CHAPTER

# 4.0 APPROACH: DESIGNING GREAT STREETSCAPES

*Good streetscape design begins with an approach that emphasizes wholeness, considering how various elements interact to create an overall streetscape composition. This chapter describes basic principles and guidelines to achieve unified designs on a variety of street types.*

CHAPTER

# 4.0

## DESIGNING GREAT STREETSCAPES

*San Francisco's streets and sidewalks are the canvas upon which the daily moments of urban life take place.*

Much more than a strip of sidewalk laid down next to a roadway, a great streetscape incorporates a holistic vision for the use of the street which takes into account the needs of all users. San Francisco's streets and sidewalks are the canvas upon which the daily moments of urban life take place. With well designed streetscapes, our city's streets can become a fundamental component of a healthy, vital and thriving public realm. The right proportions, unique spaces, and appropriate amenities can make a streetscape a comfortable and memorable place where people want to spend their time. The key to achieving a great streetscape is making sure that each element of its design works together to create an inviting public space. The following sections detail the approach and critical considerations involved in the creation of great streetscapes.

Chapter 4 presents a guiding framework for designing a great pedestrian environment. It begins with a description of street types (4.1), the first step to achieving contextual streetscape design. It describes appropriate elements for each street type, both standard elements and potential additions.

Following that, this chapter describes the general guidelines for overall streetscape design (4.2), including designing pedestrian-friendly intersections, appropriate sidewalk widths and zones, and general considerations for the layout of streetscape elements along a sidewalk.

Street designers and managers begin with this chapter, and follow these few steps when using the Better Streets Plan to design a street:

- Determine your street type (4.1)
- Identify appropriate standard and additional elements for that street type (4.1)
- If sidewalk is less than recommended width, determine whether it is feasible to widen sidewalks to minimum recommended width (4.2)
- Locate elements according to sidewalk zone and streetscape layout guidance (4.2)
- Design and locate individual elements per the specific guidance by element (Chapters 5 and 6)

# 4.1 STREET TYPES

Good street design begins with an understanding of the street context. Different streets have different conditions, and merit differing design considerations.

The street types outlined at left form the basis of the design recommendations in the Better Streets Plan. These street types are not intended to replace official functional classifications from the Transportation Element of the San Francisco General Plan but instead are meant to serve as a guide for designing appropriate streetscape environments. However, streetscape design should take functional transportation classifications into account.

## Determining Street Type

The street types in this plan are defined first by land use characteristics and secondarily by transportation characteristics. In addition, special street types that merit unique design approaches are called out individually. For all street types, designers should consider additional special roles a street may play, such as importance as a transit corridor, or having particular ecological functions.

Street types used in this document are described at left.

In determining street type for a particular project, designers should begin by determining adjacent land use: is it primarily residential, commercial, industrial, or mixed use? Second, what are the transportation characteristics: is it a major through corridor with high traffic volumes and speeds, or does it serve a more local function with lower traffic volumes and speeds? Is it in a downtown location? Finally, does it have special characteristics such that place it into one of the "Special Streets" categories?

In some cases, the point of a project may be to change the function of a street, for example from a major throughway to a traffic calmed street. The ultimate role for the street should be used when designing improvements.

### Gateways and Transitions

An individual street may fit into one or more street types. Consecutive blocks of a street may fall into different street types where land use, context, and function of the street shift from one block to the next. Designs may shift accordingly.

Additionally, locations where different street types intersect may warrant special design treatments. For example, where neighborhood residential streets intersect with major throughways, a gateway treatment such as a planted median island or other traffic calming feature may be appropriate. Similarly, where freeway on and off ramps intersect with city streets, there may be a need to highlight this transition to alert drivers to the fact that they are entering a surface street where pedestrians are likely to be present.

## Designs by Street Type

The following pages illustrate typical design treatments and appropriate elements by street type. Overall layout should follow the sidewalk zone and streetscape layout guidelines in Section 4.2. Individual elements should follow the design guidelines found in Chapters 5 and 6.

A sample page is provided to illustrate the format of this section.

### STREET TYPES USED IN THIS PLAN

The street types outlined below form the basis of the design recommendations in the Better Streets Plan and should be used to determine appropriate design treatments.

**COMMERCIAL**
- Downtown commercial
- Commercial throughway
- Neighborhood commercial

**RESIDENTIAL**
- Downtown residential
- Residential throughway
- Neighborhood residential

**INDUSTRIAL**
- Industrial
- Industrial mixed-use

**SPECIAL**
- Parkway
- Park edge
- Multi-way boulevard
- Ceremonial
- Alley
- Paseo

# STREET TYPE

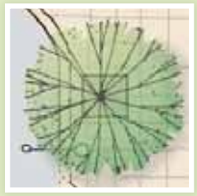
This text gives a brief description of the street type and general considerations

*This image shows a typical sidewalk section, with appropriate elements for each sidewalk zone. See Section 4.2 for recommended and standard minimum sidewalk widths*

## CONSIDERATIONS

- This text describes general considerations for this particular street type

## STANDARD IMPROVEMENTS



Stree trees
(See Section 6.1)

- This text describes standard improvements. These improvements should generally be included as part of any streetscape design project on this street type.
- In some cases, including all standard improvements may be limited by available funding. Not every project need have every standard improvement; however, projects should be consolidated wherever possible to maximize 'completeness' of improvements.

## ADDITIONAL GUIDELINES

- These describe specific guidelines that may apply to the choice of appropriate elements for this street type.

## CASE BY CASE ADDITIONS

01

Addition

This section shows elements that should be considered for the street type on a case-by-case basis, based on physical conditions, budgets, and neighborhood preferences.

These treatments should generally be considered above and beyond standard treatments, and their appropriateness will vary from project to projet.

Case-by-case additions are keyed to the map (not all improvemnets are shown in site plans).


*This image shows a typical plan view for the street type, shown with standard enhancements.*

*Numbers are keyed to the case-by-case additions.*

*** Site plans in this chapter are for representational puposes only; individual elements may not be appropriate as shown. For specific guidelines, see Chapters 5 and 6*

# DOWNTOWN COMMERCIAL

Downtown commercial streets such as Grant or Kearny Streets handle high pedestrian volumes and high levels of activity throughout the day. They are the face of the city for residents, employees, and visitors. Due to their importance, visibility, and high levels of pedestrian activity, downtown streets should have generous sidewalks, high levels of pedestrian amenities, and distinctive, formal design treatments.

Streetscape guidelines for downtown commercial streets are described in the *Downtown Streetscape Plan*.

*Downtown streets cater to a high volume of local and visiting pedestrians and should reflect a high level of amenity and quality of care.*

## CONSIDERATIONS

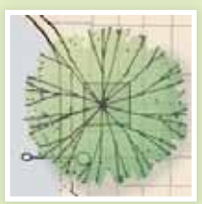
- High levels of pedestrian activity
- Desire for generous pedestrian environment and public realm
- High volume of through traffic
- Important transit functions
- Access needs for local businesses
- Potential presence of sub-sidewalk basements
- Limited sunlight access to sidewalks

## STANDARD IMPROVEMENTS

Marked crosswalks with curb ramps (Section 5.1)

Pedestrian signals (countdown and APS) (5.2)

Corner curb extensions (5.2)



Street trees in grates (6.1)

Sidewalk planters (planter boxes) (6.1)

Stormwater control measures (6.2)

Pedestrian-scale lighting (6.3)

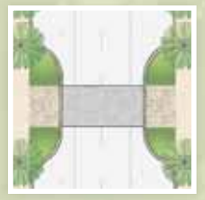
Special sidewalk paving (6.4)

Site furnishings (6.5)

## ADDITIONAL GUIDELINES

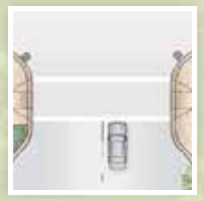
- Downtown Commercial streets should follow the guidelines in the Downtown Streetscape Plan
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS



01

Mid-block crossing (5.1)



02

High visibility crosswalks (5.1)

03

Special crossing treatments (warning signs, beacons, etc. (5.1)

04

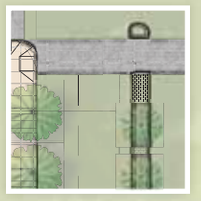
Extended bulb-out (5.2)

05

Mid-block bulb-out (5.2)

06

Center median (5.4)



07

Pedestrian refuge island (5.4)

08

Transit bulb-out or boarding island (5.5)

09

Perpendicular or angle parking (5.6)

10

Flexible use of parking lane (5.6)

11

Sidewalk pocket park (5.8)

12

Boulevard treatment (5.8)

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# COMMERCIAL THROUGHWAYS

Commercial throughways such as Van Ness Avenue or Divisadero Street move significant volumes of people across town in a variety of travel modes and attract them to shop, eat, and play from across the city. Vehicular traffic on these throughways tends to be relatively fast and continuous and transit service is often frequent. These streets should have a comfortable pedestrian realm with significant pedestrian amenities and public spaces.

*Typical section*

## CONSIDERATIONS

- High levels of pedestrian activity
- Desire for generous pedestrian environment and public realm
- High volume and speed of through traffic
- Important transit functions
- Access needs for local businesses

*Commercial throughways attract a high volume of pedestrians and visitors, and are also significant transportation corridors*

## STANDARD IMPROVEMENTS

Marked crosswalks with curb ramps (Section 5.1)

Pedestrian signals (countdown and APS) (5.2)

Corner curb extensions (5.2)



Street trees (6.1)

Sidewalk planters (planter boxes) (6.1)

Stormwater control measures (6.2)

Pedestrian-scale lighting (6.3)

Special paving in furnishings zone (6.4)

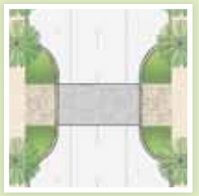


Site furnishings (6.5)

## ADDITIONAL GUIDELINES

- Tree grates should be considered in high pedestrian volume areas, or where capital and maintenance budgets allow.
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS



**01** Mid-block crossing (5.1)

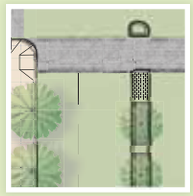
**02** High visibility crosswalks (5.1)

**03** Special crossing treatments (warning signs, beacons, etc. (5.1)

**04** Extended bulb-out (5.2)

**05** Mid-block bulb-out (5.2)

**06** Center median (5.4)



**07** Pedestrian refuge island (5.4)

**08** Transit bulb-out or boarding island (5.5)

**09** Perpendicular or angle parking (5.6)

**10** Flexible use of parking lane (5.6)

**11** Parking lane planters (5.6)

**12** Sidewalk pocket park (5.8)

**13** Boulevard treatment (5.8)

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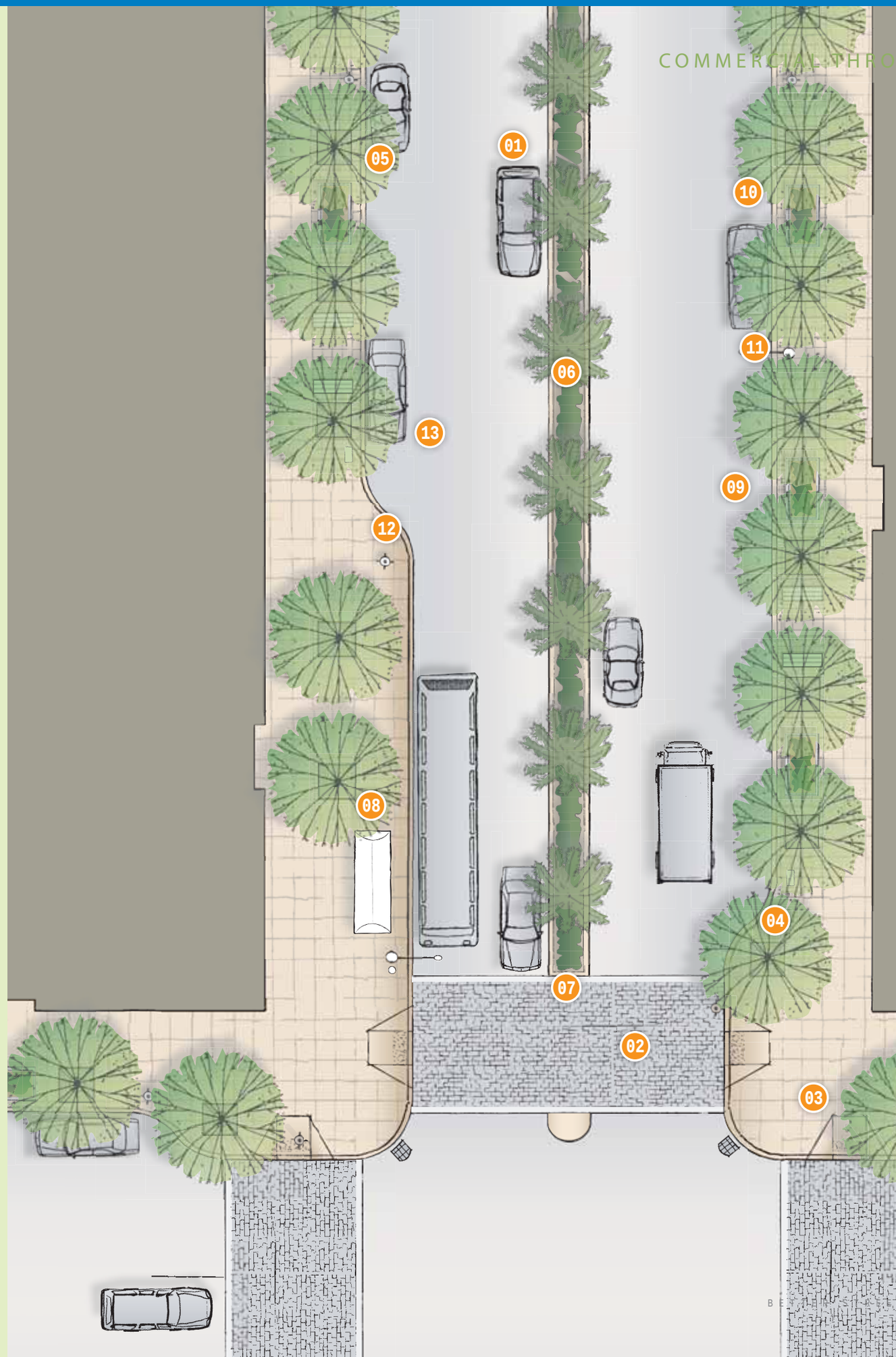
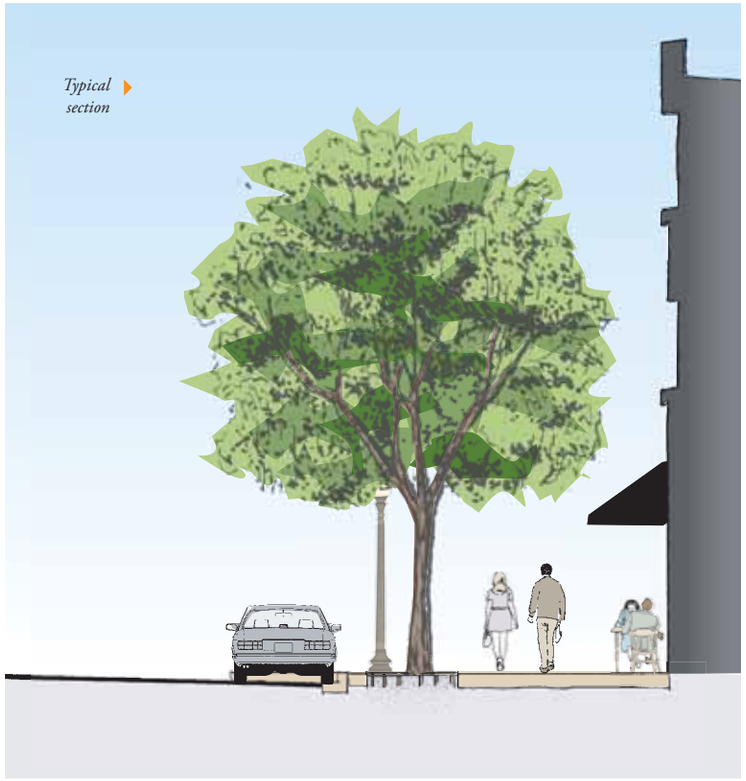
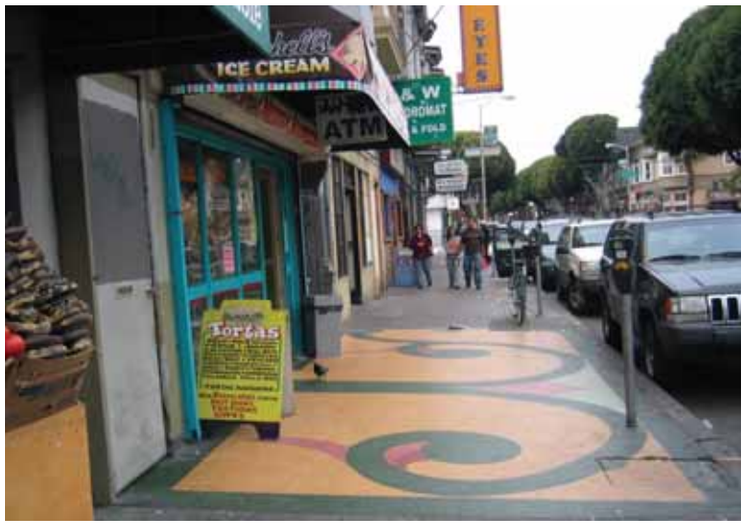


# NEIGHBORHOOD COMMERCIAL

Neighborhood commercial streets, such as Clement, Taraval, Valencia, Polk, and Leland Avenue, include many of San Francisco's most vibrant streets, handling continuous activity throughout the day. They are the streets where San Francisco residents do their daily errands, meet with friends, and shop and play on the weekends.

Short-term parking for customers and space for loading facilities are essential components of commercial districts. However, parking and loading facilities often compete for the same space as desired features such as corner bulb-outs or pedestrian plazas. Managing parking and loading facilities efficiently and effectively can serve both the needs of local businesses while enabling improvements to the public realm.




*Neighborhood commercial streets are the heart of, and serve the daily needs of San Francisco's many neighborhoods*

## CONSIDERATIONS

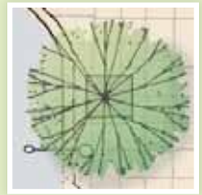
- High levels of pedestrian activity
- Desire for generous pedestrian environment and public realm
- Important transit functions
- Access needs for local businesses

## STANDARD IMPROVEMENTS

Marked crosswalks with curb ramps (Section 5.1)

Pedestrian signals (countdown and APS) (5.2)

Corner curb extensions (5.2)



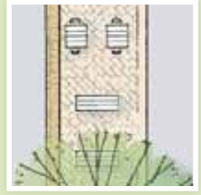
Street trees (6.1)

Sidewalk planters (planter boxes) (6.1)

Stormwater control measures (6.2)

Pedestrian-scale lighting (6.3)

Special paving in furnishings zone (6.4)

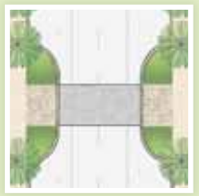


Site furnishings (6.5)

## ADDITIONAL GUIDELINES

- Tree grates should be considered in high pedestrian volume areas, or where capital and maintenance budgets allow.
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS



01

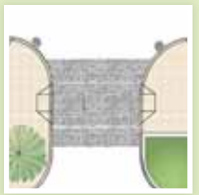
Mid-block crossing (5.1)

02

High visibility crosswalks (5.1)

03

Special crossing treatments (warning signs, beacons, etc. (5.1)



04

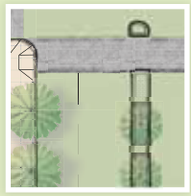
Rasied crossing (5.1)

05

Extended bulb-out (5.2)

06

Mid-block bulb-out (5.2)



07

Pedestrian refuge island (5.4)

08

Transit bulb-out or boarding island (5.5)

09

Perpendicular or angle parking (5.6)

10

Flexible use of parking lane (5.6)

11

Parking lane planters (5.6)

12

Sidewalk pocket park (5.8)

13

Shared street (5.8)

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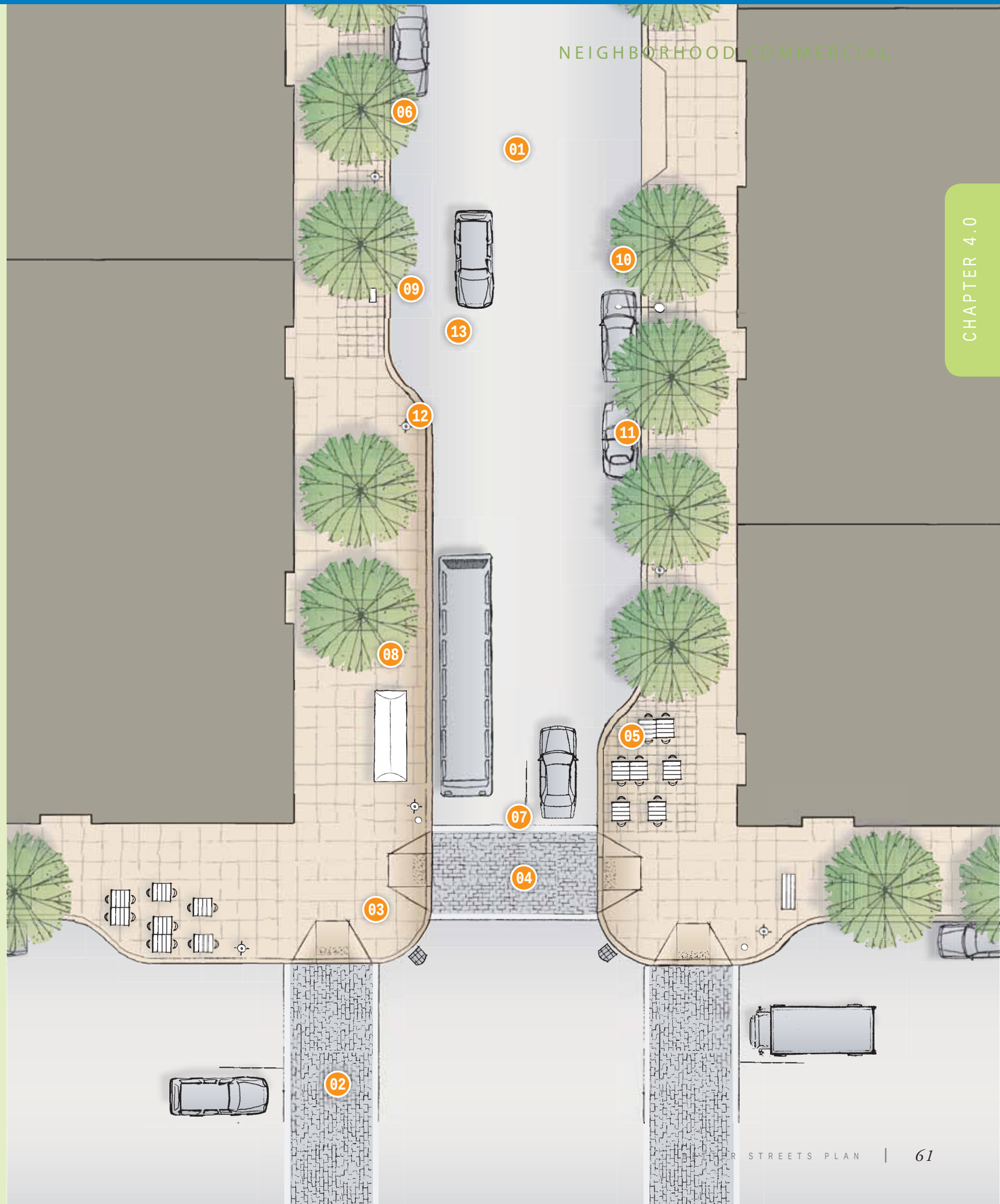


# DOWNTOWN RESIDENTIAL

As the city continues to experience economic and population growth, more areas in and adjacent to the downtown, such as Rincon Hill and South Beach, have come to share the density and intensity of the commercial areas of downtown.

These areas have high residential densities and large buildings. As these areas change to residential uses, the streets should be appropriate for residential living, with generous sidewalks, plantings, and furnishings. As many of these areas are deficient in open space, the streets should include places for neighbors to gather, relax, and recreate.

*Typical section*


*Downtown residential streets often must be reformatted to create an appropriate living environment*

## CONSIDERATIONS

- High levels of pedestrian activity
- Need for increased public open space
- High volume of through traffic

## STANDARD IMPROVEMENTS

Marked crosswalks with curb ramps (Section 5.1)

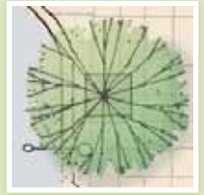
Stormwater control measures (6.2)

Pedestrian signals (countdown and APS) (5.2)

Pedestrian-scale lighting (6.3)

Corner curb extensions (5.2)

Special paving in furnishings zone (6.4)



Street trees (6.1)

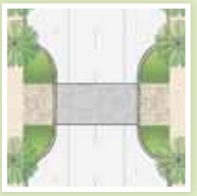
Site furnishings (6.5)

Sidewalk planters (6.1)

## ADDITIONAL GUIDELINES

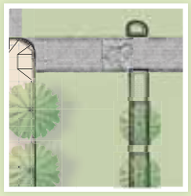
- Tree grates should be considered in high pedestrian volume areas, or where capital and maintenance budgets allow.
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS



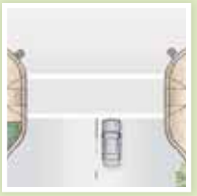
01

Mid-block crossing (5.1)



07

Pedestrian refuge island (5.4)



02

High visibility crosswalks (5.1)

08

Transit bulb-out or boarding island (5.5)

03

Special crossing treatments (warning signs, beacons, etc. (5.1)

09

Perpendicular or angle parking (5.6)

04

Extended bulb-out (5.2)

10

Parking lane planters (5.6)

05

Mid-block bulb-out (5.2)

11

Sidewalk pocket park (5.8)

06

Center median (5.4)

12

Boulevard treatment (5.8)

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# RESIDENTIAL THROUGHWAYS

Residential throughways such as 19th Avenue, Guerrero, California, Oak and Fell Streets have high levels of fast-moving traffic with residential land uses. As such, they are often not designed to serve residential uses, and can be unpleasant to walk or live along.

Streetscape improvements should focus on buffering the sidewalk and adjacent homes from vehicles passing in the street and providing a generous, useable public realm through landscaping, curb extensions, or widened sidewalks where roadway space allows.

*Typical section*

## CONSIDERATIONS

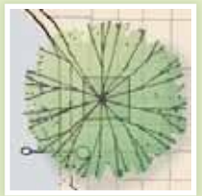
- High volume and speed of through traffic
- Need for increased public open space
- Need for improved pedestrian buffering from through traffic
- Frequent driveway cuts

## STANDARD IMPROVEMENTS

Marked crosswalks with curb ramps (Section 5.1)

Pedestrian signals (countdown and APS) (5.2)

Corner curb extensions (5.2)



Street trees (6.1)

Sidewalk planters (6.1)

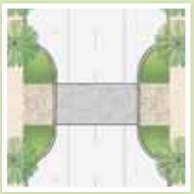
Stormwater control measures (6.2)

Pedestrian-scale lighting—at corners (6.3)

## ADDITIONAL GUIDELINES

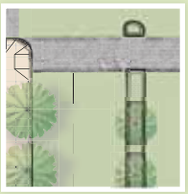
- For specific stormwater control measures, see Section 6.2.
- Special paving in furnishings zone and site furnishings should also be considered as capital and maintenance budgets allow.

## CASE BY CASE ADDITIONS



01

Mid-block crossing (5.1)



07

Pedestrian refuge island (5.4)

02

High visibility crosswalks (5.1)

08

Transit bulb-out or boarding island (5.5)

03

Special crossing treatments (warning signs, beacons, etc. (5.1)

09

Perpendicular or angle parking (5.6)

04

Extended bulb-out

10

Parking lane planters (5.6)

05

Mid-block bulb-out (5.2)

11

Sidewalk pocket park (5.8)

06

Center median (5.4)

12

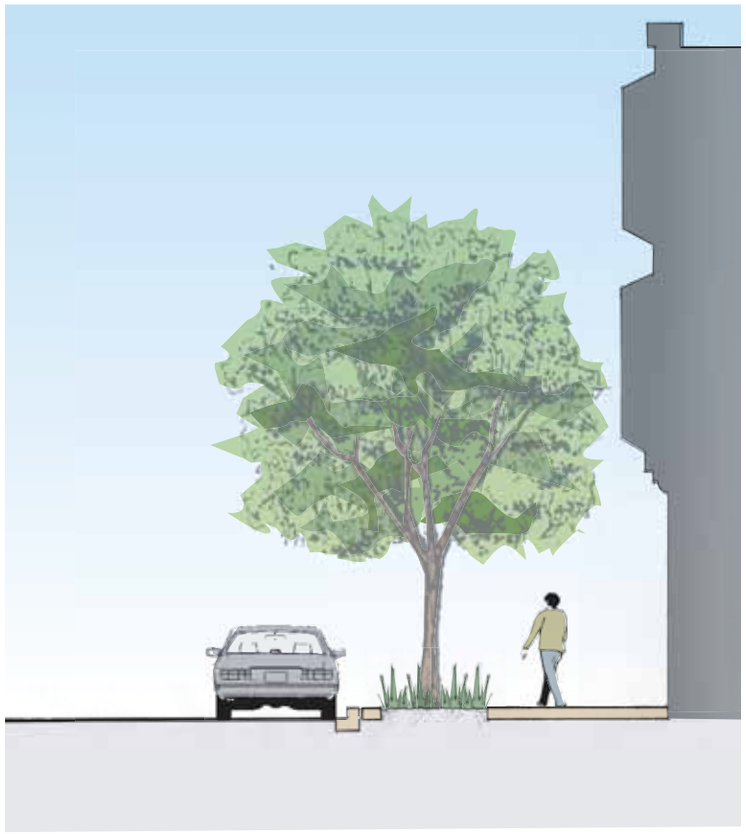
Boulevard treatment (5.8)

*** Site plans in this chapter are for representational puposes only; individual elements may not be appropriate as shown. For specific guidelines, see Chapters 5 and 6*

# NEIGHBORHOOD RESIDENTIAL

Neighborhood residential streets are quieter residential streets with relatively low traffic volumes and speeds. Though they have low levels of activity relative to other street types, they play a key role to support the social life of a neighborhood.

Residential streets should feel safe, comfortable, and cared for. Residents may think of the street outside their home as an extension of their home or a neighborhood commons. Improvements should focus on slowing traffic, providing useable space and amenities, and making improvements that encourage residents to take pride and ownership of the streetscape outside their front door.



*Typical section*

*Neighborhood residential streets are San Francisco's front yards, and should encourage neighborly interaction*

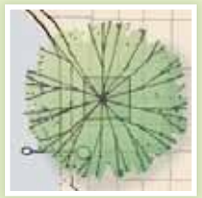
## CONSIDERATIONS

- Need for traffic calming in some cases
- Need for increased public open space
- Opportunities for community stewardship
- Frequent driveway cuts

## STANDARD IMPROVEMENTS

Curb ramps (5.1)

Stormwater control measures (6.2)



Street trees (6.1)

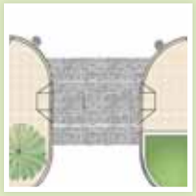
Pedestrian-scale lighting—at corners (6.3)

Sidewalk planters—continuous planting strip (6.1)

## ADDITIONAL GUIDELINES

- Neighborhood residential streets with wider crossings (generally > 40'), or higher traffic volumes and speeds (generally > 25 mph) should consider corner curb extensions and marked crosswalks.
- Neighborhood residential streets should include a continuous linear permeable strip in the Furnishings Zone, either with plantings or non-planted material such as decomposed granite.
- For specific stormwater control measures, see Section 6.2.
- Special paving in furnishings zone and site furnishings should also be considered as capital and maintenance budgets allow.

## CASE BY CASE ADDITIONS



**01**

Rasied crossing—at throughway intersections (5.1)

**02**

Extended bulb-out (5.2)

**03**

Mid-block bulb-out (5.2)

**04**

Perpendicular or angle parking (5.6)

**05**

Parking lane planters (5.6)

**06**

Chicane (5.7)

**07**

Traffic circle (5.7)

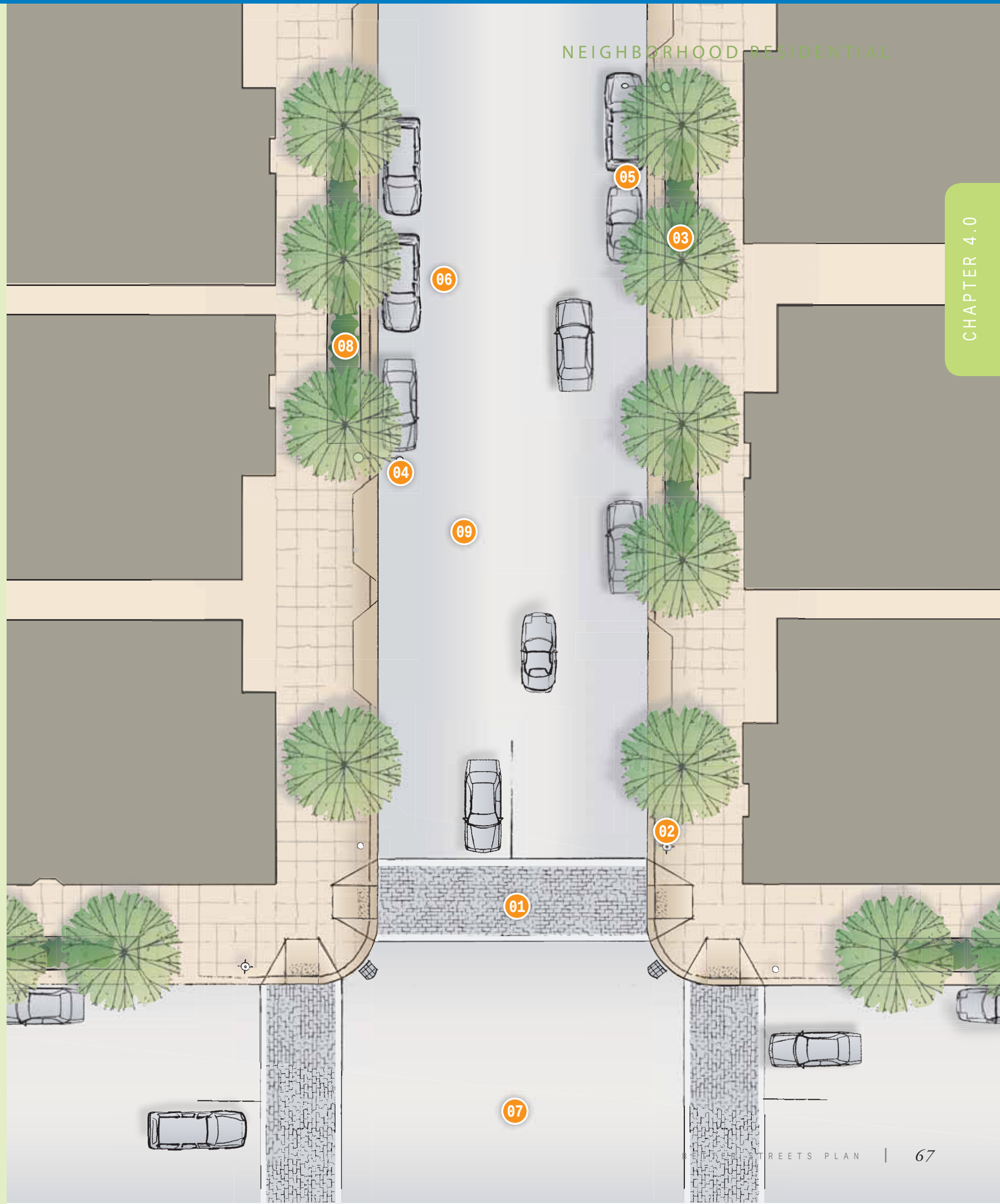
**08**

Sidewalk or median pocket park (5.8)

**09**

Shared street (5.8)

*** Site plans in this chapter are for representational puposes only; individual elements may not be appropriate as shown. For specific guidelines, see Chapters 5 and 6*



# INDUSTRIAL

Industrial streets are defined by large-scale production, distribution, and repair facilities that have an assortment of challenging impacts on streetscape character. These streets typically have a less active street frontage punctuated by large driveways, loading docks, and other auto-serving facilities, and front on wide streets that accommodate large trucks. Sidewalks and streetscape amenities are often minimal.

While these streets must serve heavy trucks and loading functions, they should also consider the pedestrian realm for workers and others passing through.

*Typical section*

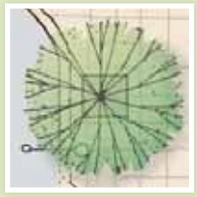
*Industrial streets must serve major freight and loading activities, but should still have a safe and comfortable pedestrian realm*

## CONSIDERATIONS

- Access needs for local businesses, including loading activities and heavy trucks
- Relatively low pedestrian volumes; however, need for pedestrian safety and comfort in challenging environment
- Need for public spaces for workers to take breaks

## STANDARD IMPROVEMENTS

Curb ramps (5.1)



Street trees (6.1)

Stormwater control measures (6.2)

## ADDITIONAL GUIDELINES

- Industrial streets should use property line plantings and street trees where trees are not possible adjacent to the curb
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS

01

Extended bulb-out (5.2)

02

Mid-block bulb-out (5.2)

03

Center median (5.4)

04

Transit bulb-out or boarding island (5.5)

05

Perpendicular or angle parking (5.6)

*** Site plans in this chapter are for representational puposes only; individual elements may not be appropriate as shown. For specific guidelines, see Chapters 5 and 6*

# INDUSTRIAL MIXED-USE

Industrial mixed-use streets such as those in SoMa or Showplace Square serve a variety of low-intensity industrial uses, as well as a growing number of residences, shops, and services. Their use and character are in a state of constant change, and streets must reflect this changing character and serve a variety of needs. They are often on wide streets, with high volumes of fast-moving traffic.

Streetscape treatments should include landscaping, pedestrian safety elements, public space uses, and other amenities to complement current and future land use.

*Typical section*

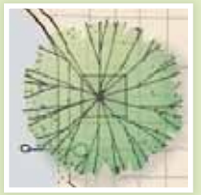
*Industrial mixed-use streets serve a changing mix of land uses*

## CONSIDERATIONS

- Access needs for local businesses, including loading activities and light trucks
- High volume and speed of through traffic
- Need for increased public open space
- Need for improved pedestrian buffering from through traffic
- Need for flexibility to accomodate changing uses

## STANDARD IMPROVEMENTS

Marked crosswalks with curb ramps (Section 5.1)



Street trees (6.1)

Pedestrian signals (countdown and APS) (5.2)

Sidewalk planters (6.1)

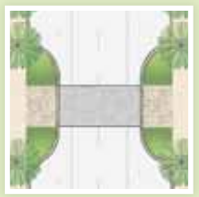
Corner curb extensions (5.2)

Stormwater control measures (6.2)

## ADDITIONAL GUIDELINES

- Tree grates, pedestrian lighting, special paving in the furnishings zone and site furnishings should be considered in high pedestrian volume areas, or where capital and maintenance budgets allow.
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS



**01** Mid-block crossing (5.1)

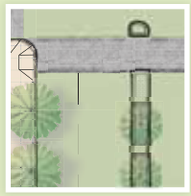
**02** High visibility crosswalks (5.1)

**03** Special crossing treatments (warning signs, beacons, etc. (5.1)

**04** Extended bulb-out (5.2)

**05** Mid-block bulb-out (5.2)

**06** Center median (5.4)



**07** Pedestrian refuge island (5.4)

**08** Transit bulb-out or boarding island (5.5)

**09** Perpendicular or angle parking (5.6)

**10** Flexible use of parking lane (5.6)

**11** Parking lane planters (5.6)

**12** Sidewalk pocket park (5.8)

**13** Boulevard treatment (5.8)

*** Site plans in this chapter are for representational puposes only; individual elements may not be appropriate as shown. For specific guidelines, see Chapters 5 and 6*

# PARKWAYS

Parkways, such as Dolores, Park Presidio, Brotherhood Way, and the Great Highway have broad well-landscaped medians and sidewalks that provide recreational paths, while moving vehicles, bikes, and pedestrians across the city. These streets function not only as transportation corridors, but also as linear parks, creating a green network.

This green spaces can often be more effectively used for pedestrian, open space, and ecological functions, by providing multi-use trails, seating, and open spaces. They can also be better used to perform ecological functions including stormwater retention and infiltration.

*Typical section*

## CONSIDERATIONS

- High volume and speed of through traffic
- Desire for generous pedestrian environment and public realm
- Opportunity to provide recreational amenities
- Opportunity to provide ecological functioning
- Few access points and driveways
- Opportunity to connect/be part of regional trails such as the Bay Trail

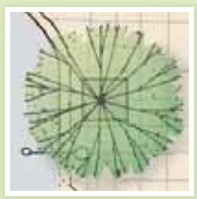
*Parkways are characterized by large landscaped medians or frontages which could often be better used for recreational or ecological purposes*

## STANDARD IMPROVEMENTS

Marked crosswalks with curb ramps (Section 5.1)

Pedestrian signals (countdown and APS) (5.2)

Corner curb extensions (5.2)

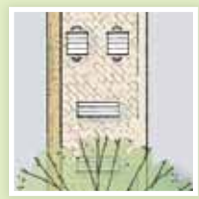


Street trees (6.1)

Sidewalk planters—continuous planting strip (6.1)

Stormwater control measures (6.2)

Pedestrian-scale lighting (6.3)

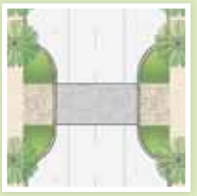


Site furnishings (6.5)

## ADDITIONAL GUIDELINES

- Parkways should include recreational spaces such as jogging paths in existing green spaces as width allows.
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS



**01**

Mid-block crossing (5.1)

**02**

High visibility crosswalks (5.1)

**03**

Special crossing treatments (warning signs, beacons, etc. (5.1)

**04**

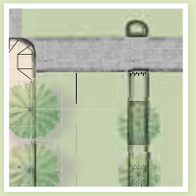
Extended bulb-out (5.2)

**05**

Mid-block bulb-out (5.2)

**06**

Center median (5.4)



**07**

Pedestrian refuge island (5.4)

**08**

Transit bulb-out or boarding island (5.5)

**09**

Perpendicular or angle parking (5.6)

**10**

Sidewalk or median pocket park (5.8)

**11**

Boulevard treatment (5.8)

**12**

Multi-Use path

*** Site plans in this chapter are for representational puposes only; individual elements may not be appropriate as shown. For specific guidelines, see Chapters 5 and 6*

# PARK EDGE STREETS

Streets that border major parks or the waterfront have one set of conditions on one side of the street and a distinctly different set of conditions on the other. Park edge streets often have fewer spatial constraints on the park edge side but unique demands of high pedestrian volumes or special activities associated with them. These streets should have a generous park edge with landscaping, lighting, furnishings, and multi-use trails.

*Typical section*

## CONSIDERATIONS

- High volume and speed of through traffic
- Desire for generous pedestrian environment and public realm
- Opportunity to provide recreational amenities
- Opportunity to provide ecological functioning
- Few access points and driveways
- Different conditions on opposite sides of the street
- Opportunity to connect/be part of regional trails such as the Bay Trail

*Park edge streets, adjacent to the City's parks and waterfront, present opportunities for significant recreational uses, landscaping, and ecological functioning*

## STANDARD IMPROVEMENTS

Marked crosswalks with curb ramps (Section 5.1)

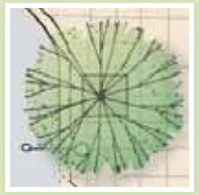
Sidewalk planters—continuous planting strip (6.1)

Pedestrian signals (countdown and APS) (5.2)

Stormwater control measures (6.2)

Corner curb extensions (5.2)

Pedestrian-scale lighting (6.3)



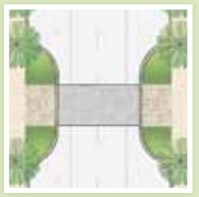
Street trees (6.1)

Site furnishings (6.5)

## ADDITIONAL GUIDELINES

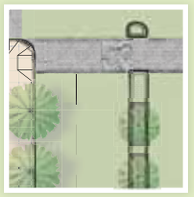
- Park edge streets should include recreational spaces such as jogging paths in existing green spaces
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS



**01**

Mid-block crossing (5.1)



**07**

Pedestrian refuge island (5.4)

**02**

High visibility crosswalks (5.1)

**08**

Transit bulb-out or boarding island (5.5)

**03**

Special crossing treatments (warning signs, beacons, etc. (5.1)

**09**

Perpendicular or angle parking (5.6)

**04**

Extended bulb-out (5.2)

**10**

Sidewalk or median pocket park (5.8)

**05**

Mid-block bulb-out (5.2)

**11**

Boulevard treatment (5.8)

**06**

Center median (5.4)

**12**

Multi-Use path

*** Site plans in this chapter are for representational puposes only; individual elements may not be appropriate as shown. For specific guidelines, see Chapters 5 and 6*

# BOULEVARDS

Multi-way boulevards such as Octavia Boulevard separate through travel lanes from local access lanes to simultaneously move vehicles while providing a calm, spacious pedestrian and living environment for adjacent residences. Boulevards should be considered on existing or new streets where opportunities exist for substantial street development or redevelopment and width allows.

*Typical section*

## CONSIDERATIONS

- High volumes of through traffic separated from local access
- Desire to create generous pedestrian realm by calming traffic and maximizing pedestrian space on local lanes
- Opportunity to provide recreational amenities
- Opportunity to provide ecological functioning
- Need to ensure emergency vehicle access
- Requires sufficient street width

*Boulevards move high traffic volumes while creating a generous pedestrian realm and living environment by separating through traffic from local access lanes*

## STANDARD IMPROVEMENTS

Marked crosswalks with curb ramps (Section 5.1)

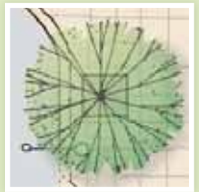
Stormwater control measures (6.2)

Pedestrian signals (countdown and APS) (5.2)

Pedestrian-scale lighting (6.3)

Corner curb extensions (5.2)

Special paving in furnishings zone (6.4)



Street trees (6.1)

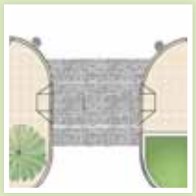
Site furnishings (6.5)

Sidewalk planters (6.1)

## ADDITIONAL GUIDELINES

- Tree grates should be considered in high pedestrian volume areas, or where capital and maintenance budgets allow.
- Bouleavards should follow the guidance in Section 5.8.
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS



**01**

Rasied crossing—at side access lanes (5.1)

**02**

High visibility crosswalks (5.1)

**03**

Special crossing treatments (warning signs, beacons, etc. (5.1)

**04**

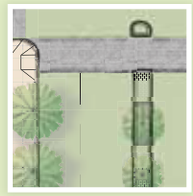
Extended bulb-out (5.2)

**05**

Mid-block bulb-out (5.2)

**06**

Center median (5.4)



**07**

Pedestrian refuge island (5.4)

**08**

Transit boarding island at side medians (5.5)

**09**

Perpendicular or angle parking (5.6)

**10**

Flexible use of parking lane (5.6)

**11**

Parking lane planters (5.6)

**12**

Sidewalk pocket park (5.8)

**13**

Shared street- at side access lanes (5.8)

*** Site plans in this chapter are for representational puposes only; individual elements may not be appropriate as shown. For specific guidelines, see Chapters 5 and 6*

# CEREMONIAL (CIVIC) STREETS

Ceremonial streets such as Market Street are grand civic spaces which serve as major gathering spots for marches, parades, and rallies, and serve as world renowned public spaces and attractions.

Ceremonial streets should be uniquely designed in each case; they should exhibit a high degree of design consistency, formality, and care.

*Ceremonial streets are the civic heart of the City*

## CONSIDERATIONS

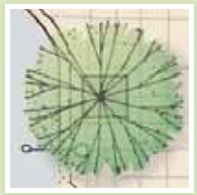
- High visibility and citywide role
- High levels of pedestrian activity, transit service, and other travel modes
- Need to create distinct public realm that can be used for rallies, parades, marches, and the like.

## STANDARD IMPROVEMENTS

Marked crosswalks with curb ramps (Section 5.1)

Pedestrian signals (countdown and APS) (5.2)

Corner curb extensions (5.2)



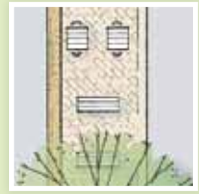
Street trees (6.1)

Sidewalk planters (planter boxes) (6.1)

Stormwater control measures (6.2)

Pedestrian-scale lighting (6.3)

Special paving (6.4)



Site furnishings (6.5)

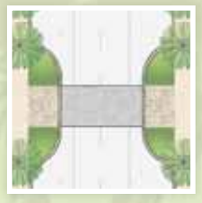
Wayfinding signage (6.5)

Public art (6.5)

## ADDITIONAL GUIDELINES

- Ceremonial streets are special streets, and should have unique, high-quality designs
- Ceremonial streets should use consistent, unique plantings, lighting, furnishings, and paving treatments
- Ceremonial streets should have generous pedestrian and public spaces
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS



01

Mid-block crossing (5.1)

02

High visibility crosswalks (5.1)

03

Special crossing treatments (warning signs, beacons, etc. (5.1)

04

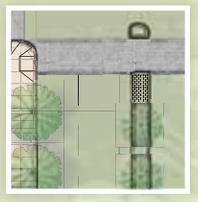
Extended bulb-out (5.2)

05

Mid-block bulb-out (5.2)

06

Center median (5.4)



07

Pedestrian refuge island (5.4)

08

Transit bulb-out or boarding island (5.5)

09

Perpendicular or angle parking (5.6)

10

Sidewalk or median pocket park (5.8)

11

Boulevard treatment (5.8)

12

Pedestrian-only street (5.8)

*** Site plans in this chapter are for representational puposes only; individual elements may not be appropriate as shown. For specific guidelines, see Chapters 5 and 6*

# ALLEYS

Alleys are small-scale streets that typically only carry low numbers of vehicles accessing adjacent properties. Their character varies across the city, from residential to service alleys.

Alleys should be designed to a pedestrian-scale speed and level of detail wherever possible, to make them attractive and comfortable spaces for pedestrians, and remind drivers that they should proceed cautiously and slowly. Alleys can also serve as valuable public space and should be designed with seating, landscaping, and pedestrian lighting to create usable spaces.

▲ *Typical sections standard street and shared street*

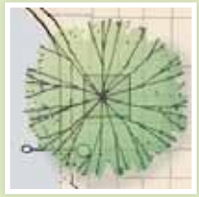
## CONSIDERATIONS

- Low vehicle speeds and volumes
- Desire to create generous pedestrian realm through designs that emphasize shared space
- Narrow right-of-way; limited sidewalk space
- Need for service access to adjacent businesses and residences

## STANDARD IMPROVEMENTS

Curb ramps—where not shared street or raised crossing (5.1)

Stormwater control measures (6.2)



Street trees (6.1)

Pedestrian-scale lighting (6.3)

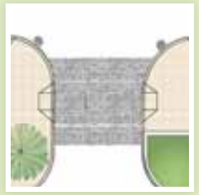
Sidewalk planters (6.1)

Special paving (6.4)

## ADDITIONAL GUIDELINES

- Alleys should use single-surface shared street design wherever possible.
- Where alleys are not shared streets, they should incorporate raised crossings across the alley entrance and special paving across the entire right-of-way wherever possible.
- Tree grates and site furnishings should also be considered in high pedestrian volume areas, or as capital and maintenance budgets allow.
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS



01

Rasied crossing—at throughway intersections (5.1)

02

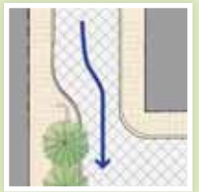
Extended bulb-out (5.2)

03

Mid-block bulb-out (5.2)

04

Parking lane planters (5.6)



05

Chicane (5.7)

06

Pocket park (5.8)

07

Shared street (5.8)

08

Pedestrian-only street (5.8)

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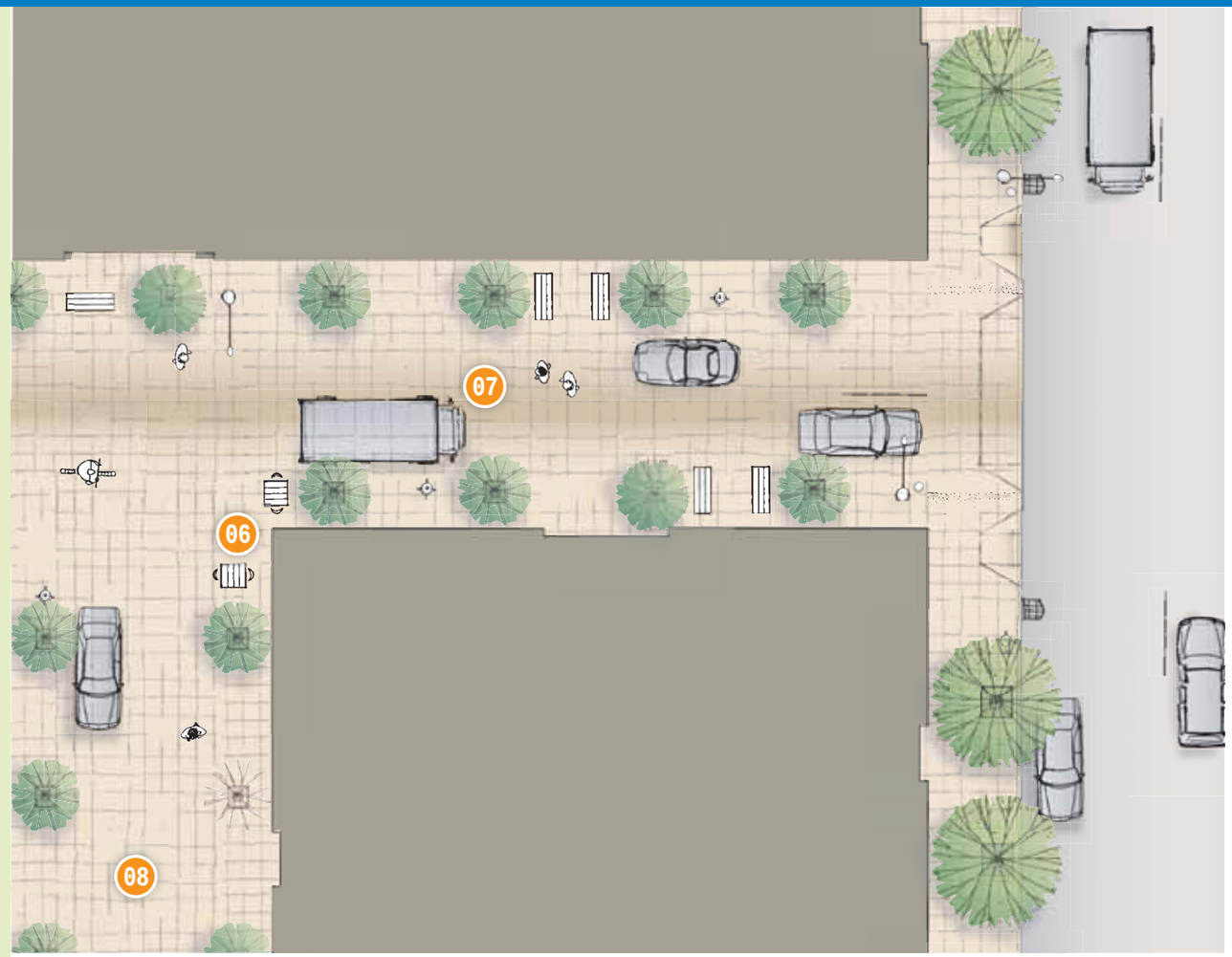
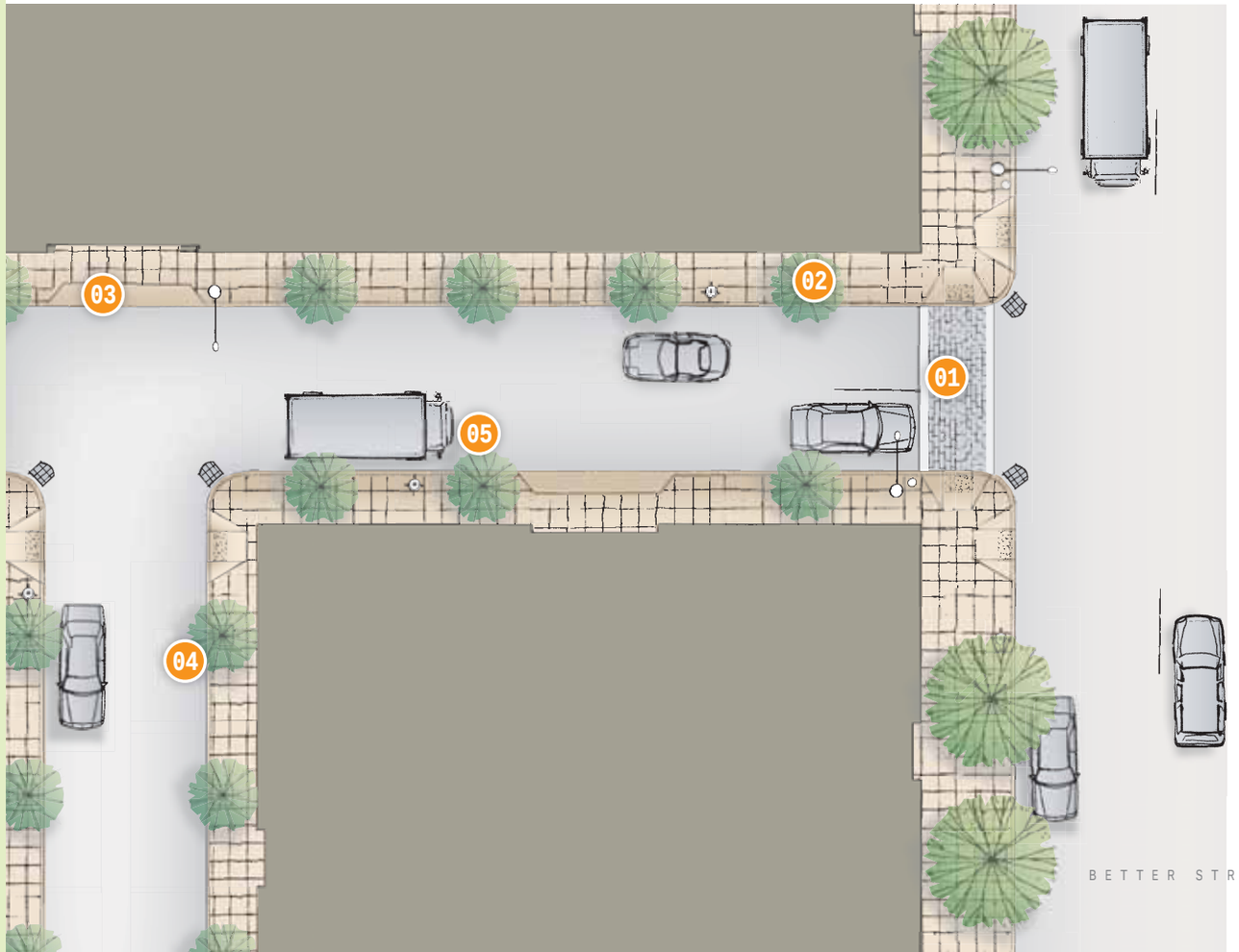



ALLEY AS SHARED STREET

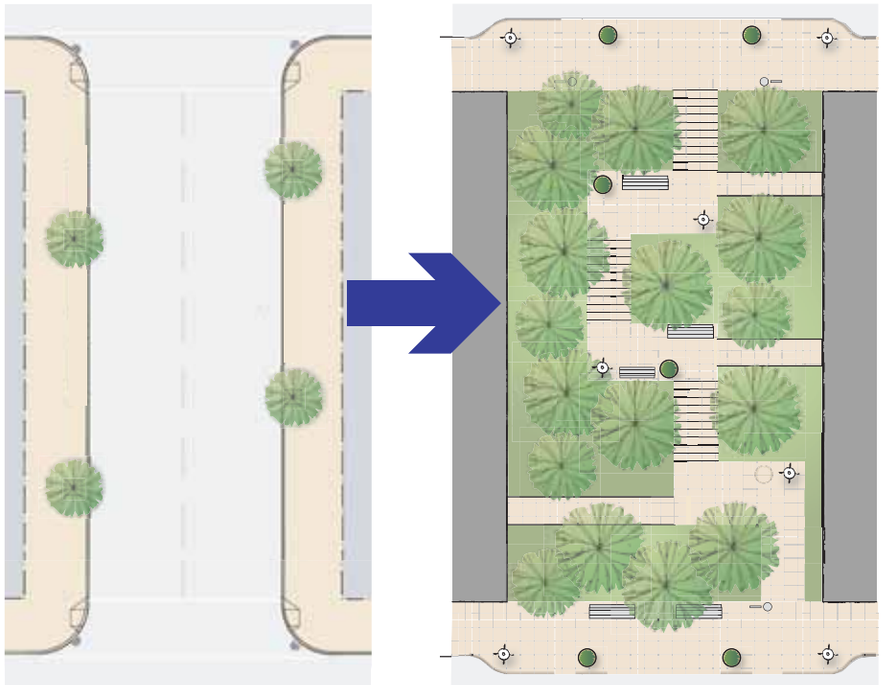



ALLEY AS STANDARD STREET

# PASEOS

Paseos are pedestrian only rights-of-way, whether a staircase, a narrow pedestrian path, or a downtown alley connecting two streets. As with alleys, paseos should be designed to a pedestrian scale with various amenities and pedestrian-oriented spaces.

As each is unique to its context, recommended improvements reflect broad categories of improvements that should be specifically tailored to context, but are all appropriate to any pedestrian scaled place.



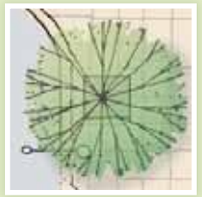
*Conversion of steep underutilized street to stairs/trails*

## CONSIDERATIONS

- No vehicle traffic
- Desire to create generous pedestrian realm
- Need to ensure emergency and maintenance vehicle access as appropriate
- Social and maintenance considerations

*Paseos are pedestrian-only pathways that provide opportunities to create unique public spaces*

## STANDARD IMPROVEMENTS



Street trees (6.1)

Pedestrian-scale lighting (6.3)

Sidewalk planters (6.1)

Special paving—entire right-of-way (6.4)

Stormwater control measures (6.2)

Site furnishings (6.5)

## ADDITIONAL GUIDELINES

- Tree grates should also be considered in high pedestrian volume areas, or as capital and maintenance budgets allow.
- For specific stormwater control measures, see Section 6.2.

## CASE BY CASE ADDITIONS

01

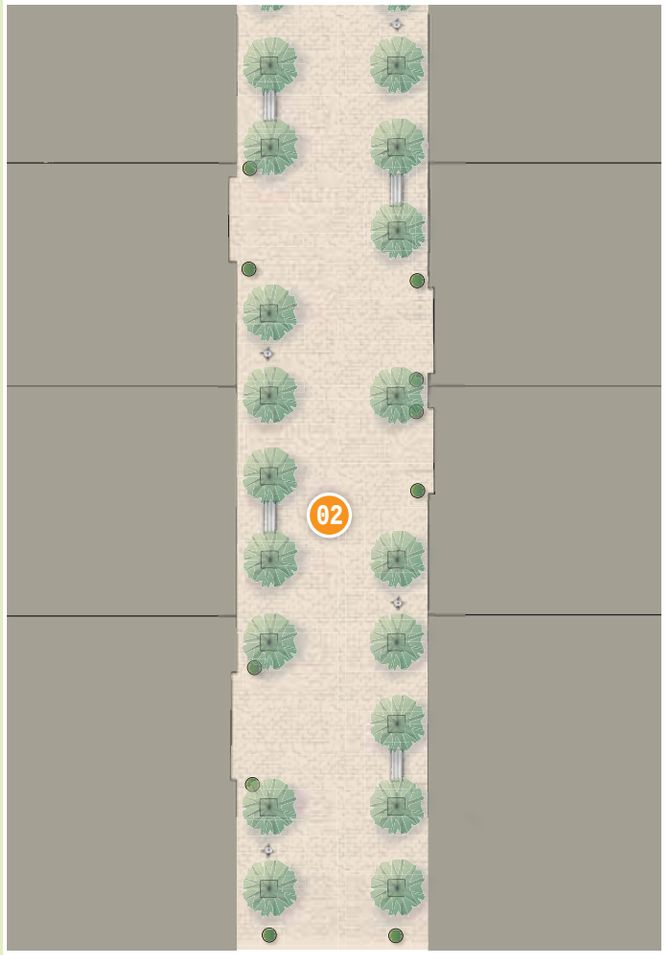
Pocket park (5.8)

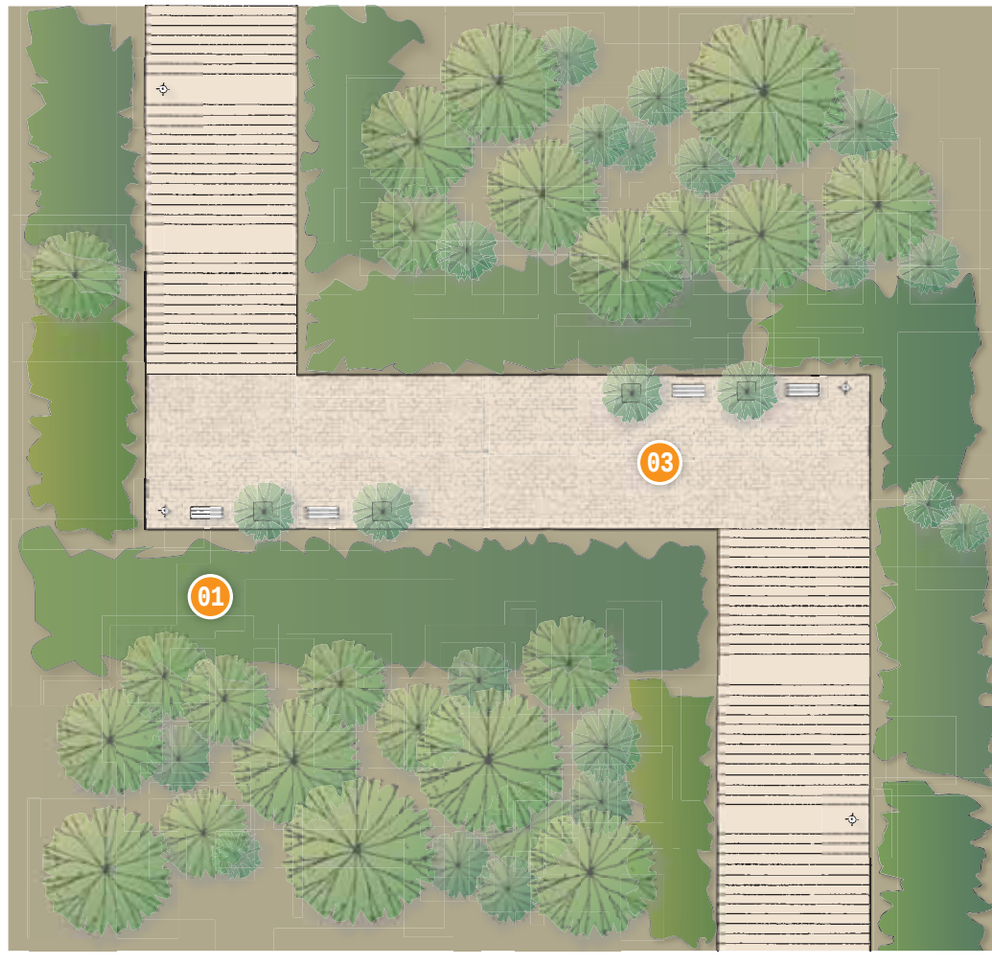
02

Pedestrian-only street (5.8)

03

Multi-Use path




*** Site plans in this chapter are for representational puposes only; individual elements may not be appropriate as shown. For specific guidelines, see Chapters 5 and 6*

## STANDARD IMPROVEMENTS BY STREET TYPE

| | Curb Ramps (5.1) | Marked Cross-walks (5.1) | Ped signals –count-down and APS (5.1) | Corner curb extensions (5.2) | Street Trees (6.1) | Tree Grates (6.1) | Sidewalk Planters (6.1) | Stormwater Control (6.2) | Pedestrian Lighting (6.3) | Special Paving (6.4) | Site Furnishings (6.5) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Downtown Commercial *( see Downtown Streetscape Plan )* | Y | Y | Y | Y | Y | Y | Y - planter box | Y | Y | Y | Y |
| Commercial Throughway | Y | Y | Y | Y | Y | M | Y - planter box | Y | Y | Y - furnishings zone | Y |
| Neighborhood Commercial | Y | Y | Y | Y | Y | M | Y - planter box | Y | Y | Y - furnishings zone | Y |
| Downtown Residential | Y | Y | Y | Y | Y | M | Y | Y | Y | Y - furnishings zone | Y |
| Residential Throughway | Y | Y | Y | Y | Y | N | Y | Y | Y - at corners | N | M |
| Neighborhood Residential | Y | M | M | M | Y | N | Y - planter strip | Y | Y - at corners | N | N |
| Industrial | Y | M | M | N | Y | N | N | Y | N | N | N |
| Industrial Mixed-Use | Y | Y | Y | Y | Y | M | Y | Y | M | Y - furnishings zone | Y |
| Parkway | Y | Y | Y | Y | Y | N | Y - planter strip | Y | Y | N | Y |
| Park Edge | Y | Y | Y | Y | Y | N | Y - planter strip | Y | Y | N | Y |
| Boulevard | Y | Y | Y | Y | Y | M | Y | Y | Y | Y - furnishings zone | Y |
| Ceremonial | Y | Y | Y | Y | Y | Y | N | Y | Y | Y | Y |
| Alley | Y - prefer shared st. or raised xing | M | n/a | N | Y | M | Y | Y | Y | Y - entire r.o.w. | M |
| Paseo | n/a | n/a | n/a | n/a | Y | M | Y | Y | Y | Y - entire r.o.w. | Y |

NOTES:
This table describes treatments that should be considered standard improvements and added to all streetscape improvement projects.

This table is meant as a general guide; there may be cases where appropriate treatments for a particular street type are different than described in this table, depending on right-of-way width, land use, and tranpsortation characteristics.

In some cases, including all standard improvements may be limited by available funding. Not every project need have every standard improvement; however, projects should be consolidated wherever possible to maximize 'completeness' of improvements.

Individual elements should follow the guidelines and criteria for appropriateness described in Chapters 5 and 6.

Key

Y = Yes
M = Maybe
N = No

## CASE-BY-CASE ADDITIONS BY STREET TYPE

| | High-visibility crosswalk (5.1) | Special crosswalk treatment (5.1) | Mid-block crossing (5.1) | Raised crossing (5.1) | Extended bulb-out (5.2) | Mid-block bulb-out (5.2) | Center median (5.4) | Pedestrian refuge island (5.4) | Transit bulb-out/ boarding island (5.5) | Perp/ angled parking (5.6) | Flex use of parking lane (5.6) | Parking lane planters (5.6; 6.1) | Chicane (5.7) | Traffic circle (5.7) | Pocket park (5.8) | Boulevard treatments (5.8) | Shared street (5.8) | Ped-only street (5.8) | Multi-use path |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Downtown Commercial | Y | Y | Y | N | Y | Y | Y | Y | Y | Y | Y | N | N | N | Y | Y | N | N | N |
| Commercial Throughway | Y | Y | Y | N | Y | Y | Y | Y | Y | Y | Y | Y | N | N | Y | Y | N | N | N |
| Neighborhood Commercial | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | N | N | Y | N | N | N | N |
| Downtown Residential | Y | Y | Y | N | Y | Y | Y | Y | Y | Y | N | Y | N | N | Y | Y | N | N | N |
| Residential Throughway | Y | Y | Y | N | Y | Y | Y | Y | Y | Y | N | Y | N | N | Y | Y | N | N | N |
| Neighborhood Residential | M | M | N | Y | Y | Y | N | M | N | Y | N | Y | Y | Y | Y | N | Y | N | N |
| Industrial | M | M | N | N | Y | Y | Y | M | Y | Y | N | N | N | N | N | N | N | N | N |
| Industrial Mixed-Use | Y | Y | Y | N | Y | Y | Y | Y | Y | Y | Y | Y | N | N | Y | Y | N | N | N |
| Parkway | Y | Y | Y | N | Y | Y | Y | Y | Y | Y | N | N | N | N | Y | Y | N | N | Y |
| Park Edge | Y | Y | Y | N | Y | Y | Y | Y | Y | Y | N | N | N | N | Y | Y | N | N | Y |
| Boulevard | Y | Y | N | Y - local lanes | Y | Y | Y | Y | Y - side median | Y | Y | Y | N | N | Y | n/a | Y - local lanes | N | N |
| Ceremonial | Y | Y | Y | N | Y | Y | Y | Y | Y | Y | N | N | N | N | Y | Y | N | Y | N |
| Alley | N | N | N | Y | Y | Y | N | N | N | N | N | Y | Y | N | Y | N | Y | Y | N |
| Paseo | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | Y | n/a | n/a | Y | Y |

NOTES:
These guidelines indicate treatments that are generally appropriate for various street types on a case-by-case basis. These treatments should be added to proejcts as capital and maintenance budgets, physical constraints, and neighborhood preferences allow. These treatments should generally be considered above and beyond standard treatments, and are not required for all improvement projects.

This table is meant as a general guide; there may be cases where appropriate treatments for a particular street type are different than described in this table, depending on right-of-way width, land use, and tranpsortation characteristics.

Individual elements should follow the guidelines and criteria for appropriateness described in Chapters 5 and 6.

Key

Y = Yes
M = Maybe
N = No

# 4.2 OVERALL STREETSCAPE GUIDELINES

Streetscapes should be designed to encompass a wide range of features and amenities, such that they fulfill a variety of functions and reflect a unified, complete design sensibility that takes into account potential trade-offs among streetscape elements, stormwater managment, pedestrian travel, vehicle movement, transit operations, maintenance, access, and emergency considerations.

This does not mean that they must be costly to build and maintain, or that projects should contain all potential elements or not be built at all—rather, it suggests that the City should coordinate streetscape-related projects to make related improvements simultaneously and look for opportunities to build additional low-cost elements into existing capital projects.

IN THIS SECTION:
OVERALL STREETSCAPE GUIDELINES

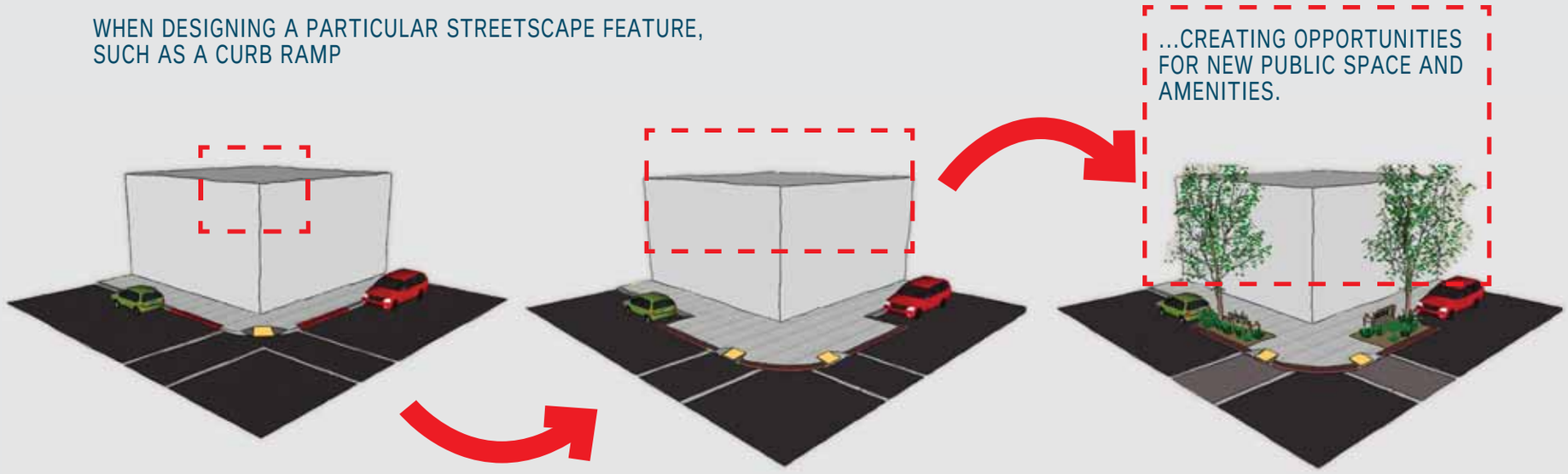



*Maiden Lane*

All streetscape projects, regardless of street type, should follow these general streetscape design guidelines:

- Wherever possible, streetscape improvements should be constructed for an entire corridor (defined by land use or functional transportation characteristics), on both sides of the block, for clarity, design consistency, and maintenance efficiency. At minimum, they should be constructed at least the length of one block.
- Streetscape improvements should look for opportunities to widen sidewalks that don't meet the minimum recommended sidewalk widths (in this section) as feasible.
- Sidewalk repair, utility trenching and other projects that excavate the sidewalk should incorporate opportunities to add street trees, planters, and stormwater facilities as feasible.
- Traffic calming projects that add medians, chicanes, circles, or the like, should incorporate opportunities to create landscaping, stormwater treatment, and public space as feasible.
- Curb ramp construction projects should incorporate opportunities to create curb extensions as feasible.
- Roadway lighting upgrades should incorporate opportunities to add pedestrian-oriented lighting as feasible.
- Streetscape improvement projects should incorporate opportunities to consolidate utilities, parking meters, and street signs and poles as feasible.
- All streetscape projects should include stormwater control measures per Section 6.2 and the San Francisco Stormwater Design Guidelines.
- All streetscape improvement projects that create new structures in the right-of-way must include public art per San Francisco Administrative Code Section 3.19 (Public Art Ordinance).

In addition, streetscape projects should follow the guidelines in the following sections for intersection design, sidewalk widths, sidewalk zones, and streetscape layout.



# INTERSECTION DESIGN

Many factors influence pedestrian quality at intersections. The width of the street, the geometry of the intersection, the timing of signalization, and the frequency of crossing opportunities all play important roles in achieving a pedestrian-friendly environment.

## Design Principles

Intersections should be designed to promote pedestrian safety and comfort. Good intersections:

- Encourage people to walk by creating a safe and inviting pedestrian realm
- Minimize pedestrian crossing distance, time and exposure to potential conflicts
- Maximize pedestrian visibility while providing design treatments that slow vehicles
- Slow traffic to allow drivers more reaction time and decrease severity when collisions do occur
- Appropriately reflect respective street typology, and transportation context

See Figure 4.1, following page.

## Design Features

When retrofitting an existing intersection, the extent of the intersection may be redefined through design modifications. For example, providing directional curb ramps may move crosswalks a few feet further back along intersecting streets or curb extensions may extend into the intersection, decreasing overall size.

Specific features include:

***Visible crosswalks (See Section 5.1)***
Well-marked, visible crossings should be provided to alert drivers to the fact that they are approaching an intersection where pedestrians may cross. Parking restrictions adjacent to corners also can enhance pedestrian visibility. In some cases, raised, colored, or textured crossings may be appropriate.

***Crossing Aids (5.1)***
Pedestrian facilities such as curb ramps, crosswalk markings and signal equipment, should be provided where appropriate to ADA standards.

***Tight curb radii (5.2)***
Curb radii should be minimized to shorten crossing distances, increase pedestrian visibility, and slow turning traffic.

***Curb Extensions (5.3)***
The installation of curb extensions should be considered in areas with high pedestrian volumes to reduce crossing times and exposure to vehicular traffic.

***Median Refuges (5.4)***
Where medians are present within one or more of the intersecting streets or space otherwise exists, median refuges should be provided up to the intersection to provide pedestrians a place of refuge should they not be able to cross the street before the end of the walk phase.

***Traffic Calming Features (5.7)***
Intersections may contain traffic calming features, such as traffic circles, that can slow vehicles, reduce conflicts, and add to the character of the surrounding neighborhood.

***Street Lighting (6.3)***
Intersetions should be well-lit at night to improve visibility for all users.

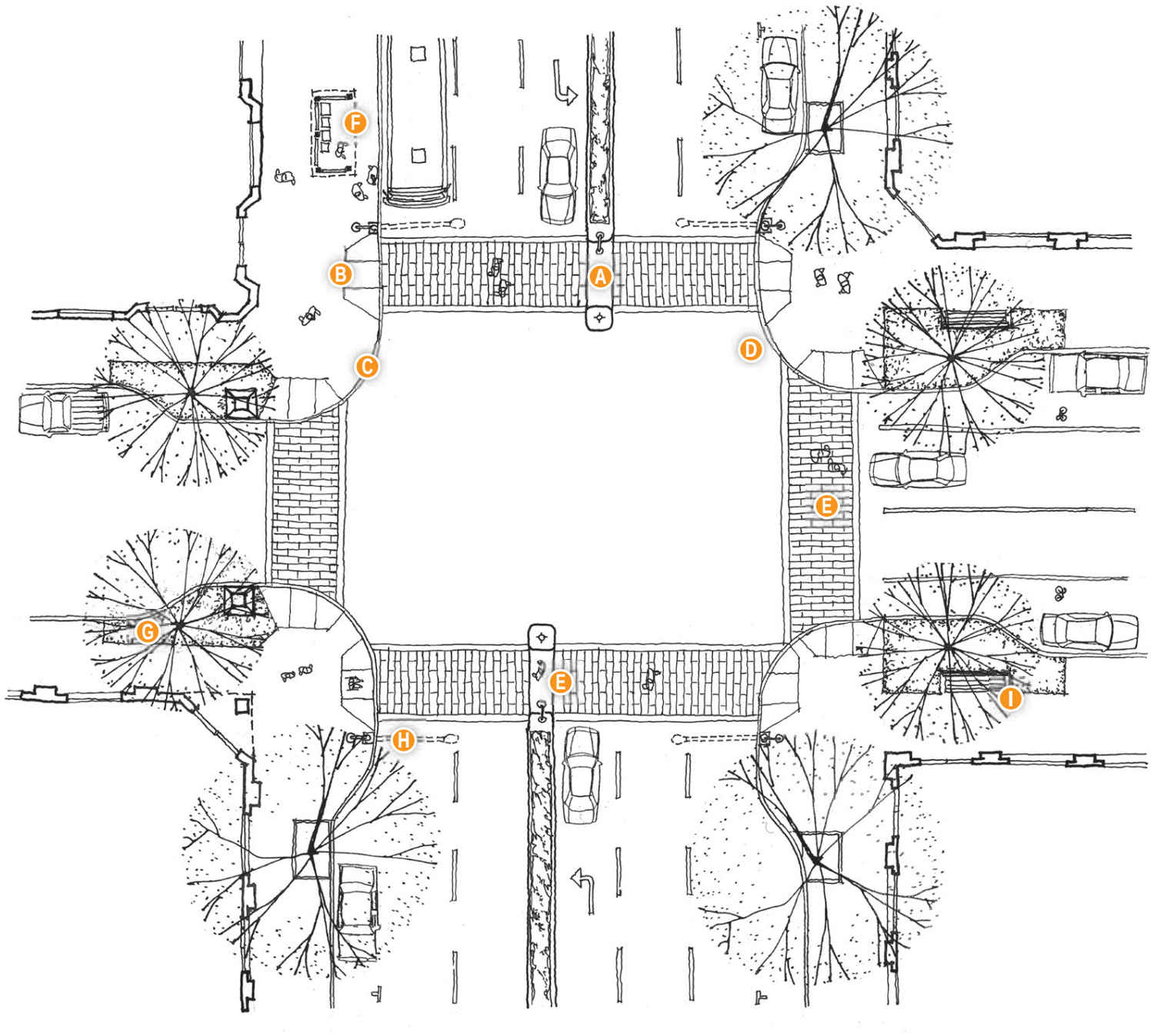
***Streetscape Elements (Chapter 6)***
In order to provide a continuous and comfortable pedestrian realm, calm traffic, and enhance the sense of an area that is used by pedestrians, streetscape elements, including trees, plantings, and seating should be provided adjacent to intersections.

*Intersections are potential conflict zones between pedestrians and motor vehicles. Their design should ensure a safe and comfortable environment for those trying to cross the street.*

*Figure 4.1*

## ELEMENTS OF A GOOD INTERSECTION

A. Visible crosswalks (5.1)
B. Curb Ramps (5.1)
C. Tight turn radii (5.2)
D. Curb Extensions (Section 5.3)
E. Pedestrian Refuge Islands (5.4)
F. Accessible transit stops (5.5)
G. Street trees and landscaping (6.1)
H. Pedestrian-scale lighting (6.3)
I. Seating and other site furnishings (6.5)




*Good intersection design provides a number of pedestrian-oriented features, such as well-marked crossings and curb extensions*

# SIDEWALK WIDTH AND ZONES

Well-designed sidewalks are a fundamental part of good multi-modal streets. They are the building block of a great pedestrian environment and are critical to the quality of public life in San Francisco.

Sidewalks should be included on both sides of all streets throughout the city. Some exceptions exist, such as along single-surface shared street conditions, and where topography does not allow. As pedestrian crossings at intersections are considered extensions of the sidewalk, crosswalk closures create discontinuous sidewalks and should be evaluated and re-opened as appropriate (see Section 5.1).

## Sidewalk Zones

Sidewalks should enable active public space and accessible pedestrian travel. Amenities such as landscaping, lighting, seating, cafes, and merchandise displays work to activate the street. These amenities should be properly organized to ensure the most fundamental purpose of the sidewalk: safe and accessible travel. To accomplish this balance, a sidewalk must simultaneously be viewed holistically and through the organizing logic of a set of zones. The five zones are defined below from property line to curb, with detailed guidelines following:

- **Frontage Zone:** The area adjacent to the property line where transitions between public sidewalk and the space within buildings occur
- **Throughway Zone:** The portion of the sidewalk for pedestrian travel along the street
- **Furnishings Zone:** The portion of the sidewalk used for street trees, landscaping, transit stops, street lights, and other street furnishings
- **Edge Zone:** The area used for people getting in and out of vehicles
- **Extension Zone:** The area where pedestrian space may be extended into the parking lane, via features such as bulb outs with mid-block plazas

These terms are used throughout the document.

### *Frontage Zone*

**Use:** Adjacent uses may utilize this zone for outdoor displays and seating. Related architectural elements that encroach into the street such as awnings, stairs, marquees and the like can occupy this zone.

**Width:** The frontage zone should be a minimum of 1 1/2 feet wide to provide a comfortable "shy zone" distance for pedestrians for whatever use takes place on the adjacent property. In constrained conditions where there is relatively little pedestrian traffic or where there are wide building setbacks this distance may be decreased. In commercial areas this width should be increased to allow for café tables and seating, benches, planting, and other amenities, and higher volumes of window shopping and entering and exiting of doors.

**Special Considerations:** On sidewalks not wide enough to accommodate a large Furnishings Zone, elements that would normally be sited there such as benches, news racks, trash cans and poles may occupy the Frontage Zone to keep the Throughway Zone clear.

### *Throughway Zone*

**Use:** The Throughway Zone is intended for pedestrian travel only and should be clear of obstacles, including driveway aprons or other changes to cross-slope.

**Width:** Accessibility guidelines require an absolute minimum of 4 feet in width for unobstructed pedestrian through travel, widening to a minimum of 5 feet at least every 200 feet per accessibility regulations. For streets with higher pedestrian volumes, the preferred dimension should be greater than this. For very high pedestrian volume areas, including many of the neighborhood commercial and downtown streets, additional width should be provided in some cases up to 14 feet in width.

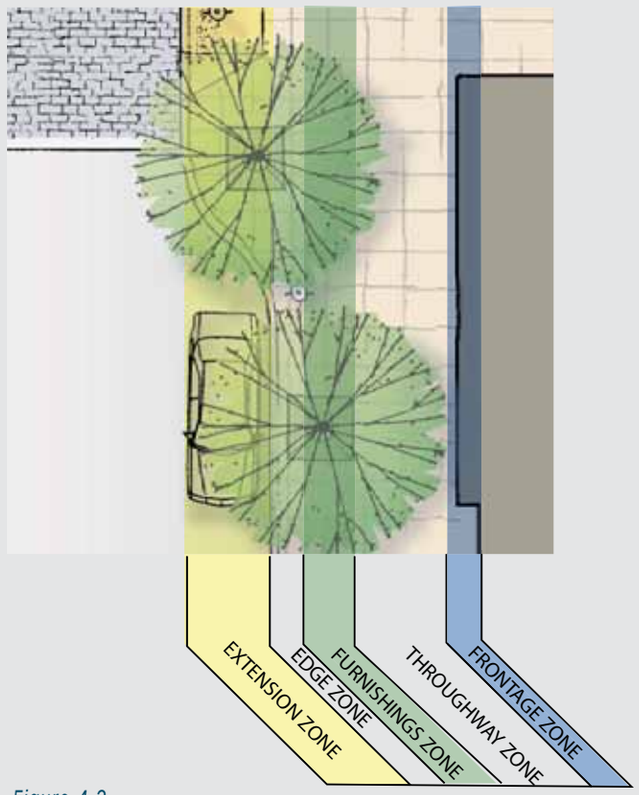




*Figure 4.2*
SIDEWALK ZONES (SECTION AND PLAN VIEWS)

## INTERACTIONS WITH ADJACENT PARCELS

The Better Streets Plan focuses primarily on improvements to the public right-of-way. However, fronting properties also exert a strong influence on the quality and character of the pedestrian realm that go beyond the scope of this plan. Specific ways in which properties can enhance or detract from the public realm include:

- Parking lot edges: opportunities for landscaping and screening of surface lots
- Building setbacks: balancing the desire for a consistent street wall with opportunities for wider sidewalks or fronting plazas
- Ground-floor uses and building design that creates activity at street level
- Overhead projections, such as awnings, marquees, signs, and balconies, that can add character to a streetscape, but may also interfere with tree plantings or accessibility

**Special Considerations:** "Overhanging" elements such as awnings, store signage, bay windows, etc. may occupy this zone as long as there is a clear distance under them of at least 6 feet 8 inches, as required by accessibility guidelines.

### *Furnishings Zone*

**Use:** The Furnishings Zone acts as a buffer between the active pedestrian walking area (Throughway Zone) and street traffic. Street trees and other landscaping, light and utility poles, street furniture, sign poles, traffic signal cabinets, fire hydrants, bicycle racks and the like are consolidated in this zone to keep them from being obstacles in the Throughway Zone. The Furnishings Zone should also enable community use, and allow for seating, small plazas, kiosks, and the like.

**Width:** Furnishings Zone dimensions should be based upon traffic speeds and volumes and whether street parking is provided. If no on-street parking is provided and traffic speeds are 25 mph or less, the ideal Furnishings Zone dimension could be as little as five feet. For speeds exceeding 30 mph, the Furnishings Zone should be one foot wider for every 5 mph increment in posted speed above 30 mph.

**Special Considerations:** The Furnishings Zone can be differentiated from the Throughway Zone through paving scoring or materials or edge treatments, and can enhance the look of the streetscape and create a sense of the Furnishings Zone as a place for inhabiting as opposed to moving.

### *Edge Zone*

**Use:** The Edge Zone, sometimes referred to as the "Curb Zone," is the interface between the roadway and the sidewalk. The edge zone should be a walkable surface, constructed of standard concrete, pavers, or a walkable landscape treatment such as decomposed granite to allow people to get in and out of parked vehicles.

**Width:** The Edge Zone is a minimum of 6 inches wide; however on many streets, it should be wider. Specifically:

- In more active mixed-use areas with on-street parking, this zone should be a minimum of 1 foot 6 inches and should be at least 2 feet wide on higher traffic streets. This distance accommodates the door swing of a parked car to prevent conflict with elements within the Furnishing Zone.
- Where planting strips or stormwater treatments are included within the Furnishings Zone on streets with on-street parking, the Edge Zone should be a minimum of 18" wide to allow access to parked vehicles.
- Where angled parking is provided, the frontage zone should be a minimum of 2'6"
- At transit stops with shelters, this zone should be widened to 4 feet to provide wheelchair access to the transit shelter, or another accessible path to the shelter should be provided
- On streets with no parking lane, the Edge Zone may be as little as 6", the width of the curb.

### *Extension Zone*

**Use:** The Extension Zone refers to specific conditions where the sidewalk and streetscaping extend into the parking lane. Specific examples include flexible use of parking lanes, curb extensions, bicycle parking and tree planting in the parking lane, and differentiating the parking lane from vehicle travel lanes through paving treatments.

**Width:** Where the pedestrian realm is expanded into the Extension Zone, it should take up the full width of the parking lane.

**Special Considerations:** Installing sidewalk extensions is an effective way to increase sidewalk space and compliment the Furnishings Zone. Additionally, as described in Section 5.8, in certain locations a combined Extension zone and Furnishing Zone may be an appropriate place to provide linear parks and public gathering spaces.

## Special Sidewalk Zones

Certain portions of the streetscape require special consideration in terms of the spacing and placement of streetscape elements. The following guidelines offer specific guidelines for these areas.

### *Corners*

Corners should be kept clear of obstructions. They should maintain drivers' and pedestrians' clear views of each other. Amenities should be clustered adjacent to corners in visible, high-use locations.

The following streetscape elements are appropriate for corners:

- Corners should include curb ramps and detectable warning surfaces as described in Section 5.1: Crosswalks.
- Pre-existing utility poles and sub-surface vaults may be prohibitively expensive to move, and may remain in place. However, they should be relocated as funding and opportunities allow.
- On residential streets, corners may include a corner planter to the width of the furnishing zone on the adjacent sidewalks, so long as sufficient clear width for curb ramps is maintained

### *Transit Stops*

Transit stops require special layout guidelines due to the high number of people often waiting near them and the need to board and alight from transit vehicles.

See Section 5.5, Transit-Supportive Streetscape Design.

### *Disabled Parking and Passenger Loading Zones*

Disabled parking and passenger loading zones require special streetscape considerations to ensure that passengers may safely get into and out of vehicles. Specific guidelines include:

- Street trees, furnishings and other obstructions should allow a minimum of 8 feet of clear sidewalk width adjacent to the curb.
- Special paving treatments and sub-surface utilities may be located within this zone, provided that they create a stable, firm, and slip-resistant surface.

### *Driveways*

Driveways present special challenges to the pedestrian due to changes in cross-slope and the presence of vehicles crossing the sidewalk.

See Section 6.6, Utilities and Driveways.

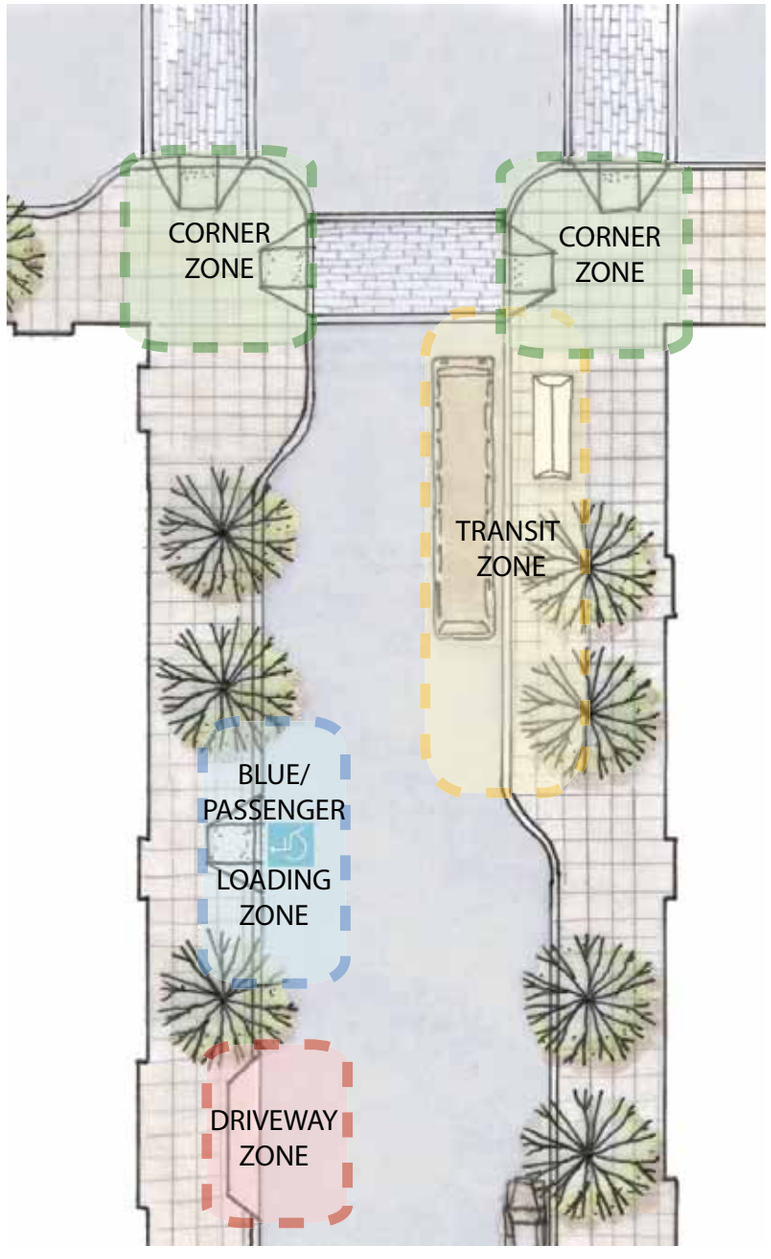
### *Medians*

Medians can contribute to the aesthetic character and ecological function of the streetscape. They can add substantial greenery, decrease impermeable surface, offer opportunities for pedestrian refuges, and offer locations for lighting and some utilities.

- Wide medians of some streets offer opportunities for lines of trees that are otherwise difficult to achieve along sidewalks.
- Sufficiently wide medians (12 feet or more) can be designed to include seating and gathering areas and other pedestrian amenities.
- Medians also create opportunities for pedestrian refuges at busy intersections.

See Section 5.4, Medians and Islands.

*Figure 4.3*
SPECIAL SIDEWALK ZONES



## Sidewalk Width

Sidewalk width has significant implications on streetscape design and pedestrian quality. Sidewalks that are too narrow can prevent the provision of amenities and also prevent pedestrians from moving comfortably.

A wide sidewalk offers pedestrians enough space walk, stand, sit, and enjoy the public realm. Wider sidewalks also offer more space for landscaping and amenities, making the streetscape more useful and attractive and also acting as a buffer between fast-moving traffic and pedestrians. In limited cases, sidewalks may be too broad, such that they become derelict or unused, and creating a misallocation of public space resources.

The following variables should be considered in determining appropriate sidewalks width:

- **Adjacent land use:** High-intensity uses attract more pedestrians, generally necessitating greater sidewalk widths.
- **Adjacent building form:** Taller buildings create greater shadow and scale; wider sidewalks can create greater separation from the buildings, and allow greater sun to sidewalks opposite tall buildings
- **Adjacent ground floor use:** Office and residential uses are often slightly set back to allow a transition from public to private spaces. In contrast, buildings with active ground floor uses typically front more directly onto the street and often spill out into the sidewalk with seating or merchandise displays. These features may also constrain clear sidewalk width.
- **Roadway characteristics:** Pedestrians typically desire a buffering between themselves and moving traffic to feel comfortable on a sidewalk. Traffic speed, volume, and type impact pedestrian comfort. Faster moving roads with heavier traffic necessitate a larger buffer and a more comfortable pedestrian realm. The presence of on street parking or bicycle lanes can provide additional buffering. Where these are not present, there is a need for more buffering via wider sidewalks or landscaping.

*Figure 4.4*
RECOMMENDED SIDEWALK WIDTHS

| | Street Types | Total | Frontage | Throughway | Furnishings | Edge |
|---|---|---|---|---|---|---|
| COMMERCIAL | Downtown commercial | Per Downtown Streetscape Plan | | | | |
| | Commercial throughway | 15’ | 2’ | 6’ | 5’ | 2’ |
| | Neighborhood commercial | 15’ | 2’ | 6’ | 5’ | 2’ |
| RESIDENTIAL | Downtown residential | 14’ | 18” | 6’ | 5’ | 18” |
| | Residential throughway | 14’ | 18” | 6’ | 5’ | 18” |
| | Neighborhood residential | 12’ | 18” | 5’ | 4’ | 18” |
| INDUSTRIAL | Industrial | 10’ | 6” | 4’ | 4’ | 18” |
| | Industrial mixed-use | 14’ | 18” | 6’ | 5’ | 18” |
| SPECIAL | Parkway | 17’ | 18” | 6’ | 8’ | 18” |
| | Park edge (if multi-use path) | 25’ | NA | 13’ | 10’ | 2’ |
| | Multi-way boulevard | 14’ | 18” | 6’ | 5’ | 18” |
| | Ceremonial | 22’ | 2’ | 10’ | 8’ | 2’ |
| | Alley (unless shared space) | 9’ | 6” | 4’ | 4’ | 6” |
| | Paseo | 10’ | NA | 6’ | 4’ | NA |

*Figure 4.5*
STANDARD MINIMUM SIDEWALK WIDTHS

| | Street Types | Total | Frontage | Throughway | Furnishings | Edge |
|---|---|---|---|---|---|---|
| COMMERCIAL | Downtown commercial | Per Downtown Streetscape Plan | | | | |
| | Commercial throughway | 12’ | 18” | 5’ | 4’ | 18” |
| | Neighborhood commercial | 12’ | 18” | 5’ | 4’ | 18” |
| RESIDENTIAL | Downtown residential | 10’ | 6” | 4’ | 4’ | 18” |
| | Residential throughway | 10’ | 6” | 4’ | 4’ | 18” |
| | Neighborhood residential | 10’ | 6” | 4’ | 4’ | 18” |
| INDUSTRIAL | Industrial | 8’ | 0’ | 4’ | 4’ | 0’ |
| | Industrial mixed-use | 10’ | 6” | 4’ | 4’ | 18” |
| SPECIAL | Parkway | 12’ | 6” | 4’ | 6’ | 18” |
| | Park edge | 12’ | NA | 4’ | 6’ | 18” |
| | Multi-way boulevard | 10’ | 6” | 4’ | 4’ | 18” |
| | Ceremonial | NA | NA | NA | NA | NA |
| | Alley (unless shared space) | 8’ | 6” | 4’ | 2’ | 18” |
| | Paseo | 8’ | NA | 4’ | 4’ | NA |

*Notes on Figures 4.4 and 4.5 ( see following page )*

The breakdown by sidewalk zones is a general guide. Throughway width should not be lower than the widths shown in the table; depending on pedestrian volumes, the throughway zone width may need to be increased by having wider sidewalks, or where widening the sidewalk is not possible, by using portions of the frontage or furnishings zone.

The edge zone should be increased to 30” wherever perpendicular or angled parking is provided. The edge zone may be decreased to 6” where there is no parking lane.

On shared streets, where the entire right-of-way accommodates pedestrian travel and amenities, these zone widths don’t apply.

Where a constrained right-of-way does not allow for these minimum dimensions, the design of the street should consider reducing the curb-to-curb area as feasible. In constrained sidewalk conditions, the sidewalk should meet the following criteria (in order of priority):

- Accommodate required access for people with disabilities and access to adjacent uses and transit stops
- Accommodate expected levels of pedestrian activity
- Provide necessary buffering between the active area of the sidewalk and adjacent traffic;
- Integrate design elements to enhance the public realm.

## *Sidewalk Widths by Street Types*

***Recommended Width***

Sidewalks should strive to meet the recommended sidewalk widths shown in Figure 4.4 at a minimum. The recommended minimum width describes the necessary width to fit desired streetscape elements and quality.

New developments that create new streets should meet the recommended sidewalk widths at a minimum.

Streetscape improvement projects should evaluate opportunities to widen sidewalks to the recommended minimums as conditions allow. Most street improvements in San Francisco take place within existing rights-of-way (as opposed to entirely new streets), and trade-offs among various travel modes are often necessary. Both the standard minimum and the recommended widths describe minimum widths for achieving a desired pedestrian supportive environment; however, they don't suggest how these should be traded off with other travel modes.

***Standard Minimum Width***

All sidewalks should meet the standard minimum widths described in Figure 4.5.

Sidewalks may be below this width for a variety of reasons, from physical constraints to historical context. Sidewalks that are below this width should be considered deficient; when funding allows or the street is otherwise being reconstructed, they should be considered for sidewalk widenings as feasible.

In some cases, where it is not possible to achieve standard minimum widths within existing rights-of-way, requiring building setbacks may be considered as a way to provide extra space.

***Sidewalk Widths & Medians***

Generally, though medians can add aesthetic value and safety benefits, roadway space is often more valuable to pedestrians as part of sidewalks rather than as part of a median. The width of a median should be balanced against ramifications on sidewalk width in planning a street.

However, due to the significant cost of changing curbs, utilities, driveways, and site furnishings, widening sidewalks by a small amount may be less cost-effective than adding median space.


*Figure 4.6*
STANDARD MINIMUM (LEFT) AND RECOMMENDED (RIGHT) SIDEWALK WIDTHS, USING NEIGHBORHOOD COMMERCIAL STREETS AS AN EXAMPLE

▲ *A well-organized streetscape balances pedestrian through travel and provision of amenities.*

▼ *Trees and lighting define the rhythm of the streetscape.*

# STREETSCAPE LAYOUT

This section provides a general overview of the placement and layout of the various streetscape elements that one typically finds along a sidewalk. When carefully placed, these elements contribute to the creation of a comfortable and effective pedestrian realm.

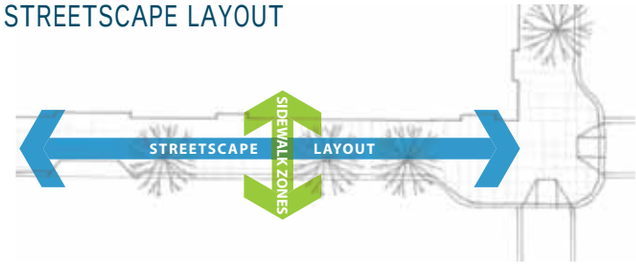
Detailed guidelines for each of these elements can be found in Chapter 6.

## General Placement Guidelines

The following three guidelines should govern the placement of all streetscape elements:

- ***Wisely Allocate Limited Space:*** Given limited street space, streetscape elements may conflict with one another, limit visibility, block pedestrian travel, or create a sense of streetscape clutter. Understanding the requirements and constraints of each element and appropriately locating them with a firm understanding for the needs of other elements is important to achieving a well-designed and rich pedestrian realm that is interesting, comfortable and visually orderly.
- ***Strive for "Wholeness":*** Layout of streetscape elements should emphasize "wholeness," or placement that looks at an entire block or corridor rather than individual placement in a piecemeal fashion. The layout should consider city pattern and be consistent with long term goals for the design and function of the street as public space.
- ***Accommodate Pedestrian Needs:*** The placement of streetscape elements should allow the comfortable and efficient flow of pedestrians along the street and from parked cars and adjacent buildings to the sidewalk. At the same time, streetscapes should provide a diversity of amenities and spaces for public enjoyment and where appropriate include elements of surprise and variety that reflect the specifics of unique places.

*Figure 4.5*
SIDEWALK ZONES VS. STREETSCAPE LAYOUT




## Layout Guidelines by Element

Each element of the streetscape plays its own role in helping establish an efficient and comfortable pedestrian realm. The guidelines below are a general overview of special considerations for some of the key elements of streetscape design. Detailed guidelines for each of these elements can be found in Chapter 6 of this document.

### *Street Trees (See Section 6.1)*

Trees should be the primary organizing elements of the streetscape. The following placement guidelines apply to trees:

***Spacing:*** Street trees should be placed in a continuous line with consistent spacing to establish a visual rhythm and organizing logic for the streetscape. Other streetscape elements should be located to minimize conflicts with potential street tree locations. It is preferable to place trees slightly off the exact desired spacing than to leave a gap. Tree planting should extend as close to the intersection as feasible. Where width allows, double rows of trees should be planted.

***Location:*** Generally, street trees should be planted in the Furnishing Zone. Trees may also be planted in the Extension Zone depending on the design and use of that space.

***Special Considerations:*** Trees planted in a median should complement the scale, character, and rhythm of trees in the sidewalk. Trees in medians provide an opportunity to create a consistent rhythm, as their placement is less likely to vary due to driveways, utilities, and other sidewalk constraints. On wide medians, there

is also an opportunity for creative planting designs utilizing street trees and understory plantings that supplement or deviate from the regular tree spacing and planting pattern of the sidewalk and create a unique aesthetic.

### *Street Lighting (6.3)*

Street lighting works in conjunction with street trees to establish the rhythm of the streetscape. On streets where it is not feasible to plant trees, street lighting may be the primary organizing element.

***Spacing:*** Street light spacing should be consistent along the length of a block or corridor. However, exact spacing may vary based on the height of light fixtures and desired light levels. Lighting on medians should complement the scale, character, and rhythm of lighting on the sidewalk.

***Location:*** In general, lighting should be located in the Furnishing Zone. Pedestrian-scaled lighting may also be appropriate in the Frontage Zone. Lighting should be offset from street trees in a regular pattern, either mid-way between trees or at a consistent distance on either side.

***Special Considerations:*** Where separate poles for roadway and pedestrian lights exist, each should be spaced in an even pattern; however, this pattern may need to be adjusted to achieve specific desired light levels.

### *Ground-Level Planting (6.1)*

Ground-level planting, including in-ground (understory planting) and containerized (above-ground planting), complements street trees and adds vibrancy and diversity to the streetscape while maintaining a sense of order.

***Spacing:*** Ground-level planting should be consistent in spacing, scale, and shape along a block or corridor and on both sides of the street.

***Location:*** Ground-level planting should be located in the Furnishings and Frontage Zone. Planters should come as near to corners, driveways, and other streetscape elements as possible. Understory planting should be located in tree basins or in landscaped planting strips.

***Special Considerations:*** A 4 foot walkable path should be provided every 40 feet for access to parked vehicles between planting areas. Driveways and curb ramps may be substituted for the walkable path where they already exist. Sub-surface utility vaults, poles, and streetlights may be located within the surface planter beds if concrete-set.

### *Site Furnishings (6.5)*

With the proper placement and design, site furnishings such as benches, information kiosks, and trash receptacles add greatly to the character, comfort and functionality of a streetscape.

***Spacing:*** Site furnishings should be placed in predictable locations, particularly near transit stops. Corner locations on short blocks, and mid-block locations on long blocks where sidewalk areas are wider, are particularly appropriate. Typically, site furnishings should be clustered near trees and light fixtures, and where possible integrated with them. For example, benches or bike racks can serve as tree guards, reducing the number of furnishings and potential for clutter.

***Location:*** Typically, site furnishings should be aligned in the center of the Furnishing Zone. Some furnishings such as bicycle racks and benches should be perpendicular to the roadway where sidewalk width allows, in order to efficiently use sidewalk space. Site furnishings should be located at the ends of on-street parking stalls rather than at the center where possible to avoid door swing conflicts from parked vehicles.

*Figure 4.7:*
APPROPRIATE STREETSCAPE ELEMENTS BY SIDEWALK ZONE

| Sidewalk Zone | Appropriate Elements (General) |
|---|---|
| FRONTAGE | Merchandise displays, cafe seating, furnishings aligned with building frontage, planting along building frontage |
| THROUGHWAY | Special paving, sub-surface utitlities. |
| FURNISHINGS | Trees and plantings, lighting, seating, bicycle racks, kiosks, cafe seating, public art, utility boxes and vaults, other site furnishings |
| EDGE | Parking meters, signage poles, bollards, sub-surface utilities otherwise clear for access to vehicles. |
| EXPANSION | Planting and seating areas in flexible parking zones or on curb extensions, trees ins islands |

*Elements listed here should also meet appropriate clearances and guidelines per Chapter 6.*

▲ *Sidewalk planters can help define a streetscape character and a rhythm of streetscape elements*

▲ *Cambridge, Massachussetts*