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Off-Street Non-Vehicular Treatments

Off-street non-vehicular treatments are those that occur within the Parkway Zone, or in the public ROW not described in this typology. Importantly, these treatments diverge from the typical roadway configurations, and may or may not be adjacent to a vehicle zone. They accomplish a variety of purposes, from providing recreation and leisure opportunities to improving the function of roadway systems. All Off-Street Non-Vehicular Treatments for pedestrians, temporary and permanent, shall be designed to be accessible for all ages and abilities as required by ADA, PROWAG and Title 24. Typical off-street non-vehicular treatments that are located within the Flex Zone such as pedestrian plazas, parklets, and streetaries can be found in Chapter 5.

4.1. Placemaking

Placemaking is the temporary use of public right-of-way and private property that activates streetscapes by enhancing the pedestrian experience and providing neighborhood-serving activities, experiences, or spaces and includes temporary, small-scale development specifically designed to support that temporary use. Projects that may qualify as Placemaking uses include, but are not limited to, those that provide areas for pedestrians to briefly rest (e.g., plazas, shade structures, and benches), promote the use of underutilized space (e.g., landscaping and decorative lighting), and improve and promote pedestrian activity and other uses of the public right-of-way (e.g., bicycle racks and refuse containers). (SDMC §113.0103; SDMC §129.070)

Placemaking projects are privately funded, typically have broad community support and are often planned in concert with community-oriented organizations, such as a Business Improvement District, Civic Association, Community Parking District, Community Planning Group, Maintenance Assessment District, Property Business Improvement District, Town Council or other similar non-profit organizations. Consult Ordinance O-20928 and Information Bulletin IB-568 (Oct. 2018) for more information on Placemaking in the City of San Diego.

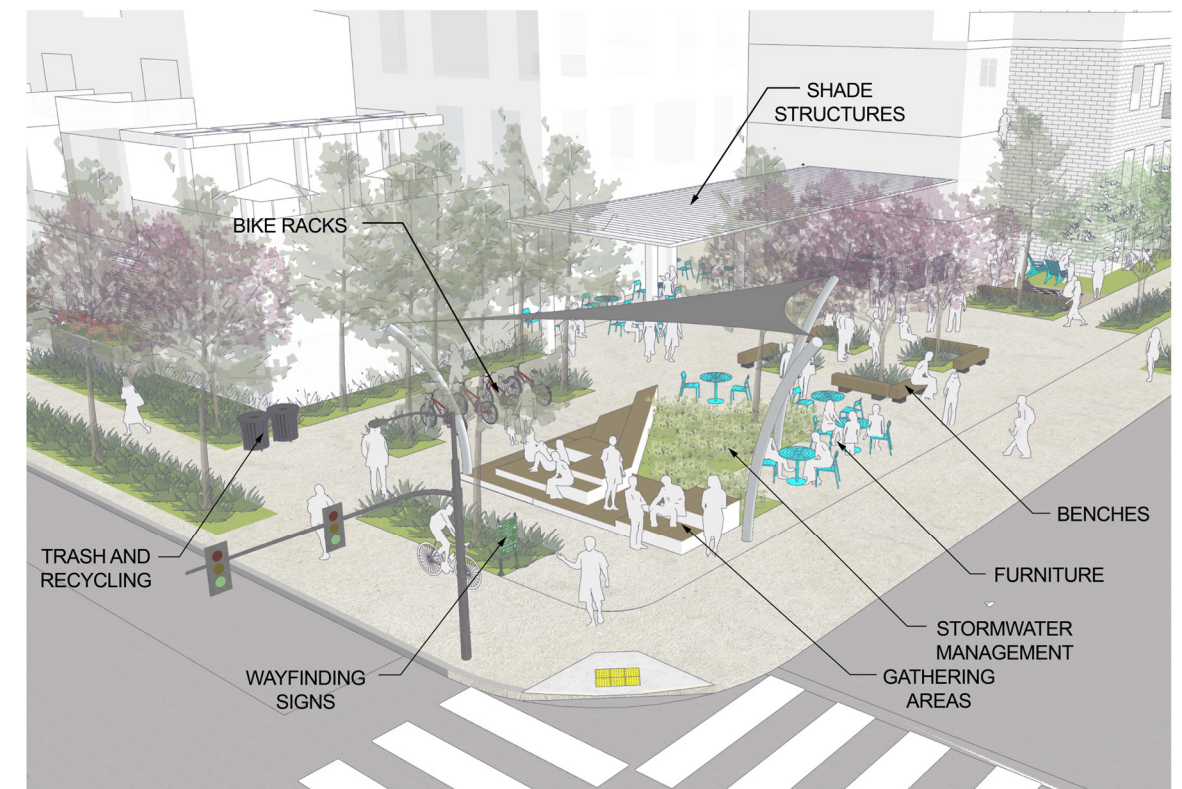


FIGURE 4-1 PLACEMAKING

4.1.1 Temporary Treatments

The City of San Diego allows for various temporary treatments to enhance placemaking efforts. Placemaking projects can be permitted for up to five years. After five years the Placemaking project must be removed, and the area returned to its original condition unless a new permit for Placemaking is obtained. Depending on the treatment, projects may be subject to fees and permitting and/or licensing requirements. Placemaking projects on private property are subject to the regulations contained in SDMC §141.0421.

4.2. Active Transportation Treatments

An activated space refers to an area within the public ROW that is designed to engage and attract people and enhance the vibrancy and functionality of the off-street environment. These carefully curated spaces also foster pedestrian and bicyclist safety, as well as boost the local economy by drawing visitors and supporting local businesses.

These types of treatments can be considered as types of Class I multi-use paths or shared-use paths. Treatments that are used by bikes and pedestrians are considered as Shared Use Paths per PROWAG, therefore shall meet all the provisions of the regulations. Curb ramps serving Shared Use Paths shall be the same width as the Shared Use Path (minus flares).

4.2.1 Class I Multi-use Paths/Shared-use Facilities

Multi-use paths are paved, off-road facilities designed for travel by a variety of nonmotorized users, including bicyclists, pedestrians, skaters, joggers, and others. Most multi-use paths in the United States are constructed to provide recreational opportunities. Some are also intended to serve commuters. Multi-use paths are also very common on university campuses because motor vehicle traffic and parking are often heavily restricted. Shared Pedestrian/Bikeway Facilities are a type of multi-use paths.

Benefits:

- Multi-use paths can provide a desirable facility, particularly for cyclists, pedestrians, and other road users who prefer separation from traffic.
- They can provide users with a shortcut through a residential neighborhood (e.g., a connection between two cul-de-sac streets). Located in a park, they can provide an enjoyable recreational opportunity.
- Multiuse paths can be located along rivers, ocean fronts, canals, abandoned or active railroad and utility rights-of-way, limited access freeways, within college campuses or within and between parks.

Considerations:

- Conflicts between different user types are especially likely to occur on regional recreational paths that attract a broad diversity of users.

Standards and Guidelines:

- Since nearly all multi-use paths are used by pedestrians, they fall under ADA requirements. These facilities are most commonly designed for two-way travel.
- In general, paths expected to receive heavy use should be a minimum of 14 feet wide, paths expected to experience moderate use should be at least 12 feet wide and low volume paths or pedestrianways can be 10 feet wide. In very rare circumstances, a reduced width of 8 ft may be used (see AASHTO for conditions in which 8 ft is appropriate).
- On pathways with heavy peak hour and/or seasonal volumes, or other operational challenges such as sight distance constraints, the use of a centerline stripe on the path can help clarify the direction of travel and organize pathway traffic. A solid yellow centerline stripe may be used to separate two directions of travel where passing is not permitted, and a broken yellow line may be used where passing is permitted. The centerline can either be continuous along the entire length of the path, or may be used only in locations where operational challenges exist. Per the MUTCD, all markings used on bikeways shall be retroreflective.
- In areas with extremely heavy pathway volumes, segregation of pedestrians from wheeled users may be appropriate; however, care should be taken that the method of segregation is simple and straightforward. Pedestrians are typically provided with a bi-directional walking lane on one side of the pathway, while bicyclists are provided with directional lanes of travel. This solution should

only be used when a minimum path width of 15 ft is provided, with at least 10 ft for two-way wheeled traffic, and at least 5 ft for pedestrians.

- Under most conditions, there is no need to segregate pedestrians and bicyclists on a multi-use path, even in areas with high user volumes—they can typically coexist. Path users customarily keep right except to pass. Signs may be used to remind bicyclists to pass on the left and to give an audible warning prior to passing other slower users. Part 9 of the CA MUTCD provides a variety of regulatory signs that can be used for this purpose.
- Joint use of paths by cyclists and equestrians can pose problems due to the ease with which horses can be startled. Also, the preferred surface treatments for cycling and equestrian paths differ. Therefore, where either equestrian or cycling activity is expected to be high, separate trails are recommended.
- Ideally, a graded shoulder area at least 3 to 5 ft wide with a maximum cross-slope of 1V:6H, which should be recoverable in all weather conditions, should be maintained on each side of the pathway. At a minimum, a 2 ft graded area with a maximum 1V:6H slope should be provided for clearance from lateral obstructions such as bushes, large rocks, bridge piers, abutments, and poles.
- Figures 4-8 and 4-9 and Table 4-2 illustrate the minimum design specifications for shared pedestrian/bikeway facilities.

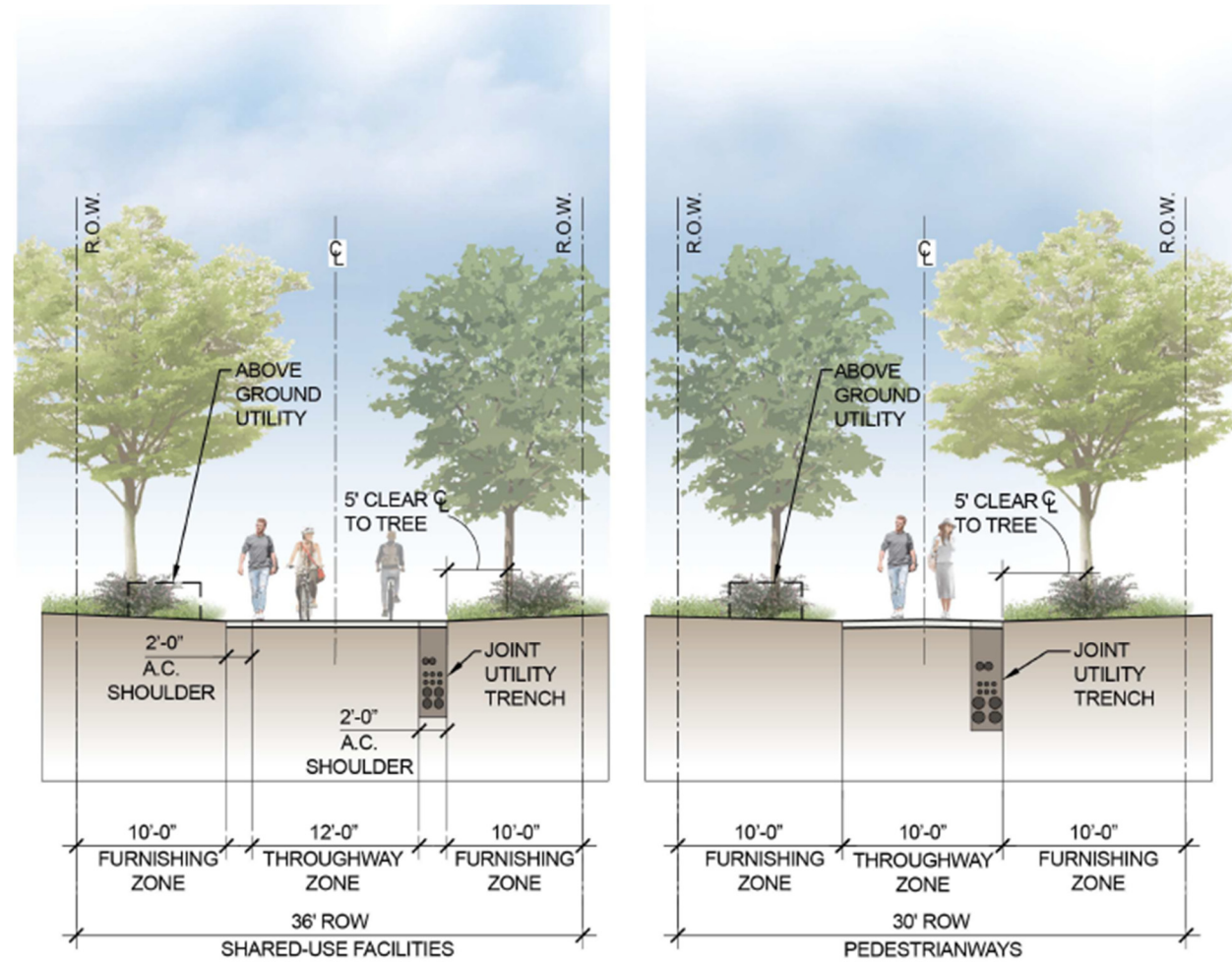


FIGURE 4-2 PEDSTRIANWAYS AND SHARED-USE FACILITIES SECTION VIEW

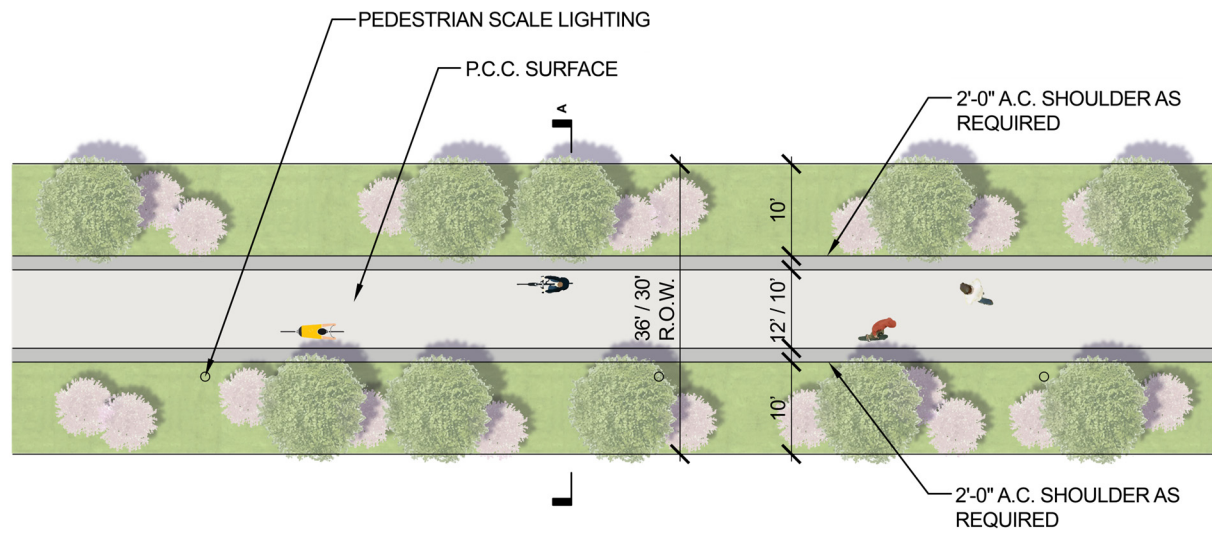


FIGURE 4-3 PEDESTRIANWAY/SHARED-USE FACILITIES PLAN VIEW

Facility	Multi-Use Path	Shoulder
Preferred	12'	2' (+10' Furnishing Zone)

TABLE 4-1 MULTI-USE PATH DIMENSIONS

Description	Specifications		Units
Width, Right-of-Way ^{1,2}	36		ft
Width of Traveled Way ³	12		ft
Width of Shoulder ⁴	2		ft
Maximum Grade	5		%
Street Trees	Permitted		-
Street Lights	Pedestrian Scale		-
Utilities	One side		-

TABLE 4-2 SHARED PEDESTRIAN/BIKEWAY SPECIFICATIONS

Notes:

1. ROW of 30 ft is required for pedestrianways only.
2. Where ROW is constrained, Furnishings Zone width may be reduced to 6 ft.
3. Width of traveled way of 10 ft. is required for pedestrianways.
4. Shoulders are not required for pedestrianways only.

References:

- CA MUTCD Rev. 8, Caltrans, 2024
- Guide for the Development of Bicycle Facilities, AASHTO, 2012
- Highway Design Manual, 7th ed., Caltrans, 2020
- PROWAG, US Access Board, 2023

4.2.1.1 Class I Bike Path within the Parkway

A bike path (Class I) is a bicycle facility on a paved right-of-way, completely separated from the roadway. A bike path allows a variety of uses in addition to bicyclists. It permits walkers, joggers, wheelchair users, and non-motorized scooter users among many others.

Benefits:

- Offers opportunities not provided by the road system.
- Provides recreational opportunities.
- Provides low-stress experience for multiple users: bicyclists, pedestrians, joggers, skaters, wheelchair users, and others.

Considerations:

- Right-of-way constraints.
- Can be parallel to higher-speed thoroughfares.

Guidelines:

- Provides a completely separated right-of-way for the exclusive use of bicycles separated from pedestrians with cross flows minimized.
- Preferred bike path width is 10 feet (12 feet City standard), with a minimum of 8 feet width in constrained locations. The preferred buffer between the roadway and multi-use path is 2 feet (plus an additional 10 feet furnishing zone, with a minimum of 6 feet furnishing zone in constrained locations).
- Provides a dedicated pedestrian path that is accessible to persons any abilities.

References:

- Evaluation of Safety, Design, and Operation of Shared-Use Paths, FHWA, 2006
- Highway Design Manual, 7th ed., Caltrans, 2020
- PROWAG (Shared Use Path Accessibility Guidelines), US Access Board, 2023

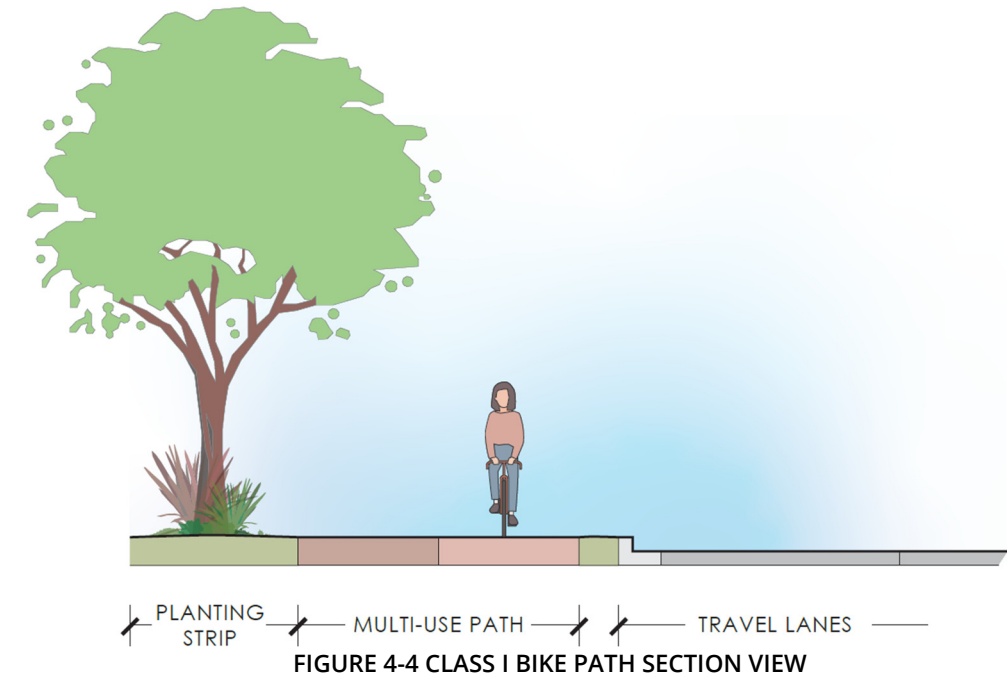


FIGURE 4-4 CLASS I BIKE PATH SECTION VIEW



FIGURE 4-5 CLASS I BIKE PATH PLAN VIEW

Facility	Bike Path	Buffer
Preferred	10'-12'	2' (+10' parkway)
Minimum	8'	2' (+6' parkway)

TABLE 4-3 CLASS I BIKE PATH DIMENSIONS

4.2.1.2 Promenade

Public Promenades involve partial or complete street closures to vehicular traffic to facilitate active transportation uses such as walking and biking free from vehicular conflicts. Recreational amenities, outdoor dining and other enjoyable public interactions can facilitate and contribute to the enjoyment of the active transportation experience. It is envisioned that promenades will create places that are sociable, have a variety of uses and activities, are well connected to their surroundings and are comfortable and welcoming to people with all abilities. Compared to more temporary treatments, promenades are intended to produce longer-term or permanent facilities for pedestrians.

Benefits:

- Promenades are designed along streets within the City of San Diego to facilitate active transportation and enhance pedestrian experience.
- Promenades encourage non-motorized transportation.
- Promenades foster safe pedestrian interaction and outdoor activities.
- Promenades can help create quality places that give an identity and image to communities, and help attract new residents, businesses, and investments.
- Promenades are envisioned to be community-driven places that are functional and inviting to all.
- Promenades present the opportunity for incremental interventions within a neighborhood.

Considerations:

- Promenades can be full street closures, partial street closures, or done as a dedication or easement as part of a development project.
- Promenade development is described in three phases within the Spaces as Places Design Manual, ranging from more temporary interventions to more permanent interventions:
 - In Phase 1, the community comes together to propose partial or complete street closure to traffic to encourage pedestrian activity and open up street space for children in the community to play and gather.
 - In Phase 2, the community adds recreational amenities to enhance the pedestrian experience and program activities that the community can enjoy.
 - In Phase 3, the Promenade becomes central to the community and additional investments are made to add lighting, paving, seating areas, trees and other amenities, thus making it a truly community-driven project.

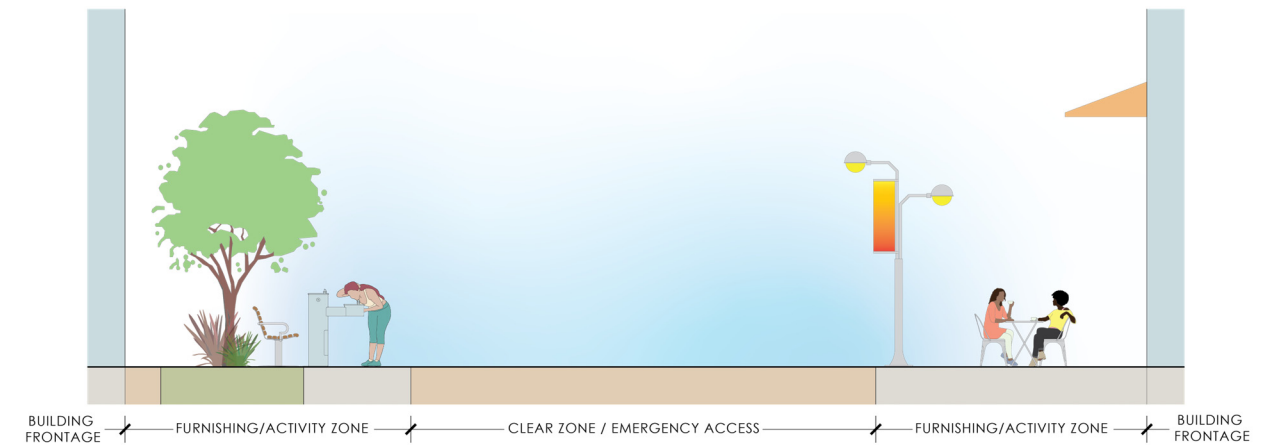


FIGURE 4-6 PROMENADE

Standards and Guidelines:

- ADA accessible curb ramps with truncated domes or City-approved detectable warning surfaces shall be provided for access to the Promenade.
- Promenades shall be designed to maintain drainage of stormwater from the gutter and not cause ponding.
- Proper location and relocation of catch basins, and utilization of design treatments to channel water through and along the Promenade, shall be required per City standards.
- When trench drains are installed, the Maintenance Assessment District, Business Improvement District, or private property owner shall be responsible for cleaning and maintaining the trench drains at all times.
- The design shall be in accordance with current City of San Diego stormwater standards and any changes to the road grade or curb line are to be reviewed and approved by the City Engineer.
- Design and placement of street furniture, trees, and plantings shall not impede pedestrian accessibility.
- Crosswalks shall be redesigned or added to ensure a safe, walkable urban environment, per the City Engineer.
- No vehicle access and no parking allowed when full street closure hours are in effect.
- Maintain an emergency access vehicle lane that is at minimum 20 to 26 feet wide (as determined by the City Engineer), provides a minimum of 13 feet and six inches of vertical clearance, and is clear at all times - any planters or furniture within this zone must be easily movable.
- See the Spaces as Places Design Manual for design guidelines specific to Phases 1 & 2 described above.

References:

- Municipal Code §141.0629, City of San Diego, n.d.
- Spaces as Places Design Manual, City of San Diego City Planning Dept, 2023

4.2.1.3 Esplanade

An esplanade integrates an off-street bicycle path (typically two-way), a pedestrian walkway, trees, and landscaping into a travel corridor alongside a vehicular roadway. An esplanade creates an inviting pathway that is safe and enjoyable for a wide range of users.

Benefits:

- Encourages bicycling and walking as an alternative to motorized travel.
- Increases comfort and safety by separating pedestrians and bicyclists from the roadway.
- May provide additional safety and comfort by providing a parkway strip separating the pedestrian walkway from the bicycle path.
- Provides key pedestrian and bicycle linkages.



FIGURE 4-7 ESPLANADE

Location: North Harbor Drive

Considerations:

- An esplanade generally requires greater width than that of a typical sidewalk area, so its development will likely necessitate the relocation of the curb to increase sidewalk width. This will

likely require the relocation of utility infrastructure (e.g., drainage infrastructure, streetlights, utility poles, underground wiring, and utility boxes).

- An esplanade should have dedicated signalization at intersections with vehicular roadways. This is desired for several reasons:
 - Pedestrians and bicyclists are less visible to turning traffic because the pathways are set back further from the street,
 - At roadway crossings with two-way bicycle paths, motorists may not expect oncoming bicycle traffic, and
 - Dedicated signalization adds convenience and comfort to users.

Guidelines:

- An esplanade is typically 25-35' wide, accommodating a minimum 7'-wide pedestrian walkway, minimum 12' two-way bicycle path, and a parkway with landscaping, trees, and/or streetlights.
- Ideally there should be two parkway strips – one between the roadway and bicycle path, and another between the bicycle path and pedestrian walkway. Trees with broad canopies should be chosen to help create an attractive environment and protect users from the sun.
- Methods for stormwater treatment and management should be integrated into the landscaping plan.
- Permeable pavement should be considered for pathway surfaces.
- Esplanades could qualify for Priority Development Project Category 1 Exemption if the design follows the criteria outlined in Section 1.4.3 and Appendix J.1 of the Stormwater Standards Manual.

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4.2.1.4 Coastal Trails

Coastal trails are applied along stretches of recreational beach sites. Boardwalks can be a type of coastal trail. Coastal trails attract many types of pathway users and conveyances, including bicyclists, pedestrians, rollerbladers, and pedicabs.

Benefits:

- Provides a pleasant recreational facility for many types of users to enjoy.
- Provides a safe way to enjoy scenic rides and walks.

Considerations:

- The bicycle path should not be placed adjacent to large numbers of destinations to avoid conflicts with pedestrians and vehicles.

Guidelines:

- To provide an adequate and pleasant facility, adequate widths and separation are needed to maintain an enjoyable pathway environment.

- Path Width:
 - Bicycle Path: 12' minimum
 - 17' with parallel 5' pedestrian path
 - 1' clearance for signage
- Pavement Markings: Standard pavement markings should be used per the CA MUTCD. In order to reinforce the need for separation of bicyclists and pedestrians, graphic markings may be used.
- Surfacing: Paved surface thickness 4", adequate to support maintenance vehicles.
- The bicycle path should be located on whichever side of the path will result in the fewest number of anticipated pedestrian crossings. Site analysis of each project is required to determine expected pedestrian behavior.
- Offsetting of the pedestrian path should be provided if possible. Otherwise, separation should be provided in the form of striping or landscaping.



FIGURE 4-8 COASTAL TRAIL

Location: Bayshore Bikeway, Coronado, CA

References:

- CA MUTCD Rev. 8, Caltrans, 2024
- Guide for the Development of Bicycle Facilities, AASHTO, 2012
- Highway Design Manual, 7th ed., Caltrans, 2020

4.2.1.5 Equestrian Trails

Equestrian trails allow individuals to enjoy a unique form of recreation and travel within the City of San Diego. An integrated network of trails promotes horseback riding and provides a safe means for recreational riders to experience scenic parts of the City.

Benefits:

- Provides access to scenic open spaces across parts of the City.
- Ensures the safety and viability of horseback riding in the City with proper design and facilities.
- Provides a means to incorporate more landscaping and native vegetation throughout the City.

Considerations:

- Equestrians include youth, elders, leisure riders, professional riders, organized groups, novices, persons with disabilities, and working ranchers. Riders recreate singly or in groups, and for many reasons—including pleasure, exercise, or challenge. Well-designed horse trails consider the setting of the trail system, the needs of all user groups, and the specific needs of stock and their riders.
- AASHTO generally finds it undesirable to mix horses and bicyclists on paved shared-use trails.



FIGURE 4-9 EQUESTRIAN TRAIL

Source: Visit California

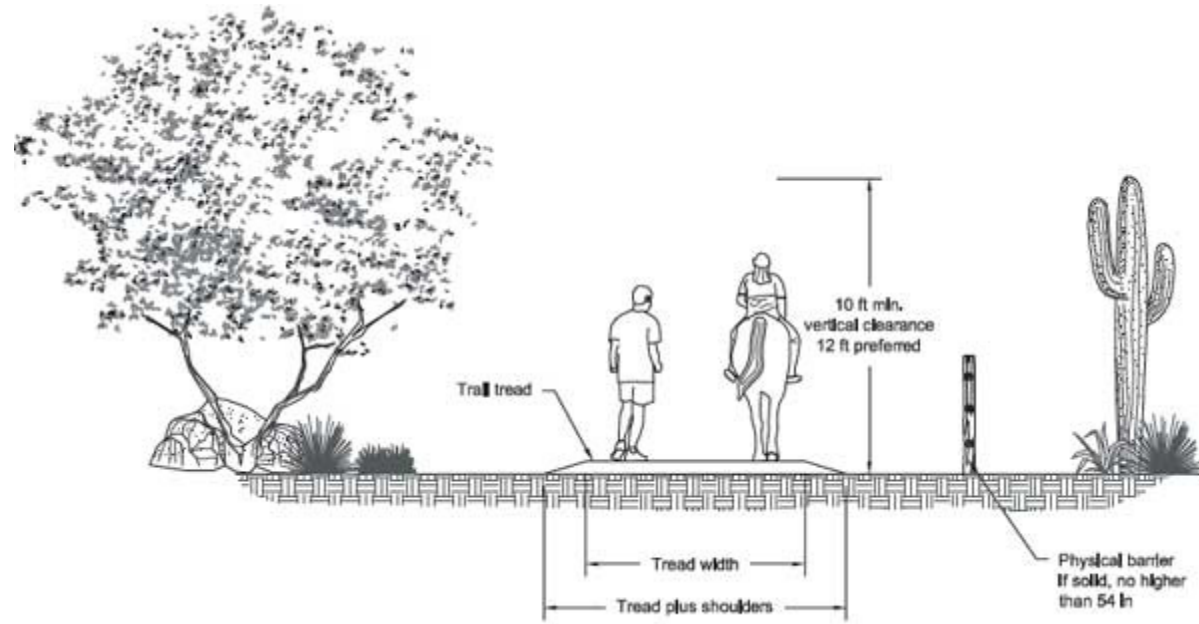


FIGURE 4-10 EQUESTRIAN TRAIL SECTION VIEW

Source: United States Department of Agriculture

Guidelines:

- Design trails adjacent to streets to be between 10 and 12 feet in width to accommodate a double-track. Trail widths may be reduced in cases where topography or space is prohibitive. No trail width should be less than 6 feet.
- Maintain a vertical clearance of 10 feet from the ground and any physical barrier such as bridges, underpasses, and maintain vegetation free of protruding branches.
- A minimum height of 4 feet is recommended for all fences and barriers along trails. A greater height may be permitted for trails adjacent to high-speed roads where traffic may startle horses. Height should be tapered down as trail approaches intersections or end, to maximize horse/rider view.
- Low walls or fences with railings added for more height are acceptable. Bollards or barrier posts can help separate equestrian from other uses. Barrier posts should be an odd number to prevent confusion, and placed 5 feet apart to allow equestrians to pass through.
- Preferred fence materials include “woodcrete” or other sturdy material that gives the appearance of wood-like finish.
- A second signal actuator push button (equine crossing signal) should be installed 5 to 6 feet above the ground where the equestrian trail crosses a street at a signalized intersection. The post should be placed 6.5 feet from the road edge so that the animal's head does not encroach into the roadway.
- Use of native plants for landscaping is encouraged. Low walls or fences can include vegetation facing the trail to improve appearance, especially along trails with pipe railing. Vegetation should

be trimmed to less than 4 feet high for crime prevention purposes, and trimmed to avoid injury to equines.

- Urban trails should be designed in accordance with traffic engineering standards.

4.2.2 Linear Parks/Greenways

Linear parks/greenways are passive or active recreation uses in urban areas, arranged parallel to the public right-of-way or a geographical feature; can be continuous or a sequence of recreational spaces, linked by a pedestrian and/or multi-use path.

Benefits:

- Can serve as a link in a city's plans to boost active transportation.
- Encourage movement and relaxation.
- Excellent way to add green space to urban areas.
- Good candidates for underutilized spaces.
- Can help create nature-based solutions for flooding, run-off pollution, and other environmental issues urban areas face.
- Allow parks to be accessible to more people.



FIGURE 4-11 LINEAR PARK

Considerations:

- The design, materials and features of a linear park impact its specific maintenance needs, but given their similarity to trails and pocket parks, maintenance needs are likely to resemble elements of both pocket park maintenance and trail maintenance.
- Greenways can include both passive and active recreational amenities to attract pedestrian activity.
- Where feasible consider the removal of a parking lane or vehicular travel lane to accommodate a Greenway.

Guidelines:

- Refer to the City of San Diego Parks Master Plan for guiding principles, goals and standards, and policies for parks in San Diego.
- Refer to PROWAG and Guide to the ABA Accessibility Standards for accessibility requirements for linear parks/greenways.
- Refer to The Consultant’s Guide to Park Design and Development for Park Design Standards for park design standards in the City of San Diego.

References:

- Consultant’s Guide to Park Design and Development, City of San Diego, 2019
- Guide to the ABA Accessibility Standards, US Access Board, 2015
- Parks Master Plan, City of San Diego City Planning Dept, 2021
- PROWAG, US Access Board, 2023

4.3. Sidewalks for Overpasses and Underpasses

Access on an overpass across a highway is often along a narrow sidewalk where the pedestrian is against a wall or guardrail and is highly exposed and vulnerable to speeding traffic. The unappealing environment of underpasses is often exacerbated by poor lighting and obscured sightlines.

The overpass discussion is applicable to all bridges with pedestrian access, and both overpass and underpass discussions are also applicable to grade-separated railroad crossings.

Benefits:

- Potentially providing complete separation of pedestrians from motor vehicle traffic.
- Providing crossings where no other pedestrian facility is available.
- Connecting off-road trails and paths across major barriers.
- Improving bicycle safety while reducing delay for all users.



FIGURE 4-12 OVERPASS

Location: La Jolla Village Drive



FIGURE 4-13 PEDESTRIAN UNDERPASS

Location: Santa Fe Drive Pedestrian Underpass, Encinitas
Source: TYLin

Considerations:

- Overpasses and underpasses are required to be accessible for persons with disabilities. Pedestrian ramps or elevators may be incorporated as part of the access elements. Pedestrian ramps may require a considerable amount of land for installation and elevators may have potential security and maintenance issues.
- Lighting, drainage, graffiti removal, and security are major concerns with underpasses.
- Overpasses and underpasses are costly, visually intrusive, and poorly utilized when a more direct at-grade crossing is possible.
- Use sparingly and as a measure of last resort. Most appropriate over high-volume, high-speed highways, railroad tracks, or natural barriers.
- If the crossing is not convenient or does not serve a direct connection, it may not be well utilized.

Guidelines

- Underpasses should have a daytime illuminance minimum of 10 footcandles achievable through artificial and/or natural light provided through an open gap to sky between the two sets of highway lanes and a nighttime level of 4 footcandles.
- Consider acoustics measures within underpasses to reduce noise impacts to pedestrians and bicyclists.
- Seek opportunities to widen sidewalks when retrofits occur.
- The AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities recommends that pedestrian overpasses be at least 8 feet wide. The width should be increased if the sidewalk leading up to the overpass is wider. If the overpass also accommodates bicyclists, the width should be at least 14 ft. Depending on the length of the overpass, it might be necessary to increase its width to counteract any visual perceptions of narrowness.
- Similar guidelines apply to underpasses. Minimum widths should be between 14 and 16 ft, but underpass width should be increased if the underpass is longer than 60 ft.
- Grade Requirements: As with other path sections, grade should not exceed 5%.

References:

- Guide for the Planning, Design, and Operation of Pedestrian Facilities, AASHTO, 2021
- Highway Design Manual, 7th ed., Caltrans, 2020
- Pedestrian Safety Guide and Countermeasure Selection System, FHWA, 2013
- PROWAG, US Access Board, 2023

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