

## Title 24 DEVELOPMENT STANDARDS

### I. ROADS

#### 24.04.020 General.

All new roads shall be constructed to the standards set forth in this chapter except as otherwise provided herein. ~~These individual standards notwithstanding, the design of a road shall take into account the combined effect of the individual elements (e.g., centerline radii, grade, cross-slope) in making up the total road. Care shall be taken to avoid combining individual design elements at the extreme limits of acceptability along the same section of road. Where this is necessary due to severe physical, right-of-way or other constraints, then design modifications and/or other mitigating measures may be required as determined appropriate by the agency. These measures may include but are not limited to additional width, longer radii, slope grading, vegetation removal, striping or other lane and/or road edge delineation, signs, signals and barriers. Under certain circumstances, reductions or deviations from these standards may be allowed for projects subject to discretionary review in accordance with Section Chapter 24.15-010 (Exceptions) of this title.~~

(Ord. 3181 § 5 (part), 1994)

#### 24.04.030 Road classifications.

The design criteria for a road shall be based on the classifications defined below. ~~Use figures (i.e., units served and Average daily traffic (ADT)) shall be based on the ultimate development of the area served by the road as defined anticipated~~ by the Marin countywide plan and/or any general, specific or community plan applicable to the area.

"Main Street" is a pedestrian-oriented road intended to support slow vehicle speeds and multiple modes of travel. Main Streets have projected average daily traffic (ADT) volumes of two thousand vehicles or fewer and are distinguished from residential roads by adjacent land use context, including at least one block on either side developed with mixed commercial and residential uses or exclusively business-oriented uses.

"Residential road" is a road intended primarily to provide access within residential areas and not for through traffic. Residential roads are identified by classification as "local roads" in the Marin County Annual Road List or, for roads not included in the Annual Road List, by their functional role within the transportation network as serving local access within residential areas. Actual or projected average daily traffic (ADT) volumes of two thousand vehicles or fewer may be used as a supporting indicator of residential roadway function.

"Collector road" is a road that carries traffic between arterial and local streets providing direct access to adjacent properties. Collector roads are identified by classification in the Marin County Annual Road List or, for roads not included in the Annual Road List, by their functional role within the transportation network. Actual or projected average daily traffic (ADT) volumes greater than one thousand vehicles may be used as a supporting indicator of collector roadway function.

"Arterial road" is a major road carrying the traffic of local and collector roads to and from highways and other major roads. Arterial roads are identified by classification in the Marin County Annual Road List or, for roads not included in the Annual Road List, by their functional role within the transportation network. Actual or projected average daily traffic (ADT) volumes greater than two thousand vehicles may be used as a supporting indicator of arterial roadway function.

"Industrial commercial road" is a road providing access to, or through, an industrial or commercial zone or an area of high truck and/or other large vehicle traffic. Industrial/commercial roads are identified based on surrounding land uses and traffic characteristics.

"Alley" is a public or private way that provides vehicular access to multiple abutting lots and is intended primarily for access to garages, parking areas, loading areas, utilities, and service functions. An alley is not a frontage street, and is not intended to serve as the primary means of vehicular access to abutting lots or general through traffic.

The following street classifications apply only within the Inland, Rural, and Coastal Corridors:

"Minor residential road" means a road providing access to a generally residential area and which serves or may serve seven to nineteen dwelling units, and a maximum potential ADT of five hundred.

"Limited residential road" means a road which serves two to six dwelling units, and a maximum potential ADT of one hundred fifty.

"Arterial road" means all arterial roads as specified in the countywide plan or the Marin county annual road list, and other major roads with an actual or projected ADT over two thousand.

"Industrial commercial road" means a road providing access to, or through, an industrial or commercial zone or an area of high truck and/or other large vehicle traffic.

"Collector road" means a road with an actual or projected ADT from one thousand to two thousand.

"Residential road" means a road providing access to a generally residential area and which serves or may serve twenty or more dwelling units, and a maximum potential ADT of one thousand.

~~or circulation or for general through traffic~~"Minor residential road" means a road providing access to a generally residential area and which serves or may serve seven to nineteen dwelling units, and a maximum potential ADT of five hundred.

~~"Limited residential road" means a road which serves two to six dwelling units, and a maximum potential ADT of one hundred fifty.~~

(Ord. 3181 § 5 (part), 1994)

#### **24.04.035 Design standards for roads within the City Centered and Baylands Corridors.**

New roads and improvements to existing roads within the City-Centered and Baylands Corridors shall be designed in accordance with the minimum standards shown in Table 24.04.035.

**Table 24.04.035-1 Design standards for roads in the City-Centered and Bayland Corridors.**

|                                        | <u>Main Street</u>                                                                                     | <u>Residential Road</u>                                        | <u>Collector Road</u>                                          | <u>Arterial Road</u>                                           | <u>Industrial Commercial Road</u>                              | <u>Alley</u> |
|----------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|--------------|
| <u>Public Frontage</u>                 |                                                                                                        |                                                                |                                                                |                                                                |                                                                |              |
| <u>Min. Walkway Width (See Note 4)</u> | <u>10'</u>                                                                                             | <u>6'</u>                                                      | <u>8' (See Note 3)</u>                                         | <u>8' (See Note 3)</u>                                         | <u>6'</u>                                                      | <u>=</u>     |
| <u>Min. Planter Width (See Note 1)</u> | <u>5'</u>                                                                                              | <u>5'</u>                                                      | <u>6'</u>                                                      | <u>6'</u>                                                      | <u>6'</u>                                                      | <u>=</u>     |
| <u>Allowed Planter Type</u>            | <u>Tree Well (with or without tree grate), Planting strip along curb, stormwater treatment allowed</u> | <u>Planting strip along curb; Stormwater treatment allowed</u> | <u>Planting strip along curb; Stormwater treatment allowed</u> | <u>Planting strip along curb; Stormwater treatment allowed</u> | <u>Planting strip along curb; Stormwater treatment allowed</u> | <u>=</u>     |

|                                                    |                                 |                                              |                                             |                                             |            |                         |
|----------------------------------------------------|---------------------------------|----------------------------------------------|---------------------------------------------|---------------------------------------------|------------|-------------------------|
| <u>Min. Public Frontage Width</u>                  | <u>15'</u>                      | <u>11'</u>                                   | <u>14'</u>                                  | <u>14'</u>                                  | <u>12'</u> | --                      |
| <b><u>Vehicular Travel / Parking</u></b>           |                                 |                                              |                                             |                                             |            |                         |
| <u>Min. Number of Travel Lanes</u>                 | <u>2</u>                        | <u>2</u>                                     | <u>2</u>                                    | <u>2</u>                                    | <u>2</u>   | <u>2</u>                |
| <u>Lane Width</u>                                  | <u>10' (see Note 2)</u>         | <u>10' (See Note 2)</u>                      | <u>10' (See Note 2)</u>                     | <u>11'</u>                                  | <u>12'</u> | <u>10'</u>              |
| <u>Min. Landscaped Median or Center Lane Width</u> | --                              | --                                           | --                                          | <u>11'</u>                                  | --         | --                      |
| <u>Parking Lane Width</u>                          | <u>8'</u>                       | <u>8'</u>                                    | <u>8'</u>                                   | <u>8'</u>                                   | <u>8'</u>  | --                      |
| <u>Min. Curb to Curb Width (See Note 5)</u>        | <u>36'</u>                      | <u>36'</u>                                   | <u>36'</u>                                  | <u>49'</u>                                  | <u>40'</u> | --                      |
| <b><u>Bike Facilities</u></b>                      |                                 |                                              |                                             |                                             |            |                         |
| <u>Bike Facility Type (See Note 6)</u>             | <u>Class III Bike Boulevard</u> | <u>Class III Bike Boulevard</u>              | <u>Class I Shared-use Path (See Note 3)</u> | <u>Class I Shared-use Path (See Note 3)</u> | --         | --                      |
| <u>Min. Bike Facility Width</u>                    | --                              | --                                           | <u>12'</u>                                  | <u>12'</u>                                  | --         | --                      |
| <b><u>Total ROW Width</u></b>                      |                                 |                                              |                                             |                                             |            |                         |
| <u>Total min. ROW width</u>                        | <u>66'</u>                      | <u>58'</u>                                   | <u>68'</u>                                  | <u>81'</u>                                  | <u>64'</u> | <u>20' (See Note 7)</u> |
| <b><u>Applicable form-based zones</u></b>          |                                 |                                              |                                             |                                             |            |                         |
| <u>Form Based Code Zones</u>                       | <u>T4.SMS.S, T4.CMS, T5.CMS</u> | <u>T3.EN, T3.SN, T4.SN.S, T4.CN.M, T5.CN</u> | <u>T4.CN.M, T4.CMS, T5.CN</u>               |                                             |            | --                      |

**Note 1:** Dimension includes a 6-inch curb. Where the curb width exceeds 6 inches, planters containing trees shall provide a minimum 4-foot-wide planting area, measured exclusive of the curb width.

**Note 2:** Travel lanes on designated truck routes, and lanes designated for exclusive transit use, shall have a minimum width of 11 feet.

**Note 3:** The walkway width is included within, and shall not be added to, the width of the Class I Shared-Use Path.

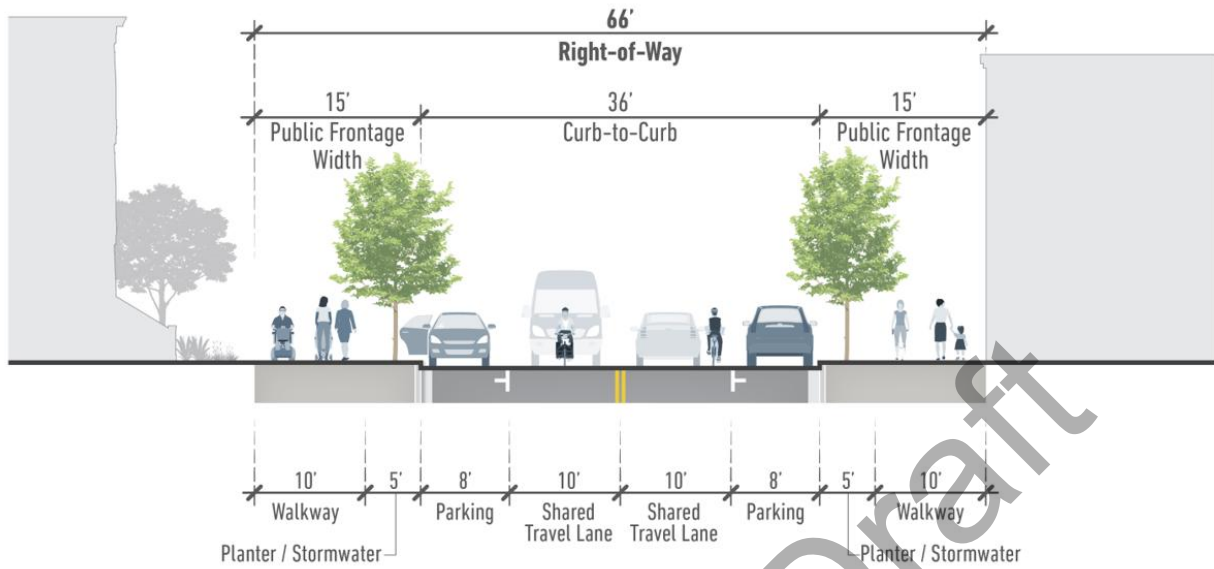
**Note 4:** A minimum 4-foot-wide clear pedestrian through zone (pedestrian access route) shall be maintained within all walkways at all times. The remaining walkway width may be used for spillover activities, provided the required clear pedestrian through zone is maintained.

**Note 5:** Where a street fronts a building exceeding 30 feet in height or three stories, the street may be required to provide increased curb to curb widths to comply with applicable Fire Code requirements.

**Note 6:** Bicycle facility standards are representative and subject to the requirements of the adopted Bicycle and Pedestrian Master Plan.

**Note 7:** Building setbacks adjacent to the alley shall be sufficient to maintain a minimum 24-foot clear width between buildings or other permanent structures.

**FIGURE 24.04.035-1 MAIN STREET DESIGN STANDARDS**



**FIGURE 24.04.035-2 RESIDENTIAL ROAD DESIGN STANDARDS**

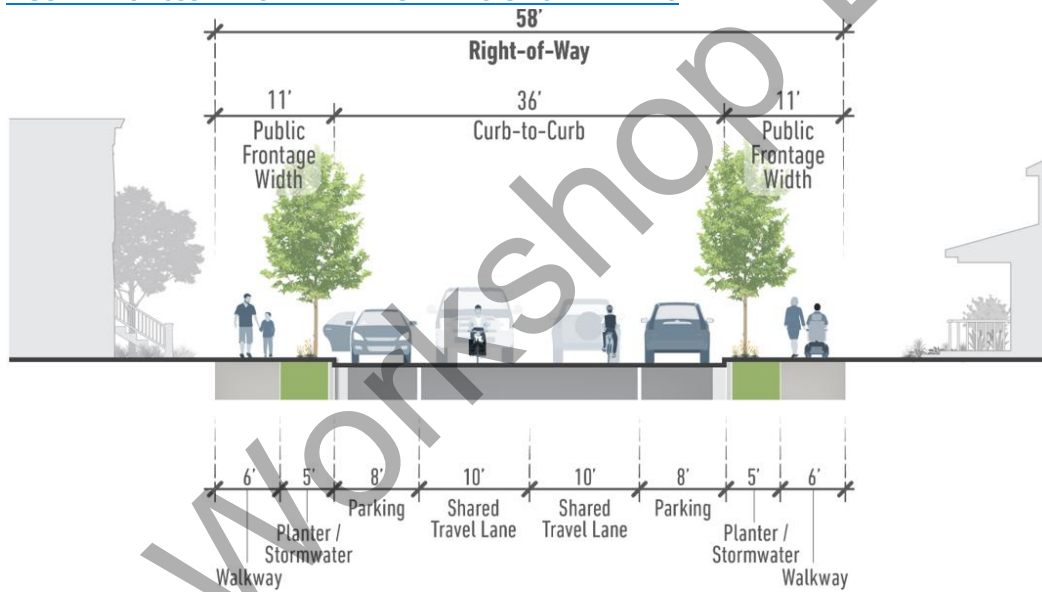


FIGURE 24.04.035-3 COLLECTOR ROAD DESIGN STANDARDS

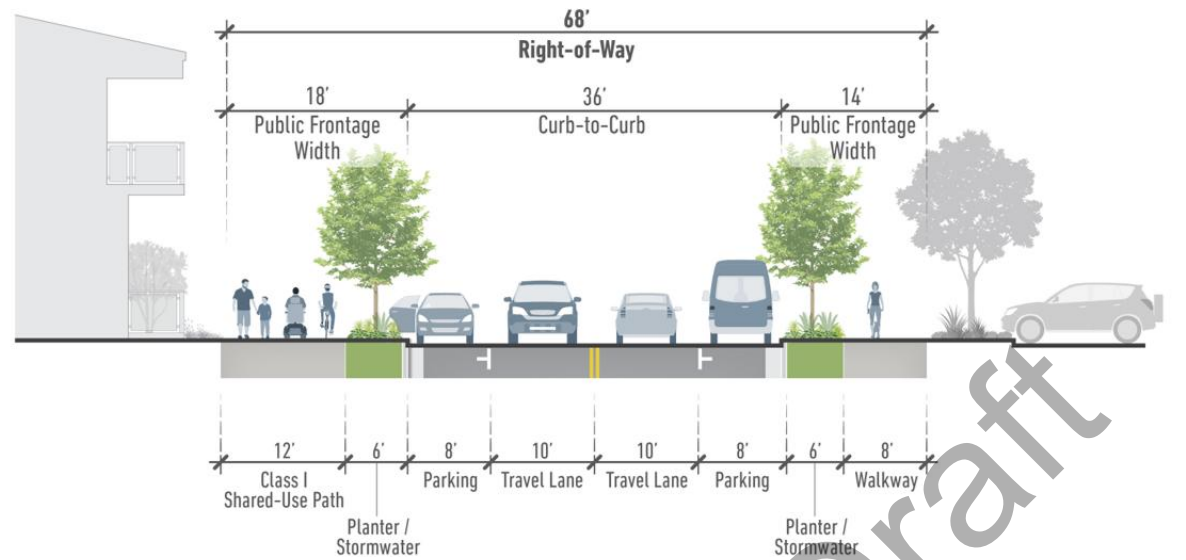
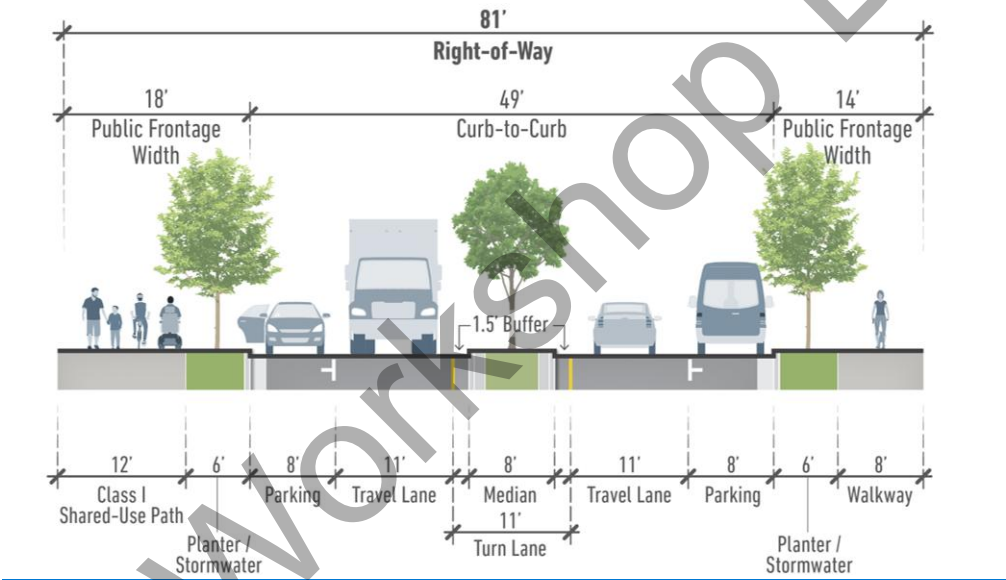
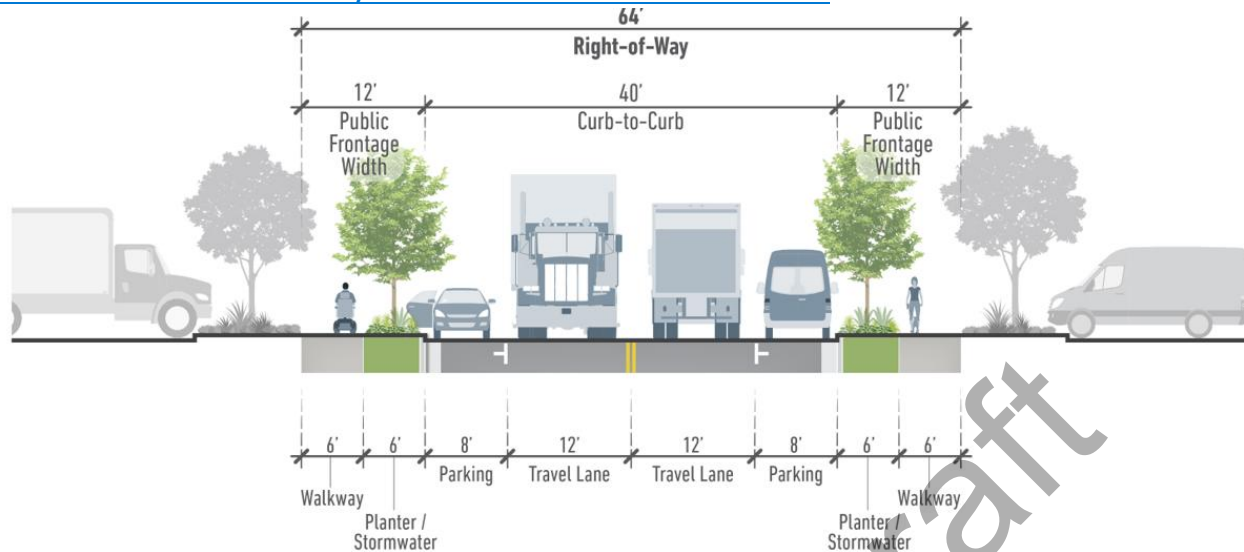


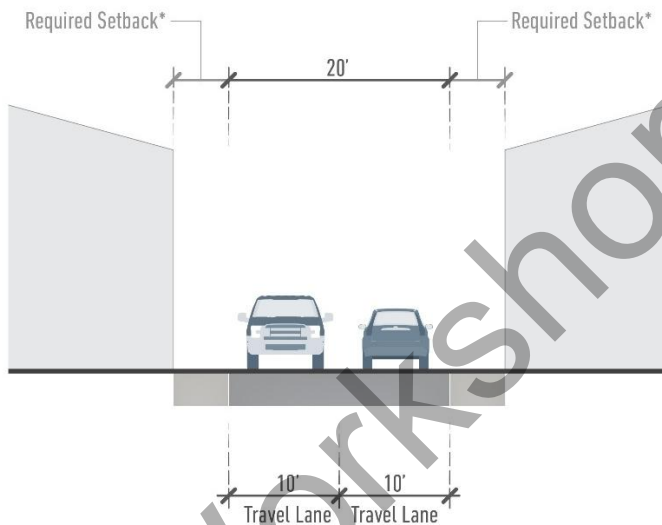
FIGURE 24.04.035-4 ARTERIAL ROAD DESIGN STANDARDS



**FIGURE 24.04.035-5 INDUSTRIAL/COMMERCIAL ROAD DESIGN STANDARDS**



**FIGURE 24.04.035-6 ALLEY DESIGN STANDARDS**



\*Building setbacks adjacent to the alley shall be sufficient to maintain a minimum 24-foot clear width between buildings or other permanent structures.

#### **24.04.040 Bicycle Facilities.**

New collector and arterial streets in the City-Centered or Baylands Corridors shall incorporate bicycle facilities consistent with the representative figures in Section 24.04.035 and the requirements of the adopted Bicycle and Pedestrian Master Plan.

#### **24.04.045 Pedestrian crossing treatments.**

Within the City-Centered and Baylands Corridors the following apply to pedestrian crossing treatments:

- (a) Where a street improvement includes a pedestrian crossing of an arterial roadway, a median pedestrian refuge shall be incorporated.

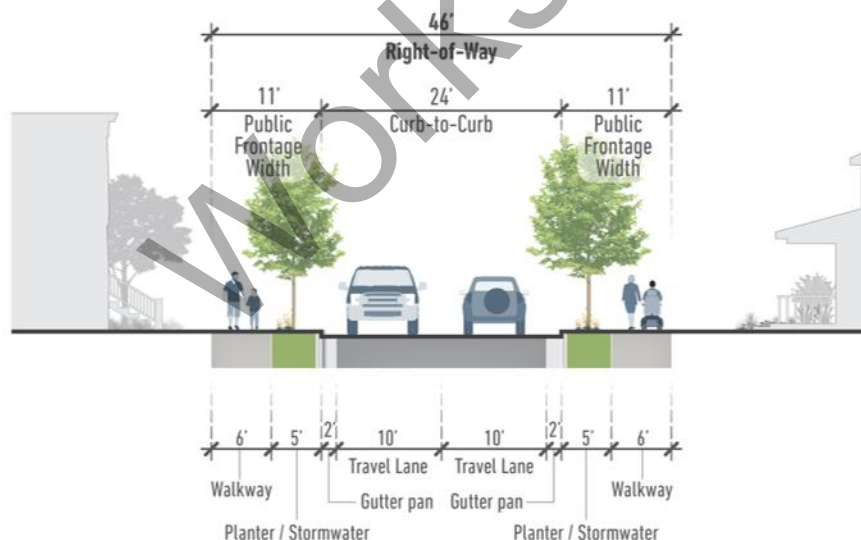
(b) Where a street improvement includes a pedestrian crossing of any street type with the exception of an alley, a curb extension shall be incorporated to reduce pedestrian crossing distance, improve pedestrian visibility, and calm vehicle turning movements

#### 24.04.050 Exceptions

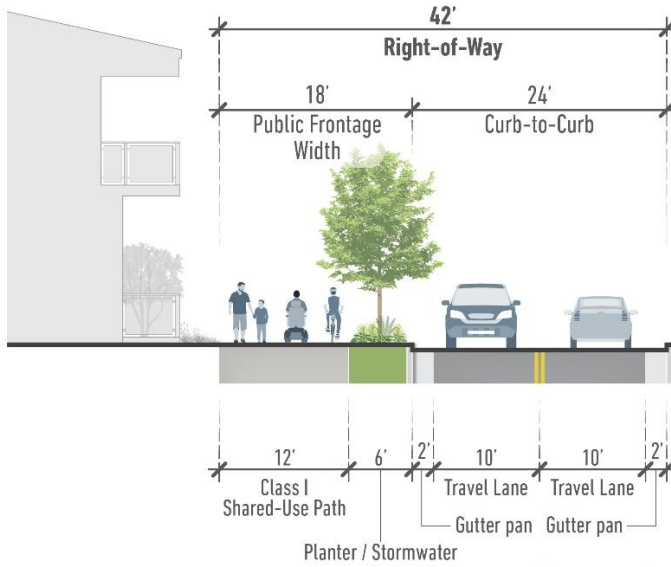
The design requirements of Section 24.04.035 shall not apply in the following circumstances:

- (a) Frontage improvements for sub-standard streets. Frontage improvements for new development on existing streets which do not conform to the design standards in Section 24.04.035 within at least 1,000 feet in either direction from the subject property lines, up to 300 feet may remain non-conforming along the subject property frontage. However, sufficient right-of-way must be dedicated to accommodate the otherwise required street type design in Section 24.04.035 as measured from the centerline of the existing street. ~~(up to 300 feet) remain non-conforming along~~
- (b) Connector streets. A street that provides through travel between two collector, ~~or arterial or~~ industrial/commercial roadways or segments thereof and along which no parcels are directly accessed or developed is not required to incorporate parking and may include a pedestrian sidewalk and bicycle facility on one side of the street only. See Connector street design standards Figures 24.04.050-2, -3, and -4 (below).
- (c) Parallel bicycle path. A parallel off-street Class I bicycle path may be substituted for an on-street bicycle facility otherwise required.
- (c) As an exception to the design standards for Residential Roads in Section 24.04.035, an existing Residential Road that is being improved or retrofitted and serves fewer than six primary residences may be improved in accordance with the Limited Residential Road design standard Figure 24.04.050-1 (below), provided that no additional primary residences or parcels are created that would increase the total number of primary residences served to six or more.

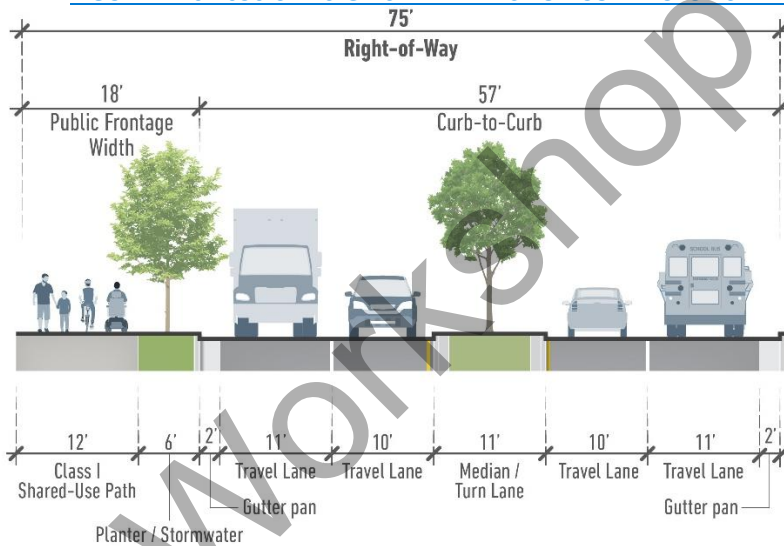
**FIGURE 24.04.050-1 DESIGN STANDARDS FOR LIMITED RESIDENTIAL ROAD**



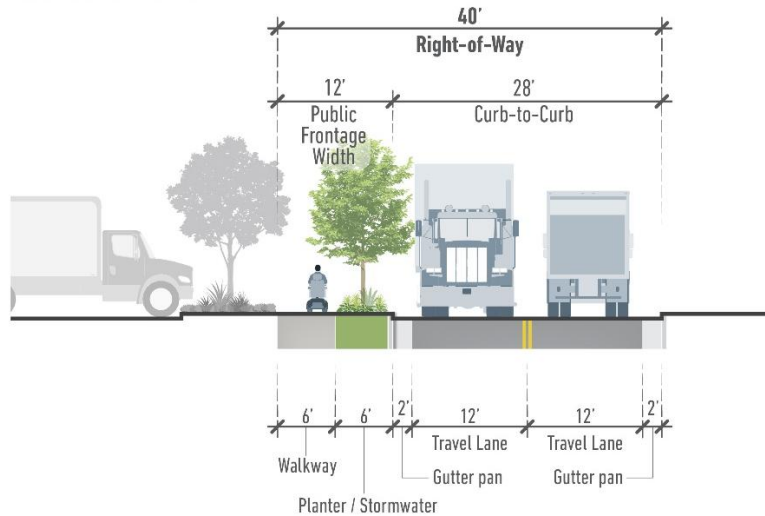
**FIGURE 24.04.050-2 DESIGN STANDARDS FOR CONNECTOR STREET DESIGNATION ON COLLECTOR ROADS**



**FIGURE 24.04.050-3 DESIGN STANDARDS FOR CONNECTOR STREET DESIGNATION ON ARTERIAL ROADS**



**FIGURE 24.04.050-4 DESIGN STANDARDS FOR CONNECTOR STREET DESIGNATION ON INDUSTRIAL/COMMERCIAL ROADS**



#### 24.04.055 Minimum Safety Standards

The street improvement standards set forth in Table 24.04.055-1 are hereby adopted and established as minimum public health and safety standards. The Marin County Board of Supervisors has determined, based on professional engineering standards and published studies, fire and life safety requirements, accessibility laws, and best practices in traffic safety, that these standards represent the minimum conditions necessary to protect the health and safety of all users of the public right-of-way. No development project shall be approved subject to street improvement conditions that fail to meet the minimum standards established in Table 24.04.055-1. Any purported waiver, concession, or reduction below these minimums shall be void and without legal effect.

**Table 24.04.055-1 Minimum Safety Standards.**

| Design Standard                            | Main Street                               | Residential | Collector / Arterial | Industrial / Commercial | Notes                                                                                |
|--------------------------------------------|-------------------------------------------|-------------|----------------------|-------------------------|--------------------------------------------------------------------------------------|
| Sidewalk Clearway Width                    | 6'                                        | 5'          | 5'                   | 6'                      | Clear pedestrian through zone only; excludes frontage, furnishing, and buffer zones. |
| Sidewalk Buffer Width (no bikeway)         | 4' (all street types)                     |             |                      |                         | May be landscaped and include street furniture, utilities, bus shelters, etc.        |
| Sidewalk Buffer Width (with bikeway)       | 0.5' (all street types)                   |             |                      |                         | Typical width of a curb                                                              |
| Parallel Parking Lane Width                | 8'                                        | 7'          | 8'                   | 8'                      |                                                                                      |
| Minimum Roadway Width                      | 20' unobstructed width (all street types) |             |                      |                         | General fire apparatus access roads; see Marin County Fire Code §503.2.1.            |
| Minimum Roadway Width (Aerial Fire Access) | 26' unobstructed width (where required)   |             |                      |                         | Buildings over 30' or three stories; see Marin County Fire Code §503.1.5.1.          |

|                |          |          |                                                      |          |  |
|----------------|----------|----------|------------------------------------------------------|----------|--|
| <u>Bikeway</u> | <u>—</u> | <u>—</u> | <u>10' two-way<br/>shared-use<br/>path (Class I)</u> | <u>—</u> |  |
|----------------|----------|----------|------------------------------------------------------|----------|--|

#### **24.04.060 Minimum widths for roads within Inland, Rural, and Coastal Corridors.**

- (a) The following table sets forth the minimum widths for the improved section measured from face of curb to face of curb for roadways within the Inland, Rural, and Coastal Corridors. Where no curb or berm is proposed the paved width shall be one foot greater than that listed to allow for edge striping and pavement edge raveling. Minimum paved curb-to-curb width for roads in the City-Centered and Baylands Corridors are provided in Table 24.04.060-1.

| <u>Table 24.04.060-1 Minimum widths for roads within Inland, Rural, and Coastal Corridors.</u> |                                         |
|------------------------------------------------------------------------------------------------|-----------------------------------------|
| <u>Road Classification</u>                                                                     | <u>Minimum Paved Curb-to-curb Width</u> |
| <u>Limited residential road</u>                                                                | <u>20' with shoulders</u>               |
|                                                                                                | <u>24' with curbs</u>                   |
| <u>Minor residential road</u>                                                                  | <u>28'</u>                              |
| <u>Residential road</u>                                                                        | <u>36'</u>                              |
| <u>Collector road</u>                                                                          | <u>40'</u>                              |
| <u>Arterial and industrial/commercial</u>                                                      | <u>As required</u>                      |

- (b) Shoulders shall be provided on each side of all roads. Shoulders shall normally be four feet wide although wider shoulders may be required as deemed appropriate by the agency.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.065035 Design speed.**

All roads ~~except limited residential roads~~ shall have a minimum design speed of twenty-five mph.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.070040 Centerlines.**

The centerlines of all roads shall be continuations of the centerlines of existing roads in adjacent and contiguous territory. For cases in which straight continuations are not physically possible, such centerlines may be continued by curves, and shall be in general conformity with the plans made for the most advantageous development of the area in which the development lies.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.075045 Centerline radii.**

The centerline radii of all roads shall be designed in ~~general~~ accordance with the ~~procedures contained in the~~ current edition of the CalTrans Highway Design Manual.

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(Ord. 3181 § 5 (part), 1994)

#### **24.04.080050 Vertical curves.**

Vertical curves shall be used at any change in grade of one percent or more. The length of the vertical curve shall be determined according to the ~~procedure contained in the~~ current edition of the CalTrans Highway Design Manual ~~or as required by the agency.~~

(Ord. 3181 § 5 (part), 1994)

#### **24.04.085055 Cross-slope and superelevation.**

- (a) Superelevation shall be provided ~~where appropriate and as required by the agency. Where required it shall be in general~~ accordance with ~~the procedures contained in the~~ current edition of the CalTrans Highway Design Manual. The maximum superelevation allowed shall be eight percent.
- (b) Where superelevation is not required ~~by the current edition of the CalTrans Highway Design Manual~~, the cross-slope shall be a minimum of two percent and a maximum of ~~eight four~~ percent. The road shall be either cross-sloped to the cut bank side or crown-sloped ~~as required~~ for proper drainage.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.090060 Intersections.**

- (a) Roads shall intersect each other as near to a right angle as is practical. ~~Where several streets converge at one point, special approach treatment shall be provided to optimize driver sight distance and pedestrian safety. Provisions may include, but are not limited to, setback lines, special rounding, slope grading and/or vegetation removal.~~ Block corners shall be rounded at the property line by a radius of not less than twenty feet and curb or pavement returns shall have a minimum radius of twenty-five feet.
- (b) ~~Care shall be taken to avoid sight restrictions caused by the combined vertical alignments of two or more intersecting streets.~~
- (c) Design of intersections shall comply with Chapter 13.18, Visibility Obstructions, of the Marin County Code which prohibits sight obstructions including landscaping over thirty inches in height within defined areas adjacent to intersections.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.095070 Extensions.**

Where a development adjoins undeveloped property, provisions shall be made for ~~adequate~~ street access thereto.

(Ord. 3181 § 5 (part), 1994)

#### **~~24.04.080 Access to major streets.~~**

~~Where a development abuts upon an arterial road or other major road, a parallel service road or limited right of access to the arterial or major road may be required.~~

~~(Ord. 3181 § 5 (part), 1994)~~

#### 24.04.100090 Blocks.

Newly created or modified existing blocks shall not exceed the following lengths between street intersections:

- (a) For properties within the City-Centered and Bayside Corridors, block length shall be in compliance with Section 08.020.63 (Block Size) of the Form-Based Code.
- (b) For properties within the Inland-Rural and Coastal Corridors ~~Long blocks are generally encouraged, and are required adjacent to main thoroughfares for the purpose of reducing the number of intersections; however,~~ blocks shall ~~not~~ exceed twelve hundred feet in length.

(Ord. 3181 § 5 (part), 1994)

#### 24.04.100 Alleys.

~~Alleys may be required in commercial or industrial areas where trucks stopping on the access streets would impede traffic flow and/or cause a traffic hazard.~~

~~(Ord. 3181 § 5 (part), 1994)~~

#### 24.04.110 Width.

- (a) ~~The following table sets forth the minimum widths for the improved section measured from face of curb to face of curb for roadways within the Inland Rural and Coastal Corridors. Where no curb or berm is proposed the paved width shall be one foot greater than that listed to allow for edge striping and pavement edge raveling.~~

| <u>Road Classification</u>         | <u>Minimum Paved Curb to curb Width</u> |
|------------------------------------|-----------------------------------------|
| Limited residential road           | 20' with shoulders<br>24' with curbs    |
| Minor residential road             | 28'                                     |
| Residential road                   | 36'                                     |
| Collector road                     | 40'                                     |
| Arterial and industrial/commercial | As required                             |

- (b) ~~Additional width may be required for left turn storage, intersection widening, bus lanes and multipurpose pathways.~~

- (bc) ~~Shoulders shall be provided on each side of all roads. Shoulders shall normally be four feet wide although wider shoulders may be required as deemed appropriate by the agency.~~

~~(Ord. 3181 § 5 (part), 1994)~~

#### 24.04.120 Grades.

Grades shall not exceed six percent on arterial, industrial/commercial and collector roads, twelve percent on residential roads, or eighteen percent on minor and limited residential roads. ~~Continuous steep grades shall be avoided.~~

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(Ord. 3181 § 5 (part), 1994)

#### **24.04.130 Retaining walls.**

For all roads, both public and private, the following standards and restriction shall apply:

- (a) On the downhill side of the road, timber walls shall not be allowed.
- (b) On the uphill side of the road, timber walls ~~may be allowed depending on site conditions, as determined by the agency, but~~ shall not exceed three feet in height (measured from the road surface).
- (c) If the use of timber walls is allowed, pressure treated timbers shall be used and shall conform to the requirements of the standard specifications of the cities and county of Marin.
- ~~(d) Notwithstanding the above criteria, the use of timber walls may not be allowed where the agency determines that the proposed location would present inordinately difficult problems for future repair and/or replacement.~~
- ~~(e) Mitigation of the visual impact of walls may be required. Measures may include, but are not limited to, surface texturing, coloring and landscaping.~~

(Ord. 3181 § 5 (part), 1994)

#### **24.04.140 Entry treatment.**

~~Where a~~Any form of entry treatment (e.g., pillars, walls, signs) ~~to a specific area is allowed, they~~ shall be located at least five feet beyond the edge of pavement ~~and shall comply with Chapter 13.18, Visibility Obstructions, of the Marin County Code~~. In addition, where they would be located within the county maintained right-of-way, a recorded encroachment permit must be obtained to authorize their installation and provide for their maintenance.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.150 Turnarounds.**

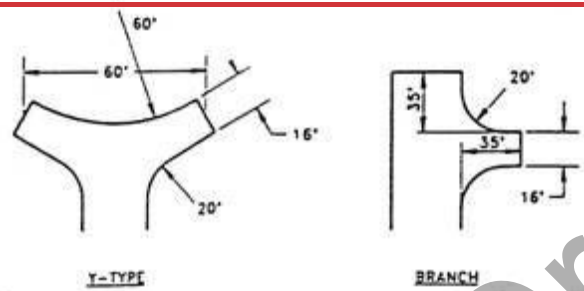
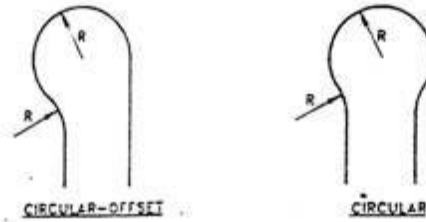
The end of a cul-de-sac road shall be provided with a turnaround in conformance with Appendix D of the California Fire Code, Title 24, Part 9.  
~~using one of the designs shown in Figure 24-1. Type (a) or (b) may be used at the end of any road provided that the appropriate radius is used as shown below. Measurement shall be to face of curb or, where no curb is proposed, to six inches inboard of the proposed edge of pavement.~~

~~R = 30 feet for all residential roads~~

~~R = 60 feet for industrial/commercial roads~~

~~R = 40 feet for other roads~~

**FIGURE 24-1: CUL-DE-SACS**



- (b) For all residential cul-de-sac roads where severe topographic and/or right-of-way constraints warrant, Types (c) or (d) turnarounds may be used where allowed by the director.
- (c) The slope in any direction for any turnaround should not be more than five percent and shall not be more than eight percent.
- (d) Where the street may be extended at some time in the future, a temporary turnaround shall be required and the stub end of the street shall be closed with an approved barricade or gate if a fire road or other such access extends from the end of the paved road.
- (e) Alternatives and/or exceptions to the above standards may be considered, but shall be submitted to the appropriate fire department or fire protection district for review, comment, advice and mitigation suggestions.

(Ord. 3181 § 5 (part), 1994)

#### 24.04.160 Turnaround islands.

Islands within turnarounds will not be allowed on roads that are currently or are proposed to be county-maintained roads. ~~On other roads they may be considered provided they are approved by the appropriate fire department or protection district and the agency. Where allowed, provisions must be made for long-term maintenance of the island landscaping or other architectural treatment.~~

(Ord. 3181 § 5 (part), 1994)

#### 24.04.170 Curbs—General.

Curbs and gutters or berms shall be required adjacent to all parking lanes and where physical separation, delineation or stormwater control is ~~necessary~~ required. P.C.C. curbs and gutters shall normally be required in order to minimize long-term maintenance. A.C. berms may be allowed where appropriate at the discretion of the agency.

(Ord. 3181 § 5 (part), 1994)

#### 24.04.190 Surfacing.

Surfacing shall ~~be designed in accordance with Section 24.04.200 and shall~~ consist of ~~conventional asphalt concrete or Portland cement concrete pavement. In no cases shall pavements consist of less than a minimum of~~ two inches of ~~A.C. asphalt concrete~~ over six inches of Class II aggregate base ~~or an alternate of either P.C.C. or deep lift A.C.~~. Alternates are subject to the review and approval of the agency. Surfacing requirements within the rural corridor and coastal ~~recreation~~ corridor for roads serving only residential and agricultural property which is zoned into parcels of ten acres or larger may be reduced or waived except where the grade exceeds twelve percent.

(Ord. 3181 § 5 (part), 1994)

#### 24.04.200 Structural section.

The roadbed design shall be based on ~~a the~~ traffic index established by the agency ~~in Table 24.04.200-1~~ and in accordance with the standard procedure used by CalTrans or such other method as is in general use and considered sound practice by the agency.

| <b>Table 24.04.200-1 Minimum Required Traffic Index by Roadway Classification</b> |                           |
|-----------------------------------------------------------------------------------|---------------------------|
| <u>Road Classification</u>                                                        | <u>Traffic Index (TI)</u> |
| <u>Main Street</u>                                                                | <u>6</u>                  |
| <u>Residential</u>                                                                | <u>5.5</u>                |
| <u>Collector</u>                                                                  | <u>6.5</u>                |
| <u>Arterial</u>                                                                   | <u>7.5</u>                |
| <u>Industrial/Commercial</u>                                                      | <u>8</u>                  |

(Ord. 3181 § 5 (part), 1994)

#### 24.04.210 Street names.

All street names shall be subject to the approval of the ~~planning commission,~~ sheriff's office and the appropriate fire department or protection district. ~~Duplication of existing names within the surrounding community will not be allowed unless the streets are obviously in alignment with existing streets of the same names and not so far removed as to be confusing to avoid duplicate names or sufficiently similar names so as to create confusion as other existing street names within Marin County.~~

(Ord. 3181 § 5 (part), 1994)

#### 24.04.220 Street name signs.

At least one street name sign shall be placed at all street intersections. The word "Private" shall be placed on all name signs for private roads.

(Ord. 3181 § 5 (part), 1994)

#### 24.04.230 Private roads.

Private roads shall be constructed to the standards specified in this chapter ~~with the following additional requirements:-~~

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~~(a) Private roads shall connect to public roads by means of a driveway approach or alternative feature, approved by the agency, which shall clearly define the limits of each.~~

~~(b)~~ When a private road is proposed to extend off of the end of a public road, the public road shall have a turnaround consistent with requirements of Section 24.04.150.

## **II. DRIVEWAYS**

### **24.04.235 General.**

~~(a) A driveway shall be defined as a private vehicular access roadway connecting the public right-of-way to a parking area, garage or loading area not intended for through -vehicular movement or circulation between more than two sites.~~

~~(b)~~ All new driveways shall be constructed to the standards set forth in this chapter except as otherwise provided herein. The following individual standards notwithstanding, the design of a driveway shall take into account the combined effect of the individual elements (e.g., centerline radii, grade, cross slope) in making up the total driveway. Care shall be taken to avoid combining individual design elements at the extreme limits of acceptability along the same section of driveway. Where this is necessary due to severe physical, easement or other constraints, then design modifications and/or other mitigating measures may be required as determined appropriate by the agency. These measures may include but are not limited to: additional width, longer radii, slope grading, vegetation removal, striping or other lane and/or road edge delineation, signs, signals and barriers. Under certain circumstances, reductions in these standards may be allowed in accordance with Section 24.15.010 of this title.

(Ord. 3181 § 5 (part), 1994)

## **III. PARKING AND LOADING<sup>1</sup>**

### **24.04.335 General conditions.**

- (a) Parking study. The amount and dimensions of required parking and loading spaces may be increased or decreased by the agency through design review or other appropriate process of the community development agency through an agency parking exception if supported by an independent parking study completed within the last three years, provided by the applicant or property owner. The parking study shall include, but is not limited to, an analysis of parking availability, differing levels of transit access, walkability access to transit services, the potential for shared parking; and, for residential developments and mixed-use developments with a residential component, the effect of parking requirements on the cost of market-rate and subsidized developments and the lower rates of car ownership for low-, very-low-, and extremely-low-income individuals, including seniors and individuals with special needs. Such approvals shall include a finding citing the particular circumstances and reasons why the exception was made and may also include provisions for periodic review to establish actual parking needs and to allow for revision of the parking requirements.
- (b) Off-street residential parking. All required residential and non-residential parking and loading spaces shall be provided on the same site as the use to which they relate or for multi-family and non-residential uses along the street right-of-way frontage adjacent to the subject site.
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## **IV. SIDEWALKS AND PEDESTRIAN PATHS**

### **24.04.430 General provisions.**

General provisions for pedestrian circulation shall be provided as required in this chapter.

(Ord. 3181 § 5 (part), 1994)

### **24.04.435 ~~Disability~~ Accessibility provisions relating to public sidewalks.**

Provisions for persons with disabilities shall be included in the design of all new sidewalks and pedestrian paths in accordance with federal and state standards. Ord. 3181 § 5 (part), 1994)

(Ord. No. 3522, § XVI, 2009)

### **24.04.440 Sidewalks required.**

Sidewalks shall be provided in conjunction with new or retrofitted streets in conformance with ~~any applicable general, specific or community plan which has been adopted by the county~~ the requirements of Sections ~~24.04.110 (XXXXXX035)~~ and ~~240.04.050XXX (Frontage Improvements on Non-conforming Streets Exceptions)~~. In addition, the following general standards shall apply:

- (a) Sidewalks shall be required on both sides of all ~~roads~~ street types, including within residential areas where densities will be equal to or ultimately exceed four units per acre.
- (b) Sidewalks shall be required on only one side of each ~~road~~ residential street within a residential area where densities will be less than four units per acre.
- (c) ~~Pedestrian paths of an acceptable width may also be required through the center of long blocks; to provide access to schools, parks, playgrounds, open space, and other public areas; to river, lake, bay and ocean frontages; to connect cul-de-sac streets and where otherwise necessary as determined by the agency and/or the community development agency. If located outside of the right-of-way of a county maintained road, provisions must be made for their maintenance.~~
- (d) ~~Sidewalks may be eliminated on one or both sides of streets where it is found that topography, density or other circumstances makes them impractical as determined by the agency.~~
- (e) ~~Sidewalks shall be required on both sides of all roads in industrial, commercial and business districts.~~
- (f) ~~Safe and reasonably direct pedestrian access shall be provided between residential subdivisions and transit stops where feasible.~~

(Ord. 3181 § 5 (part), 1994)

### **~~24.04.450 Sidewalks within the city-centered corridor.~~**

~~Sidewalks within the city-centered corridor shall be paved at least four feet in width adjacent to a curb, and at least four and one-half feet in width when separated from a curb. Additional paved width may be required in~~

areas with potentially high pedestrian volumes such as near schools, places of public assembly, commercial areas and in the vicinity of senior citizen housing or convalescent hospitals.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.460 Sidewalks within village areas.**

Unless otherwise provided for in an adopted community plan, sidewalks within commercial and business sections of the village areas shall be paved at least four feet in width adjacent to a curb, and at least four and one-half feet in width when separated from a curb. Paved sidewalks may be required in areas with high pedestrian volumes, such as near schools and places of public assembly or in the vicinity of senior citizen housing or convalescent hospitals. Unpaved pedestrian walks at least four feet in width shall be required elsewhere.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.470 Surfacing.**

Where paved sidewalks, walkways, or shared use paths are required they shall be constructed per the County Standard Plans but not less than the paving shall be four inches of P.C.C. Portland cement concrete where there is P.C.C. a Portland cement concrete curb and gutter, even if that curb and gutter are separated by a landscaped buffer, stormwater treatment device or other streetscape element. In areas where there is no P.C.C. curb and gutter, paving may be two inches of A.C. over at least four inches of compacted base rock contained within header boards. Where an unpaved pedestrian walk is required, it shall be surfaced with at least four inches of compacted base rock contained within header boards.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.480 Alignment.**

Sidewalks may be located adjacent to or separated from the edge of the road but shall abut the edge of the road at intersections.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.490 Grades.**

Sidewalk grades shall not exceed eighteen percent. Steps may be required in special instances.

(Ord. 3181 § 5 (part), 1994)

#### **24.04.500 Obstructions.**

- (a) No poles, grates, utility covers, fire hydrants or other fixed obstructions are allowed within shall be located within the required clear width of an accessible route as defined by the Americans with Disabilities Act (ADA). sidewalk. Utility boxes and other flush facilities may be allowed within a sidewalk if their location and nature are deemed safe by the agency.
- (b) If the postal service requires that mailboxes be located adjacent to the curb then the sidewalk shall be either separated from the curb or wide enough to provide a four-foot unobstructed width.
- (c) The location of any collection boxes required by the postal service and any multiple mailbox stations must be shown on the development plans and are subject to the review and approval of the agency.

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## VIII. - GRADING

### 24.04.627 Permanent stormwater controls for new and redevelopment.

The agency may require, as a condition of project approval, permanent controls designed to remove sediment and other pollutants and to mimic the pre-project site hydrology by controlling the flow rates and/or the volume of stormwater runoff from the project's added and/or replaced impervious surfaces. These controls may include limits on impervious area. The selection and design of such controls shall be in general accordance with criteria established or recommended by federal, state, and local agencies, and where required by the agency, the BASMAA Post Construction Manual. Where physical and safety conditions allow, the preferred control measure is to retain drainage ways above ground and in as natural a state as possible or other biological methods such as bioretention areas. Where required by the phase II stormwater permit provision E.12, or where required by the nature and extent of a proposed project and where deemed appropriate by the agency, every applicant shall develop, submit and implement a stormwater control plan (SCP) as described below:

Stormwater control plan (SCP) requirements:

- (a) The SCP shall follow the appropriate SCP template, based on project type, in the most recent version of the BASMAA Post Construction Manual.
- (b) The specific practices proposed in the SCP shall be subject to the review and approval of the agency and shall be in general accordance with the BASMAA Post Construction Manual, and the phase II stormwater permit.
- (c) The SCP is separate and distinct from the ESCP requirements described in Section 24.04.625.
- (d) All stormwater management facilities shall be designed in a manner to minimize the need for maintenance and reduce the chances of failure. Design guidelines for bioretention facilities are outlined in the BASMAA Post Construction Manual.
- (e) Where required by the agency, as a condition precedent to the issuance of a building permit, the applicant shall submit a preliminary stormwater facilities operation and maintenance plan (O&M plan). The approval of the O&M plan by the agency is required prior to final inspection and approval of building permit closure.
- (f) All **required** stormwater management facilities **located on private property or within the right-of-way of a road** shall be maintained according to the approved O&M Plan. ~~The person(s) or organization(s) responsible for maintenance shall be designated in the plan.~~ **Stormwater facilities installed within the public right-of-way of a road shall remain the responsibility of the property owner, homeowners' association, or other entity designated in the approved O&M Plan, unless the County accepts maintenance responsibility by formal action of the Board of Supervisors. The O&M Plan shall identify the person(s) or organization(s) responsible for the operation and maintenance of all stormwater management facilities.** The plan shall require that stormwater management facilities be inspected by those responsible for maintenance at least annually. The O&M Plan shall also describe how the maintenance will be funded. Upon the failure of a responsible person to maintain the stormwater management facilities in accordance with the O&M Plan, the County may perform the maintenance and recover its costs from the responsible person as provided in Section 23.18.140.
- (g) Where deemed appropriate by the agency, access by the county to stormwater management facilities for inspections, as provided in Section 23.18.120, and through such means as may be appropriate, including, but not limited to, legal agreements, recorded covenants or easements, shall be provided by the property owner.
- (h) All project proponents and their successors, or successors in fee title, in control of a project that is located within a county urbanized area and that is defined as a regulated project in section E.12.c. of the phase II stormwater permit shall submit for approval one of the following as a condition prior to final inspection and approval of building permit closure:

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1. The project proponent's signed statement accepting responsibility for the operations and maintenance of stormwater management facilities until such responsibility is legally transferred to another entity;
  2. Written conditions in the sales or lease agreements or deed for the project that requires the buyer or lessee to assume responsibility for the operations and maintenance of the stormwater management facilities until such responsibility is legally transferred to another entity;
  3. Written text in project deeds, or conditions, covenants and restrictions for multi-unit residential projects that require the homeowners association or, if there is no association, each individual owner to assume responsibility for the operation and maintenance of the stormwater management facilities until such responsibility is legally transferred to another entity; or
  4. Any other legally enforceable agreement or mechanism, such as recordation in the property deed, that assigns the operation and maintenance of the stormwater management facilities to the project owner(s) or the permittee.
- (i) Financial security may be required to ensure that stormwater management facilities operate and are maintained following construction for a period which may be determined by the agency. Financial security shall consist of an irrevocable letter of credit, cash deposit, or performance bond as determined by the agency.

## ***IX. - TREES AND LANDSCAPING***

### **24.04.755 New landscaping.**

- (a) For new developments, the location and species of all proposed landscaping shall be subject to the review and approval of the community development agency. All proposed landscaping along or within a road or road right-of-way shall be subject to the further review and approval of the agency.
- (b) The maintenance provisions for all landscaping within the right-of-way of a road that is or is proposed to be a county-maintained road shall be as required by the agency. **All required landscaping, irrigation systems, street trees, planter strips, and related improvements installed within the right-of-way of a road shall remain the responsibility of the property owner, homeowners' association, or other responsible entity, unless the County accepts maintenance responsibility by formal action of the Board of Supervisors.** The maintenance provisions for all other proposed landscaping shall be as required by the community development agency.
- (c) Bonds may be required for new landscaping as required by the community development agency. For landscaping in a county right-of-way, the agency may require landscape bonds where such improvements would not be covered under a community development agency bond.
- (d) See Section 24.04.335(i) for parking lot landscaping requirements.