (continued)

be located in the amenity zone of the sidewalk (i.e., area closest to curb) and should not interfere with pedestrian circulation.

2. Levels, Direction, and Quality of Illumination

- A. **Limit Light Pollution.** Illumination generally should be focused down toward the ground, avoiding all unnecessary lighting of the night sky. In addition to standard street light poles, light sources that are mounted closer to and focus illumination directly onto the ground plane, such as bollard-mounted lighting, stair lighting, and wall- and bench-mounted down-lighting, are desirable. Light fixtures should include internal reflector caps, refractors, or shields that provide an efficient and focused distribution of light and avoid glare or reflection into upper stories of adjacent buildings.
- B. **Levels of Activity and Illumination.** Levels of illumination should be responsive to the type and level of anticipated activity, without over-illuminating the area (i.e., bright, uniform lighting of all public right-of-ways is not desirable). The level of illumination for pedestrian areas generally should range from 0.5 foot candles in lower activity areas up to 2.0 foot candles in more critical areas (A foot candle is a unit of illumination, measured at the distance of one foot from the source of light.)
- C. **Illumination of Pedestrian Realm.** Street lighting should focus on illuminating the pedestrian zone (e.g., sidewalks, paseos, plazas, alleys, transit stops), rather than the vehicular zone (i.e., the street). Provisions for festive tree lighting should be available in retail districts and other suitable areas.
- D. **Illumination of Conflict Areas.** Higher lighting levels should be provided in areas where there is potential for conflict between pedestrians and vehicles, such as intersections and crosswalks, changes of grade, and areas with high levels of nighttime activity. Thus, commercial shopping streets should have higher levels of illumination than side streets that are more residential

in character and have lower levels of nighttime activity.

- E. **Color Balance.** Color-balanced lamps that provide a warm white illumination and realistic color rendition are recommended.
- F. **Energy Efficiency.** In order to conserve energy and reduce long-term costs, energy-efficient, Energy Star-certified lamps should be used for all public realm lighting, and hours of operation should be monitored and limited to avoid waste.



Light standards with banners add visual interest to the streetscape.

C. Pedestrian Realm

D.3.e Street Furnishings and Amenities - Other

1. Drinking Water Fountains

- A. Drinking water fountains should be “high-low” type to provide comfort and accessibility for tall people or those who have difficulty bending, as well as for children, short people, or those in wheelchairs.
- B. Consider the need to provide bollards or other detectable barriers for the blind as the ends of protruding drinking fountain arms.

2. News Racks

- A. Consolidate newspaper racks into consistently designed newspaper boxes to reduce the physical and visual clutter of individually placed newspaper boxes.
- B. Prohibit the clustering and chaining of news boxes to trees, street signs, and utility poles.
- C. Newspaper racks generally should be located at intersections, and where possible, co-located with transit stops, to provide an amenity to transit riders.



Consolidated newsracks provide an opportunity for adding artistic elements to the streetscape.

3. Wayfinding Signage

- A. The City’s existing wayfinding system should be expanded and enhanced to serve the needs of out-of-town visitors as well as citizens of Sacramento who circulate in the District.
- B. A River District wayfinding system should:
 - I. Provide directional and information signs that are attractive, clear and consistent in theme, location, and design.
 - II. Identify key historic, cultural, civic, and shopping destinations and facilities, e.g., public parking structures, parks and open space areas, transit routes and stops, etc.
 - III. Be co-located with other streetscape furniture (e.g., light standards, transit shelters) where possible to reduce visual clutter in the public realm.
 - IV. Be incorporated to cover the entire River District with constant, yet distinct and defined graphics.



Kiosk



Wayfinding Signage



Downtown Map



Convention Center Map

C. Pedestrian Realm

D.3.e Street Furnishings and Amenities - Other (continued)

4. Kiosks and Rest Rooms

- A. Kiosks and rest rooms should be located in high-activity areas such as public plazas and intersections. They should be constructed of durable materials that can be easily maintained.
- B. Kiosks are places for both permanent and temporary signs. The kiosks should be designed with permanent signage in mind that ties into the wayfinding system; surfaces should be provided for taped or stapled temporary signs. Temporary signs should be removed regularly (e.g. monthly) to avoid clutter.
- C. Design systems should be explored that combine rest rooms and kiosks into a single structure.



Public Restroom

5. Seating

- A. Benches and other forms of seating (e.g., low walls, planter edges, wide steps, etc.) should be provided throughout the River District, with more seating provided in areas with ground-level retail frontages and at entrances to major employers.
- B. Attractively designed City benches should be provided in sidewalks, plazas, parks and other high pedestrian use areas to further promote pedestrian use. These benches should be fixed in place and constructed of durable and low-maintenance materials. Benches at bus stops should be incorporated into the design of the bus shelter, where appropriate.
- C. Use of individual, movable chairs is encouraged where there is an organization which is willing to manage their use (e.g., secure the seats at night). Such seating provides appealing flexibility that can enhance public use.
- D. The creation of seat walls, steps, and planters that can serve as informal seating areas is encouraged as a means of expanding the seating potential and provid-



Expanded sidewalk creates additional space for seating and other amenities. (Examples: University Avenue, San Jose, CA and Castro Street, Mountain View, CA)

C. Pedestrian Realm

D.3.e Street Furnishings and Amenities - Other (continued)

ing diverse opportunities for social interaction.

6. Trash and Recycling Receptacles

- A. Separate trash and recycling receptacles should be located regularly at intersections, near major building entrances, near bus stops and light rail stations, and adjacent to outdoor seating areas.
- B. Each receptacle should accommodate recycling, prevent wind and rain from entering the container, facilitate convenient access to the liner, and have the option of being anchored to the pavement.
- C. The style and color of the City's trash receptacles should be coordinated with the selected bench design and be consistent throughout the District or the Central City.

7. Bollards

- A. Where necessary, bollards can be used to prevent vehicles from entering pedestrian zones.
- B. Bollards may also be used to mark pathway entries at public-private interfaces.
- C. Bollard placement and design should be coordinated with emergency vehicle access; in certain locations, removable bollards may be appropriate to balance pedestrian protection with emergency access.
- D. Bollard style and color should match the selected bench and be consistent throughout a corridor or district.

8. Tree Grates

- A. Tree grates should be used in commercial districts and areas with high pedestrian activity to protect trees and reduce safety hazards.
- B. Tree grates should be used in all tree wells that are surrounded by paving, unless the wells are specifically designed for accent planting. In areas with lower levels of pedestrian activity, decomposed granite or gravel instead of tree grates may be permitted.



Tree grate with integrated tree guards in areas with high pedestrian use.

- C. Grates that allow for integrated tree guards, decorative lighting, electrical fixtures and auxiliary power (for special events, holiday lighting, or maintenance) are encouraged.

9. Parking Meters

The City should move toward installing pay-and-display solar powered parking meters throughout the River District. These meters are well-designed, reduce clutter in the pedestrian realm, conserve energy, increase revenues, and are customer friendly.

D.4 Riverfront Promenades, Trails and Bikeways

PRINCIPLE: Pedestrian and bike facilities should be a source of creative inspiration for accessing the riverfronts of the District and shall maximize the opportunities for public access to the rivers.

Rationale

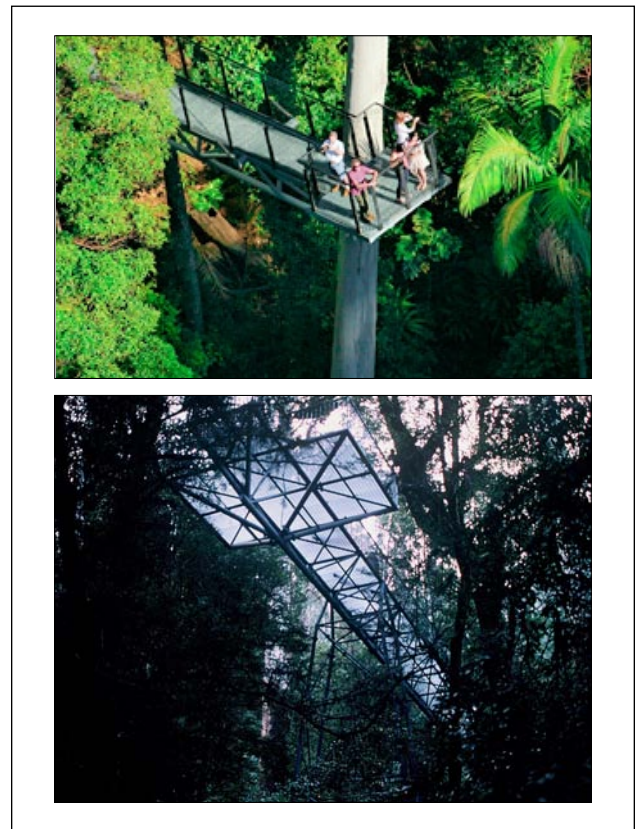
The River District is bounded by over 2.7 miles of riverfront that is a part of two trail systems. However, despite this impressive length of shoreline, few opportunities exist to access the the levee trails or the riparian environment.

Recommendations

1. Extend the Sacramento River Promenade north from Old Sacramento to the entrance of Tiscornia Park.
2. Provide well defined trails to selected areas of the river's edge, discouraging off-trail use in areas of sensitive habitat.
3. In context with the view opportunities provided by the public viewing platform of the City Water Intake Facility, delicate platform structures should be considered for access into sensitive areas along the American River Parkway. Such structures provide accessible access from the trail and provide an unique vantage point to the immediate flora of the riparian area, as well as special views to the city and parkway.



Sacramento River Promenade south of Old Sacramento. Planned southward xtensions should be complimented with similar facilities to the River District.



Examples of lightweight structures for pedestrian access into sensitive habitat areas.

E. Landscape

PRINCIPLE: Trees and other plant materials shall be provided as a means of enriching the pedestrian experience, enhancing River District aesthetics, and improving the ecological function of the urban environment.

Rationale

Traditionally, as core centers became denser and more urban, they also tended to eliminate or severely reduce the amount of greenery in the urban environment. While sustaining plants in an urban environment is more challenging, urban environments need not be devoid of plant materials. Growing plants are one of the most important elements in creating a humane streetscape and attractive public realm. For this reason, Sacramento’s reputation as the “City of Trees” is a key component in its desire to be America’s most livable city.

Trees and plants soften the city’s hard surfaces and sharp edges, not just by screening but also by adding organic forms, colors, textures, and movement to the urban setting. They also add scale to the River District environment that people can readily relate to, and, as living organisms that grow and change with the seasons, introduce a dynamic quality that mitigates the largely inanimate character of the built environment. Coordinated selection and spacing of tree species and other plantings can help to establish a distinctive identity for a corridor or district.

While creating a more attractive environment is important, it is only one of the benefits gained from maintaining a well-landscaped urban area. Landscaping also contributes to creating a healthier and more sustainable environment. A diverse and healthy urban forest provides many environmental benefits, including enhanced energy efficiency, stormwater management, air quality, and wildlife habitat.

Trees provide an inexpensive form of “air-conditioning” by contributing to micro-climate control during the hot summer months. The shade provided by a mature tree canopy reduces the build up of surface temperatures in paving and buildings (i.e., the “urban heat island effect”). This, in turn, makes streets more comfortable for pedestrians and reduces air conditioning required for buildings, both of which result in reduced energy consumption and improved air quality. A more comfortable pedestrian environment means fewer vehicle trips, less gas consumption,



Street trees supplemented with additional landscaping create an inviting streetscape.



Landscaped median adds visual interest.

and fewer carbon emissions. Reduced air conditioning means less electricity used and less air pollution related to power generation.

The combination of foliage cover, pervious surfaces, and evapotranspiration provided by trees and other vegetation contribute to improved stormwater management and water quality, and reduced demand on City infrastructure. The combination of foliage cover and pervious soil

D. Landscape

also slows stormwater runoff and increases groundwater infiltration. By reducing peak storm flows that periodically contribute to exceeding capacity of the City’s combined sewer system. The City’s Stormwater Quality Design Manual should be consulted for planning, design guidance and requirements.

The urban forest also helps battle climate change, by removing carbon, a major contributor to the “greenhouse effect”, from the atmosphere. Through the process of photosynthesis, trees remove carbon dioxide (CO2) from the atmosphere and store it in their cellulose. Tree and other plant foliage also absorb other gaseous pollutants through their leaf surfaces and can remove up to 60% of the particulate matter from the atmosphere.

Clearly Sacramento’s robust urban forest is a significant amenity and asset. The mature tree canopy that graces the city streets and parks leaves an indelible impression on those who visit Sacramento and engenders great pride for Sacramentans. Maintaining and expanding that urban forest represents an ongoing challenge. There has been increasing concern about the potential implications for the health of the urban forest as taller buildings with sub-surface garages are built to right-of-way lines, occupying space previously available for tree canopies and roots. With redevelopment, there is an opportunity to ensure that future development reserves the space needed for a healthy urban forest.

The maturity of the City’s urban forest raises another challenge, which is how to maintain its health as existing trees reach an age at which they naturally begin to decline. As the City embarks on an agenda to become more sustainable, comprehensive strategy for landscaping the urban environment is needed that engages the urban forest’s environmental function and optimizes its role as part of Sacramento’s green infrastructure.

*The term “heat island” refers to urban air and surface temperatures that are higher than in nearby rural areas due to decreased vegetation, reduced air flow due to buildings, and waste heat from cars, air conditioners, and other forms of energy consumption. Concrete and masonry materials store heat during the day and re-radiate it at night.

A. Comfort and Interest. Landscaping shall be introduced to the public realm to contribute to the quality



Large expanses of pavement should be broken up with landscape elements.



Permeable pavement and rain gardens provide stormwater management benefits (Portland, OR).

D. Landscape

E.1. General Landscaping Guidelines

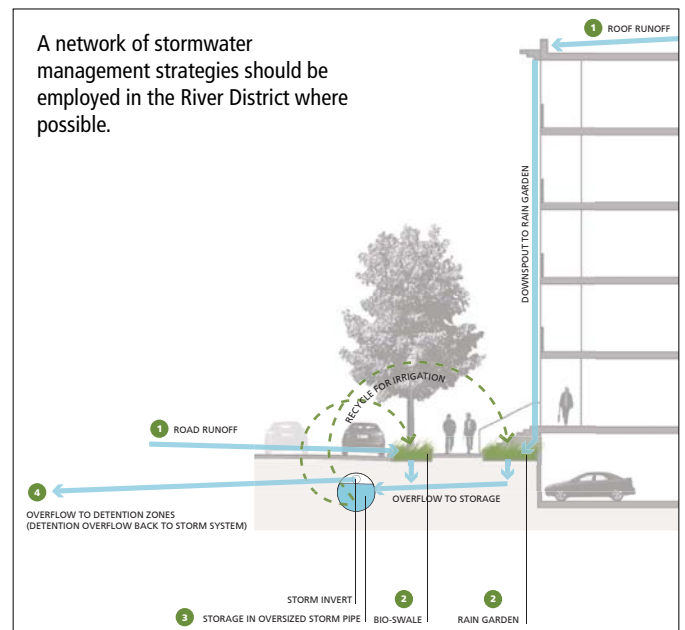
- of the pedestrian experience by adding color, texture, and form that add visual interest, and providing scale, shade, and buffering that contribute to the sense of comfort.
- B. Planters. In order to provide variety and visual interest, public realm landscaping may include permanent above-grade planters, movable pots and planters, and hanging planters in addition to tree wells and planting strips.
 - C. Location. Typically, the Public Amenity Zone separating the sidewalk from the street will be the primary landscape zone, although landscaping can be introduced to all sidewalk zones as long as adequate clearance is maintained.
 - D. Urban Context. Plant materials should be in scale and compatible with the adjacent land uses and buildings. Plant materials and landscaped areas should be used to enhance the appearance of structures, define site functions and edges, and screen undesirable views.
 - E. Local Climate and Ecology. Plant species should be selected that are suited to climatic conditions in Sacramento, including native or naturalized species that provide potential habitat for local wildlife.
 - F. Reduction of Water Consumption. To minimize maintenance and water consumption, emphasis should be placed on the selection of native, drought-tolerant species, and all landscape areas should be irrigated with high-efficiency automatic drip and low-flow watering systems.
 - G. Water Reuse. To minimize water consumption associated with public realm landscaping, the use of rain-water harvesting and recycled water for irrigation purposes should be encouraged and expanded.
 - H. Planting Conditions. When selecting trees and planting material, consideration should be given to their compatibility with the physical conditions of the urban setting, such as limited space for roots and canopies, limited soil fertility, impervious coverage of the root zone, heat build up, increased urban pollution, and compatibility with adjacent uses.



Raised planters create informal seating opportunities.



Landscaping can be accommodated in a combination of planting strips and pots. Native drought-tolerant plants are recommended.



D. Landscape

E.1. General Landscaping Guidelines (continued)

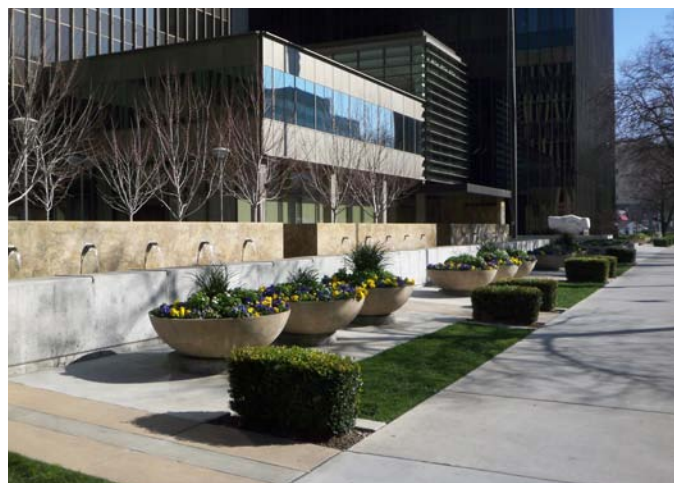
- I. Plant Selection. Plant species should be responsive to climate, existing species and planting patterns, although planting diversity is allowed where it complements and does not detract from a prevailing planting theme or pattern.
- J. Plant Selection for District/Corridor Identity. Species selection should include one or two species that are repeated regularly over the length of a block or throughout a district, to provide visual continuity.
- K. Maintenance. Landscaped areas should be properly maintained, which includes watering, removing debris, weeds and litter, modifying tree grates, and pruning and replacing plants when necessary. Adjacent private property owners are required to maintain the grounds and trees on any unpaved portion of the adjacent public street right-of-way where space is provided for a city street tree or other planting, regardless of whether the adjacent property is developed.
- L. Vertical Clearance. To maintain proper clearance:
 - Shrubs should be trimmed to three (3) feet or less in height above the grade of the sidewalk
 - Tree canopies should be trimmed up to at least eight (8) feet over the sidewalk and fourteen (14) feet above the street.
- M. Seating. Permanent above-ground planters should be designed so that the height and width of planter walls create suitable opportunities to double as informal seating areas.
- N. Stormwater Management. Wherever feasible, landscaped areas should incorporate permeable or unpaved surfaces to reduce the “heat island effect,” aid in stormwater management, and supply water to the root system of adjacent plants. The Stormwater Quality Design manual for Sacramento and South Placer county should be referenced for further guidance.
- O. Applicable city standards for sightlines should be consulted.



Landscaping can contribute significantly to the identity of an area.



Movable landscape elements provided by businesses



Fountain and landscape elements

D. Landscape**E.2. Street Tree Guidelines**

- A. General. In addition to playing important aesthetic and pedestrian comfort functions, the urban forest is also a vital component of the city's sustainability strategy. Street tree issues should be coordinated with the Urban Forest Manager.
- B. Tree Protection. Maintain and protect existing mature trees wherever possible, including notching or stepping back of buildings where trees are deemed to be of significance (refer to Private Realm guidelines for more discussion of building adjustments to pre-existing street trees).
- C. New Tree Plantings. New and/or replacement street trees should conform to the predominant existing planting pattern with respect to species, spacing, and alignment. Species may need to be changed to reflect current horticultural best practices and site conditions.
- D. Trees in New Development Areas. Street trees represent a critical framework element and piece of green infrastructure within the public right-of-way. In newly developing and/or redeveloping areas such as the Railyards, River District, and Docks Area, street tree design, including species selection, tree spacing, and planter dimensions, should occur concurrently with the development's build-to lines & setbacks. Street tree design should occur concurrently with, and guide, the selection and placement of public facilities such as street lights and signage, rather than being treated as an afterthought.
- E. Horizontal Clearance. Appropriate horizontal clearance is dependant upon species and subject to approval. Chapter 12 of the Municipal Code and the DOT Design and Procedures Manual should be referenced. Generally, to maintain proper clearance and sight lines, street tree centerlines should be located no closer than:
- I. 10-20 feet from a building façade, depending upon tree form,
 - II. 25 feet from the curb line of an intersection ,
 - III. 5 feet from a driveway or alley,
 - IV. 5 feet from fire hydrants, underground utilities, utility poles, and parking meters
 - V. 3 feet from sidewalk furniture,
 - VI. 3 feet from curb adjacent to parallel parking; 4 feet from curb for perpendicular and diagonal parking,
 - VII. 15 feet from street lights.
- F. Canopy Cover. Street tree spacing should support the City goal of achieving at least 50% shade coverage of streets and paved areas. While canopy coverage will be less in higher-intensity, urban areas, the level of canopy coverage of the public realm (i.e., public rights-of-way, parks, and plazas) in the River District suggest that the following guidelines should be used:
- I. 35% coverage in commercial streets,
 - II. 50% coverage in neighborhood streets.
- G. Tree Spacing. The maximum spacing for street trees should not exceed 40 feet on center. The minimum spacing for street trees is 12 feet for trees with small mature size. The optimum spacing should be responsive to species type and canopy characteristics. As a general rule, the following spacing should be used:
- I. Large canopy trees: 30 to 40 feet on center
 - II. Medium canopy trees: 20 to 30 feet on center
 - III. Small canopy trees: 15 to 20 feet on center.
- H. New Space for Additional Trees and Plantings. In order to achieve the City's objectives for canopy coverage and enhance its identity as the City of Trees even as development intensities in the River District become more urban, alternative tree planting configurations



Sacramento is renowned for its street trees. Preserving and enhancing the existing canopy is a top priority.

D. Landscape

E.2. Street Tree Guidelines (continued)

should be pursued that allow for more trees of all sizes to be planted, including more large canopy trees. Changes in the public right-of-way that could accommodate additional and more sustainable tree planting include: narrowing streets (i.e., removing and narrowing lanes), adding medians and bumped out planting bulbs within the parking lane, and widening sidewalks and parkways. Corner sightlines should be taken into consideration. Such actions require reconsideration of the design of the public right-of-way, and can only be done with full consideration of the implications for the circulation function of the street (see guidelines in Section B. Travelway Realm).

- I. **Double Rows of Trees.** Generally, the Public Amenity Zone serves as the primary location for street trees in order to keep the pedestrian thoroughfare clear and to provide maximum space for tree canopies. However, on wide sidewalks a second row of trees may be planted interior to the amenity zone as long as adequate pedestrian way clearances are maintained. Similarly, additional rows of trees can also be added within the curb-to-curb street cross-section within the parking zone or in a center median.
- J. **Unified Tree Planting Scheme.** To optimize the beneficial effects of street trees, both aesthetic and as green infrastructure, emphasis should be placed on establishing and maintaining a consistent and well-coordinated planting scheme within a district or along a specific corridor. A formal planting scheme that uses a single, regularly spaced dominant species can be appropriate for street trees in the River District. This should be done intermittently on a block basis to alleviate host-specific diseases. Accent species that highlight special features or uses should be interspersed with the primary species, rather than replacing it.
- K. **Pruning.** To maintain health of tree (e.g. safety, longevity) and provide a pleasing form, existing street trees should be pruned per ANSI standards, and not be topped.
- L. **Vertical Tree Clearance.** Street trees should be selected that have a branching pattern and bottom canopy

height at maturity—generally fourteen (14) feet or higher—that will not obscure commercial signage and storefront windows or conflict with truck access. Lower branching heights may be appropriate in plazas or other open spaces.



Where sidewalks are wide enough, a second row of trees can be added for variety.



Continuous planting trenches covered with permeable pavers provide for healthier trees.

D. Landcape

E.3. Tree Planting Guidelines

- A. **Planting Conditions.** The urban environment is not the ideal setting for growing trees. Thus, it is critical that efforts be made to provide the best possible conditions for proper tree growth when planting new street trees, including ample soil planting depth, subsurface preparation, aeration, root protection, irrigation, and drainage. Newly planted street trees will need supplemental irrigation until they are established.
- B. **Planting Trees in-ground v. in planters.** Primary street trees should be planted directly in the ground. The use of above-grade pots or raised planters for primary street trees is discouraged, but may be appropriate for smaller accent trees.
- C. **Tree Wells.** Trees can be planted in parkway planting strips or in individual tree wells. Tree wells are preferred in higher intensity areas with high levels of pedestrian activity, particularly cross-traffic between on-street parking and adjoining buildings (e.g., retail districts, sidewalk cafes, etc.).
- D. **Tree Well Dimensions.** In order to promote tree health, tree wells should generally be 6 feet by 6 feet or larger. In constrained areas, the minimum acceptable tree well is 4 feet by 6 feet. As existing trees are replaced, existing tree wells should be expanded wherever possible.
- E. **Tree Grates.** In areas with high pedestrian activity, metal tree grates and tree guards may be used on all tree wells to protect trees, and allow for aeration and surface water collection. In areas with lower pedestrian traffic, decomposed granite in addition to park strips may be used. See expanded tree grate guidelines in Street Furnishings and Amenities section.
- F. **Continuous Planting Trenches.** Even where tree wells are used, continuous planting trenches parallel to the curb should be installed, where possible, to provide maximum soil area for roots to spread. Trench areas should be filled with structural soil that prevents compaction and allows for better tree health, and is recommended for any tree planted in a sidewalk or hard-scape plaza. The sections of trench between tree



Park strips for street trees are appropriate on residential streets within the River District.

- wells may be covered with steel grating, cantilevered concrete, or pavers to create additional space for pedestrian amenities while also allowing air and water to penetrate.
- G. **Parkway Planting Strips.** Where appropriate, new parkway planting strips ideally should be 8 feet wide, and a minimum of 6 feet wide. Planting strip widths of 4 to 5 feet are acceptable in very constrained conditions, but are the absolute minimum width needed for most trees to survive. In areas where sidewalk zones are widened, existing narrow parkway planting strips should be widened to 6 or 8 feet, whichever is feasible. An increased distance from building façade will maximize the space available for tree branching, canopy cover, and root zones.
- H. **Protecting Tree Roots.** In order to avoid damage to pavement, appropriate, deep-rooted trees should be selected, and root barriers should be installed as necessary.

F. Small Public Places

PRINCIPLE: Small Public Places shall be provided throughout the River District, supplementing the main civic-scaled park system.

Rationale

Small Public Places can provide needed open space for surrounding residences, offices, and commercial buildings, especially when larger land parcels are not available. Small Public Places will help fill any park deficiency gaps and help to create public gathering places that will foster a sense of community. The scale and features of these small public places should be consistent with its context.

The inclusion of small parks and plazas is also intended to provide needed relief from the hardscape and intensity of the denser land use patterns within the River District. Small Public Places will serve as visible and positive places to gather and recreate for persons living, working or visiting nearby. The intent is that Small Public Places will help create a sense of community and provide both passive and recreational facilities and experiences. They should be easily accessed by the surrounding neighborhood, so as to become a community meeting place and neighborhood focus at a very local level. Their central location facilitates the good casual surveillance typical of local, community-vested amenities.

Their smaller size generally limits their use to casual and passive recreation (i.e. no ball-games), dog walking, etc. Their layout may include seating areas and sometimes children's play areas, often combining hardscaped and landscaped spaces with features like water fountains or raised stage areas.

Although there is no minimum size, an example would be a small public space that fits on a single 40' x 80' lot. Small Public Places in many urban centers, like Paley Park (Figure 2) in New York City - at just 1/10 of an acre - can provide valued respite from the city despite being small in size.

Small Public Places can contribute to local stormwater management strategies, serving as a storage area for run-off, with swales that may connect to larger systems, and through the provision of permeable areas.

Small Public Places may be public, private, or any form of partnership. They are often created on abandoned inner-

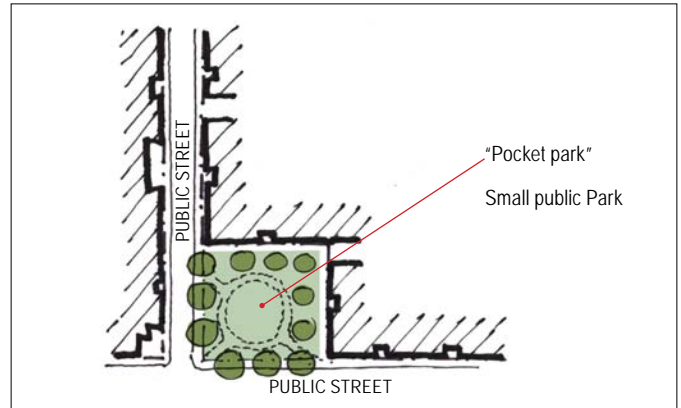


Figure 1. Small public places should be accessible from the public sidewalk.



Figure 2. Paley Park in New York City is a small, cobble urban room of just 4,200 sf (1/10 acre).



Figure 3. Neighborhood volunteers work to implement the Paige Booker pocket park in Indianapolis, IN.

E. Small Public Places

neighborhood parcels. Many neighborhood groups provide the labor for implementation (Figure 3) and maintenance, while in some cases the City may want to perform this role.

Figure 3 is a project from Keep Indianapolis Beautiful Inc., a 30-year-old program aiming “to unite people to beautify the city, improve the environment, and foster pride in the community.”

Guidelines

1. The Parks and Recreation Master Plan should be referenced for policies and further guidelines for Small Public Places.
2. Design all new Small Public Places parks around a “purpose.” Applicants or Property Owners should identify an appropriate purpose for each of their proposed parks, preferably by meeting with the neighborhood and/or community to determine the most appropriate purpose of the future park, before it is designed. Categories of purposes could include Education; Socializing; Exercise; and Relaxation.
3. Small Public Places shall be designed to be accessible to the highest possible number of users. They should be accessible from a public sidewalk and be inviting to the public.
4. Layout should include seating areas and central design features. The design should combine hard and soft landscape.
5. There is no minimum size for a Small Public Place, although established guidelines should be followed for a minimum size dependent upon the purpose of the park.
6. Encourage Small Public Places to contribute to local stormwater management strategies.



Figure 4. Aerial View & Plan of South Park, San Francisco (75' x 500'; 0.86 Ac)



Figure 5. Aerial View & Plan of Precita Park, San Francisco (120' x 800'; 2.2 Ac)

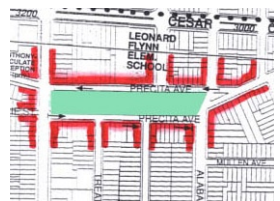


Figure 6. Panoramic view of the mini-park at 24th street in the Potrero Hill neighborhood of San Francisco

G. Public Art

PRINCIPLE: Public art shall be incorporated into the public realm to add visual interest for pedestrians and foster a distinct identity for individual districts and corridors.

Rationale

Public art enhances the environment and encourages pedestrian travel by adding visual interest to the public streetscape. Adding elements that visually and intellectually engage the community can be an effective means of encouraging pedestrian activity and fostering community identity. On a large scale, public art has the ability to enhance a district's identity, contribute to the creation of a new identity, or reinforce a design theme.

Consideration should be given to the integration of public art into all aspects of the public and private realm. Given the competition for space in the pedestrian realm, it is important to move beyond the concept of public art as discrete elements such as statues or sculpture that occupy their own space. Instead, public art should be conceived of as something that is integral to the design of the many elements that occupy the public streetscape--making them more interesting, but not necessarily requiring more space. Thus, the design of all streetscape elements, including pavement treatments, street furniture, transit stops, light fixtures, etc., should consider the potential to incorporate public art.

The Sacramento Metropolitan Arts Commission (SMAC) is the coordinating body for public art in the Sacramento region, and should be consulted in coordinating public art at the beginning stages of projects.

Guidelines

1. Capital Improvements and Development Projects. All capital improvement and development projects, should explore the integration of public art into the design of public streetscape elements (e.g., paving, street furniture, transit shelters, lighting, etc.).
2. Location. Public art should be located where it can be enjoyed by a large number of people, including sidewalks, intersections, plazas, and medians.



Public art should be engaging, either through physical movement or public interaction.

F. Public Art

3. Enhance Challenging Pedestrian Areas. Public art should be incorporated into difficult pedestrian transition zones, such as the connections over and under the freeway to the Railyards and below the freeway to the River, to facilitate pedestrian use by enhancing and animating these spaces.
4. Interactive Art. Interactive art is encouraged; examples include pieces that either invite user participation or provide sensory stimulation through touch, movement, or sound.
5. Educative and Interpretive Art. Public art should be used as a means of enhancing community understanding of Sacramento's history and unique cultural assets and appreciation for local artists.
6. Permanent and Temporary. Public art may consist of both permanent and temporary installations.
7. Unified Design Identity. The design and placement of public art should enhance and be coordinated with other streetscape improvements to ensure a coherent character for a given district or corridor.
8. Driver Safety. Placement of public art and monuments should not obstruct drivers' view of traffic control devices, be a distraction, or be located in a manner that could create a roadside hazard to motorists.



Tree grates with artistic flourishes add visual interest to the streetscape.



Sculptural elements can double as seating.



Water fountains provide relief during Sacramento summers



Prominently located public sculpture by R. Arneson is enjoyed by many.