

# Orange County Fire Authority

## Community Risk Reduction

1 Fire Authority Road, Building A, Irvine, CA 92602 • [www.ocfa.org](http://www.ocfa.org) • 714-573-6100

# Vegetation Management Guideline: Technical Design for New Construction Fuel Modification Plans and Maintenance Program



## Guideline C-05

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# Vegetation Management Guideline: Technical Design for New Construction Fuel Modification Plans and Maintenance Program

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# Technical Design for New Construction Fuel Modification Plans and Maintenance Program

## INTRODUCTION

Vegetation management has proven to be a major factor in reducing the probability of buildings igniting from wildfires. When combined with special building construction features, the potential for ignition is further reduced.

## PURPOSE

Fuel Modification Plans help control vegetation design and placement around new structures to limit wildfire impact. These plans ensure that landscaped areas next to buildings are maintained permanently for fire safety.

This guideline provides:

- Design and maintenance requirement for Fuel Modification Zones (FMZ), Special Maintenance Areas (SMA) and Roadside Protection Zones (RPZ)
- Standards for both **Conceptual** and **Precise** Fuel Modification Plans
- Steps to integrate fire-safe landscaping with construction features for long-term protection

Note: For existing structures that were not developed with a fuel modification plan, maintenance shall be completed as required in the Vegetation Management Recommendations/Requirements for Homeowners document found at: [OCFA.org](http://OCFA.org)

## SCOPE

All new single-family homes, multi-family residential, Accessory Dwelling Unit (ADU), utility, and commercial structures built in, or adjacent to, a wildfire-risk area or such areas designated by the fire code official, require a Fuel Modification Plan in conjunction with the 2025 California Wildland Urban Interface Code (CWUIC).

- Required for State Responsibility Area (SRA) or Local Responsibility Area – Very High Fire Hazard Severity Zone (LRA-VHFHSZ) and High Fire Hazard Severity Zone (LRA-HFHSZ)
- Required per 2025 California Wildland Urban Interface Code, Government Code Section 51175 – 51189, and the California Code of Regulations, Title 14

To confirm if your property requires fuel modification, contact the OCFA tech line at (714) 573-6108.

Regulations for wildfire safety are dynamic and new requirements may be enacted by the State of California and its regulatory agencies at any time. Projects must comply with all state requirements for vegetation management and wildfire safety, in addition to the requirements in this guideline, in place at the time of plan submittal. Where a conflict between this guideline and other applicable regulations exists, the more stringent or specific requirement will apply.

## **FUEL MODIFICATION PLAN OVERVIEW & SEQUENCING**

There are **two types** of fuel modification plans, submitted at different stages of the development process:

### **1. Conceptual Fuel Modification Plan\***

- Submitted before tentative tract map, parcel map, or fire master plan approval
- Shows zone layouts, widths, and program intent
- Includes land-use restrictions, tract boundaries, and property lines
- Typically reviewed during the Conditional Use Permit (CUP) process and prior to approval of any Tentative Maps

\*Note: Conceptual fuel modification plans and precise fuel modification plans can be combined into one submittal when planting plans, final specifications, and inspection information are known.

### **2. Precise Fuel Modification Plan**

- Submitted before grading permit or building permit issuance (whichever comes first) and prior to fire master plan approval
- Includes conceptual fuel modification details and planting plans, final specifications, and inspection information
- May require approval from other permitting agencies (e.g., Coastal Commission, Army Corps, Habitat Management Plan) before OCFA final sign-off

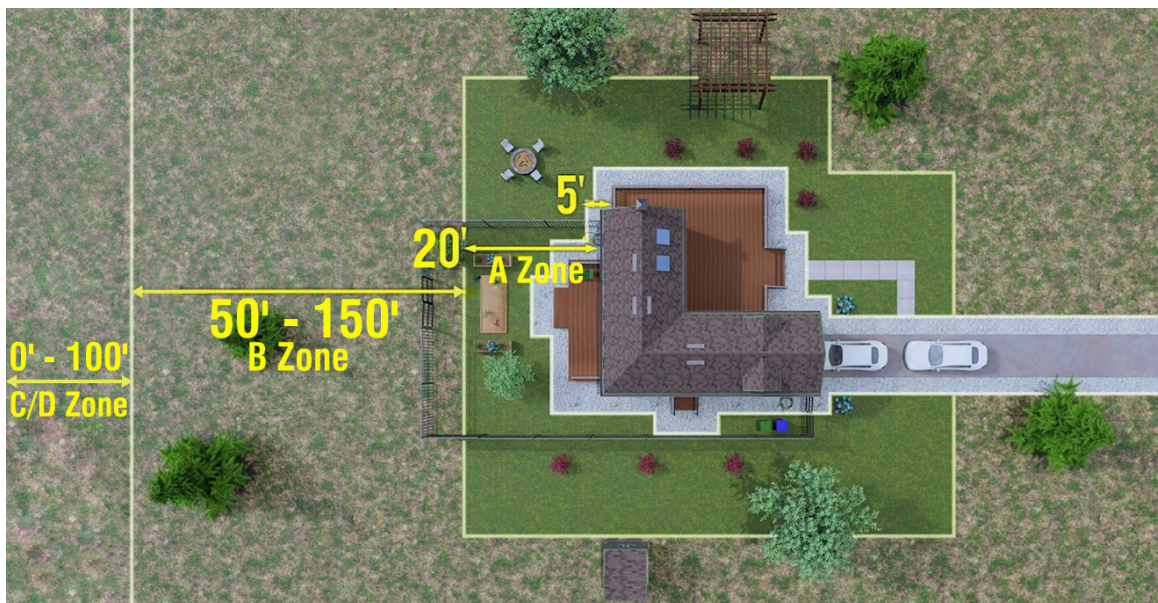
### **3. Required Inspections** (OCFA must be contacted at 714-573-6150 to schedule)

- **Vegetation Clearance** – Before dropping lumber, remove all combustible vegetation within 100 feet of structures, lumber stockpiles, generators, and fuel tanks.
- **Final Fuel Modification Inspection** – Before occupancy, ensure all zones, irrigation, planting, and access features match approved plans.
- **Turnover Inspection** – When HOA or owner takes over maintenance, meet with OCFA to confirm maintenance responsibility and review requirements.

## FUEL MODIFICATION ZONES

The standard FMZ is 170 feet wide, measured horizontally from the structure outward in all directions. It is divided into Zones A (minimum 20 feet), B, C, and D (minimum 50 feet each), with specific design and maintenance requirements for each zone. The width of a more stringent zone may be increased, pushing a less stringent zone farther from the structure or even completely replacing it. For example, an FMZ may be comprised of a 20 foot A zone, a 100 foot B zone, and a 50 foot C or D zone. Some developments may also have Special Maintenance Areas (SMA) or Roadside Protection Zones (RPZ) in addition to the FMZ.

Any project where the entire 170 foot FMZ does not fit on the property, or where any FMZ, SMA, or RPZ does not meet the requirements listed in this guideline, will require an Alternate Materials and Methods (AM&M) request (see Section 4).



### Zone A

**Width:** 20 feet minimum with first 5 feet as the “Immediate Zone”

#### **Immediate Zone (0–5 feet):**

- No combustible bark or mulch
- Remove all dead and dying plants
- Plants: Irrigated, naturally low growing (2 feet or less), non-woody
- Additional Zone A Area Requirements listed below

#### **Zone A Area (0-20 feet):**

- Flat level ground (Slopes shall be labeled as B, C or D zone)
- No combustible construction allowed
- No grouping of shrubs
- Single specimen shrubs shall be spaced 15 feet apart
- Tree limbs shall be minimum of 10 feet from structures
- Irrigated zone (shall have automatic irrigation to maintain high-moisture vegetation)
- Plants must be highly fire-resistant, selected from the Fuel Modification Zone Plant List (Attachment 8) or similar species (See Section 3 – Plant Palette Information)
- No undesirable and invasive plant species (Attachment 7)

**Zone B****Width:** 50 feet minimum

- Irrigated zone (shall have automatic irrigation to maintain high-moisture vegetation)
- Planted with approved species from the Fuel Modification Zone Plant List (Attachment 8) or similar species (See Section 3 – Plant Palette Information)
- Must comply with planting and maintenance requirements from:
  - Attachment 6 – Planting Installation Requirements
- No combustible construction is allowed
- No undesirable and invasive plant species (Attachment 7)

Note: Zone B may be dry if plant selection and design are appropriate

**Zone C****Width:** 50 feet minimum

- Non-irrigated
- Shrub and tree coverage up to 50% throughout
- Spacing and clearance per Attachment 6 within 100 feet of structures
- Planted with approved species from the Fuel Modification Zone Plant List (Attachment 8) or similar species (See Section 3 – Plant Palette Information)
- No combustible construction allowed
- No undesirable and invasive plant species (Attachment 7)

**Zone D****Width:** 50 feet minimum

- Non-irrigated
- Shrub and tree coverage up to 70% throughout
- Planted with approved species from the Fuel Modification Zone Plant List (Attachment 8) or similar species (See Section 3 – Plant Palette Information)
- No combustible construction allowed
- No undesirable and invasive plant species (Attachment 7)

Note: Additional planting restrictions may be required for certain plant species (see Approved Plant Palette Qualification Statements for Select Plant Species on page 31).

Note: A clear, brush-free area of 10 feet is required around the perimeter of the ground-mounted photovoltaic arrays. An approved non-combustible base shall be installed and maintained under arrays and associated electrical equipment installations, 2025 CFC Chapter 1205.5.1.

## **SPECIAL MAINTENANCE AREAS AND ROADSIDE PROTECTION ZONES**

Interior landscaped areas and roadside plantings inside a community can present a significant hazard during a wildfire. They are subject to planting restrictions, irrigation, and maintenance requirements to protect structures from vegetation fires started by windblown embers and to ensure roadways are available for evacuation and emergency vehicle use during a wildfire.

### **TYPES OF INTERIOR SLOPES**

#### **Special Maintenance Areas (SMA)**

- Are areas typically located within a residential community outside of the individual private lots. They are often common areas, and landscaped slopes interior to the residential community perimeter.
- Comply with Zone B requirements
- Start at the property line of privately owned lots
- Minimum of 50 feet irrigated zone

#### **Roadside Protection Zones (RPZ)**

- Width: 50 feet from road edge
- Provides a buffer at roadways for safe evacuation and limits fuel load within residential developments and at neighborhood perimeters.
- Streetscapes not on the perimeter may not be regulated unless a hazard exists
- Comply with Zone B requirements

#### **Maintenance Recording Requirement**

Fuel Modification Zones (FMZ), Special Maintenance Areas (SMA), and Roadside Protection Zones (RPZ) must have maintenance responsibilities recorded in CC&Rs or deed restrictions.

- When Zone “A” is on private lots and other zones are HOA/common, a signed homeowner disclosure is required.
- Maintenance must be permanent and consistent with approved plans.

#### **Defensible Space Requirement\***

If an SMA or RPZ is within 100 feet of a structure, the first 100 feet is treated as defensible space and must comply with state regulations.

\*Note: Alternative designs may be considered through the AM&M process

## **FUEL MODIFICATION PLANS: REQUIRED INFORMATION**

### **Submittals**

- All plans shall be submitted electronically through OCFA’s Public Services Portal. See the OCFA website and Guideline A-02 for more information on plan submittals.
- A licensed landscape architect or equivalent qualified design professional should prepare fuel modification plans.

### **Submittal Sequence**

- For an individual residential home lot, the Precise Fuel Modification Plan must be approved prior to approval of the Residential Site Plan.
- For commercial or residential developments:
  - The Conceptual Fuel Modification Plan must be approved prior to approval of the Tentative Map.
  - The Precise Fuel Modification Plan must be approved prior to approval of the Fire Master Plan or, where a Conceptual Fuel Modification Plan is not submitted, prior to approval of the Tentative Map.

## **Section 1: Conceptual Fuel Modification Plans**

Include the following information on your plans, as applicable:

### **Project Details**

- Show total development size with tract boundary lines, property lines, slope contour lines, and structure foundation footprints.
- Identify adjoining land uses on all sides (e.g., existing structures, HOA maintained properties, open space, vacant lots, natural vegetation, roads, parks).
- Identify each fuel modification zone within your property (A, B, C & D) as it applies to your project.
- State whether the project is in an LRA–VHFHSZ, LRA–HFHSZ or SRA.
- Note on plan: “Structures in these zones must meet CWUIC standards.”
- Note on plan: “Combustible fencing is prohibited in all Fuel Modification Zones.”

### **Topography & Setbacks**

- Show contour lines for slopes and valleys.
- Identify slopes 20% or greater

### **Plant Selection**

- All plants must be from the Fuel Modification Zone Plant List (Attachment 8) or follow Section 3 for alternate species.
- Show the name and location of any retained existing plants (if none, remove all existing vegetation from the plan).
- Label all interior slopes and common areas as “SMA” or “RPZ”.
- If SMA planting plans are not yet designed, note that they require review and approval before installation.

**RPZ Specifications**

- Delineate RPZ areas with either:
  - Max 50-foot-wide irrigated Zone “B” (if on community perimeter)
  - SMA designation (if interior to the community)

**Legend & Maintenance Notes**

- Clearly symbol and reference each FMZ, SMA, and RPZ in a legend.
- Note each area is irrigated (automatic irrigation) or non-irrigated as required.
- Identify who is responsible for the maintenance of FMZ, SMA, and RPZ.

**Access & Covenants**

- Design emergency/maintenance access paths from street frontage to lettered lots:
  - At least every 500 feet of FMZ/SMA length
  - 7-foot clear width, flat path
- Record covenants for FMZ/SMA access and maintenance with planning maps and CC&Rs.
- Note: FMZ, SMA, and RPZ on private lots require recorded easements before plan approval.

**Required Plan Inserts**

- Include:
  - Attachment 1: New Construction Inspection Requirements
  - Attachment 2: Introductory Maintenance Information
  - Attachment 3: Incline Measurement for Selected Slopes
  - Attachment 6: Planting Installation Requirements
  - Attachment 7: Undesirable/Invasive Plant Species

**Special Conditions**

- If Fuel Modification distance requirements cannot be met, follow Alternate Materials & Methods submittal instructions (Section 4).
- If other agencies restrict vegetation management (e.g., Coastal Commission, Army Corps, Habitat Management Plan), provide their name, maintenance scope, and management plan.

**Required Notes to Copy onto Plans (1–6)**

1. The owner/developer will obtain planting plan approval from OCFA before final approval from any other permitting agency.
2. FMZ, SMA, and RPZ areas are purchased/dedicated for wildfire maintenance, beautification, and erosion control.
3. The developer must ensure the HOA dues cover future maintenance costs.
4. If Zone “A” is on homeowner land but other maintenance areas are on HOA/common land, the homeowner must sign a disclosure referencing the lot number in CC&Rs.
5. FMZ, SMA, and RPZ must be maintained in perpetuity for fire safety per CC&Rs, property titles and recorded easements.
6. Prior to dropping lumber, call for a Vegetation Clearance Inspection; combustible vegetation must be removed at least 100 feet from structures and lumber stockpiles.

**Additional Requirements**

- Provide CC&Rs confirming maintenance responsibilities before conceptual plan approval.
- Provide photographs of existing vegetation.
- Show slope degree/percentage at zone markers to determine actual distance (per Attachment 3).

**Section 2: Precise Fuel Modification Plans**

Include the following on your Precise Plan:

- Include Conceptual Plan requirements** if no Conceptual Fuel Modification Plan was previously approved, provide additional details from section 1 listed above.
- Show permanent zone marker locations:**
  - Install the minimum number needed to clearly define side property lines and where Zone D ends
  - See Attachment 4 – Zone Marker Details for reference
- Copy onto the plans:**
  - Attachment 4 – Zone Marker Details (if applicable)
  - Attachment 5 – Sample CC&R Maintenance Language (if applicable)

Note: Attachments 4 & 5 are in addition to Attachments required on Conceptual Plan
- Provide written proof** that CC&Rs reference fuel modification areas, maintenance responsibilities, and restrictions (see Attachment 5).
- Provide recorded documentation** showing Fuel Modification Zones, SMAs, RPZs, and access/maintenance points are recorded on Tentative Tract Maps.
- Provide note indicating “irrigated” or “non-irrigated” zones**
- Submit planting plans** for FMZ, SMA, and RPZ (see Section 5).
- Plant Palette Legend:** For each plant category, provide the information indicated in the Sample #1: Plant Legend below. See Attachment 8 for plant # and Symbol Code.

**Sample #1: Plant Legend**

Plant Form	Plan Symbol	Botanical Name	Common Name	Plant # from Attach 8	Symbol Code from Attach 8	Expected Max Growth Height	Expected Max Growth Width
<b>TREES</b>							
Plant Form	Plan Symbol	Botanical Name	Common Name	Plant # from Attach 8	Symbol Code from Attach 8	Expected Max Growth Height	Expected Max Growth Width
<b>SHRUBS</b>							
Plant Form	Plan Symbol	Botanical Name	Common Name	Plant # from Attach 8	Symbol Code from Attach 8	Expected Max Growth Height	Expected Max Growth Width
<b>GROUND COVER</b>							
Plant Form	Plan Symbol	Botanical Name	Common Name	Plant # from Attach 8	Symbol Code from Attach 8	Expected Max Growth Height	Expected Max Growth Width
<b>GRASSES</b>							
<b>SPECIES NOT ON ATTACH 8</b>	Plan Symbol	Botanical Name	Common Name			Expected Max Growth Height	Expected Max Growth Width

**Planting Plans**

- Use Attachment 8 codes and qualification notes before placing plants on plans.
- Space plants per Attachment 6 using max heights and widths from your legend.
- For plants not on the OCFA list, follow Section 3 – Plant Palette Information.

**Alternate designs:** If required distances, plant species, or irrigation requirements cannot be met, an AM&M request is required. See Section 4.

- Submit technical justification and compensating measures per OCFA Guideline A-01.
  - AM&M approval must be obtained before plan approval.
- Required Inspections:** Create a heading titled “Required Inspections” on the plan and copy Attachment 1 – New Construction Inspection Requirements under it.

**Section 3: Plant Palette Information****Requirements:**

- The Fuel Modification Zone Plant List (Attachment 8) was approved by resource agencies responsible for environmental protection. All plants must be selected from Attachment 8 or following the “Proposing Alternate Plant Species” below.
- Group and space plants according to Attachment 6 – Planting Installation Requirements.
- Existing plants must be proposed for approval on fuel modification plans.
- If planting within 300 feet of reserve lands, written concurrence from the relevant resource agency is required unless prior approval already exists.

**Proposing Alternate Plant Species**

If proposing species not on the approved list, provide the following information for review:

- Photographs
- Size and growth characteristics
- Species must be equal to or superior to the Attachment 8 approved list in fire-resistant properties
- Maximum: 10 alternate species per project

**Prohibited Plants**

- All plants from Attachment 7 – Undesirable and Invasive Plant Species
- Plant species with:
  - High oil/resin content
  - High flammability
  - Invasive growth habits
  - Excessive litter or deadwood retention

**Section 4: Alternative Materials & Methods Construction Features, & Fire Protection Plans****When to Apply for AM&M**

- Any FMZ, SMA or RPZ unable to achieve the minimum requirements due to lot size, topography, or existing structures
- Site conditions require modified vegetation management strategies (e.g., cultural, environmental, or historic preservation areas)

**Performance Based Design**

Projects with insufficient fuel modification zone width(s) may be given consideration for building and site features that reduce the susceptibility of structures to ignition. Such alternative proposals include, but are not limited to:

- Non-combustible walls
- Increased setbacks
- Reduced planting/increased hardscape
- Additional home hardening features exceeding minimum CWUIC requirements

**Requirements for AM&M proposal**

1. Submit an OCFA AM&M request with proposed compensating factors.
2. Follow OCFA Guideline A-01 for AM&M letter format.
3. If approved, copy the AM&M letter directly onto the plans
4. A detailed technical fire behavior analysis by a wildland fire behavior professional may be required on a case-by-case basis.
5. For commercial and multi-lot residential developments, submit a Fire Protection Plan

**AM&M Application Checklist**

- Cover letter describing the request and justification
- Fire resistance data or research on proposed plant materials
- Maintenance plan and responsible party identification
- Comparative safety analysis to standard FMZ requirements
- Environmental or site-specific justification (if applicable)
- Fire Behavior Analysis (if applicable)
- Draft CC&R language for long-term maintenance obligations

**Fire Protection Plan Requirements:**

- Submit with Fuel Modification Plan.
- Fee Code: PR 146 (Fire Protection Plan)
- Does not replace PR 145 (Fire Master Plan).
- Must include special CWUIC screening forms indicating which lots/buildings meet each code section.
- OCFA provides approved plan copies to the Building Department for reference

**Offsite Landowner Recorded Easements:**

A standard fuel modification requires 170 feet of space measured out from the structure. Where insufficient space is available on the property, it may be possible to arrange an easement with adjacent landowners to extend the fuel modification onto their property. If this approach is used:

- Obtain recorded easements from adjoining landowners.
- Include easement details on plans.

Note: Plans will not be approved without recorded agreements attached (if applicable)

# ATTACHMENT 1

## New Construction Inspection Requirements

The Builder or Developer shall call OCFA Inspection Scheduling at (714) 573-6150 for the inspections listed below:

### **Vegetation Clearance Inspection:**

Prior to dropping of lumber on the site, all combustible vegetation must be cleared at least **100 feet** from:

- Structures under construction
- Lumber stockpiles
- Generators
- Fuel tanks and dispensers

Note: An inspection sign-off or release letter must be issued to the Building Department before construction proceeds.

### **Final Fuel Modification Inspection:**

Prior to occupancy:

- All FMZ, SMA, and RPZ adjacent to structures must:
  - Be fully installed
  - Have functional irrigation
  - Match the approved Fuel Modification Plan specifications
- Physical installation includes:
  - Zone markers
  - Required planting
  - Access paths
  - Hardscape features

Inspection Notes:

- The developer/builder is responsible for scheduling all inspections.
- Any deviation from approved plans must be corrected before final sign-off.
- Inspections will not be passed if undesirable/invasive species (Attachment 7) are found present.

### **Homeowners Association (HOA) or Landowner Maintenance Acceptance from Developer/Builder:**

Schedule an Owner Turnover Inspection – This inspection/ meeting must happen with OCFA staff prior to accepting the maintenance responsibility from the developer or builder.

1. The inspection/meeting must include the following representatives:
  - 1.1. Landscape architect
  - 1.2. Community manager or homeowner
  - 1.3. HOA board member
  - 1.4. Installing landscape company
  - 1.5. HOA landscape company
2. At the time of turnover, the Fuel Modification areas shall be maintained by the developer or builder as originally installed and approved.

3. The accepting landowner is responsible for ensuring the developer or builder sufficiently calculated the amount of revenue needed to perform the on-going maintenance of the FMZs and any SMAs per the approved plans.
4. A copy of the approved plans must be provided to the HOA representatives or homeowner at this time.
5. The Landscape Architect must convey ongoing maintenance requirements to HOA representatives or homeowner and provide OCFA a document stating the fuel modification has been installed per plan.
6. An OCFA written disclosure will be required to be signed by the HOA representatives or homeowner indicating that the HOA or homeowner is aware of the FMZ on their land and that they are aware of the importance of retaining the plans and the ongoing maintenance. The responsibility and necessary language for maintenance must also be stated within the CC&Rs (Refer to Attachment 5: Sample CC&R Maintenance Language).

## **ATTACHMENT 2**

### **Introductory Maintenance Information**

The FMZ, SMA, RPZ shall be maintained in perpetuity for fire safety purposes and shall cause a covenant to be recorded and referenced in the CC&Rs or on the property title when there is no HOA involvement.

Emergency access covenants shall be identified on the tract map indicating the reservation and restriction for permanent entry by the HOA or Fire Authority.

On-going maintenance shall occur to preserve the originally approved design found on the approved Fuel Modification Plans.

- a. Spacing shall be maintained in accordance with Attachment 6: Requirements for Planting Installation in Fuel Modification Zones. Plant species and arrangements shown on the plans shall be perpetually preserved. Distances of FMZ, SMA, and RPZ will always remain required and will be specific to the approved Fuel Modification Plan.
- b. The property owner is responsible for all maintenance of FMZ, SMA, and RPZ.
- c. **Two maintenance activities** shall be performed each year, the first during middle- to late-Spring and the second in early- to middle-Fall:
  - 1) Grasses cut to 4 inches after annual seeding
  - 2) Dead and dying, all vegetation litter, and Attachment 7: Undesirable and Invasive Plant Species removed from all zones
  - 3) Maintenance of irrigation systems
  - 4) Replacement of dead or dying vegetation with approved species (proposed changes shall be approved by OCFA)
  - 5) Removal of trees and shrubs not on the approved plans
- d. If maintained by an HOA, the landscape maintenance company and/or property manager shall inspect the FMZ, SMA & RPZ's throughout the year to identify where specific maintenance activities need to take place.
- e. The OCFA may conduct inspections of established fuel modification areas. Ongoing maintenance shall be conducted a minimum of twice each year regardless of the dates of these inspections.
- f. The property owner shall retain all approved Fuel Modification Plans. The design and information on the plans shall be used as the basis for maintenance.

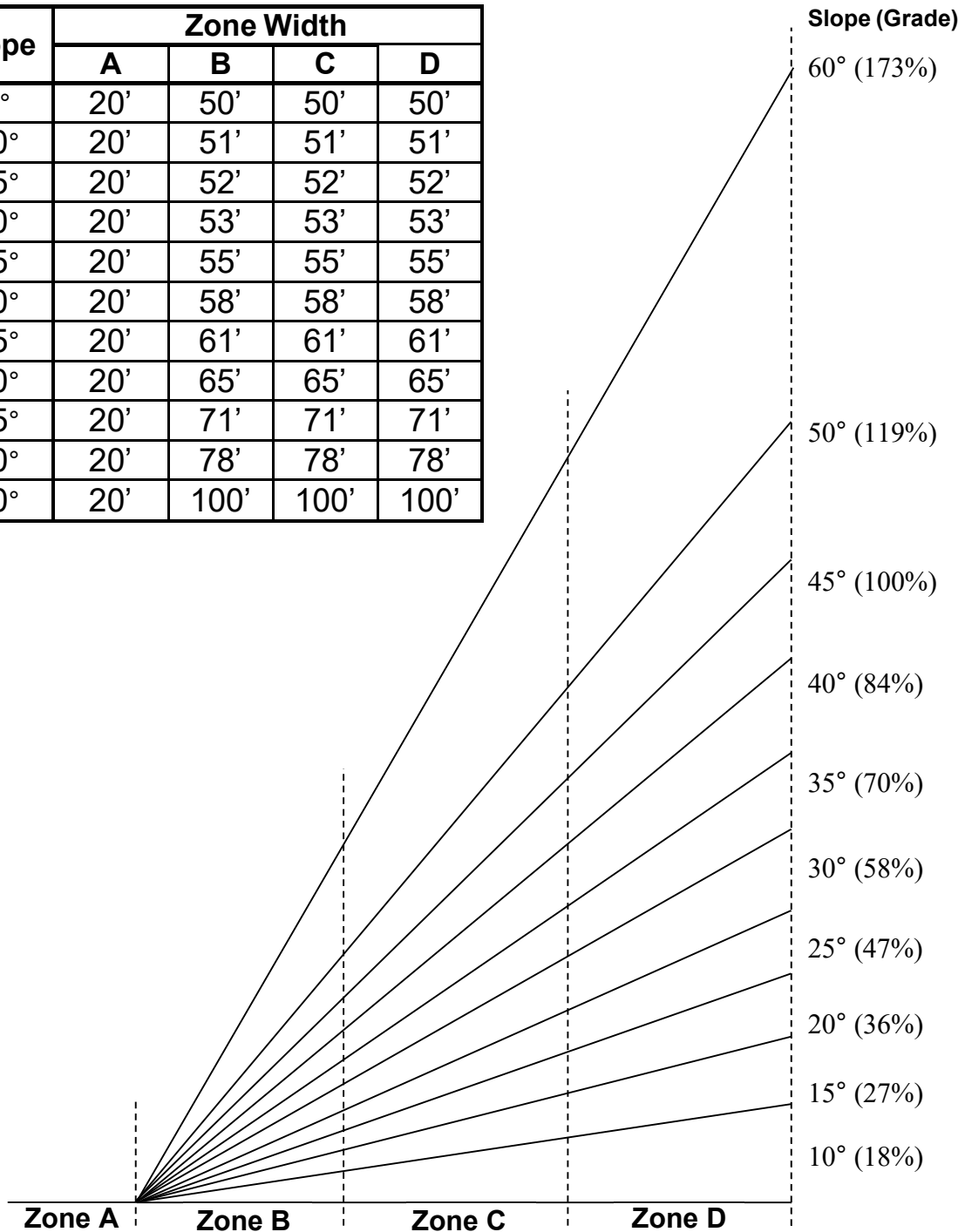
Where there is no approved fuel modification plan, ongoing maintenance of vegetation in wildfire risk areas shall be in accordance with the currently posted OCFA Vegetation Management Recommendations/Requirements for Homeowners document at [www.ocfa.org](http://www.ocfa.org).

## ATTACHMENT 3

### Incline Measurement for Selected Slopes (See Attachment 4: Zone Marker Details)

Zone widths described in this guideline are measured horizontally. When zones occur on a slope, the distance measured along the ground will be increased—see the diagram below for examples of effective zone widths at various slopes.

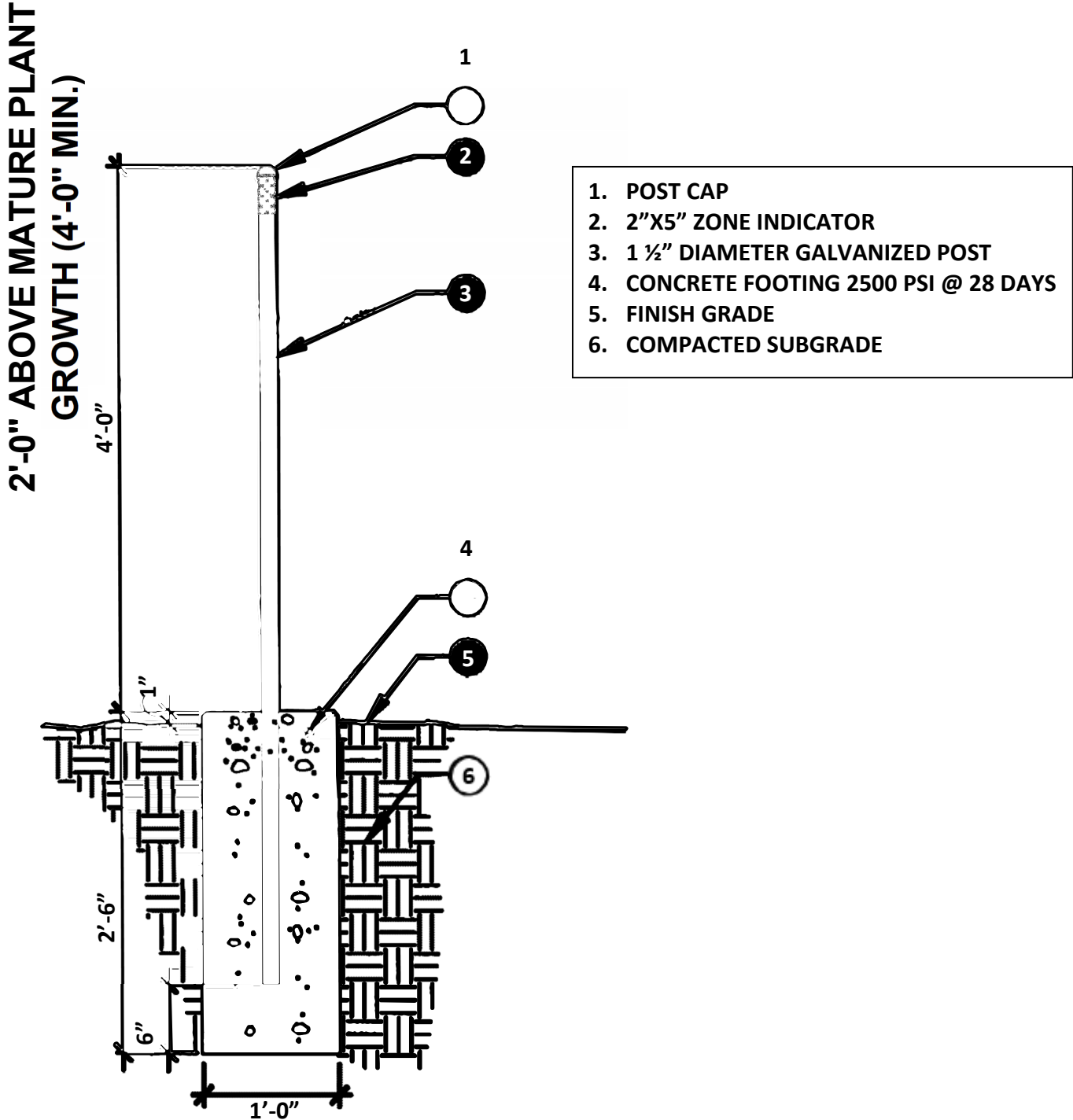
Slope	Zone Width			
	A	B	C	D
0°	20'	50'	50'	50'
10°	20'	51'	51'	51'
15°	20'	52'	52'	52'
20°	20'	53'	53'	53'
25°	20'	55'	55'	55'
30°	20'	58'	58'	58'
35°	20'	61'	61'	61'
40°	20'	65'	65'	65'
45°	20'	71'	71'	71'
50°	20'	78'	78'	78'
60°	20'	100'	100'	100'



## ATTACHMENT 4 Zone Marker Details

Provide zone markers near the property line at the end of each zone and along each zone boundary within the property where needed to provide a clear line-of-sight delineation of the extent of each zone.

**Note:** An alternate design may be proposed and approved on a case-by-case basis (e.g., using a large boulder, existing fencing, permanent fixtures, etc.).



## **ATTACHMENT 5**

### **Sample CC&R Maintenance Language**

It is recommended that the following language be included in the CC&Rs recorded for a common interest development:

“The duty of the homeowners’ association to perform ‘Fire Prevention Maintenance’ (as defined below) for all Fuel Modification Zones, Special Maintenance Areas, Roadway Protection Zone, and manufactured interior slopes within the development shall be included as an express obligation in the recorded CC&Rs for the development. Similarly, each Owner whose Lot (or Condominium) is subject to FMZ restrictions (e.g., non-combustible structure setback, etc.) shall be obligated to comply with such restrictions.”

1. The OCFA will be designated as a third-party beneficiary of an HOA’s duty to perform “Fire Prevention Maintenance” (as defined below) for all portions of the Association Property or Common Area that constitute FMZs and designated interior/manufactured slopes to be maintained by the H O A , and of any Owner’s duty to comply with any FMZ restrictions applicable to their lot or condominium. Additionally, OCFA shall have the right, but not the obligation, to enforce the HOA’s duty to perform such Fire Prevention Maintenance, and to enforce compliance by any owner with any FMZ restrictions applicable to their lot or condominium. In furtherance of such right, the OCFA shall be entitled to recover its costs of suit, including its actual attorneys’ fees, if it prevails in an enforcement action against an HOA and/or an individual owner (a sample third-party beneficiary provision to be incorporated into the CC&Rs is attached hereto as Addendum "1").
2. As used herein, "Fire Prevention Maintenance" shall mean the following:
  - a. All portions of the Association Property or Common Area that constitute FMZs or designated interior/manufactured slopes shall be regularly maintained by the HOA on a year-round basis in accordance with the fuel modification plan on file with the property manager for the development.
  - b. The irrigation system for FMZs or designated interior/manufactured slopes shall be kept in good condition and proper working order at all times. The irrigation system shall not be turned off except for necessary repairs and maintenance.

**ADDENDUM “1”**

Enforcement by the Orange County Fire Authority (OCFA): The OCFA is hereby designated as an intended third-party beneficiary of the Association’s duties to perform “Fire Prevention Maintenance” for all portions of the Association Property or Common Areas consisting of FMZs or designated interior/manufactured slopes in accordance with the fuel modification plan, and of each owner’s duty to comply with any FMZ or designated interior/manufactured slopes restrictions applicable to their lot or condominium as set forth in the fuel modification plan. In furtherance thereof, the OCFA shall have the right, but not the obligation, to enforce the performance by the association of its duties and any other fire prevention requirements which were imposed by the OCFA or other public agency as a condition of approval for the development (e.g., prohibition of parking in fire lanes, maintenance of the blue reflective markers indicating the location of fire hydrants, etc.). The OCFA shall also have the right, but not the obligation, to enforce compliance by any owner with any FMZ or designated interior/manufactured slopes restrictions applicable to their lot or condominium as set forth in the fuel modification plan. If in its sole discretion, the OCFA shall deem it necessary to take legal action against the association or any owner to enforce such duties or other requirements, and prevails in such action, the OCFA shall be entitled to recover the full costs of said action including its actual attorneys’ fees, and to impose a lien against the association property, or an owner’s lot or condominium, as the case may be, until said costs are paid in full.

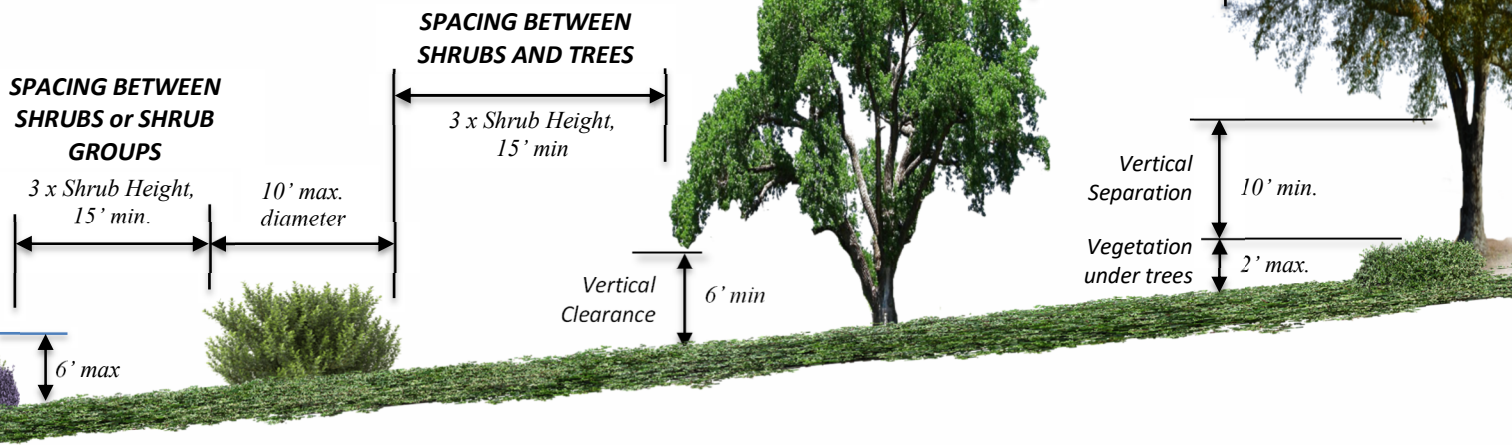
# ATTACHMENT 6

## Requirements for Planting Installation in Fuel Modification Zones

### SHRUB & TREE SPACING

Flat to mild slope: < 20%

### SPACING BETWEEN TREES & TREE GROUPS



### Horizontal Spacing for Slopes less than 20%

Vegetation Less than 2 Feet in Height:

- Classified as ground cover.
- Horizontal spacing and vertical separation not required for ground cover less than 2 feet in height.

Vegetation 2–6 Feet in Height:

- Classified as shrubs.
- Groups of shrubs are limited to a maximum aggregate diameter of 10 feet.
- Groups of shrubs shall be separated from other shrubs or trees by 15 feet or 3x the height of the tallest specimen. The greater distance shall take precedence.
- Groups of shrubs shall be spaced a minimum of 30 feet from structures.
- No shrubs allowed within 5 feet of combustible structures.
- No shrubs allowed within 15 feet of the edge of a tree canopy.

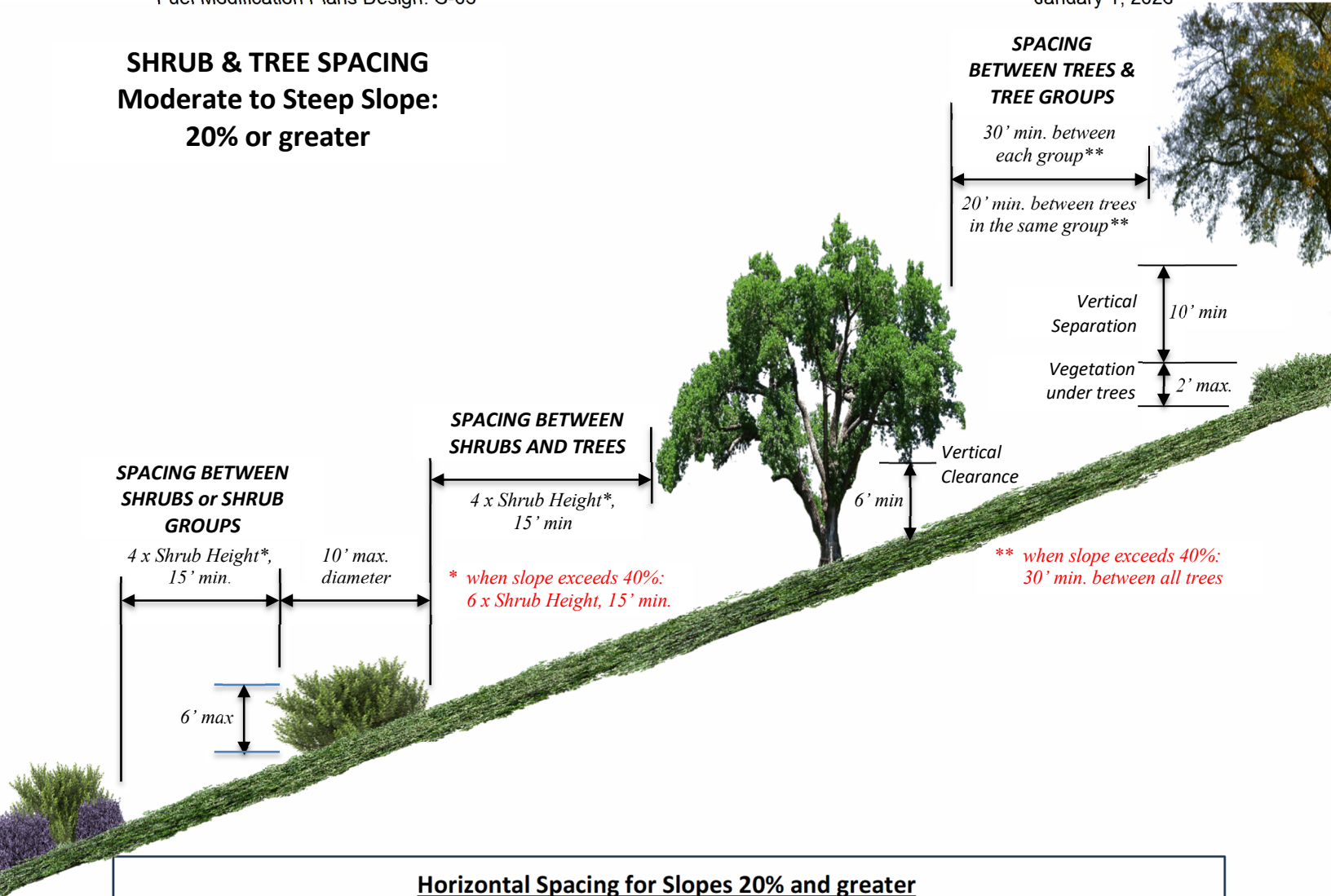
Vegetation exceeding 6 feet in Height:

- Classified as trees
- 3 trees maximum may be grouped with a minimum 10 foot separation between driplines.
- Groups of trees shall be separated from other tree groups by 30 feet measured from the edge of the dripline.

### Vertical Separation

- A vertical separation of 6 feet shall be maintained between ground cover and the lowest branches of trees.

**SHRUB & TREE SPACING**  
**Moderate to Steep Slope:**  
**20% or greater**



**Horizontal Spacing for Slopes 20% and greater**

Vegetation Less than 2 Feet in Height:

- Classified as ground cover.
- Horizontal spacing and vertical separation not required for ground cover less than 2 feet in height.

Vegetation 2–6 Feet in Height:

- Classified as shrubs.
- Groups of shrubs are limited to a maximum aggregate diameter of 10 feet.
- Groups of shrubs shall be separated from other shrubs or trees by 4x the height of the tallest specimen.  
*Note: when slope exceeds 40%, spacing shall be 6x shrub height*
- Groups of shrubs shall be spaced a minimum of 30 feet from structures.
- No shrubs allowed within 5 feet of combustible structures.
- No shrubs allowed within 15 feet of the edge of a tree canopy.

Vegetation exceeding 6 feet in Height:

- Classified as trees
- 3 trees maximum may be grouped with a minimum 20 foot separation between driplines.
- Groups of trees shall be separated from other tree groups by 30 feet measured from the edge of the dripline.  
*Note: when slope exceeds 40%, all trees shall be spaced at 30'*

**Vertical Separation**

- A vertical separation of 6 feet shall be maintained between ground cover and the lowest branches of trees.

## ATTACHMENT 7

### Undesirable and Invasive Plant Species

Certain plants are considered to be undesirable and invasive due to their physical or chemical characteristics. Physical properties that would contribute to high flammability include large amounts of dead material retained within the plant, rough or peeling bark, and the production of copious amounts of litter. Chemical properties include the presence of volatile substances such as oils, resins, wax, and pitch. Certain native plants are notorious for containing these volatile substances.

Plants with these characteristics shall not be planted in any fuel modification zones or anywhere within the area covered by Alternate Methods & Materials agreements (see Section 4: Alternate Materials & Methods). Should these species already exist within these areas, they shall be removed because of their invasiveness or potential threat they pose to structures.

#### PLANT SPECIES (MANDATORY REMOVAL)

<b>Botanical Name</b>	<b>Common Name</b>
Adenostoma Fasciculatum	Chamise
Adenostoma Sparsifolium	Red Shanks
Anthemix Cotula	Mayweed
Artemisia Californica	California Sagebrush
Brassica Nigra	Black Mustard
Brassica Rapa	Wild Turnip, Yellow Mustard, Field Mustard
Cardaria Draba	Hoary Cress, Perennial Peppergrass
Cirsium Vulgare	Wild Artichoke
Conyza Canadensis	Horseweed
Cynara Cardunculus	Artichoke Thistle
Eriogonum Fasciculatum	Common Buckwheat
Heterothaca Grandiflora	Telegraph Plant
Lactuca Serriola	Prickly Lettuce
Nassella/Stipa tenuissima	Mexican Feathergrass
Nicotiana Bigelevelil	Indian Tobacco
Nicotiana Glauca	Tree Tobacco
Pennisetum alopecuroides	Fountain Grass
Ricinus Communis	Castor Bean Plant
Saccola Austails	Russian Thistle/Tumbleweed
Salvia Mellifera	Black Sage
Silybum Marianum	Milk Thistle
Tamarix Ramosissima	Salt Cedar
Urtica Urens	Burning Nettle
<b>Ornamental:</b>	
Arecaceae *(all palm species)	Palms * <b>exception: King Palms</b>
Cycas Revoluta	Sago Palms
Cortaderia	Pampas Grass
Cupressus sp	Cypress
Eucalyptus sp	Eucalyptus
Juniperus sp	Juniper
Pinus sp	Pine

# ATTACHMENT 8

## Fuel Modification Zone Plant List

### Symbol Legend

- X = Plant species prohibited in wet and dry FMZs adjacent to reserve lands. Acceptable on all other fuel modification locations and zones.
- W = Plant species appropriate for use in wet FMZs adjacent to reserve lands. Acceptable in all other wet and irrigated dry (manufactured slopes) fuel modification locations and zones.
- o = Plant species native to Orange County. Acceptable in all fuel modification wet and dry zones in all locations.
- N = Plant species acceptable on a limited basis (maximum 30% of the area) in wet FMZs adjacent to reserve lands. Acceptable on all other FMZs.
- \* = If locally collected.
- \*\* = Not native but can be used in all zones.
- n = Plant species acceptable on a limited use basis. Refer to qualification requirements following plant palette.

**Yellow row** = Plant species susceptible to Invasive Shot Hole Borers (ISHB) infestation.

	<b>Code</b>	<b>Botanical Name</b>	<b>Common Name</b>	<b>Plant Form</b>
1.	W	Abelia x grandiflora	Glossy Abelia	Shrub
2.	n	Acacia redolens desert carpet	Desert Carpet	Ground Cover
3.	o	Acer macrophyllum	Big Leaf Maple	Tree
4.	X	Achillea millefolium	Common Yarrow	Low Shrub
5.	W	Achillea tomentosa	Woolly Yarrow	Low Shrub
6.	X	Aeonium decorum	Aeonium	Ground cover
7.	X	Aeonium simsii	no common name	Ground cover
8.	W	Agave attenuata	Century Plant	Succulent
9.	W	Agave shawii	Shaw's Century Plant	Succulent
10.	N	Agave victoriae-reginae	no common name	Ground Cover
11.	X	Ajuga reptans	Carpet Bugle	Ground Cover
12.	W	Alnus cordata	Italian Alder	Tree
13.	o	Alnus rhombifolia	White Alder	Tree
14.	N	Aloe arborescens	Tree Aloe	Shrub
15.	N	Aloe aristata	no common name	Ground Cover
16.	N	Aloe brevifoli	no common name	Ground Cover
17.	W	Aloe Vera	Medicinal Aloe	Succulent
18.	W	Alogyne huegeii	Blue Hibiscus	Shrub
19.	o	Ambrosia chammissonis	Beach Bur-Sage	Perennial

	<b>Code</b>	<b>Botanical Name</b>	<b>Common Name</b>	<b>Plant Form</b>
20.	o	<i>Amorpha fruticosa</i>	Western False Indigobush	Shrub
21.	W	<i>Anigozanthus flavidus</i>	Kangaroo Paw	Perennial/accnt
22.	o	<i>Antirrhinum nuttalianum</i> ssp.	no common name	Subshrub
23.	X	<i>Aptenia cordifolia</i> x 'Red Apple'	Red Apple Aptenia	Ground cover
24.	W	<i>Arbutus unedo</i>	Strawberry Tree	Tree
25.	W	<i>Arctostaphylos</i> 'Pacific Mist'	Pacific Mist Manzanita	Ground Cover
26.	W	<i>Arctostaphylos edmundsii</i>	Little Sur Manzanita	Ground Cover
27.	o	<i>Arctostaphylos glandulosa</i> ssp.	Eastwood Manzanita	Shrub
28.	W	<i>Arctostaphylos hookeri</i> 'Monterey Carpet'	Monterey Carpet Manzanita	Low Shrub
29.	N	<i>Arctostaphylos pungens</i>	no common name	Shrub
30.	N	<i>Arctostaphylos refugioensis</i>	Refugio Manzanita	Shrub
31.	W	<i>Arctostaphylos uva-ursi</i>	Bearberry	Ground Cover
32.	W	<i>Arctostaphylos</i> x 'Greensphere'	Greensphere Manzanita	Shrub
33.	N	<i>Artemisia caucasica</i>	Caucasian Artemisia	Ground Cover
34.	X	<i>Artemisia pycnocephala</i>	Beach Sagewort	Perennial
35.	X	<i>Atriplex canescens</i>	Four-Wing Saltbush	Shrub
36.	X	<i>Atriplex lentiformis</i> ssp. <i>breweri</i>	Brewer Saltbush	Shrub
37.	o	<i>Baccharis emoyi</i>	Emory Baccharis	Shrub
38.	W o	<i>Baccharis pilularis</i> ssp. <i>Consanguinea</i>	Chaparral Bloom	Shrub
39.	X	<i>Baccharis pilularis</i> var. <i>pilularis</i>	Twin Peaks #2	Ground Cover
40.	o	<i>Baccharis salicifolia</i>	Mulefat	Shrub
41.	N	<i>Baileya Multiradiata</i>	Desert Marigold	Ground Cover
42.	N n	<i>Bougainvillea spectabilis</i>	Bougainvillea	Shrub
43.	o	<i>Brickellia californica</i>	no common name	Subshrub
44.	W o	<i>Bromus carinatus</i>	California Brome	Grass
45.	o	<i>Camissonia cheiranthifolia</i>	Beach Evening Primrose	Perennial Shrub
46.	N	<i>Carissa macrocarpa</i>	Green Carpet Natal Plum	Ground Cover/Shrub
47.	X	<i>Carpobrotus chilensis</i>	Sea Fig Ice Plant	Ground Cover
48.	W	<i>Ceanothus gloriosus</i> 'Point Reyes'	Point Reyes Ceanothus	Shrub
49.	W	<i>Ceanothus griseus</i> 'Louis Edmunds'	Louis Edmunds Ceanothus	Shrub
50.	W	<i>Ceanothus griseus horizontalis</i>	Yankee Point	Ground Cover
51.	W	<i>Ceanothus griseus</i> var. <i>horizontalis</i>	Carmel Creeper Ceanothus	Shrub
52.	W	<i>Ceanothus griseus</i> var. <i>horizontalis</i>	Yankee Point Ceanothus	Shrub
53.	o	<i>Ceanothus megarcarpus</i>	Big Pod Ceanothus	Shrub
54.	W	<i>Ceanothus prostratus</i>	Squaw Carpet Ceanothus	Shrub
55.	o	<i>Ceanothus spinosus</i>	Green Bark Ceanothus	Shrub
56.	W	<i>Ceanothus verrucosus</i>	Wart-Stem Ceanothus	Shrub
57.	W	<i>Cerastium tomentosum</i>	Snow-in-Summer	Ground cover/Shrub
58.	W	<i>Ceratonia siliqua</i>	Carob	Tree
59.	W	<i>Cercis occidentalis</i>	Western Redbud	Shrub/Tree

	<b>Code</b>	<b>Botanical Name</b>	<b>Common Name</b>	<b>Plant Form</b>
60.	X	<i>Chrysanthemum leucanthemum</i>	Oxeye Daisy	Ground Cover
61.	W	<i>Cistus Crispus</i>	no common name	Ground Cover
62.	W	<i>Cistus hybridus</i>	White Rockrose	Shrub
63.	W	<i>Cistus incanus</i>	no common name	Shrub
64.	W	<i>Cistus incanus ssp. Corsicus</i>	no common name	Shrub
65.	W	<i>Cistus salviifolius</i>	Sageleaf Rockrose	Shrub
66.	W	<i>Cistus x purpureus</i>	Orchid Rockrose	Shrub
67.	W	<i>Citrus species</i>	Citrus	Tree
68.	o	<i>Clarkia bottae</i>	Showy Fairwell to Spring	Annual
69.	o	<i>Cneoridium dumosum</i>	Bushrue	Shrub
70.	o	<i>Collinsia heterophyllia</i>	Chinese Houses	Annual
71.	W o	<i>Comarostaphylis diversifolia</i>	Summer Holly	Shrub
72.	N	<i>Convolvulus cneorum</i>	Bush Morning Glory	Shrub
73.	W	<i>Coprosma kirkii</i>	Creeping Coprosma	Ground Cover/Shrub
74.	W	<i>Coprosma pumila</i>	Prostrate Coprosma	Low shrub
75.	o	<i>Coreopsis californica</i>	California Coreopsis	Annual
76.	W	<i>Coreopsis lanceolata</i>	Coreopsis	Ground Cover
77.	N	<i>Corea pulchella</i>	Australian Fuchsia	Ground Cover
78.	W	<i>Cotoneaster buxifolius</i>	no common name	Shrub
79.	W	<i>Cotoneaster congestus 'Likiang'</i>	Likiang Cotoneaster	Ground Cover/Vine
80.	W	<i>Cotoneaster aprneyi</i>	no common name	Shrub
81.	X	<i>Crassula lactea</i>	no common name	Ground Cover
82.	X	<i>Crassula multicava</i>	no common name	Ground Cover
83.	X	<i>Crassula ovata</i>	Jade Tree	Shrub
84.	X	<i>Crassula tetragona</i>	no common name	Ground Cover
85.	W o	<i>Croton californicus</i>	California Croton	Ground Cover
86.	X	<i>Delosperma 'alba'</i>	White trailing Ice Plant	Ground Cover
87.	o	<i>Dendromecon rigida</i>	Bush Poppy	Shrub
88.	o	<i>Dichelostemma capitatum</i>	Blue Dicks	Herb
89.	N	<i>Distinctis buccinatoria</i>	Blood-Red Trumpet Vine	Vine/Climbing vine
90.	N	<i>Dodonaea viscosa</i>	Hopseed Bush	Shrub
91.	X	<i>Drosanthemum floribundum</i>	Rosea Ice Plant	Ground Cover
92.	X	<i>Drosanthemum hispidum</i>	no common name	Ground Cover
93.	X	<i>Drosanthemum speciosus</i>	Dewflower	Ground Cover
94.	o	<i>Dudleya lanceolata</i>	Lance-leaved Dudleya	Succulent
95.	o	<i>Dudleya pulverulenta</i>	Chalk Dudleya	Succulent
96.	W	<i>Elaeagnus pungens</i>	Silverberry	Shrub
97.	o	<i>Encelia californica</i>	California Encelia	Small Shrub
98.	o *	<i>Epilobium canum [Zauschneria californica]</i>	Hoary California Fuschia	Shrub
99.	o	<i>Eriastrum Sapphirinum</i>	Mojave Woolly Star	Annual
100.	N	<i>Eriobotrya japonica</i>	Loquat	Tree

	<b>Code</b>	<b>Botanical Name</b>	<b>Common Name</b>	<b>Plant Form</b>
101.	o	Eriodictyon trichocalyx	Yerba Santa	Shrub
102.	W o	Eriophyllum confertiflorum	no common name	Shrub
103.	W	Erythrina species	Coral Tree	Tree
104.	N	Escallonia species	Several varieties	Shrub
105.	W o	Eschscholzia californica	California Poppy	Flower
106.	X	Eschscholzia mexicana	Mexican Poppy	Herb
107.	N	Euonymus fortunei	Winter Creeper Euonymus	Ground Cover
108.	N	Feijoa sellowiana	Pineapple Guava	Shrub/Tree
109.	N	Fragaria chiloensis	Wild Strawberry/Sand Strawberry	Ground Cover
110.	o	Frankenia salina	Alkali Heath	Ground Cover
111.	W	Fremontodendron californicum	California Flannelbush	Shrub
112.	X	Gaillardia x grandiflora	Blanketflower	Ground Cover
113.	W	Galvezia speciosa	Bush Snapdragon	Shrub
114.	W	Garrya ellipta	Silktassel	Shrub
115.	X	Gazania hybrids	South African Daisy	Ground Cover
116.	X	Gazania rigens leucolaena	Training Gazania	Ground Cover
117.	o	Gilia capitata	Globe Gilia	Perennial
118.	W	Gilia leptantha	Showy Gilia	Perennial
119.	W	Gilia tricolor	Bird's Eyes	Perennial
120.	W	Ginkgo biloba	Maidenhair Tree	Tree
121.	o	Gnaphalium californicum	California Everlasting	Annual
122.	W	Grewia occidentalis	Starflower	Shrub
123.	o	Grindelia stricta	Gum Plant	Ground Cover
124.	N n	Hakea suaveolens	Sweet Hakea	Shrub
125.	W	Hardenbergia comptoniana	Lilac Vine	Shrub
126.	N	Heliathemum mutabile	Sunrose	Ground Cover/Shrub
127.	o	Helianthemum scoparium	Rush Rose	Shrub
128.	o	Heliotropium curassavicum	Salt Heliotrope	Ground Cover
129.	X	Helix Canariensis	English Ivy	Ground Cover
130.	W	Hesperaloe parviflora	Red Yucca	Perennial
131.	o n	Heteromeles arbutifolia	Toyon	Shrub
132.	X	Hypericum calycimum	Aaron's Beard	Shrub
133.	N	Iberis sempervirens	Edging Candytuft	Ground Cover
134.	N	Iberis umbellatum	Globe Candytuft	Ground Cover
135.	o	Isocoma menziesii	Coastal Goldenbush	Small Shrub
136.	o	Isomeris arborea	Bladderpod	Shrub
137.	W	Iva hayesiana	Poverty Weed	Ground Cover
138.	N	Juglans californica	California Black Walnut	Tree
139.	o	Juncus acutus	Spiny Rush	Perennial
140.	o	Keckiella antirrhinoides	Yellow Bush Penstemon	Subshrub
141.	o	Keckiella cordifolia	Heart Leaved Penstemon	Subshrub
142.	o	Keckiella ternata	Blue Stemmed Bush Penstemon	Subshrub

	<b>Code</b>	<b>Botanical Name</b>	<b>Common Name</b>	<b>Plant Form</b>
143.	W	Kniphofia uvaria	Red Hot Poker	Perennial
144.	W	Lagerstroemia indica	Crape Myrtle	Tree
145.	W	Lagunaria patersonii	Primrose Tree	Tree
146.	X	Lampranthus aurantiacus	Bush Ice Plant	Ground Cover
147.	X	Lampranthus filicaulis	Redondo Creeper	Ground Cover
148.	X	Lampranthus spectabilis	Trailing Ice Plant	Ground Cover
149.	W	Lantana camara cultivars	Yellow Sage	Shrub
150.	W	Lantana montevidensis	Trailing Lantana	Shrub
151.	o	Lasthenia californica	Dwarf Goldfields	Annual
152.	W	Lavandula dentata	French Lavender	Shrub
152.	W	Leptospermum laevigatum	Australian Tea Tree	Shrub
154.	W	Leucophyllum frutescens	Texas Ranger	Shrub
155.	o	Leymus condensatus	Giant Wild Rye	Large Grass
156.	N	Ligustrum japonicum	Texas privet	Shrub
157.	X	Limonium pectinatum	no common name	Ground Cover
158.	X	Limonium perezii	Sea Lavender	Shrub
159.	W n	Liquidambar styraciflua	American Sweet Gum	Tree
160.	W	Liriodendron tulipifera	Tulip Tree	Tree
161.	X	Lonicera japonica 'Halliana'	Hall's Japanese Honeysuckle	Vining Shrub
162.	o	Lonicera subspicata	Wild Honeysuckle	Vining Shrub
163.	X	Lotus corniculatus	Bird's Foot Trefoil	Ground Cover
164.	o	Lotus hermannii	Northern Woolly Lotus	Perennial
165.	o	Lotus scoparius	Deerweed	Shrub
166.	W	Lupinus arizonicus	Desert Lupine	Annual
167.	W	Lupinus benthamii	Spider Lupine	Annual
168.	o	Lupinus bicolor	Sky Lupine	Flowering annual
169.	o	Lupinus sparsiflorus	Loosely Flowered Annual Lupine or Coulter's Lupine	Annual
170.	W	Lyonothamnus floribundus ssp. Asplenifolius	Fernleaf Ironwood	Tree
171.	W	Macadamia integrifolia	Macadamia Nut	Tree
172.	W	Mahonia aquifolium 'Golden Abundance'	Golden Abundance Oregon Grape	Shrub
173.	W	Mahonia nevenii	Nevin Mahonia	Shrub
174.	o	Malacothamnus fasciculatus	Chapparal Mallow	Shrub
175.	X	Malephora luteola	Training Ice Plant	Ground Cover
176.	W	Maytenus boaria	Mayten Tree	Tree
177.	W	Melaleuca nesophila	Pink Melaleuca	Shrub
178.	N	Metrosideros excelsus	New Zealand Christmas Tree	Tree
179.	o *	Mimulus species	Monkeyflower	Flower
180.	o	Mirabilis californica	Wishbone Bush	Perennial
181.	N	Myoporum debile	no common name	Shrub
182.	W	Myoporum insulare	Boobyalla	Shrub

	<b>Code</b>	<b>Botanical Name</b>	<b>Common Name</b>	<b>Plant Form</b>
183.	W	Myoporum parvifolium	no common name	Ground Cover
184.	W	Myoporum 'Pacificum'	no common name	Ground Cover
185.	o	Nassella (stipa) lepidra	Foothill Needlegrass	Ground Cover
186.	o	Nassella (stipa) pulchra	Purple Needlegrass	Ground Cover
187.	o	Nemophila menziesii	Baby Blue Eyes	Annual
188.	X	Nerium Oleander	Oleander	Shrub
189.	o	Nolina cismontana	Chapparal Nolina	Shrub
190.	N	Nolina species	Mexican Grasstree	Shrub
191.	W	Oenothera belandieri	Mexican Evening Primrose	Ground Cover
192.	N	Oenothera hookeri	California Evening Primrose	Flower
193.	W	Oenothera speciosa	Show Evening Primrose	Perennial
194.	X	Ophiopogon japonicus	Mondo Grass	Ground Cover
195.	o *	Opuntia littoralis	Prickly Pear	Cactus
196.	o *	Opuntia oricola	Oracle Cactus	Cactus
197.	o *	Opuntia prolifera	Coast Cholla	Cactus
198.	W	Osmanthus fragrans	Sweet Olive	Shrub
199.	X	Osteospermum fruticosum	Training African Daisy	Ground Cover
200.	X	Parkinsonia aculeata	Mexican Palo Verde	Tree
201.	W	Pelargonium peltatum	Ivy Geranium	Ground Cover
202.	X	Penstemon species	Beard Tongue	Shrub
203.	W	Photinia fraseria	no common name	Shrub
204.	W	Pistacia chinensis	Chinese Pistache	Tree
205.	X	Pittosporum undulatum	Victorian Box	Tree
206.	o	Plantago erecta	California Plantain	Annual
207.	**	Plantago insularis	Woolly Plantain	Annual
208.	X	Plantago sempervirens	Evergreen Plantain	Ground Cover
209.	W	Plantanus racemosa	California Sycamore	Tree
210.	W	Plumbago auriculata	Plumbago Cape	Shrub
211.	o	Populus fremontii	Western Cottonwood	Tree
212.	X	Portulacaria afra	Elephant's Food	Shrub
213.	o	Potentilla glandulosa	Sticky Cinquefoil	Subshrub
214.	X	Potentilla tabernaemontanii	Spring Cinquefoil	Ground Cover
215.	X	Prunus caroliniana	Carolina Cherry Laurel	Shrub/Tree
216.	o	Prunus ilicifolia ssp. ilicifolia	Holly Leafed Cherry	Shrub
217.	X	Prunus lyonii	Catalina Cherry	Shrub/Tree
218.	N	Punica granatum	Pomegranate	Shrub/Tree
219.	W	Puya species	Puya	Succulent/Shrub
220.	W	Pyracantha species	Firethorn	Shrub
221.	o	Quercus agrifolia	Coast Live Oak	Tree
222.	o n *	Quercus berberidifolia	California Scrub Oak	Shrub
223.	o n *	Quercus dumosa	Coastal Scrub Oak	Shrub
224.	X	Quercus engelmannii	Engelmann Oak	Tree

	<b>Code</b>	<b>Botanical Name</b>	<b>Common Name</b>	<b>Plant Form</b>
225.	X	<i>Quercus suber</i>	Cork Oak	Tree
226.	X	<i>Rhamnus alaternus</i>	Italian Buckthorn	Shrub
227.	o	<i>Rhamnus californica</i>	California Coffee Berry	Shrub
228.	o	<i>Rhamnus crocea</i>	Redberry	Shrub
229.	o	<i>Rhamnus crocea</i> ssp. <i>ilicifolia</i>	Hollyleaf Redberry	Shrub
230.	N	<i>Rhaphiolepis</i> species	Indian Hawthorne	Shrub
231.	o	<i>Rhus integrifolia</i>	Lemonade Berry	Shrub
232.	N	<i>Searsia Lancea</i>	African Sumac	Tree
233.	o n	<i>Rhus ovata</i>	Sugar bush	Shrub
234.	o	<i>Ribes aureum</i>	Golden Currant	Shrub
235.	o	<i>Ribes indecorum</i>	White Flowering Currant	Shrub
236.	o	<i>Ribes speciosum</i>	Fuschia Flowering Gooseberry	Shrub
237.	W	<i>Ribes viburnifolium</i>	Evergreen currant	Shrub
238.	o *	<i>Romneya coulteri</i>	Matilija Poppy	Shrub
239.	X	<i>Romneya coulteri</i> 'White Cloud'	White Cloud Matilija Poppy	Shrub
240.	W n	<i>Rosmarinus officinalis</i>	Rosemary	Shrub
241.	W n	<i>Salvia greggii</i>	Autums Sage	Shrub
242.	W n	<i>Salvia sonomensis</i>	Creeping Sage	Ground Cover
243.	o	<i>Sambucus mexicana</i>	Mexican Elderberry	Tree
244.	W	<i>Santolina chamaecyparissus</i>	Lavender Cotton	Ground Cover
245.	W	<i>Santolina virens</i>	Green Lavender Cotton	Shrub
246.	o	<i>Satureja chandleri</i>	San Miguel Savory	Perennial
247.	o	<i>Scirpis scutus</i>	Hard Stem Bulrush	Perennial
248.	o	<i>Scirpus californicus</i>	California Bulrush	Perennial
249.	X	<i>Sedum acre</i>	Goldmoss Sedum	Ground Cover
250.	X	<i>Sedum album</i>	Green Stonecrop	Ground Cover
251.	X	<i>Sedum confusum</i>	no common name	Ground Cover
252.	X	<i>Sedum lineare</i>	no common name	Ground Cover
253.	X	<i>Sedum x rubrotinctum</i>	Pork and Beans	Ground Cover
254.	X	<i>Senecio serpens</i>	no common name	Ground Cover
255.	o	<i>Sisyrinchium bellum</i>	Blue Eyed Grass	Ground Cover
256.	o	<i>Solanum douglasii</i>	Douglas Nightshade	Shrub
257.	o	<i>Solanum xantii</i>	Purple Nightshade	Perennial
258.	W	<i>Stenocarpus sinuatus</i>	Firewheel Tree	Tree
259.	W	<i>Strelitzia nicolai</i>	Giant Bird of Paradise	Perennial
260.	W	<i>Strelitzia reginae</i>	Bird of Paradise	Perennial
261.	o	<i>Symphoricarpos mollis</i>	Creeping Snowberry	Shrub
262.	W	<i>Tecoma stans</i> ( <i>Stenolobium stans</i> )	Yellow Bells	Shrub/Small Tree
263.	X	<i>Tecomaria capensis</i>	Cape Honeysuckle	Ground Cover
264.	N	<i>Teucarium chamedrys</i>	Germander	Ground Cover
265.	N	<i>Thymus serpyllum</i>	Lemon Thyme	Ground Cover
266.	N	<i>Trachelospermum jasminoides</i>	Star Jasmine	Shrub

	<b>Code</b>	<b>Botanical Name</b>	<b>Common Name</b>	<b>Plant Form</b>
267.	o	Trichostema lanatum	Woolly Blue Curls	Shrub
268.	X	Trifolium hirtum 'Hyron'	Hyron Rose Clover	Ground Cover
269.	X	Trifolium fragerum 'O'Connor's'	O'Connor's Legume	Ground Cover
270.	o	Umbellularia californica	California Laurel	Tree
271.	o	Verbena lasiostachys	Western Vervain	Perennial
272.	N	Verbena peruviana	no common name	Ground Cover
273.	X	Verbena species	Verbena	Ground Cover
274.	X	Vinca minor	Dwarf Periwinkle	Ground Cover
275.	o	Vitis girdiana	Desert Wild Grape	Vine
276.	X	Vulpia myuros 'Zorro'	Zorro Annual Fescue	Grass
277.	W	Westringia fruticosa	no common name	Shrub
278.	W	Xanthorrhoea species	Grass Tree	Perennial, Accent shrub
279.	W	Xylosma congestum	Shiny Xylosma	Shrub
280.	X	Yucca Species	Yucca	Shrub
281.	o	Yucca whipplei	Yucca	Shrub

## Approved Plant Palette Qualification Statements for Select Plant Species

2. **Acacia redolens desert carpet:** May be used in the furthest ½ of the “B” FMZ from the structure, and no closer than 25 feet from the edge of the zone nearest the structure. The plants may be planted with a minimum spacing at 10 feet on center, maximum spacing in meandering zones not to exceed a mature width of 24 feet and mature height of 24 inches. If acacia redolens desert carpet is used in the roadway protection zone, it shall be maintained at a minimum of 25 feet from the curb face. At the time of precise plan review, the mature spacing shall be accounted for.
42. **Bougainvillea spectabilis (procumbent varieties):** Procumbent to mounding varieties may be used in the mid “B” FMZ. The plants may be planted in groups at 6 feet on center spacing not to exceed eight plants per group. Mature spacing between individual plants or groups shall be at a 30 foot minimum.
125. **Hakea suaveolens:** May be used in the mid “B” FMZ. The plants shall be used as single specimens with mature spacing between plants of 30 feet minimum.
132. **Heteromeles arbutifolia:** May be used in the mid to lower “B” FMZ. The plants may be planted in groups of up to 3 plants per group. Mature spacing between individual plants or groups shall be at a 30 foot minimum.
160. **Liquidambar styraciflua:** May be used in the mid “B” FMZ. The plant shall be used as single specimens with mature spacing between trees and a 30 foot minimum.
223. **Quercus berberdifolia:** Additional information may be required as directed by the OCFA unless approved on the plan as shown.
224. **Quercus dumosa:** May be used in the mid to lower “B” FMZ. The plants may be planted in groups of up to 3 plants per group. Mature spacing between individual plants or groups shall be at a 30 foot minimum.
234. **Rhus ovata & Rhus integrifolia:** May be used in the mid to lower “B” FMZ of inland areas only. The plants may be planted in groups of up to 3 plants per group. Mature spacing between individual plants or groups shall be at a 30 foot minimum.
241. **Rosmarinus officinalis:** When used as a ground cover, it shall be maintained at 2 feet in height. Additional information may be required as directed by the OCFA.
242. **Salvia greggii:** Additional information may be required as directed by the OCFA unless approved on the plan as shown.
243. **Salvia sonomensis:** May be used in the mid to upper “B” FMZ. The plants may be planted in groups of up to 3 plants per group. Mature spacing between individual plants or groups shall be at a 15 foot minimum.