

**APPENDIX C**

**LANDSCAPING & BIKE PATHS**

**C-1.0 GENERAL**

Landscaped areas serve both functional and aesthetic purposes. From a functional standpoint, a barrier is created that provided noise attenuation, security, and privacy between residential projects and roadways. Aesthetically, landscaping provides a visual buffer and softens the appearances of walls and fences. The City of Red Bluff landscaping and bike path standards are designed to ensure adequate recreational bike path construction; proper landscaping along soundwalls, fences, and other open areas that abut public roadways; and to assure a consistent and visually pleasing environment along the City of Red Bluff's public roadways.

**C-2.0 DESIGN CRITERIA**

All landscaping design shall conform to these standards and the ground cover policies contained in the City's Land Use Element of the General Plan, Zoning Ordinance and Design Guidelines.

Landscaping plans shall be drawn at a scale no smaller than one inch = 20 feet. The plans shall show all proposed grades, landscaping, soundwall or fence locations, utility boxes, street lights, manholes, traffic signs, and any other structure what may be impacted by revisions to grading and planting. Soundwall fence details shall be drawn at a sufficient scale to show adequate detail.

**C-3.0 PLAN APPROVAL**

Prior to construction of any landscape-related improvements (grading, irrigation installation, planting, etc.), a complete set of plans must be approved and seven sets of approved plans provided to the Engineering Division for distribution to the Technical Advisory Committee.

**C-4.0 DESIGN REQUIREMENTS**

The following standards shall apply to all projects where landscaping along a soundwall, fence, or open area abuts a public roadway:

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### **A. Landscaping**

1. All landscaping shall be consistent with the City's ground cover policies.
2. Trees, shrubs, and ground cover plantings shall be consistent with the plant listings contained in the Specific Plan or Master Tree Plan where applicable. Substitutions or alternatives shall be approved by the Technical Advisory Committee.
3. Tree placement shall allow for sufficient root space adjacent to paved surfaces. Root guards are required to force roots away from soundwalls, utility facilities, sidewalks, curbs, gutters, and roadways.
4. Trees are to be located a minimum of ten feet from the curb return at all intersections and driveways to maintain sufficient site distance as determined by the Engineering Division.
5. Vegetation shall be located so as not to create conflicts with underground or above-ground utility lines, services, and equipment. All such facilities shall be noted on the landscape plans.

### **B. Irrigation - Irrigation plans shall include the location and detail of the automatic clock system, controller, strainer, siphon valve, water, meter, drip emitters, spray heads, quick couplers, and other appropriate elements, Other requirements are as follows:**

1. A drip/bubbler or other approved low-flow irrigation system shall be used for trees and shrubs. Specification requirements for irrigation are per the Standard Drawings. If other irrigation type is required for ground cover, low-flow control heads shall be used. Recommended spray sprinkler heads are Rainbird with PRS stem valve nozzles. Substitutions are acceptable if deemed equal or better by the Public Works Department.
2. The Developer or his consultant shall ensure to the satisfaction of all departments that there are no conflicts between irrigation lines and underground or over-ground utilities, equipment, or services.
3. An addition one-inch line shall be installed for quick couplers (Rainbird 33D, 34D, and approved equal valve) and shall be located every 100 feet along sidewalk, road, and curb. Quick coupler keys with hose swivels may be required depending upon the landscape situation.
4. The landscaping consultant is responsible for ensuring adequate and proper water supply connection and pressure to the main irrigation line. The consultant shall coordinate such service with the City Water

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Department. The connection shall be defined on the plans and inspected in the field for proper implementation during construction. The water service shall be constructed to the City of Red Bluff specifications.

5. The electrical service point for the sprinkler system time clock is to be coordinated by the landscaping consultant with the Public Works Department. The service point is to be approved by the Department and shown on the landscaping plans. Final installation is to be inspected prior to the energization of the timeclock by the Department.

NOTE: It is the contractor's responsibility to call for inspections. Failure to do so may result in delay of project acceptance by the City.

- C. Grade and Line of Sight – The maximum slope from back of sidewalk to base of soundwall shall not exceed 3:1 for non-turf areas and 5:1 in turf areas. The minimum slope shall not be less than 2%. All slopes shall be rounded and tapered to blend with contours on adjacent areas.

Landscaping design along soundwalls and fences shall be according to line of sight on corners and shall not wrap around corners.

- D. Soundwalls and Fences – All soundwalls and fences adjacent to landscape areas shall be located on private property.

### **C-5.0 BIKE PATHS**

All Class 1 recreational bike path design shall be in accordance with the State of California Department of Transportation, AASHTO Guide for Bike Paths, and the following standards. For pedestrian/bicycle pathways within landscape corridors along roadways, refer to the applicable specific plan landscaping guidelines.

- A. Structural Section – Bike path structural section shall be a minimum of two inches of asphalt concrete on four inches aggregate base. Bike paths shall have a width of eight feet with one-foot gravel shoulders. Minimum cross slope for drainage shall be a minimum of 1%, maximum 2%.
- B. Design Speed – Bike paths shall be designed for an average design speed of ten miles per hours. On downhill sections, minimum radius curves shall be as follows:

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DESIGN SPEED	RADIUS
10 mph	15 feet
15 mph	35 feet
20 mph	70 feet

C. Grades – Grades along bike paths shall be as follows:

1. Maximum extended grade (greater than 1,500 feet) shall be 2%.
2. Maximum sustained grade (greater than 300 feet) shall be 5%.
3. Maximum grade shall be 8%.

D. Striping – Striping of bike path shall be in accordance with the California Department of Transportation Highway Design Manual, latest edition.

Also, where applicable, two barrier posts/bollards shall be placed on bike path where it intersects with the roadway. Bollard shall be of a removable design.

### **C-6.0 MAINTENANCE REQUIREMENTS**

The project Developer shall be responsible to properly maintain the landscape for a minimum of three months (90 days) after installation of all planting and before the City makes its final inspection. In those cases where private, long-term maintenance is not required, the City will take over maintenance responsibilities after all conditions are met via the final inspection.

### **C-7.0 AS-BUILTS**

As-built, reproducible mylars shall be provided to the Public Works Department prior to a notice of completion being filed for the project.