

## **Request for Qualifications**

For

**Preferred Construction & Defensible Space Vendors** 

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#### INTRODUCTION

Fire safety is critically important to residents in rural areas. More than half of Lake County's unincorporated communities are located within very high or high fire severity zones. To better protect the homes of residents living in areas most vulnerable to wildfire, North Coast Opportunities (NCO) has been selected to establish a pilot California Wildfire Home Hardening Program in collaboration with the California Office of Emergency Services (Cal OES) and the California Department of Forestry and Fire Protection (CAL FIRE).

This program will focus on retrofitting homes with fire-resistant materials and creating defensible space around homes in the Kelseyville Riviera Community Association (95451). It will provide direct financial assistance to support home hardening work for socially vulnerable and low and moderate-income homeowners, in addition to providing community and homeowner wildfire education on defensible space and home retrofitting.

In support of this grant program, NCO is seeking qualified Vendors to provide as needed home hardening retrofits and defensible space in the Kelseyville Riviera Community Association (95451). Home hardening addresses the most vulnerable components of a home with building materials and installation techniques that increase resistance to heat, flames, and embers that accompany most wildfires. Qualifying homes include Single-family homes and multi-family homes such as duplexes and quadplexes may all be considered. Mobile and manufactured homes may also be eligible. A home assessment will determine the specific measures which may be taken at a homesite. Commercial buildings and apartment complexes do not qualify for this program at this time.

All work completed under the scope of this agreement shall be done in accordance with the California Building Code Chapter 7A. Interested vendors who meet the minimum requirements outlined in Section 1.1 below, may submit a Statement of Qualifications (SOQ) for any or all of the following ten (10) service categories for on site-built, modular, and mobile homes:

- 1. Roof Repair or Replacement (see Requirements for Service on Page 9-10)
- 2. Windows/ Doors Installation, Repair or Replacement (see Requirements for Service on Page 11-12)
- 3. Vent Removal, Repair or Replacement (see Requirements for Service on Page 13-14)
- 4. Garage Door Repair or Replacement (see Requirements for Service on Page 15)
- 5. Gutter and Gutter Covers Repair, Removal, or Installation (see Requirements for Service on Page 16)
- 6. Walls/Siding Installation, Repair or Replacement (see Requirements for Service on Page 17)
- 7. Attachments to Residence Removal, Repair or Replacement (see Requirements for Service on Page 18)
- 8. Mobile Home Hardening Elements (see Requirements for Service on Page 19)
- 9. Defensible Space (see Requirements for Service on Page 20-21)
- 10. Auxiliary Buildings & Structures (see Requirements for Service on Page 22)

## **RFSQ OBJECTIVE**

The objective of this RFSQ process is to create a pool of Qualified Vendors to update harden homes against the risk of wildfire losses through ignition resistant retrofit measures, defensible space, and/or retrofit homes so they may be more resistant to heat, flames, and embers. If approved as a Qualified Vendor, NCO will enter a Master Services Agreement with each vendor establishing them as part of the pool as an NCO Vendor. Once the pool of Qualified Vendors has been compiled, specific Work Order bids will be published by NCO to the pool members ONLY. Bids will be accepted on an as-needed basis at the discretion of the vendor. There is no guaranteed minimum amount of work. Any vendor interested in becoming a Qualified Vendor shall submit a letter of interest based on the initial requirements below.

## QUALIFIED VENDOR LETTER OF INTEREST REQUIREMENTS

## 1. VENDOR CAN MEET MINIMUM QUALIFICATIONS

The following minimum qualifications apply to all the ten (10) service categories listed in Section 1, Scope of Work above.

- a. General Contractor must hold a current license as a General "B" (Residential Builder), "B-2" (Residential Remodeler), HIC (Home Improvement Contractor), C-47 (General Manufactured Housing Contractor) and/or C-61 (Limited Specialty) in California.
- b. Roofers must hold a current license as a D-39 in California.
- c. Defensible Space Vendors must hold a current license as a D-49 (Tree Service) and/or C-27 (Landscaping Construction) in California.
- d. Vendors must not be debarred from conducting business with the State of California.
- e. Vendors must not be on the SAM.Gov Debarment or Suspended list.
- f. Vendors must possess a current business license where required by local law.
- g. Vendors must provide proof of sufficient worker's compensation, general liability insurance in compliance with NCO's 1 million dollar minimum per occurrence, per contract.
- h. Vendor must possess sufficient financial stability to enable the Vendor to finance the construction projects for 30-days while reimbursement from North Coast Opportunities is processed.
- i. Vendor is expected to comply with 2 C.F.R 200., Federal guidelines on federally funded projects.
- j. Vendors are required to provide a 5% Bid Guarantee when Federal SAT (simplified acquisition threshold) is met or exceeded.
- k. Vendors are required to provide a Performance Bond for 100% of the contract price that meets or exceeds a \$25,000 (twenty five thousand dollars).
- 1. Vendors are required to provide a Payment Bond for 100% of the contract price that meets or exceeds a \$25,000 (twenty five thousand dollars).

## 2. VENDOR WILL AGREE TO ASSIGNMENT OF WORK PROCESS

The Work Order process shall be a defined project upon which qualified Vendors will submit competitive bids.

- a. The bid price will determine the task order stipulated lump sum compensation.
- b. Work will be awarded to the lowest qualified bidder.
- c. Work Orders will include a Statement of Work which will describe in detail the scope and the work required for the performance thereof.
- d. Payment for all work shall be firm fixed price contract.
- e. Vendors are not required to bid on Work Orders if they choose not to.
- f. Only those Vendors qualified for the specific category will be contacted to submit bids on Work Orders.
- g. NCO reserves the right to use other than the lowest cost Vendor (s) if, in its sole discretion, it is deemed necessary to respond to an emergency, or to ensure work is completed within a narrow window of opportunity.
- h. "Any and all bids may be rejected if there is a sound documented reason. 2 CFR 200.320
- i. Vendor agrees to furnish all labor, materials, tools, equipment, permits, licenses, HOA committee review fees & applications, and services for the work.
- j. All work shall be performed in a workmanlike manner, in accordance with State and Local Building Codes and applicable ordinances, industry standards and manufacturer specifications.
- k. Substantial Completion shall be achieved within thirty (30) calendar days, dependent on the extent of the scope of work, with an additional seven (7) calendar days shall be allowed for final completion to include punch list items. Substantial Completion is the state in the progress of the work when the work is sufficiently complete in accordance

with the Contract Documents so that the work can be occupied and utilized for its intended use. The number of calendar days from the date of the Notice to Proceed through the date set forth for substantial completion shall constitute the "Term".

- 1. The property shall remain homeowner occupied during construction.
- m. Any defects or deficiencies in materials or workmanship that are deemed by NCO as needing immediate correction shall be addressed within ten (10) days of written notification to the Vendor.
- n. All communications, written or verbal, shall be conducted between the Vendor and homeowner through the NCO Project Manager. If the Vendor has questions or clarifications that need to be made, the Vendor shall contact the Project Manager to discuss the issues that need clarification. Written correspondence shall be in email form and shall be addressed to the Project Manager. Whenever practical, the use of email is preferred form of communication for the project correspondence, and it is recommended that all verbal communications regarding design or contract related issues be followed up with a confirmatory email to the parties involved. The Vendor will be required to respond to any phone, verbal, or electronic communication from the Project Manager, or any other representative of the Home Hardening Program, by the close of business the next day.

### 3. VENDOR WILL AGREE TO PROCESS FOR CHANGES IN THE WORK

Except in an emergency, endangering life or property, no changes in the work shall be made by the Vendor unless Vendor receives a prior written change order agreed upon by the homeowner AND the Project Manager of NCO.

- a. The Agreement sum and Term may be changed only by written Change Order. No extra costs will be paid to Vendor when Vendor has neglected to properly evaluate the extent of the work.
- b. All substitutions and change orders will be approved, in writing, by NCO Project Manager prior to installation, or Vendor risks replacing such materials at their own expense.
- c. Vendor will contact the NCO Project Manager immediately for change orders requiring immediate attention.
- d. Vendor will photograph all work for client file.

## 4. VENDOR CAN FULFILL GENERAL RESPONSIBILITIES

Vendor can show intent that they will agree to be bound by all terms and conditions of the contract documents which will include:

- a. Worksite
  - i. Vendor shall always have a competent resident job superintendent on the worksite while work is in progress. The superintendent will be Vendor's representative at the worksite and shall have authority to act on behalf of Vendor. All directions given to the superintendent shall be binding on Vendor.
  - ii. Vendor shall confine construction equipment, stored materials and equipment, and the operations of workers to only those areas prescribed by NCO. Vendor is responsible for the secure storage of all equipment and materials. The Homeowner and NCO will not be held liable for any losses or damages sustained during the construction project. The Vendor will not store equipment and materials on site that is not used for the work described in the contract/work order for that homesite.
  - iii. During the progress of the work, Vendor shall keep the premises free from accumulation of waste materials, rubbish, and all other debris resulting from the work. At the completion of the work, Vendor shall remove all waste materials, rubbish, and debris from and about the premises, as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and

- ready for occupancy by the homeowner. Vendor shall restore areas disturbed by construction measures to original condition.
- iv. Vendor is responsible for any damages made to the property as a result of performing the scope of work that may occur during the construction period. Vendor will repair or replace all damaged property at no cost to NCO nor the Homeowner.

## b. Construction Debris Removal & Disposal

- i. Vendor shall be responsible for the removal of their own debris, recyclable materials, and green waste.
- ii. Vendor is required to recycle 65% of all debris and show proof by receipt from refuse centers
- iii. Vendor shall provide onsite portable toilet facilities when necessary for staff use in accordance with KRCA's Building Guidelines.
- iv. When applicable, Vendor shall provide plastic dust barrier to renovated areas to minimize dust and use drop cloths to protect flooring and furniture.
- v. Vendor shall vacuum and clean all areas outlined in the specific Scopes of Work for each project.
- vi. Vendor is required to remove all metal objects from the premises once the work is finished.

#### c. Personnel

- Vendor shall appoint one individual to act as the representative regarding the contract. Contact numbers for this individual and for a secondary or back-up person shall be provided to NCO.
- ii. Vendor shall utilize competent employees in performing the work. At the request of NCO, Vendor shall replace any incompetent, unfaithful, abusive and/or disorderly person in Vendor's employ. NCO and Vendor shall each be promptly notified by the other of any complaints received. Smoking and/or vaping is prohibited at homeowner's premises and Vendor shall assure that its employees, Sub-Contractors, and Sub-Contractor's employees abide by the NCO's smoking regulations. All Vendors and Sub-Contractor's vehicles shall have their company names located on the sides and all personnel shall be required to wear company attire. Vendor shall coordinate services with NCO's Project Manager for purposes of this contract whose phone number is 707-998-8665.

## d. Working Hours

i. Normal work hours are from 7:00 A.M. to 5:00 P.M., Monday through Friday. Any changes in the work hours must be agreed to by the Project Manager, homeowner and Vendor and any Sub-Contractors.

#### e. Signage

i. Vendor shall not display any signs, posters, or other advertising matter in or on any part of the Work or around the site thereof without the specific approval in writing by NCO.

#### f. Permits

- i. Vendor should promptly secure and submit to NCO all necessary licenses, permits, inspections and approvals required prior to work beginning and allow all inspections of all work by authorized personnel.
- ii. Vendor or Company Representative will be onsite at all inspections.
- iii. Vendor shall pay for and <u>post</u> on site all permits and licenses necessary to complete the project.
- iv. Vendor and any Sub-Contractors must have current licenses required by the State and County.
- v. Vendor shall provide current copies of company's vehicle insurance.
- vi. Vendor shall comply with all applicable laws, ordinances, rules, regulations, HOA building regulations, and orders of any public body having jurisdiction over the safety of persons or property, or to protect them from damage, injury, or loss; and shall erect

and maintain all necessary safeguards for such safety and protection. All, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Vendor, any Sub-Contractor, or anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, shall be remedied by Vendor. Vendor's duties and responsibilities for the safety and protection of the work shall continue until such time as the work is completed and accepted by NCO.

- vii. Pre-construction nesting bird surveys will be conducted prior to any construction activity and within 7 (seven) days of the commencement of work within nesting bird season (February 1st to August 31st). NCO will be responsible for the expense of the original nesting bird survey. Vendor agrees that any such delay, inefficiency, or interference at no fault of NCO, causing any additional nesting bird surveys to be conducted, will be at the expense of Vendor.
- viii. If any Historic, Native American and/or Archeological artifacts are unearthed during construction, all work must be halted immediately, and Vendor must notify NCO Project Manager. The FEMA Record of Environmental Consideration will be provided to the selected vendors before the quote process. (The REC is issued when FEMA approves the project and will include any environmental conditions)

## g. Damage

i. Any damage to the existing facilities or surrounding grounds shall be restored by the Vendor to an acceptable condition as directed by NCO's Project Manager. No additional compensation shall be made for site restoration.

#### 5. WARRANTY

Vendor shall guarantee to correct any work that fails to conform to the Contract Documents and shall correct such defects due to faulty materials, equipment, or workmanship which appear during the progress of the work or within a period of one (1) year from the date of final inspection and acceptance or such longer periods of time as may be specified by law or by the terms of any special guarantees required by the Contract Documents.

The provisions of the contract will apply to work done by sub-Contractors as well as work done by Vendor. Furthermore, Vendor shall furnish homeowners with all manufacturers and suppliers' written guarantees and warranties covering materials and equipment furnished under the contract.

## 6. EMERGENCIES

In an emergency affecting the safety of life or property, Vendor, without special instruction or authorization from NCO Project Manager, will be permitted, authorized, and directed to act at its own discretion to prevent threatened loss or injury.

Except in the case of an emergency requiring immediate remedial work, any work performed after regular working hours, on Saturdays, Sundays, or legal holidays, shall be performed without additional expense to NCO unless such work has been specifically requested and approved by NCO Project Manager.

Vendor will agree to file with NCO Project Manager the names, addresses and telephone numbers of their representatives who can be contacted at any time in case of emergency. Vendor representatives must be fully authorized and equipped to correct unsafe or excessively inconvenient conditions on short notice by NCO or the public inspectors.

## 7. DEFAULT

Vendor will agree that NCO reserves the right to immediately cancel either in whole or in part any portion of this Agreement due to failure of Vendor to carry out any obligation, term, or condition of the agreement. NCO will issue a written notice of default effective immediately and not deferred by any interval of time. Homeowner will specifically acknowledge that a default shall be any act or failure to act on the part of Vendor including, but not limited to, any of the following:

- a. Vendor fails to adequately perform the services set forth in the specifications of this agreement.
- b. Vendor provides material that does not meet the specifications of this agreement.
- c. Vendor fails to complete the work required within the time stipulated in this agreement; and Vendor fails to make progress in the performance of this agreement and/or gives the NCO reason to believe that Vendor will not or cannot perform to the requirements of this agreement.

## 8. VENDOR WILL ENTER 3<sup>RD</sup> PARTY AGREEMENT WITH HOMEOWNER AND NCO

There will be a third-party agreement made and entered between NCO, the Homeowner, and the Licensed Vendor who will be performing the retrofit on the assigned home and/or Defensible Space. Resident may have a cost share. For homeowners with income exceeding the current AMI in which the homeowner is contributing funds directly payable to NCO.

## 9. VENDOR WILL AGREE TO INVOICING AND PAYMENT PROCEDURE

The Project Manager and Project Coordinators will verify the reported work completion which includes a physical inspection of the property and Lake County permit clearance if applicable. After verification of the work and permit clearance, the Vendor will prepare and submit an invoice. The Project Manager will investigate any discrepancies and make the final determination.

- a. Upon the execution of the triparty agreement, NCO will pay Vendor a onetime upfront payment for 25% of the contracted materials cost.
- b. Vendor shall claim payment only for the amount quoted per project's work order and contract. Vendor will not be compensated for work done beyond what was assigned and approved by the Project Manager. Any excess hours not approved will be absorbed by Vendor.
- c. Invoicing
  - i. NCO will pay Vendors within 30 days of receipt of an invoice. NCO's obligation is payable only and solely from funds appropriated for the purpose of this Agreement.
  - ii. The period of performance specified in Vendor's invoice(s) must coincide with the period of performance specified in the applicable Work Order.
  - iii. Each invoice submitted by Vendor shall specify:
    - 1. NCO contract number
    - 2. Date(s) when work was performed
    - 3. Address or Assessor's I.D. of the property/parcel where work was performed
    - 4. A brief description of the deliverable(s) for which payment is claimed, the respective number(s) assigned to the deliverable(s), and the individual amount being billed for each allowable deliverable.
    - 5. The total amount of the invoice.
  - iv. Invoices shall be submitted to homehardening@ncoinc.org

If Vendor believes they would be a good candidate for the RFSQ Pool based on the above requirements, please submit a Letter of Interest to <a href="mailto:homehardening@ncoinc.org">homehardening@ncoinc.org</a> Letters will be reviewed as received and Vendors will be notified in writing of acceptance to the RFSQ Pool.

Questions should be directed to: <a href="mailto:homehardening@ncoinc.org">homehardening@ncoinc.org</a> or (707) 461-0760

# REQUIREMENTS FOR SERVICE CATEGORY #1 ROOF REMOVAL, REPAIR, OR REPLACEMENT

(PERMIT REQUIRED)

DISCLAIMER: All work specified below is not all-inclusive. They are general requirements so Vendors can have a preview of the typical specifications utilized on Home Hardening projects. Prior to an awarded Vendor starting a specifically assigned project, the Vendor is required to verify exact measurements, size and quantities, understand job conditions, and to immediately notify the NCO Project Manager of any other work necessary to achieve quality finished products that meet or exceed applicable specs and codes prior to work commencing. See Attachment A for additional details.

## **General Requirements:**

- Roof assemblies shall be Class A rated as described in the CBC Section 705A Roofing and CRC R337.5.2, CBC Chapter 15 or CRC Section R901.1-R908.6, and CRC Chapter 9 or equivalent local ordinance. Roof Coverings or equivalent local ordinance.
- Vendor is responsible for confirming all measurements, roof square footage, and quantities for all roofing materials required to complete roof replacement when final quote is submitted.
- Shingle color to be selected by homeowner and approved by HOA review committee.
- Vendor is required to notify Project Manager two working days in advance of roof tear off date.
- Prior to dry-in decking, truss repair and wood fascia must be inspected by County inspector.
   Inspection date and time to be established by Vendor. Vendor to inform Project Manager of appointment date and time.
- Vendor and employees must use extreme caution while working around electrically charged wires to
  existing weather-head. Vendor and Sub-Contractors are responsible for providing safety training for
  all employees and trades while conducting work activities related to this project.
- Remove all existing shingles and underlayment down to roof decking.
- Replace roof covering with Class A where required.
- Replace plastic skylight with multi-pane tempered glass outer pane. If skylight opens, install metal screen on the inside and mesh will not exceed 1/8". If screen is non-metal on the inside, replace with metal replace with metal screen. Install or replace metal flashing if necessary. Refer to Chapter 7A section 708A (Exterior Windows, Skylights, and Doors).
- Install metal flashing at roof-to-wall to avoid moisture problems.
- Install a non-combustible gutter cover. If non-combustible gutter cover cannot be installed on combustible gutter, replace gutter with a non-combustible material and fitted with non-combustible cover.
- Install a metal drip edge on all gutters.
- Add metal flashing (Drip edge by 1 ½") if fascia does not cover roof sheathing.
- Close, plug, or fill roof opening with metal or non-combustible bird stopping.
- Replace non-metal ridge vents with metal ridge vents and install according to manufacturer's recommendations.
- Replace off-ridge vents with ember and flame-resistant vents and install according to manufacturer's recommendations.
- Add metal baffles or replace plastic ridge vent with metal ridge vent.

## **Services:**

- Vendor to remove all existing shingles and underlayment down to roof decking.
- Vendor to remove gutters carefully and reinstall existing gutters when roof is complete. Note: This
  only applies to existing gutters.
- Re-nail existing sheathing per code specifications.
- Furnish and install code compliant underlayment properly nailed per code.
- Furnish and install new code compliant roof plumbing vent stacks.

- Apply roofing tar and fasteners, per manufacturer instructions.
- Furnish and install new retrofit adjustable pipe flashing boot around existing weather-head, mounted through roof.
- Remove all water damaged wood fascia around home as needed. Note: Project Manager must inspect repair before covering.
- Furnish and install pressure treated lumber to replace rotten framing, behind finished fascia. Note: Project Manager must inspect repair before covering.
- Furnish and install pressure treated lumber to replace rotten finished fascia. Note: Project Manager must inspect repair before covering.
- Furnish and install the same species of lumber to replace rotten trusses, rafters, or truss tails. Note: Project Manager must inspect repair before covering.
- Furnish and install new metal ridge vent with matching shingles installed on top surface, per Building Code and Manufacturer specifications.
- Furnish and install new drip edge to cover entire roof perimeter. Drip edge to match color of shingles, per Building Code and Manufacturer specifications.
- Furnish and install 30-year architectural/dimensional shingles for repaired roof area. Provide warranty information.
- During roof rafter and fascia repairs, soffits, and other brackets may become loose and come apart.
   Vendor to reinstall all loose brackets and soffit sections around entire home, as needed. All damaged soffits during construction are the Vendor's responsibility to furnish and install to original condition.
- Construct/reconstruct and re-roof any crickets that may be needed for the upslope side of any/all fireplace penetrations.
- Vendor to spread tarps along the base of home to protect shrubs and catch roofing debris during demo and reinstallation.
- Vendor to thoroughly clean up roof debris to exterior of home and use rolling magnet device to pickup nails when roof replacement is completed.

# REQUIREMENTS FOR SERVICE CATEGORY #2 WINDOWS/DOORS INSTALLATION, REPAIR, OR REPLACEMENT

(PERMIT MAY BE REQUIRED)

DISCLAIMER: All work specified below is not all-inclusive. They are general requirements so Vendors can have a preview of the typical specifications utilized on Home Hardening projects. Prior to an awarded Vendor starting a specifically assigned project, the Vendor is required to verify exact measurements, sizes, and quantities, understand job conditions, and to immediately notify the County Project Manager of any other work necessary to achieve quality finished products that meet or exceed applicable specs and codes prior to work commencing. See Attachment A for additional details.

## **General Requirement:**

- Vendor shall meet all requirements for the California Building Code Chapter 7A, Section 708A Exterior Windows, and Doors.
- Vendor is responsible for all final measurements of windows and doors.
- Vendor must provide all materials required to complete replacement of windows and doors according to manufacturer's recommendations.
- Window and door color will be selected by the homeowner.
- Vendor is required to notify Project Manager two working days in advance of window and door replacement date.
- Prior to window and door installation, the area must be inspected by the County Project Manager
- Vendor will remove and discard of all existing exterior windows and doors to prepare the site.
- Vendor will use retrofit windows or equivalent and install according to manufacturer's recommendations.
- Vendor and its employees must use extreme caution while working around electrically charged wires to existing weather-head.
- Vendor and employees must use extreme caution while working around electrically charged wires to existing weather-head. Vendor and Sub-Contractors are responsible for providing safety training for all employees and trades while conducting work activities related to this project. Vendor may shift furniture, curtains, blinds, and any other contents in order to protect asset. Vendor will concur with Homeowner on best option.

### **Services:**

## Windows

- Replace exterior windows with dual pane (exterior pane will need to be tempered glass) windows and install according to manufacturer's recommendations. Refer to Chapter 7A Section 708A.
- Replace all single paned windows with non-combustible frame and dual pane windows and install according to manufacturer's recommendations.
- Replace all exposed wooden or aluminum frame dual pane windows with non-combustible frame and dual pane windows along with adding a metal screen and install according to manufacturer's recommendations.
- Reseal windows and paint around windows to match residential house.
- Vendor will make sure windows open and close freely once window installation is complete.

### Window Screens

 Add metal screen on exterior opening windows and install according to manufacturer's recommendations.

#### Exposed Wooden Frame Single Pane

• Vendor will replace with non-combustible frame and dual pane exterior window.

## Exposed Wooden Frame Dual Pane Exterior Windows (without screen)

- Vendor will add a metal screen and install according to manufacturer's recommendations.
- Vendor will replace with non-combustible frame and dual pane exterior windows and install according to manufacturer's recommendations.

## Exterior Doors (non-sliding)

- Furnish and install new pre-hung, insulated metal door according to manufacturer's recommendations. Refer to Chapter 7A Section 708A.3.
- Install metal jam door kit and metal threshold, add metal kick plate and a metal door bottom according to manufacturer's recommendations.
- Replace with metal door frame and metal threshold, add metal kick plate and a metal door bottom.

## Exterior Door (sliding)

- Replace with non-wood containing slider with dual pane tempered glass and with metal screen and install according to manufacturer's recommendations.
- Install with double pane windows (both panes tempered) according to manufacturer's recommendations.

#### Wood Screen Door

• Replace wooden screen door with metal door frame.

## Plastic Screen in Screen Door

• Replace with metal screen (1/16 inch or greater).

## REQUIREMENTS FOR SERVICE CATEGORY #3 VENT REMOVAL, REPAIR, OR REPLACEMENT

(PERMIT MAY BE REQUIRED)

DISCLAIMER: All work specified below is not all-inclusive. They are general requirements so Vendors can have a preview of the typical specifications utilized on Home Hardening projects. Prior to an awarded Vendor starting a specifically assigned project, the Vendor is required to verify exact measurements, sizes, and quantities, understand job conditions, and to immediately notify the County Project Manager of any other work necessary to achieve quality finished products that meet or exceed applicable specs and codes prior to work commencing. See Attachment A for additional details.

## **General Requirements:**

- Vendor will meet all requirements for the California Building Code Chapter 7A, Section 706A and 707A.5.
- Vendor will remove all existing vents that are not compliant with the California Fire Code Chapter 7A Section 706A and replace with code compliant materials and according to manufacturer's recommendations.
- Vendor is responsible for replacing all vents and furnishing materials as needed.
- Vendor is required to notify Project Manager two working days in advance of the tear out date.
- Vendor and its employees must use extreme caution while working around resident's home.
- Vendor is responsible for providing safety training for all employees and trades while conducting work activities related to this project.

#### **Services:**

- Remove all Ridge Vents in addition to metal baffle and replace with a with a metal ridge according to manufacturer's recommendations.
- Remove all Gable Vents and replace with ember and flame-resistant Gable Vents and according to manufacturer's recommendations.
- Replace all under eave vents in the under-eave area with ember and flame-resistant vents and add fire caulking around all blocking.

## Ridge Vent

- Add metal baffle
- Replace ridge vent with metal ridge vent

#### Off Ridge

• Replace with ember and flame-resistant vent

#### Gable Vent

- Removal and replace Gable Vent and replace with ember and flame-resistant vent.
- Replace Gable Vents with ember and flame-resistant material vents according to manufacturer's recommendations. Refer to Chapter 7A Section 706A.

Under eave and any vents in the under-eave area on the rake (gable) end of the building

- Vendor will meet all requirements for the California Building Code Chapter 7A, Section 706A and 707A.5 and install according to manufacturer's recommendations.
- Replacement with ember and flame-resistant vent, add fire caulking around all blocking.
- Create a soffited eave (horizontal) or closed eave (angled) using non-combustible or ignition-resistant material. Refer to Chapter 7A Section 707A.4

## Crawl space vents

- Replace with ember and flame-resistant vent according to manufacturer's recommendations.
- Replace with ember and flame-resistant vent and add moisture barrier (reducing required vent area by 10x) according to manufacturer's recommendations.

## Dryer Vents

• Install metal flapper (closed unless in use) according to manufacturer's recommendations.

## Makeup Air Intake

• Replace makeup air intake vents with ember and flame-resistant vents according to manufacturer's recommendations.

## Other Penetrations (e.g., electrical, water)

• Close with fire caulking and inspect during routine maintenance

## REQUIREMENTS FOR SERVICE CATEGORY #4 GARAGE DOOR REPLACEMENT OR REPAIR

(PERMIT NOT REQUIRED)

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## **General Requirements:**

- Vendor will meet all requirements for the California Building Code Chapter 7A, Section 708A4.
- Vendor will remove all existing garage door materials that are not compliant with the California Fire Code Chapter 7A and replace with code compliant materials.
- Vendor is required to notify Project Manager two working days in advance of the tear out date.
- Vendor and employees must use extreme caution while working around resident's home.
- Vendor and employees must use extreme caution while working around electrically charged wires to
  existing weather-head. Vendor and Sub-Contractors are responsible for providing safety training for
  all employees and trades while conducting work activities related to this project.

#### **Services:**

- If garage door is not metal, cover with metal flashing around the bottom of the door (both inside and outside for first 6 inches using a metal "C" channel)
- Add metal flashing at base of the framing for first 6 inches, going as close to the ground as possible (<</li>
   1/8" desired, raise wood and extend flashing to lower than bottom of wood)
- Add gasketing if gaps are present
- Replace all wooden garage doors with metal doors and install according to manufacturer's recommendations.
- Add metal flashing to wooden door jams and headers.

## REQUIREMENTS FOR SERVICE CATEGORY #5 GUTTER INSTALLATION, REPAIR, OR REPLACEMENT

(NO PERMIT REQUIRED)

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## **General Requirements:**

- Vendor will meet all requirements for the California Building Code Chapter 7A, Section 705A.4.
- Vendor will remove all existing combustible materials that are not compliant with the California Fire Code Chapter 7A and replace with code compliant materials.
- Vendor is required to notify Project Manager two working days in advance of the tear out date.
- Vendor and employees must use extreme caution while working around resident's home.
- Vendor and employees must use extreme caution while working around electrically charged wires to
  existing weather-head. Vendor and Sub-Contractors are responsible for providing safety training for
  all employees and trades while conducting work activities related to this project.

#### **Services:**

- Vendor is responsible for the removal of all combustible gutters.
- If there is no gutter, add metal flashing if fascia does not cover roof sheathing.
- Install non-combustible gutter cover.
- If a non-combustible gutter cover cannot be installed on combustible gutter, gutter must be replaced with non-combustible material and fitted with non-combustible cover.
- Installation of a metal drip edge.

# REQUIREMENTS FOR SERVICE CATEGORY #6 WALL/SIDING INSTALLATION, REPAIR, OR REPLACEMENT

(PERMIT REQUIRED)

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## **General Requirements:**

Vendor will meet all requirements for the California Building Code Chapter 7A, Section 707A.3

## **Services:**

- Vendor will remove and replace all combustible exterior wall covering non-combustible exterior wall covering.
- Vendor will replace exterior wall covering with non-combustible materials for the bottom 2 ft (from ground).
- Vendor will add metal flashing to protect bottom edge of sheathing.
- Vendor will enclose exposed framing with non-combustible material. If the framing is enclosed with combustible material, it will need to be replaced with non-combustible material.
- Vendor and employees must use extreme caution while working around electrically charged wires to
  existing weather-head. Vendor and Sub-Contractors are responsible for providing safety training for
  all employees and trades while conducting work activities related to this project.

#### **Bump Outs**

- Add on top (of existing cladding) or replace with non-combustible cladding. Trim must be non-combustible.
- If exposed framing, enclosing with non-combustible material. If enclosed with combustible material, replacing, or covering with non-combustible. Trim must be non-combustible and extend (vertically) to account for added material.

### Siding

- Replace all combustible siding with non-combustible options.
- Replacing all under eave construction with non-combustible options or cover with non-combustible material
- Replace all siding around dual pane windows.

### Window

Replacing with Dual pane window with one pane being tempered.

#### Trim

• Install trim that is non-combustible.

# REQUIREMENTS FOR SERVICE CATEGORY #7 ATTACHMENTS TO RESIDENCE REMOVAL, REPAIR, OR REPLACEMENT

(PERMIT MAY BE REQUIRED)

DISCLAIMER: All work specified below is not all-inclusive. They are general requirements so Vendors can have a preview of the typical specifications utilized on Home Hardening projects. Prior to an awarded Vendor starting a specifically assigned project, the Vendor is required to verify exact measurements, size and quantities, understand job conditions, and to immediately notify the County Project Manager of any other work necessary to achieve quality finished products that meet or exceed applicable specs and codes prior to work commencing. See Attachment A for additional details.

## **General Requirements:**

Vendor will meet all requirements for the California Building Code Chapter 7A, Section 709A.

## **Services:**

Decks, Stairs, and Landings that Attach to Residence

- Vendor will remove all combustible decks, stairs, and landing material.
- Vendor will replace the walking surface deck boards with non-combustibledeck board for first 1 ft. away from residence.
- Vendor will replace entire deck with non-combustible option (metal or other option). within 10 feet of the building it is attached to.

## Deck-to-Wall Intersection

- Vendor will replace bottom 2 ft. combustible siding with non-combustible (e.g., fiber cement) and add metal flashing to protect exposed sheathing.
- Vendor will remove combination decks that are combustible within the 0-5 ft zone around decks and will replace the combination deck with a non-combustible or fire treated material.

#### Between Deck Boards

Insert metal flashing between deck boards at joists.

### Fence to Residence

• Replace with non-combustible option (metal or other option). Distance guidance needed (8' minimum).

### Steps Connected to Residence

- Introduction of non-combustible barrier/section between steps and house (12 inches minimum).
- Introduction of non-combustible barrier/section between handrails and residence or replace with non-combustible handrail (12 inches minimum).

#### Other Attachments

• Introduction of non-combustible barrier/section between combustible attachment and residence or replace with non-combustible (12 inches minimum).

## Attached Retaining Wall

 Replace retaining wall length equal to two times retaining wall height with non-combustible components.

## REQUIREMENTS FOR SERVICE CATEGORY #8 MOBILE HOMES

(PERMIT MAY BE REQUIRED)

DISCLAIMER: All work specified below is not all-inclusive. They are general requirements so Vendors can have a preview of the typical specifications utilized on Home Hardening projects. Prior to an awarded Vendor starting a specifically assigned project, the Vendor is required to verify exact measurements, size and quantities, understand job conditions, and to immediately notify the County Project Manager of any other work necessary to achieve quality finished products that meet or exceed applicable specs and codes prior to work commencing. See Attachment A for additional details.

## **General Requirements:**

- Vendor will meet all requirements for the California Building Code Chapter 7A Urban Interface requirements, Section 701A.
- If mobile home was built after June 15, 1976, and is located on a private lot and is attached to a designated foundation system, it shall comply with the provisions of Section 18551 of the health and safety code. If covered with a non-combustible exterior wall finish (stucco, cement fiber board, etc.) per Lake County Building code 704A.3.1. The exterior covering material shall extend to the ground, accept that when a solid concrete or masonry perimeter foundation is used, the exterior covering material need not extend below the top of the foundation.
- Roofs shall have a pitch of not less than 2" vertical rise for each 12" of horizontal run (2:12 bracket) and consist of asphalt shingles or other materials customarily used for conventional dwellings, unless waived by the director of the Lake County Building Department. All roofing shall have a Class "A" fire rating per Lake County building code Section 1505.1.

### **Services:**

## Skirting

Vendor will install mobile home non-combustible skirting on all sides.

Crawl space vents according to manufacturer's recommendations.

• Vendor will install ember and flame-resistant vents according to manufacturer's recommendations. if venting is required.

## REQUIREMENTS FOR SERVICE CATEGORY #9 DEFENSIBLE SPACE

(PERMIT MAY BE REQUIRED)

DISCLAIMER: All work specified below is not all-inclusive. They are general requirements so Vendors can have a preview of the typical specifications utilized on Home Hardening projects. Prior to an awarded Vendor starting a specifically assigned project, the Vendor is required to verify exact measurements, size and quantities, understand job conditions, and to immediately notify the County Project Manager of any other work necessary to achieve quality finished products that meet or exceed applicable specs and codes prior to work commencing. See Attachment A for additional details.

## **General Requirements:**

Contractor will meet all requirements for the California Building Code Chapter 7A, Section 709A.

## **Defensible Space Measures:**

#### Zone 0

- Removal of leaves, needles or other vegetation on roofs, gutters, decks, porches, stairways in compliance with PRC 4291
- No equipment shall be used that will damage existing building components.
- All vegetation removed from the project site will be disposed at an approved facility.
- Vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure. Removal of leaves, needles or other vegetation on roofs, gutters, decks, porches, stairways.
- Combustible item removal within Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck.
- All items designated for removal will be identified by flagging or marking prior to initiating work.
- Remove all woodchips, bark, combustible mulch, synthetic lawns, combustible boards, timbers, planting
  pots or containers.
- Remove combustible materials located on top of or underneath a deck, balcony, or stairs.
- All combustible material removed from the project site will be disposed at an approved facility.
- All hazardous materials will be disposed of at an approved facility.
- No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.
- Combustible item removal within Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck.
- All items designated for removal will be identified by flagging or marking prior to initiating work.
- Remove all woodchips, bark, combustible mulch, synthetic lawns, combustible boards, timbers, planting pots or containers.
- Remove combustible materials located on top of or underneath a deck, balcony, or stairs.
- Remove planting pots or containers, regardless of material, mounted on the structure or located directly beneath a window
- Relocate exposed firewood piles in Zone 0 (that are not completely covered in a fire-resistant material) 30 feet from the primary structure, adjacent residences, accessory buildings, fences and other miscellaneous structures.
- Remove exposed firewood located in Zone 0 and from the property.
- Stumps or logs shall be removed, cut or mulched down to ground level.
- Remove all living, dead or dying grass, including grass lawns, herbaceous ground covers, plants, shrubs and bushes within Zone 0 including underneath decks, balconies, or stairs.

- Tree felling will only be performed on the designated property. Property boundary delineations will be identified prior to the initiation of work. If flagging is required, the property boundary will be identified in red flagging.
- It is the responsibility of the contractor to adhere to local ordinances regulating tree removal and to obtaining applicable permits.
- Trees designated for removal will be marked with blue tracer paint. Designated trees will have a painted highly visible attention band 2" wide at eye level. The attention mark will be visible from 360 degrees and from at least 50 feet. Cut trees will also have two painted stump marks on all marked trees. The stump marks shall be placed in the furrows of the bark at ground level on the downhill and uphill sides of the trees. Stump marks will touch the ground and be at least 2" wide.
- Tree stumps will be removed to ground level. Stump material deposited on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure. Areas with equipment or work exclusions will be flagged prior to the initiation of work. Watershed and Lake Protection Zones (WLPZ) delineations will be identified with blue and white stripe flagging with "Watercourse and Lake Protection Zone" black print. Equipment Exclusion Zone delineations will be identified with yellow and white stripe flagging with "Equipment Exclusion Zone" black print.
- Remove all live and dead tree branches 10 feet above the roof and 10 feet away from chimneys and stovepipe outlets. Remove all live or dead branches or ladder fuels within five feet (5 ft.) of the sides of the structure in Zone 0.
- The contractor will prepare a hardscaping site plan that include all areas around the structure including any attached decks.
- The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).
- The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.
- No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.

#### Zone 1

- Annual Grasses and Forbs will be mowed or cut and should not exceed 4 inches in height. If there are areas that need to be retained to a height not to exceed 18 inches above the ground, where necessary to stabilize the soil and prevent erosion, the areas will be identified to the contractor and flagged prior to the initiation of work. Removal of all branches within 10 feet (or more if local ordinance is more stringent) of any chimney or stovepipe outlet.
- Removal of leaves, needles, cones, bark, etc. from roofs, gutters, decks, porches, stairways, etc.
- Stumps or logs shall be removed, cut or mulched down to ground level.
- Vegetation stems/stobs/stumps will be removed to ground level.
- Lower limbs of trees will be limbed/pruned to at least 6 feet up to 15 feet (or the lower 1/3 branches for small trees).
- Removal of dead and dying trees, branches and shrubs or other plants adjacent to or overhanging buildings.
- If this includes the removal of conifer trees, ensure the procedures for obtaining a timber harvest exemption are followed (if applicable).
- Trees designated for removal will be marked with blue tracer paint. Designated trees will have a painted highly visible attention band 2" wide at eye level. The attention mark will be visible from 360 degrees and from at least 50 feet. Cut trees will also have two painted stump marks on all marked trees. The stump marks shall be placed in the furrows of the bark at ground level on the downhill and uphill sides of the trees. Stump marks will touch the ground and be at least 2" wide.
- Tree stumps will be removed to ground level.

- It is the responsibility of the contractor to adhere to local ordinances regulating tree trimming and to obtain applicable permits.
- Areas with equipment or work exclusions will be flagged prior to the initiation of work. Watershed and Lake Protection Zones (WLPZ) delineations will be identified with blue and white stripe flagging with "Watercourse and Lake Protection Zone" black print. Equipment Exclusion Zone delineations will be identified with yellow and white stripe flagging with "Equipment Exclusion Zone" black print.
- Removal of dead and dying grass, plants, shrubs, trees, branches, leaves, weeds and needles within (the distance provided by state or local ordinance) of the home.
- If this includes the removal of conifer trees, the subrecipient will ensure the procedures for obtaining a timber harvest exemption are followed (if applicable).
- Creation of appropriate separation of (the distance provided by state or local ordinance) between shrubs and live flammable ground cover and all structures.
- If this includes the removal of conifer trees, ensure the procedures for obtaining a timber harvest exemption are followed (if applicable).
- Removal of any flammable vegetation or items that could catch fire that are adjacent to or below combustible decks, balconies, and stairs.
- If this includes the removal of conifer trees, the subrecipient will ensure the procedures for obtaining a timber harvest exemption are followed (if applicable).
- Relocation of firewood and lumber not completely covered in fire-resistant material to Zone 2 or distance established by local ordinance if more stringent
- Installation of hardscape like gravel, pavers, concrete and other non-combustible mulch materials. No combustible bark or mulch.
- Replacement of combustible fencing, gates, and arbors attached to the residence with non-combustible alternatives
- Areas with equipment or work exclusions will be flagged prior to the initiation of work. Watershed and Lake Protection Zones (WLPZ) delineations will be identified with blue and white stripe flagging with "Watercourse and Lake Protection Zone" black print. Equipment Exclusion Zone delineations will be identified with yellow and white stripe flagging with "Equipment Exclusion Zone" black print.
- All vegetation removed from the project site will be disposed at an approved facility.
- Vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.
- The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).
- No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.

## Zone 2

- Annual Grasses and Forbs will be mowed or cut and should not exceed 4 inches in height. If there are areas that need to be retained to a height not to exceed 18 inches above the ground, where necessary to stabilize the soil and prevent erosion, the areas will be flagged prior to the initiation of work.
- Trimming or removal of any tree branches that are at least (the distance provided by state or local ordinance) from the ground.
- Tree felling for designated trees within Zone 2 which extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure, but not beyond the property line.
- The contractor shall utilize qualified tree workers as described in Title 8 California Code of Regulations Section 3420(b). The contractor shall comply with applicable requirements for tree workers identified in Title 8 California Code of Regulations for Tree Work, Maintenance or Removal including sections 3420-3427 & 3458. The contract shall also abide by other requirements in Title 8 California Code of Regulations including, section 2940,2 (Clearances from high-voltage power lines), 3203 (Injury and Illness Prevention), 3328 (Machinery and equipment), 3380 (Personal Protective Devices), 3395 (Heat

- Illness Prevention), and 3648 (Fall protection). For additional information see the Cal/OSHA Tree Work Safety Guide.
- Lower limbs of trees will be limbed/pruned to at least 6 feet up to 15 feet (or the lower 1/3 branches for small trees).
- Stumps shall be removed, cut or mulched down to ground level.
- Stump material deposited on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.
- Creation of vertical space (3 times the height of shrub) between grass, shrubs and trees.
- Creation of effective horizontal space between shrubs and trees.
- If this includes the removal of conifer trees, ensure the procedures for obtaining a timber harvest exemption are followed (if applicable).
- If woodpile(s) are exposed, creation of a minimum of 10 feet of clearance, down to bare mineral soil, in all directions.
- Removal of any dead and dying woody surface and aerial fuels.
- Removal of fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of 3 inches.
- Removal of logs or stumps embedded in the soil that are close to other vegetation.
- Vegetation will be removed to ground level.
- Groups of vegetation (numerous plants growing together less than 10 feet in total foliage width) may be treated as a single plant.
- Vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.
- Areas with equipment or work exclusions will be flagged prior to the initiation of work. Watershed and Lake Protection Zones (WLPZ) delineations will be identified with blue and white stripe flagging with "Watercourse and Lake Protection Zone" black print. Equipment Exclusion Zone delineations will be identified with yellow and white stripe flagging with "Equipment Exclusion Zone" black print.
- The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).
- No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.
- The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.

## Other

- Ensuring 10 feet of clearance to the bare mineral soil and no flammable vegetation for an additional 10 feet around their exterior.
- Relocate propane tank if necessary.
- Replacing address numbers displayed in contrasting colors (4" min. size) and place where readable from the street or access road.
- Covering the chimney and/or stovepipe opening with a metal screen mesh having openings between 3/8and 1/2-inch.

## REQUIREMENTS FOR SERVICE CATEGORY #10 AUXILIARY BUILDINGS & STRUCTURES

(Eg: Storage Units, Tool Sheds, and Playground Equipment)
(PERMIT MAY BE REQUIRED)

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## **General Requirements:**

Vendor will meet all requirements for the California Building Code Chapter 7A, Section 710A.

## **Services:**

- Relocation
- Removal
- Retrofitting

Codo	Retrofit	Minimum Quality Standard
ROO-AFR	Roof Assembly Full Replacement Retrofit	*Roof assemblies shall be Class A rated as described in the CBC Section 705A Roofing and CRC R337.5.2 Roof Coverings or equivalent local ordinance.  *The roof covering/assembly will be replaced with a similar code compliant product.  *The Roof will have a 30 year lifecycle.  *Roofs will be installed by its listing and the manufacturer's installation instructions.  *Roofs will be assembled following the CBC Chapter 15 Roof Assemblies and Rooftop Structures or CRC Chapter 9 Roof Assemblies or equivalent local ordinance.
ROO- APR	Roof Assembly Partial Replacement Retrofit	*Roof assemblies shall be Class A rated as described in the CBC Section 705A Roofing and CRC R337.5.2 Roof Coverings or equivalent local ordinance.  *The roof covering/assembly will be replaced with a similar code compliant product.  *The Roof will have a 30 year lifecycle.  *Roofs will be installed in accordance with its listing and the manufacturer's installation instructions.  *Roofs will be assembled following the CBC Chapter 15 Roof Assemblies and Rooftop Structures or CRC Chapter 9 Roof Assemblies or equivalent local ordinance.
ROO- AOR	Roof Assembly Openings or Gaps Retrofit	*Shall comply with CBC Section 705A.2 Roof Coverings or CRC R337.5.2 Roof Coverings or equivalent local ordinance.  *Bird stops shall be used at the eaves when the profile fits, to prevent debris at the eave.  *Hip and ridge caps shall be mudded in to prevent intrusion of fire or embers or CRC Section.
ROO- DER	Roof Drip Edge Retrofit	*Roof drip edge shall comply with CBC Section 1503.2 Flashing or CRC Section R903.2 Flashing or equivalent local ordinance.  *The roof drip edge shall extend down to the gutter.
ROO- VAR	Roof Valley Retrofit	*Roof valley retrofit shall comply with CBC Section 705A.3 Roof Valley and CBC Chapter 15 or CRC R337.5.3 Roof Valleys and CRC Chapter 9 or equivalent local ordinance.
ROO- CDR	Roof Combustible Debris Removal	*Leaves, needles or other vegetation on roofs will be removed in compliance with PRC § 4291 (a)(4) or GC Section 51182 (a)(4) and 14 CCR § 1299.03(a)(1) or equivalent local ordinance.  *No equipment shall be used that will damage roof assembly building components.  *Personnel working on a roof will have the required licenses and training.  *All vegetation removed from the project site will be disposed at an approved facility.
ROO- CAR	Roof Combustible Attachment Retrofit	*Features attached to the roof (Solar Panels, Air Conditioners, etc.) will be installed with non-combustible attachments and provide adequate clearance underneath the attachment to reduce the accumulation of debris.
GUT- COR	Gutter Cover Retrofit	*Shall comply with the CBC Section 705A.4 Roof Gutters or CRC R337.5.4 Roof Gutters or equivalent local ordinance.  *Roof gutter covers will be replaced with a noncombustible and corrosion resistant material and if available an integrated metal drip edge.

GUT- SYR	Gutter System Replacement Retrofit	*Roof gutters shall comply with the CBC Section 705A.4 Roof Gutters or CRC R337.5.4 Roof Gutters or equivalent local ordinance.  *Roof gutter systems will be replaced with a noncombustible and corrosion resistant material not less than .032 gauge.  *The roof gutter components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *Roof gutter replacement color shall be matched with existing building components.
GUT- CDR	Gutter Combustible Debris Removal	*Leaves, needles or other vegetation on and in gutters will be removed in compliance with PRC § 4291 (a)(4) or GC Section 51182 (a)(4) and 14 CCR § 1299.03(a)(1) or equivalent local ordinance.  *No equipment shall be used that will damage roof assembly building components.  *All vegetation removed from the project site will be disposed at an approved facility.
FAS- FFR	Roof Eave Fascia Replacement Retrofit	*Roof eave fascia materials will be replaced in compliance with the CBC Section 707A Exterior Covering or CRC Section R337.7 Exterior Covering.  *Roofs will be assembled following the CBC Chapter 15 Roof Assemblies and Rooftop Structures or CRC Chapter 9 Roof Assemblies or equivalent local ordinance.  *Fascia penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *The roof eave fascia components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *Replacement building components shall have a primer and paint applied that matches current the building color.
FAS- HGR	Roof Eave Fascia Holes or Gaps Retrofit	*Fascia penetrations including holes and gaps shall be mitigated for ember exposure by using a putty or calking designed for wood products. If hardening for fire has been identified and the facia could be exposed to fire, the holes and gaps shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.

EAV- EER	Existing Open Roof Eaves or Enclosed Roof Eaves or Roof Eave Soffits Retrofit	Retrofitting existing open or soffit eave components shall comply one or more of the following requirements as described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:1. Noncombustible material2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.*Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.*The installation of the exterior covering shall comply with the products manufacturer's installation instructions*The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17. *Vents will comply with CBC 706A.2 or CRC R337.6.2. Retrofit will also comply with CBC 1202.2 Roof Ventilation or CRC Section R806 Roof Ventilation. *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).*Replacement building components shall have a primer and paint applied that matches current the building color.
EAV- ECR	Enclosed Roof Eaves and Roof Eave Soffits Conversion Retrofit	Retrofitting existing open eaves to soffit eaves materials shall comply one or more of the following requirements as described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Buildings shall be provided with natural ventilation in accordance with CBC Section 1202 Roof Ventilation or CRC Section R806 Roof Ventilation.  *Vents will comply with CBC 706A.2 or CRC R337.6.2. Retrofit will also comply with CBC 1202.2 Roof Ventilation or CRC Section R806 Roof Ventilation.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.

SKY- FFR	Skylight Flashing Retrofit	*Skylight flashing shall comply with CBC Chapter 15 – Roof Assemblies and Rooftop Structures or CRC Chapter 9 – Roof Assemblies.  *Skylight flashing shall be made of a corrosion-resistant metal of minimum nominal 0.019 inch (0.483 mm) thickness.  *Skylight flashing shall be installed so that no exposed wood is present.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
SKY- SRR	Skylight Replacement Retrofit	*Skylight glazing shall comply with CBC 708A.2.1 Exterior Windows, Skylights and Exterior Glazed Door Assembly Requirements or CRC R337.8.2.1 Exterior Windows, Skylights and Exterior Glazed Door Assembly Requirements.  *Operable skylights shall be protected by a noncombustible mesh screen in accordance with CBC 708A.2.2 Operable Skylights or CRC R337.8.2.2 Operable Skylights.  *Alteration or replacement of roof coverings or assemblies shall comply with CBC Section 705A Roofing and Chapter 15 – Roof Assemblies and Rooftop Structures and CRC R337.5.2 Roof Coverings and CRC Chapter 9 – Roof Assemblies.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions
SKY- SCR	Operable Skylight Screen Retrofit	*Operable skylights with missing, combustible, or damaged screens will be retrofitted as described below:  *Operable skylights shall be protected by a noncombustible mesh screen in accordance with CBC 708A.2.2 Operable Skylights or CRC R337.8.2.2 Operable Skylights.  *Building components being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.
VEN- ARR	Attics and Rafter Space Flame and Ember Resistant Vent Retrofit	*Attics and Rafter Space ventilation for buildings shall be provided with natural ventilation in accordance with the California Building Code Section 1202 – Ventilation, California Residential Code Section R806 Roof Ventilation, or mechanical ventilation by the California Mechanical Code. The Contractor will be required to provide documentation showing compliance with these codes after the installation of retrofitted vents. *All vents (Except Ridge and Off Ridge Vents) shall comply with CBC Section 706A.2 Vent Requirements or CRC R337.6.2 Vent Requirements or equivalent local ordinance. * The installation of vents shall comply with the product manufacturer's installation instructions. *For the installation or repair of vents, the contractor will make sure there are no gaps or areas where embers can penetrate the concealed space around the vent. Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).*Building components being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.

VEN- ARM	Attics and Rafter Space Metal Mesh Vent Retrofit	*Attics and Rafter Space ventilation for buildings shall be provided with natural ventilation in accordance with the California Building Code Section 1202 – Ventilation, California Residential Code Section R806 Roof Ventilation, or mechanical ventilation by the California Mechanical Code. The Contractor will be required to provide documentation showing compliance with these codes after the installation of retrofitted vents.  *Ridge and Off Ridge Vents shall comply with CBC Section 706A.2.1 Off Ridge and Ridge Vents or CRC R337.6.2.1 Off Ridge and Ridge Vents or equivalent local ordinance.  *For vents where it is not feasible or there is not a retrofit Wildfire Flame and Ember Resistant vents approved and listed by the California State Fire Marshal, or WUI vents tested to ASTM E2886 as required by the CBC 706A.2 Vent Requirement or CRC R337.6.2 Vent Requirements or equivalent local ordinance, vents shall be covered with a non-combustible and corrosion-resistant mesh where the dimensions of the mesh is a minimum of 1/16-inch (1.6 mm) and does not exceed 1/8-inch (3.2 mm) in diameter.  * The installation of vents shall comply with the product manufacturer's installation instructions.  *For the installation or repair of vents, the contractor will make sure there are no gaps or areas where embers can penetrate the concealed space around the vent. Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
VEN- UFR	Under-Floor Ventilation Flame and Ember Resistant Vent Retrofit	*Under-Floor ventilation for buildings shall be provided with natural ventilation in accordance with the California Building Code Section 1202.4 Under-Floor Ventilation or California Residential Code Section R408.2 Openings for Under-Floor Ventilation. The Contractor will be required to provide documentation showing compliance with these codes after the installation of retrofitted vents.  *All vents (Except Ridge and Off Ridge Vents) shall comply with CBC Section 706A.2 Requirements or CRC R337.6.2 Requirements or equivalent local ordinance.  *For vents where it is not feasible or there is not a retrofit Wildfire Flame and Ember Resistant vents approved and listed by the California State Fire Marshal, or WUI vents tested to ASTM E2886 as required by the CBC 706A.2 or CRC R337.6.2 or equivalent local ordinance, vents shall be covered with a noncombustible and corrosion resistant mesh where the dimensions of the mesh is a minimum of 1/16-inch (1.6 mm) and does not exceed 1/8-inch (3.2 mm) in diameter.  * The installation of vents shall comply with the product manufacturer's installation instructions.  *For the installation or repair of vents, the contractor will make sure there are no gaps or areas where embers can penetrate the concealed space around the vent. Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.

VEN- UMR	Under-Floor Ventilation Metal Mesh Vent Retrofit	*Under-Floor ventilation for buildings shall be provided with natural ventilation in accordance with the California Building Code Section 1202.4 Under-Floor Ventilation or California Residential Code Section R408.2 Openings for Under-Floor Ventilation. The Contractor will be required to provide documentation showing compliance with these codes after the installation of retrofitted vents. *For vents where it is not feasible or there is not a retrofit Wildfire Flame and Ember Resistant vents approved and listed by the California State Fire Marshal, or WUI vents tested to ASTM E2886 as required by the CBC 706A.2 or CRC R337.6.2 or equivalent local ordinance, vents shall be covered with a noncombustible and corrosion resistant mesh where the dimensions of the mesh is a minimum of 1/16-inch (1.6 mm) and does not exceed 1/8-inch (3.2 mm) in diameter.* The installation of vents shall comply with the product manufacturer's installation instructions. *For the installation or repair of vents, the contractor will make sure there are no gaps or areas where embers can penetrate the concealed space around the vent. Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).*Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
VEN- AIR	Air Intake Vent Retrofit	*Air Intake Vents utilized for attics and rafter space ventilation or ventilation for water heater rooms shall be provided with natural ventilation in accordance with the California Building Code Section 1202 – Ventilation, California Residential Code Section R806 Roof Ventilation, and the requirements outlined for systems outlined in the California Mechanical Code.  *All vents (Except Ridge and Off Ridge Vents) shall comply with CBC Section 706A.2 Vent Requirements or CRC R337.6.2 Vent Requirements or equivalent local ordinance.  *The installation of vents shall comply with the product manufacturer's installation instructions.  *For the installation or repair of vents, the contractor will make sure there are no gaps or areas where embers can penetrate the concealed space around the vent. Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Building components being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.
VEN- DVR	Dryer Vent Retrofit	*Dryer vents shall be covered with a non-combustible and corrosion-resistant louvered cover.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.

Exterior Wall WAL-Full FFR Replacement Retrofit  i  i  i  i  i  i  i  i  i  i  i  i	requirements as described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.  *Flashing will be installed at the base of the exterior covering if there is a gap between the covering and foundation that would allow for the intrusion of embers.  *The replacement exterior covering will be of a similar design as the structures existing exterior covering.  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions and CBC Chapter 14 Wall Covering, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).
Exterior Wall WAL- Partial WPR Replacement Retrofit i	*Replace exterior wall covering for the bottom 2 ft (from ground). *The replacement of the exterior covering shall comply with one or more of the following requirements as described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:1. Noncombustible material2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 801. **Exterior use and shall meet the requirements of Section 2003.2.**Flashing will be installed at the base of the exterior covering if there is a gap between the covering and foundation that would allow for the intrusion of embers. **Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.*The installation of the exterior covering shall comply with the products manufacturer's installation instructions*The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17. *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).*Replacement building components shall have a primer and paint applied that matches

WA WC	Exterior Wa AL- Ground CR Clearance Retrofit	*Replace exterior wall covering or clad the exterior wall covering for the bottom 6 inches (from ground).  *The replacement of the exterior covering shall comply with only the following option as described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  1. Noncombustible material  *Flashing will be installed at the base of the exterior covering if there is a gap between the covering and foundation that would allow for the intrusion of embers.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.
WA SPI	Support Pos or Stair Rise AL- or Stair Stringer Cladding Retrofit	

WAL- GOR	Exterior Wall Gaps or Openings Retrofit	*Exterior coverings shall resist the intrusion of embers or flames by preventing openings or gaps exceeding 1/8 inch (3.2 mm).*Small opening or gaps less than 1/4-inch Fascia penetrations including holes and gaps shall be mitigated for ember exposure by using a putty or calking designed for the existing wall material. If hardening for fire has been identified and the wall could be exposed to fire, the holes and gaps shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).*Larger gaps greater than 1/4 inch shall utilize a partial replacement of the exterior covering and shall comply with CBC 707A.1-707A.11, CRC R337.7.1 - R337.7.11 or equivalent local ordinance. *The replacement exterior covering will be of a similar design as the structures existing exterior covering. *The installation of the exterior covering shall comply with the products manufacturer's installation instructions and CBC Chapter 14 Wall Covering, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17. *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site. *Replacement building components shall have a primer and paint applied that matches current the building color.
WAL- TRR	Exterior Wall Trim Retrofit	*Exterior trim materials will be replaced in compliance with the CBC Section 707A Exterior Covering or CRC Section R337.7 Exterior Covering.  *Trim penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *The exterior wall trim components being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.  *Replacement building components shall have a primer and paint applied that matches current the building color.

WAL-PCR	Exterior Porch Ceilings Retrofit	*Retrofitting exterior porch ceilings shall comply with one of the identified options described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Buildings shall be provided with natural ventilation in accordance with CBC Section 1202 Roof Ventilation or CRC Section R806 Roof Ventilation.  *All vents (Except Ridge and Off Ridge Vents) shall comply with CBC 706A.2 or CRC R337.6.2.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.
WAL- FPR	Exterior Floor Projection Retrofit	*Retrofitting exterior floor projections shall comply with one of the identified options described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:1. Noncombustible material2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.*Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.*The installation of the exterior covering shall comply with the products manufacturer's installation instructions*The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.*Buildings shall be provided with natural ventilation in accordance with CBC Section 1202 Roof Ventilation or CRC Section R806 Roof Ventilation. *All vents (Except Ridge and Off Ridge Vents) shall comply with CBC 706A.2 or CRC R337.6.2. *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).*Replacement building components shall have a primer and paint applied that matches current the building color.

WAL- UPR	Exterior Underfloor Protection Retrofit	*Retrofitting exterior underfloor protection shall comply with one of the identified options described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Buildings shall be provided with natural ventilation in accordance with CBC Section 1202 Roof Ventilation or CRC Section R806 Roof Ventilation.  *All vents (Except Ridge and Off Ridge Vents) shall comply with CBC 706A.2 or CRC R337.6.2.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.
WAL- UAR	Exterior Wall Unenclosed Area Retrofit	*Unenclosed areas of exterior walls where debris can accumulate and are difficult to access for removal. *All debris and combustible material will be removed prior to retrofitting unenclosed areas of exterior walls.  *Unenclosed areas will be covered with a noncombustible and corrosion resistant mesh where the dimensions of the mesh shall be a minimum of 1/16-inch (1.6 mm) and shall not exceed 1/8-inch (3.2 mm) in diameter. The metal mesh shall be installed to allow for occasional access for debris removal.  *Metal mesh enclosures shall comply with the natural ventilation requirements outlined in the CBC Section 1202 Ventilation or CRC Section R408 Under-Floor Space.
WAL- FRR	Combustible Wall at Roof Intersection Flashing or Cladding Retrofit	*Install metal or noncombustible flashing at roof-to-wall intersection extending a minimum of 6" up the wall.  *The installation of the flashing shall comply with CBC 1404.4 - Flashing or CRC R703.4 - Flashing or equivalent local ordinance  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).

WAL- RWR	Combustible Wall at Roof Intersection Full Replacement Retrofit	*Replace exterior wall covering at roof Intersection.*The replacement of the exterior covering shall comply with one or more of the following requirements as described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:1. Noncombustible material2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.*Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.*The installation of the exterior covering shall comply with the products manufacturer's installation instructions*The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17. *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).*Replacement building components shall have a primer and paint applied that matches current the building color.
		*Retrofitting exterior underside of appendages shall comply with one of the identified options described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use
WAL- AWR	Exterior Underside of Appendages Retrofit	and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Buildings shall be provided with natural ventilation in accordance with CBC Section 1202 Roof Ventilation or CRC Section R806 Roof Ventilation.  *All vents (Except Ridge and Off Ridge Vents) shall comply with CBC 706A.2 or CRC R337.6.2.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.

WAL- CMR	Crawl Space Access Ignition Resistant Material Retrofit	*Replace an exterior crawl space opening that is missing, combustible, or deteriorated with an ignition-resistant material as described below:  *The replacement of the crawl space opening shall comply with one or more of the following requirements as described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.  *Building components being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.  *The installation of the exterior covering shall comply with the product manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Wall penetrations shall be protected by an approved penetration firestop term installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.
WAL- CIR	Crawl Space Access Metal Mesh Retrofit	*Cover an exterior crawl space opening that is missing, combustible, or deteriorated with a noncombustible and corrosion-resistant mesh as described below:*All debris and combustible material will be removed before retrofitting the crawl space access opening. *Crawl space access openings will be covered with a noncombustible and corrosion-resistant mesh where the dimensions of the mesh shall be a minimum of 1/16-inch (1.6 mm) and shall not exceed 1/8-inch (3.2 mm) in diameter. The metal mesh shall be installed using a noncombustible frame to allow for access to underfloor areas. There will be no gaps or holes greater than 1/8" around the frame and the crawl space access opening. *Metal mesh enclosures shall comply with the natural ventilation requirements outlined in the CBC Section 1202 Ventilation or CRC Section R408 Under-Floor Space.*Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).*Replacement building components shall have a primer and paint applied that matches current the building color.
WAL- HGR	Window Frame Holes and Gaps Retrofit	*Exterior window frame holes or gaps shall be mitigated for ember exposure by using a putty or calking designed for wood products. If hardening for fire has been identified and the facia could be exposed to fire, the holes and gaps shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.

WAL- WFR	Window Frame Replacement Retrofit	*Replace an exterior window frame with an ignition-resistant material as described below:  *The replacement of the crawl space opening shall comply with one or more of the following requirements as described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.  *Building components being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.  *The installation of the exterior covering shall comply with the product manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.
WAL- ADR	Combustible Wall Above Deck Intersection Retrofit	*Replace the upper 2 feet of combustible exterior wall covering at deck Intersection with the material described below:  *The replacement of the exterior covering shall comply with one or more of the following requirements as described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.

WAL- BDR	Combustible Wall Below Deck Intersection Retrofit	*Replace the bottom two feet of a combustible exterior wall covering at the deck Intersection with the material below:*The replacement of the exterior covering shall comply with one or more of the following requirements as described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:1. Noncombustible material*Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.*The installation of the exterior covering shall comply with the products manufacturer's installation instructions*The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17. *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).*Replacement building components shall have a primer and paint applied that matches current the building color.
WIN- WRR	Exterior Window Retrofit	*Window retrofits shall comply with CBC Section 708A Exterior Windows, Skylights and Doors including Section 708A.1-708A.2.1 or CRC Section R337.8 Exterior Windows, Skylights and Doors including Sections R337.8.1 -R337.8.2.1 or equivalent local ordinance. *When hardening for fire, double pain windows will have both panes tempered and the window frame will be non-combustible.  *Building components being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.  *The installation of the exterior covering shall comply with the product manufacturer's installation instructions and CBC Chapter 14 - Exterior Walls including Section 1404.4  Flashing and Section 1404.13 Exterior Windows and Doors or CRC Section R703 Exterior Covering including Section R703.4 Flashing.  *Window retrofits shall also comply with other applicable codes including Installation Standards (CBC 104.9 and CRC R104.9), Efficiency Standards (CEES 150.2(b), Emergency Escape (Egress) Windows in Sleeping Rooms (CBC 1030 and CRC R310.2), Fall Protection (CBC 1015.1 and CRC R312.2), Natural Light and Ventilation (CBC 1204.2, 1202.5.1, and CRC R303.1) and Tempered Glazing (CBC 2406 and CRC R308).  *Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).
WIN- SCR	Exterior Window Screen Retrofit	*The replacement or repair of the window screens shall include the following:  *The window screen frame shall be constructed of a non-combustible material and the window screen will fit securely without gaps into the window channels or slot.  *The recommended window screen material shall be aluminum with wire diameter not to exceed 1/8 inch.
DOO- DFR	Exterior Door Full Replacement Retrofit	*Shall comply with CBC 708A.3 Exterior Doors or CRC R337.8.3 Exterior Doors or equivalent local ordinance.  *Doors shall be replaced with a similar 708A.3 Exterior Doors or CRC R337.8.3 Exterior Doors compliant product.  *The door finish will match the existing building component finish.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.

DOO- DPR	Exterior Door Partial Retrofit	*Install noncombustible door kick plate that covers 100 percent of the bottom 6" of the door, install noncombustible door bottom tested to UL Fire Rate 10C. *Install a noncombustible door jamb kit and metal threshold.
DOO- SDR	Exterior Sliding or Swinging Screen Door Retrofit	*The door frame shall be constructed of a non-combustible material and the window screen will fit securely without gaps into the window channels or slot.  *The window screen material shall be aluminum with 18 mesh × 16 mesh and a minimum .21 Wire Diameter (mm).  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
DOO- GFR	Garage Door Full Replacement Retrofit	*Garage doors shall comply with 708A.3 Exterior Doors and the exterior surface or cladding shall be of noncombustible material.  *Shall comply with CBC Section 708A.4 Garage Door Perimeter Gap or CRC 337.8.4 or equivalent local ordinance.  *Building components being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.  *The installation of the garage door shall comply with the products manufacturer's installation instructions.
DOO- GPR	Garage Door Partial Retrofit	* A Metal Kick Plate or Metal flashing shall be installed along the bottom 6 inches of the combustible garage door. The kick plate or metal flashing shall be properly sealed to retard moisture. If the garage door frame is constructed of combustible material one of the additional retrofits is required:1) A noncombustible and corrosion-resistant metal flashing can be added to the base of a combustible garage door frame to a minimum height of 6 inches. 2) The combustible garage door frame trim can be replaced in accordance with CBC, Section 708A.4 Garage Door Perimeter Gap or CRC, Section R337.8.4 Garage Door Perimeter Gap and the materials used should be in accordance with the CBC, Section 704A.2 Ignition-Resistant Materials or CRC, Section R337.4.2 Ignition-Resistant Materials or equivalent local ordinance. *Exterior garage doors shall resist the intrusion of embers from entering by preventing gaps between doors and door openings, at the bottom, sides, and tops of doors, from exceeding 1/8 inch (3.2 mm). Gaps between doors and door openings shall be controlled by one of the methods described in CBC Section 708A.4 Garage Door Perimeter Gap or CRC 337.8.4 or equivalent local ordinance.*Penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).
DOO- GGR	Garage Door Perimeter Gap Retrofit	*Exterior garage doors shall resist the intrusion of embers from entering by preventing gaps between doors and door openings, at the bottom, sides and tops of doors, from exceeding 1/8 inch (3.2 mm).  *Gaps between doors and door openings shall be controlled by one of the methods described in CBC Section 708A.4 Garage Door Perimeter Gap or CRC 337.8.4 or equivalent local ordinance.

DEC- DFR	Deck Walking Surface Full Replacement Retrofit	*Decks shall comply with CBC Section 709A Decking or CRC Section R337.9 Decking or equivalent local ordinance.  *The replacement of walking surface deck boards shall comply with one or more of the following requirements as described in CBC Section 709A.3 Decking Surfaces or CRC Section R337.9 Decking or equivalent local ordinance:  2) Ignition-resistant material that complies with the performance requirements of Section 704A.3  4) Exterior fire-retardant-treated wood  5) Noncombustible material.  *Deck walking surfaces located at means of egress locations shall utilize a slip-resistant surface described in CBC Section 1003.4 Slip-Resistant Surface.  *The installation of a deck shall also comply with the CBC Chapter 16 Structural Design including section 1604.8.3 Decks or CRC Section R507 Exterior Decks.  *Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
DEC- DPR	Deck Walking Surface Partial Replacement Retrofit	*Replace walking surface deck boards and deck rails for the first 1 ft away from the residence with materials identified below.  *Decks shall comply with CBC Section 709A Decking or CRC Section R337.9 Decking or equivalent local ordinance. The replacement of walking surface deck boards shall comply with only the non-combustible material option described in CBC Section 709A.3 Decking Surfaces or CRC Section R337.9 Decking or equivalent local ordinance.  *Deck walking surfaces and deck rails located at means of egress locations shall utilize a noncombustible slip-resistant surface described in CBC Section 1003.4 Slip-Resistant Surface.  *Building components that are being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.  *This retrofit also requires WAL-ADR Combustible Wall Above Deck Intersection Retrofit and the WAL-BDR Combustible Wall Below Deck Intersection Retrofit.
DEC- FDR	Deck Full Replacement Retrofit	*Decks shall comply with CBC Section 709A Decking or CRC Section R337.9 Decking or equivalent local ordinance. The replacement of walking surface deck boards, support structures and posts and rails shall comply with only the non-combustible material option described in CBC Section 709A.3 Decking Surfaces or CRC Section R337.9 Decking or equivalent local ordinance.  *Deck walking surfaces and deck rails located at means of egress locations shall utilize a noncombustible slip-resistant surface described in CBC Section 1003.4 Slip-Resistant Surface.  *Building components that are being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.  *This retrofit also requires WAL-ADR Combustible Wall Above Deck Intersection Retrofit and the WAL-BDR Combustible Wall Below Deck Intersection Retrofit.

DEC- DRR	Deck Removal	*All decking components will be disassembled, and all debris will be disposed of at an approved off-site facility. *If the exterior siding at the attached deck location is damaged and needs repair, that section of exterior coving will be replaced and shall comply with CBC Section 707A Exterior Covering or CRC Section R337.7 Exterior Covering or equivalent local ordinance.*The replacement exterior covering will be of a similar design as the structure's existing exterior covering. *The installation of the exterior covering shall comply with the product manufacturer's installation instructions and CBC Chapter 14 Wall Covering, Section 1404.1-1404.18, or CRC Chapter 7 Wall Covering, Section R703.1-703.17. *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).*Replacement building components shall have a primer and paint applied that matches current the building color.
DEC- UAR	Deck Unenclosed Area Retrofit	*Unenclosed decks 4 feet or less off grade where debris can accumulate and are difficult to access for removal.  *All debris and combustible material will be removed before retrofitting unenclosed areas under the deck.  *Unenclosed areas will be covered with a non-combustible and corrosion-resistant mesh where the dimensions of the mesh shall be a minimum of 1/16-inch (1.6 mm) and shall not exceed 1/8-inch (3.2 mm) in diameter. The metal mesh shall be installed to allow for occasional access for debris removal.  *Metal mesh enclosures shall comply with the natural ventilation requirements outlined in the CBC Section 1202 Ventilation or CRC Section R408 Under-Floor Space.
DEC- SPR	Deck Ground Clearance Retrofit	*Install a noncombustible cladding vertically for a minimum of 6 inches from the ground.  *The replacement of the exterior covering shall comply with only the Noncombustible Material option described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.
DEC- CDR	Deck Combustible Vegetative Debris Removal	*Leaves, needles, vegetation or debris on decks will be removed in compliance with 14 CCR § 1299.03 (a) Zone 1 Requirements:  (1) Remove all dead or dying grass, plants, shrubs, trees, branches, leaves, weeds, and pine needles from the Zone whether such vegetation occurs in yard areas around the "Building or Structure," or the roof or rain gutters of the "Building or Structure," or any other location within the Zone.  *All vegetation removed from the project site will be disposed at an approved facility.

DEC- ARM	Above Deck Combustible Material Removal	*Combustible materials located above a deck will be removed in accordance with 14 CCR § 1299.03, (a) Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.  *All items designated for removal will be identified by flagging or marking prior to initiating work.  *All combustible material removed from the project site will be disposed at an approved facility.  *All hazardous materials will be disposed of at an approved facility.
DEC- ARL	Above Deck Combustible Material Relocation	*Combustible materials located above a deck will be relocated to a safe location in accordance with 14 CCR § 1299.03, (a) Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.  *Small combustible items will be located at least 5 feet from a structure or deck.  *All combustible items determined to be relocated will be flagged by the program and the contractor will be given instructions on where the items will be relocated.
DEC- BRM	Below Deck Combustible Material Removal	Combustible materials below a deck will be removed in accordance with 14 CCR § 1299.03, (a)Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.  *All combustible items determined to be removed from the property will be flagged by the program prior to removal.  *All combustible items will be disposed of at an approved facility.  *All hazardous materials will be disposed of at an approved facility.
DEC- BRL	Below Deck Combustible Material Relocation	*Combustible material below a deck will be relocated to a safe location in accordance with 14 CCR § 1299.03  (a) Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.  *Small combustible items will be located at least 5 feet from a structure or deck.  *All combustible items determined to be relocated will be flagged by the program and the contractor will be given instructions on where the items will be relocated.
STA- WFR	Stair Walking Surface Full Replacement Retrofit	*Stairway retrofit will comply with CBC Section 709A Decking or CRC Section R337.9 Decking or equivalent local ordinance. *The replacement of walking surface stair boards shall comply with one or more of the following requirements as described in CBC Section 709A Decking or CRC Section R337.9 Decking or equivalent local ordinance:2) Ignition-resistant material that complies with the performance requirements of Section 704A.3 4) Exterior fire-retardant-treated wood 5) Noncombustible material.*Installation shall comply with the requirements of the CBC Section 1011 Stairways or CRC R311.7 Stairways*Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.

STA- WPR	Stairs Walking Surface Partial Replacement Retrofit	*Replace stair walking surface boards and handrails for the first 1 ft away from the residence.  *Stairway retrofit will comply with CBC Section 709A Decking.  *The replacement of stair walking surface boards and handrails shall comply with only the non-combustible option described in CBC Section 709A.3 Decking Surfaces or CRC 337 or equivalent local ordinance.  *Installation shall comply with the requirements of the CBC Section 1011 Stairways or CRC R311.7 Stairways  *Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
STA- SFR	Stair Complete Replacement Retrofit	*Stairway retrofit will comply with CBC Section 709A Decking or CRC Section R337.9 Decking or equivalent local ordinance.  *The replacement of walking surface stair boards shall comply with one or more of the following requirements as described in CBC Section 709A Decking or CRC Section R337.9 Decking or equivalent local ordinance: 2) Ignition-resistant material that complies with the performance requirements of Section 704A.3 4) Exterior fire-retardant-treated wood 5) Noncombustible material.  *Installation shall comply with the requirements of the CBC Section 1011 Stairways or CRC R311.7 Stairways  *Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
STA- UAR	Stairs Unenclosed Area Retrofit	*Unenclosed stairs 4 feet or less off grade where debris can accumulate and are difficult to access for removal.  *All debris and combustible material will be removed before retrofitting unenclosed areas under the deck.  *Unenclosed areas will be covered with a non-combustible and corrosion-resistant mesh where the dimensions of the mesh shall be a minimum of 1/16-inch (1.6 mm) and shall not exceed 1/8-inch (3.2 mm) in diameter. The metal mesh shall be installed to allow for occasional access for debris removal.  *Metal mesh enclosures shall comply with the natural ventilation requirements outlined in the CBC Section 1202 Ventilation or CRC Section R408 Under-Floor Space.
STA- SGR	Stairs Ground Clearance Retrofit	*Install a noncombustible cladding vertically for a minimum of 6 inches from the ground.  *The replacement of the exterior covering shall comply with only the Noncombustible Material option described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.

STA- CDR	Stair Combustible Vegetative Debris Removal	*Leaves, needles, vegetation or debris on decks will be removed in compliance with 14 CCR § 1299.03 (a) Zone 1 Requirements: (1) Remove all dead or dying grass, plants, shrubs, trees, branches, leaves, weeds, and pine needles from the Zone whether such vegetation occurs in yard areas around the "Building or Structure," on the roof or rain gutters of the "Building or Structure," or any other location within the Zone.  *All vegetation removed from the project site will be disposed at an approved facility.
STA- ARM	Above Stair Combustible Material Removal	*Combustible materials located above a stair will be removed in accordance with 14 CCR § 1299.03, (a) Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.  *All items designated for removal will be identified by flagging or marking prior to initiating work.  *All combustible material removed from the project site will be disposed at an approved facility.  *All hazardous materials will be disposed of at an approved facility.
STA- ARL	Above Stair Combustible Material Relocation	*Combustible materials located above a stair will be relocated to a safe location in accordance with 14 CCR § 1299.03, (a) Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.*Small combustible items will be located at least 5 feet from a structure or deck. *All combustible items determined to be relocated will be flagged by the program and the contractor will be given instructions on where the items will be relocated.
STA- BRM	Below Stair Combustible Material Removal	Combustible materials below a stair will be removed in accordance with 14 CCR § 1299.03, (a)Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.  *All combustible items determined to be removed from the property will be flagged by the program prior to removal.  *All combustible items will be disposed of at an approved facility.  *All hazardous materials will be disposed of at an approved facility.
STA- BRL	Below Stair Combustible Material Relocation	*Combustible material below a stair will be relocated to a safe location in accordance with 14 CCR § 1299.03  (a) Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.  *Small combustible items will be located at least 5 feet from a structure or deck.  *All combustible items determined to be relocated will be flagged by the program and the contractor will be given instructions on where the items will be relocated.
RAM- RFR	Ramp Complete Replacement Retrofit	*Ramps walking surfaces will comply with CBC Section 709A Decking.  *The replacement of walking surface boards and handrails shall comply with one or more of the following requirements as described in CBC Section 709A.3 Decking Surfaces or CRC 337 or equivalent local ordinance:  2) Ignition-resistant material that complies with the performance requirements of Section 704A.3  4) Exterior fire-retardant-treated wood  5) Noncombustible material.  *Installation shall comply with the requirements of the CBC Section 1012 Ramps or CRC R311.8 Ramps  *Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.

RAM- RPR	Ramp Partial Replacement Retrofit	*Replace ramp walking surface deck boards and handrails for the first 1 ft away from the residence.  *Ramp retrofit will comply with CBC Section 709A Decking or CRC 337 or equivalent local ordinance.  *The replacement of ramp walking surface boards and handrails shall comply with only the non-combustible option described in CBC Section 709A.3 Decking Surfaces or CRC 337 or equivalent local ordinance.  *Installation shall comply with the requirements of the CBC Section 1012 Ramps or CRC R311.8 Ramps  *Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
RAM- UAR	Ramp Unenclosed Area Retrofit	*Unenclosed ramps 4 feet or less off grade where debris can accumulate and are difficult to access for removal.  *All debris and combustible material will be removed before retrofitting unenclosed areas under the deck.  *Unenclosed areas will be covered with a non-combustible and corrosion-resistant mesh where the dimensions of the mesh shall be a minimum of 1/16-inch (1.6 mm) and shall not exceed 1/8-inch (3.2 mm) in diameter. The metal mesh shall be installed to allow for occasional access for debris removal.  *Metal mesh enclosures shall comply with the natural ventilation requirements outlined in the CBC Section 1202 Ventilation or CRC Section R408 Under-Floor Space.
RAM- SPR	Ramp Ground Clearance Retrofit	*Install a noncombustible cladding vertically for a minimum of 6 inches from the ground.  *The replacement of the exterior covering shall comply with only the Noncombustible Material option described in CBC 707A.3 Exterior Wall Coverings or R337.7.3 Exterior Wall Coverings or equivalent local ordinance:  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions  *The installation of the exterior covering shall comply with CBC Chapter 14 Exterior Walls, Section 1404.1-1404.18 or CRC Chapter 7 Wall Covering, Section R703.1-703.17.  *Wall penetrations shall be protected by an approved penetration firestop system installed as tested in accordance with ASTM E119, ASTM E814, UL 263, or UL 1479 with a positive pressure differential of not less than 0.01 of an inch of water (0.002 kPa).  *Replacement building components shall have a primer and paint applied that matches current the building color.
RAM- CDR	Ramp Combustible Vegetative Debris Removal	*Leaves, needles, vegetation or debris on decks will be removed in compliance with 14 CCR § 1299.03 (a) Zone 1 Requirements: (1) Remove all dead or dying grass, plants, shrubs, trees, branches, leaves, weeds, and pine needles from the Zone whether such vegetation occurs in yard areas around the "Building or Structure," on the roof or rain gutters of the "Building or Structure," or any other location within the Zone.  *All vegetation removed from the project site will be disposed at an approved facility.

RAM- ARM	Above Ramp Combustible Material Removal	*Combustible materials located above a ramp will be removed in accordance with 14 CCR § 1299.03, (a) Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.*All items designated for removal will be identified by flagging or marking prior to initiating work.  *All combustible material removed from the project site will be disposed at an approved facility. *All hazardous materials will be disposed of at an approved facility.
RAM- ARL	Above Ramp Combustible Material Relocation	Combustible materials located above a ramp will be relocated to a safe location in accordance with 14 CCR § 1299.03, (a) Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.  *Small combustible items will be located at least 5 feet from a structure or deck.  *All combustible items determined to be relocated will be flagged by the program and the contractor will be given instructions on where the items will be relocated.
RAM- BRM	Below Ramp Combustible Material Removal	Combustible materials below a ramp will be removed in accordance with 14 CCR § 1299.03, (a)Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.  *All combustible items determined to be removed from the property will be flagged by the program prior to removal.  *All combustible items will be disposed of at an approved facility.  *All hazardous materials will be disposed of at an approved facility.
RAM- BRL	Below Ramp Combustible Material Relocation	*Combustible material below a ramp will be relocated to a safe location in accordance with 14 CCR § 1299.03  (a) Zone 1 Requirements: (4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.  *Small combustible items will be located at least 5 feet from a structure or deck.  *All combustible items determined to be relocated will be flagged by the program and the contractor will be given instructions on where the items will be relocated.
ATT- RHB	Rails, Handrails and Baluster Replacement Retrofit	*The replacement of a minimum of one foot of rails, handrails and balusters attached closest to the home shall comply with one or more of the following requirements as described in CBC Section 709A.3 Decking Surfaces or CRC 337 or equivalent local ordinance:  2) Ignition-resistant material that complies with the performance requirements of Section 704A.3  4) Exterior fire-retardant-treated wood 5) Noncombustible material.  *Installation shall comply with the requirements of the CBC Section 1012 Ramps or CRC R311.8 Ramps  *Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
ATT- FGR	Attached Combustible Fence/Gate Retrofit	*Attached sections of fence or gates within 8 feet (Or property line) and attached to a primary residence will be replaced with a non-combustible material as defined by the CBC Section 202 or CRC R201 *Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.

ATT- RER	Attached Combustible Fence/Gate Removal	*All fence and gate components will be disassembled, and all debris will be disposed of at an approved off-site facility.
ATT- RWR	Attached Retaining Wall Retrofit	*Replace retaining wall length equal to two times retaining wall height with non-combustible material as defined by the CBC Section 202 or CRC R201.  *Retaining wall retrofits will also comply with CBC Section 1807.2 Retaining Walls.  *Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
ATT- ACR	Attached Awning and Coverings Retrofit	*Shall comply with CBC Section 3105 Awnings and Canopies  *The installation of the exterior covering shall comply with the products manufacturer's installation instructions  *Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
ATT- PTR	Attached Pergola or Trellis Retrofit	*Remove vegetation, detached from residence  *Create a 2 ft open space/separation from residence  *The replacement of pergola or trellis components shall comply with one or more of the following requirements as described in CBC Section 709A.3 Decking Surfaces or CRC 337 or equivalent local ordinance:  2) Ignition-resistant material that complies with the performance requirements of Section 704A.3  4) Exterior fire-retardant-treated wood  5) Noncombustible material.  *Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.
ATT- MAR	Other Miscellaneous Attachments Retrofit	*The replacement of other miscellaneous attachments shall comply with one or more of the following requirements as described in CBC Section 709A.3 Decking Surfaces or CRC 337 or equivalent local ordinance: 2) Ignition-resistant material that complies with the performance requirements of Section 704A.3 4) Exterior fire-retardant-treated wood 5) Noncombustible material.*Building components that are being replaced will be the responsibility of the contractor to remove and disposed of at an approved disposal site.

ACC- REL	Accessory Building Relocation	*Accessory buildings moved to a new location will have a new foundation installed to fully support the building.  The building foundation will be installed to not allow ember intrusion under the building and will be required to have a 0 ft to 5 ft ember-resistant zone.  *Auxiliary buildings <64 ft2 in size will be moved at least 30 feet away from the non-hardened primary structure and also must be 30 feet away from any adjacent parcel primary residence.  *Accessory buildings 64 ft2 to 120 ft2 in size will be moved at least 40 feet away from the non-hardened primary structure and also must be 40 feet away from any adjacent parcel primary residence.  *Accessory buildings >120 ft2 in size will be moved at least 50 feet away from the non-hardened primary structure and also must be 50 feet away from any adjacent parcel primary residence.  *Accessory buildings <26 ft2 in size will be moved at least 10 feet away from hardened (Chapter 7A Compliant) structures and must also be 10 feet away from any adjacent parcel primary residence.  *Accessory buildings <26 ft2 to 64ft2 in size will be moved at least 15 feet away from hardened (Chapter 7A Compliant) structures and must also be 15 feet away from any adjacent parcel primary residence.  *Accessory buildings will also not be located closer than the distances identified below from other miscellaneous structures:  1) Must be 10 feet away from combustible retaining walls.  2) Must be 10 feet away from single combustible fences  3) Must be 20 feet away from double combustible fences.  4) Must be 30 feet away from wood piles.  5) Must be located 50 feet (MFSD) away from large auxiliary structures such as an RV's, Gazebo, or boats.
ACC- REM	Accessory Building Removal	*All buildings will be disassembled, and all debris will be disposed of at an approved off-site facility.
ACC- RET	Accessory Buildings Retrofit	*Accessory buildings less than 120 square feet shall be constructed in accordance with CBC Section 704A.2, specifically section 710A.3.3 Accessory Buildings 120 Square Feet (11.15 M2) or Less, Located 3 Feet (914 mm) or More but Less Than 50 Feet (15 240 mm) and 710A.4 Roof Construction.  *Accessory building vents shall be in accordance with any of the following retrofits, Attics and Rafter Space Flame and Ember Resistant Vent Retrofit (VEN-ARR), Attics and Rafter Space Metal Mesh Vent Retrofit (VEN-ARM) Under-Floor Ventilation Flame and Ember Resistant Vent Retrofit (VEN-UFR) or Under-Floor Ventilation Metal Mesh Vent Retrofit (VEN-UMR).  *Accessory building doors shall not have gaps greater than 1/8 that would be vulnerable to embers.  *The accessory building foundation shall be noncombustible or be enclosed using the ATT-UAR Deck/Stairs/Ramp Unenclosed Area Retrofit.  *This retrofit will also require the Outbuilding Clearance (DZ1-OCT) treatment.

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ACC- RPL	Accessory Building Replacement	*Accessory buildings less than 120 square feet shall be replaced with a building that is constructed in accordance with CBC Section 704A.2, specifically section 710A.3.3  Accessory Buildings 120 Square Feet (11.15 M2) or Less, Located 3 Feet (914 mm) or More but Less Than 50 Feet (15 240 mm) and 710A.4 Roof Construction.  *Accessory building doors shall be located away from the primary residence and detached combustible hazards.  *Accessory building vents shall be in accordance with any of the following retrofits, Attics and Rafter Space Flame and Ember Resistant Vent Retrofit (VEN-ARR), Attics and Rafter Space Metal Mesh Vent Retrofit (VEN-ARM) Under-Floor Ventilation Flame and Ember Resistant Vent Retrofit (VEN-UFR) or Under-Floor Ventilation Metal Mesh Vent Retrofit (VEN-UMR).  *Accessory building doors shall not have gaps greater than 1/8 that would be vulnerable to embers.  *The accessory building foundation shall be non combustible or be enclosed using the ATT-UAR Deck/Stairs/Ramp Unenclosed Area Retrofit.  *This retrofit will also require the Outbuilding Clearance (DZ1-OCT) treatment.
MIS- REL	Miscellaneous Structures - Relocating	*Large miscellaneous structures such as an RV's, Gazebo, or boats shall be relocated 50 feet (MFSD) away from the primary residence and also must be 50 feet away from any adjacent parcel primary residence. *Wood piles shall be moved 30 feet away from the primary residence and also must be 30 feet away from any adjacent parcel primary residence. *Double combustible fences shall be relocated 20 away from the primary residence and also must be 20 feet away from any adjacent parcel primary residence. *Single combustible fences shall be relocated 10 feet away from the primary residence and also must be 10 feet away from any adjacent parcel primary residence. *Combustible retaining walls shall be relocated 10 feet away from the primary residence and also must be 10 feet away from any adjacent parcel primary residence.
MIS- REM	Miscellaneous Structures- Removing	*All miscellaneous structures will be disassembled and all debris will be disposed of at an approved off site facility.
MIS- RET	Miscellaneous Structures - Retrofitting	*Miscellaneous Structures mitigations shall include: 1) Clearing all debris from on and under the miscellaneous structures 2) Clearing all small combustibles to at least 5 feet away from the miscellaneous structure. 3) Mitigate all holes or gaps greater than 1/8 inch.
MIS- VRR	Vehicle Relocation	*Inoperable vehicles should be relocated a minimum of 50 feet away from the primary residence, neighboring residence, or any building or structure.  *Vehicles will also not be located closer than the distances identified below from other miscellaneous structures:  1) Must be 10 feet away from combustible retaining walls.  2) Must be 10 feet away from single combustible fences  3) Must be 20 feet away from double combustible fences.  4) Must be 30 feet away from wood piles.
MIS- VRM	Vehicle Removal	*Inoperable vehicles will be removed to an approved off site facility. 19.030 Junking a Vehicle—Individual (VC §11520) Prior to dismantling a vehicle, the vehicle owner must submit an application to DMV to record the vehicle as "Junk." When an owner dismantles a vehicle prior to doing this, the owner is subject to an investigative service fee.

MIS- VHR	Vehicle Hardening	*Vehicle Hardening mitigations shall include:  1)Clearing all debris from on and under the vehicle.  2)Clearing all small combustibles to at least 5 feet away from the vehicle.  3) Mitigate all holes or gaps greater than 1/8 inch on the vehicle.
MIS- VCR	Vehicle Cover	*Vehicle covers shall be flame-retardant fabrics or materials approved by the by CAL FIRE Office of the State Fire Marshal (OSFM) in accordance with 19 CCR § 332. Flame Resistance and be tagged and labeled with the Seal of Registration of the OSFM.  *The vehicle cover will completely cover the vehicle and the cover will be kept free of debris.
MIS- FRM	Detached Combustible Fence Removal	*All fence components will be disassembled, and all debris will be disposed of at an approved off-site facility.
MIS- FRE	Detached Combustible Fence Relocation	*Detached combustible fences will not be located closer than the distances identified below from buildings or structures:  *Single combustible fences must be located 10 feet away from any building or structure  *Double combustible fences must be 20 feet away from any building or structure.
MIS- FRT	Detached Fence Retrofit	Fence components including posts, rails and pickets will be replaced with components that meet the requirements below:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.  *Building components being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.
MIS- RWR	Detached Retaining Wall Retrofit	Retaining wall components including posts, rails and pickets will be replaced with components that meet the requirements below:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.  *Building components being replaced will be the responsibility of the contractor to remove and dispose of at an approved disposal site.
MIS- GCR	Garbage Can Enclosure	Garbage can enclosures shall be constructed of components as defined below:  1. Noncombustible material  2. Ignition-resistant material. The ignition-resistant material shall be labeled for exterior use and shall meet the requirements of Section 704A.2.  3. Fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and shall meet the requirements of Section 2303.2.
DZ0- GFR	Zone 0 Ground Level Vegetation Removal	*Ground level vegetation will be removed within Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck.*Ground level vegetation will be removed and disposed of at an approved off site facility.

DZ0- GFM	Zone 0 Ground Level Vegetation Modification	TBD by Board of Forestry Regulations
DZ0- MUR	Zone 0 Combustible Mulch Removal	*Mulch will be removed within Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck.  *Mulch will be removed and disposed of at an approved off-site facility.
DZ0- SLR	Zone 0 Synthetic Lawn Removal	*Combustible synthetic lawns will be removed within Zone 0 which extends five feet (5ft.) from each structure or if applicable, an attached deck.  *Material will be removed and disposed of at an approved off-site facility.
DZ0- PPR	Planter Pot Relocation	*Planter pots will be removed within Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck.
DZ0- HAR	Zone 0 Hardscaping	*Installation of a hardscape in Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck.  *The contractor will prepare a hardscaping site plan that include all areas around the structure including any attached decks. The site plan will include:  1) Procedures for avoiding utilities. The contractor will be responsible for contacting the Underground Service Alert https://www.california811.org/ to assure all utilities will be avoided during site preparation and construction.  2) Procedures for securing existing irrigation lines.  4) Guidelines for obtaining compliance with ground sloping requirements as required by CBC Chapter 18 Soils and Foundations, Section 1804.4 Site Grading.  5) The installation of a permeable weed barrier and hardscaping material.
DZ0- SFR	Zone 0 Surface Level Vegetation Removal	*Surface Vegetation removal from Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck includes removing all living, dead or dying shrubs, bushes and plants, within Zone 0 including underneath decks, balconies, or stairs.  *All vegetation removed from the project site will be disposed at an approved facility.  *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 Gasoline powered saws, etc.; firefighting equipment and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).  *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.  *The contractor will be responsible for the safe operation around utilities. The contractor will be responsible for contacting the Underground Service Alert https://www.california811.org/ to assure all utilities will be avoided during site preparation and construction.
DZ0- SFM	Zone 0 Surface Level Vegetation Modification	TBD by Board of Forestry Regulations

DZ0 VCI	*Tree trimming within Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck. *Remove all live and dead tree branches 10 feet above the roof and 10 feet away from chimneys and stovepipe outlets. Remove all live or dead branches or ladder fuels within five feet (5 ft.) of the sides of the structure in Zone 0.*It is the responsibility of the contractor adhere to local ordinances regulating tree trimming and to obtaining applicable permits. *All vegetation removed from the project site will be disposed at an approved facility. *Vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure. *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions). *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning.*The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements. *The contractor will be responsible for the safe operation around utilities. The contractor will be responsible for contacting the Underground Service Alert https://www.california811.org/ to assure all utilities will be avoided during site preparation and construction. *The contractor shall utilitie qualified tree workers as described in Title 8 California Code of Regulations for Tree Work, Maintenance or Removal including sections 3420-3427 & 3458. The contract shall also abide by other requirements in Title 8 California Code of Regulations including, section 2940,2 (Clearances from high-voltage power lines), 3203 (Injury and Illness Prevention), 3328 (Machinery and equipment), 3380 (Personal Protective Devices), 3395 (Heat Illness Prevention), and 3

DZ0- MIS	Zone 0 Miscellaneous Combustible Material Removal	*Combustible item removal within Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck.*All items designated for removal will be identified by flagging or marking prior to initiating work. *Remove all woodchips, bark, combustible mulch, synthetic lawns, combustible boards, timbers, planting pots or containers. *Remove combustible materials located on top of or underneath a deck, balcony, or stairs in compliance with 14 CCR § 1299.03(a)(4).*Remove planting pots or containers, regardless of material, mounted on the structure or located directly beneath a window or near vents.*All combustible material removed from the project site will be disposed at an approved facility. *All hazardous materials will be disposed of at an approved facility. *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions). *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.
DZ0- MCR	Zone 0 Miscellaneous Combustible Material Relocation	*Miscellaneous combustibles identified for relocation will be flagged prior to moving.  *The contractor will be provided the location for combustible items to be relocated.  *Miscellaneous combustibles will be moved a minimum of 5 feet from the structure or attached deck.
DZ0- FRM	Zone 0 Firewood Removal	*Remove exposed firewood located in Zone 0 and from the property. This is an alternative method of compliance with PRC 4291 (e)(1) or GC Section 51182 (c)(1) and 14 CCR § 1299 .03(a)(3) or equivalent local ordinance.  *All combustible material removed from the project site will be disposed at an approved facility.
DZ0- FRL	Zone 0 Firewood Relocation	*Relocate exposed firewood piles located in Zone 0 that are not completely covered in a fire-resistant material in accordance with PRC 4291 (e)(1) or GC Section 51182 (c)(1) and 14 CCR § 1299 .03(a)(3) or equivalent local ordinance.  *Firewood will be relocated a minimum of 30 feet from the primary structure.  *Firewood piles will also be located 30 feet away from adjacent residences, accessory buildings, fences and other miscellaneous structures.

DZ0- STM	Zone 0 Stump Mitigation	*Stumps located within Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck.  *Stumps shall cut or mulched down to ground level.  *All vegetation removed from the project site will be disposed at an approved facility.  *Stump material deposited on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.  *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).  *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.
DZ0- LGM	Zone 0 Log Mitigation	*Logs located within Zone 0 which extends five feet (5 ft.) from each structure or, if applicable, an attached deck shall be removed.  *Log material deposited on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.  *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).  *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.  *All vegetation removed from the project site will be disposed at an approved facility.
DZ1- GFM	Zone 1 Ground Level Litter or Woody Material Removal	
DZ1- CUT	Zone 1 Cutting of Annual Grasses and Forbs	*Cutting of Annual Grasses and Forbs in Zone 1 which extends five to thirty feet (30 ft.) from each structure in compliance with PRC 4291 (e)(1) or GC Section 51182 (c)(1) and 14 CCR § 1299 .03(a)(1) or equivalent local ordinance.*Annual Grasses and Forbs will be mowed or cut and should not exceed 4 inches in height. If there are areas that need to be retained to a height not to exceed 18 inches above the ground, where necessary to stabilize the soil and prevent erosion, the areas will be identified to the contractor and flagged prior to the initiation of work. *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions). *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.

DZ1- VRT	Zone 1 Surface Level Vegetation Horizontal Clearance Modification	*Vegetation Removal within Zone 1 which extends five to thirty feet (30 ft.) from each structure.  *Vegetation horizontal or vertical separation distances shall be incompliance with the Board of Forestry General Guidelines for Creating Defensible Space (Appendix A), Reduced Fuel Zone: Fuel Separation Guidelines and Plant Spacing Guidelines table.  *Groups of vegetation (numerous plants growing together less than 10 feet in total foliage width) may be treated as a single plant.  *Vegetation removal will only be performed on the designated property. Property boundary delineations will be identified prior to the initiation of work. If flagging is required, the property boundary will be identified in red flagging.  *It is the responsibility of the contractor to adhere to local ordinances regulating vegetation removal and to obtaining applicable permits.  *Vegetation will be removed to ground level.  *Areas with equipment or work exclusions will be flagged prior to the initiation of work.  Watershed and Lake Protection Zones (WLPZ) delineations will be identified with blue and white stripe flagging with "Watercourse and Lake Protection Zone" black print. Equipment Exclusion Zone delineations will be identified with yellow and white stripe flagging with "Equipment Exclusion Zone" black print.  *All vegetation removed from the project site will be disposed at an approved facility.  *Vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.  *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).  *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to
DZ1- DDR	Zone 1 Surface Level Dead or Dying Vegetation Removal	

DZ1- VCL	Zone 1 Tree Vertical Clearance Limbing	*Tree limbing within Zone 1 which extends five to thirty feet (30 ft.) from each structure or property line, whichever comes first. *Lower limbs of trees will be limbed/pruned to at least 6 feet up to 15 feet (or the lower 1/3 branches for small trees). *It is the responsibility of the contractor adhere to local ordinances regulating tree trimming and to obtaining applicable permits. *All vegetation removed from the project site will be disposed at an approved facility. *Vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure. *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions). *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. *The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements. *The contractor will be responsible for the safe operation around utilities. The contractor will be responsible for contacting the Underground Service Alert https://www.california811.org/ to assure all utilities will be avoided during site preparation and construction. *The contractor shall utilize qualified tree workers as described in Title 8 California Code of Regulations Section 3420(b). The contractor shall comply with applicable requirements for tree workers identified in Title 8 California Code of Regulations for Tree Work, Maintenance or Removal including sections 3420-3427 & 3458. The contract shall also abide by other requirements in Title 8 California Code of Regulations including, section 2940,2 (Clearances from high-voltage power lines), 3203 (Injury and Illness Prevention), 3328 (Machinery and equipment), 3380 (Personal Protectiv
DZ1- HCL	Zone 1 Tree Horizontal Clearance Limbing	

		*Tree felling for designated trees within Zone 1 which extends five to thirty feet (30 ft.) from
		each structure or property line, whichever comes first.
		*Tree horizonal separation distances shall be incompliance with the Board of Forestry
		General Guidelines for Creating Defensible Space (Appendix A), Reduced Fuel Zone: Fuel
		Separation Guidelines and Plant Spacing Guidelines table.
		*Tree or vegetation vertical separation distances shall be incompliance with the Board of
		Forestry General Guidelines for Creating Defensible Space (Appendix A), Reduced Fuel
		Zone: Fuel Separation Guidelines and Plant Spacing Guidelines table.
		*Tree felling will only be performed on the designated property. Property boundary
		delineations will be identified prior to the initiation of work. If flagging is required, the
		property boundary will be identified in red flagging.
		*It is the responsibility of the contractor to adhere to local ordinances regulating tree removal
		and to obtaining applicable permits.
		*Trees designated for removal will be marked with blue tracer paint. Designated trees will
		have a painted highly visible attention band 2" wide at eye level. The attention mark will be visible from 360 degrees and from at least 50 feet. Cut trees will also have two painted stump
		marks on all marked trees. The stump marks shall be placed in the furrows of the bark at
		ground level on the downhill and uphill sides of the trees. Stump marks will touch the ground
		and be at least 2" wide.
		*Tree stumps will be removed to ground level.
		*Areas with equipment or work exclusions will be flagged prior to the initiation of work.
	Zone 1	Watershed and Lake Protection Zones (WLPZ) delineations will be identified with blue and
DZ1-	Horizontal	white stripe flagging with "Watercourse and Lake Protection Zone" black print. Equipment
HCF	Clearance	Exclusion Zone delineations will be identified with yellow and white stripe flagging with
	Tree Felling	"Equipment Exclusion Zone" black print.
		*All vegetation removed from the project site will be disposed at an approved facility.
		*Vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth
		of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each
		structure.
		*The contractor will be responsible for adhering to requirements outlined in PRC 4427
		(Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting
		equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement;
		exemptions).
		*No operations will be allowed on days identified by the National Weather Service as Fire
		Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any
		local daily Fire Danger and Project Activity Level requirements.
		*The contractor will be responsible for the safe operation around utilities. The contractor will
		be responsible for contacting the Underground Service Alert https://www.california811.org/
		to assure all utilities will be avoided during site preparation and construction.
		*The contractor shall utilize qualified tree workers as described in Title 8 California Code of
		Regulations Section 3420(b). The contractor shall comply with applicable requirements for
		tree workers identified in Title 8 California Code of Regulations for Tree Work, Maintenance
		or Removal including sections 3420-3427 & 3458. The contract shall also abide by other
		requirements in Title 8 California Code of Regulations including, section 2940,2 (Clearances
		from high-voltage power lines), 3203 (Injury and Illness Prevention), 3328 (Machinery and
		equipment), 3380 (Personal Protective Devices), 3395 (Heat Illness Prevention), and 3648
		(Fall protection). For additional information see the Cal/OSHA Tree Work Safety Guide.

Dead or Dying Aerial Material Limbing  Flag Warning.*The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements. *The contractor will be responsible for the safe operation around utilities. The contractor will be responsible for contacting the Underground Service Alert https://www.california811.org/ to assure all utilities will be avoided during site preparation and construction.*The contractor shall utilize qualified tree workers as described in Title 8 California Code of Regulations for Tree Work, Maintenance or Removal including sections 3420-3427 & 3458. The contract shall also abide by other requirements in Title 8 California Code of Regulations including, section 2940,2 (Clearances from high-voltage power lines), 3203 (Injury and Illness Prevention), 3328 (Machinery and equipment), 3380 (Personal Protective Devices), 3395 (Heat Illness Prevention), and 3648 (Fall protection). For additional information see the Cal/OSHA Tree Work Safety Guide.
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Snags identified for removal will adhere to the requirements below: \*Tree felling will only be performed on the designated property. Property boundary delineations will be identified prior to the initiation of work. If flagging is required, the property boundary will be identified in red flagging. \*It is the responsibility of the contractor to adhere to local ordinances regulating tree removal and to obtaining applicable permits. \*Snags designated for removal will be marked with blue tracer paint. Designated trees will have a painted highly visible attention band 2" wide at eye level. The attention mark will be visible from 360 degrees and from at least 50 feet. Cut trees will also have two painted stump marks on all marked trees. The stump marks shall be placed in the furrows of the bark at ground level on the downhill and uphill sides of the trees. Stump marks will touch the ground and be at least 2" wide. \*Tree stumps will be removed to ground level. \*Areas with equipment or work exclusions will be flagged prior to the initiation of work. Watershed and Lake Protection Zones (WLPZ) delineations will be identified with blue and white stripe flagging with "Watercourse and Lake Protection Zone" black print. Equipment Exclusion Zone delineations will be identified with yellow and white stripe flagging with "Equipment Exclusion Zone" black print. \*All vegetation removed from the project site will be disposed at an approved facility. DZ1-\*Vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth Zone 1 Snag **SGM** Mitigation of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each \*The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions). \*No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements. \*The contractor will be responsible for the safe operation around utilities. The contractor will be responsible for contacting the Underground Service Alert https://www.california811.org/ to assure all utilities will be avoided during site preparation and construction. \*The contractor shall utilize qualified tree workers as described in Title 8 California Code of Regulations Section 3420(b). The contractor shall comply with applicable requirements for tree workers identified in Title 8 California Code of Regulations for Tree Work, Maintenance or Removal including sections 3420-3427 & 3458. The contract shall also abide by other requirements in Title 8 California Code of Regulations including, section 2940,2 (Clearances from high-voltage power lines), 3203 (Injury and Illness Prevention), 3328 (Machinery and equipment), 3380 (Personal Protective Devices), 3395 (Heat Illness Prevention), and 3648 (Fall protection). For additional information see the Cal/OSHA Tree Work Safety Guide. "

DZ1- STM	Zone 1 Stump Mitigation	*Stumps or logs located within Zone 1 which extends five to thirty feet (30 ft.) from each structure.  *Stumps or logs shall be removed, cut or mulched down to ground level.  *All vegetation removed from the project site will be disposed at an approved facility.  *Stump material deposited on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.  *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).  *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.
DZ1- LGM	Zone 1 Log Mitigation	*Logs located within Zone 1 which extends five to thirty feet (30 ft.) from each structure shall be removed. *Log material deposited on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure. *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions). *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements. *All vegetation removed from the project site will be disposed at an approved facility.
DZ1- MIS	Zone 1 Miscellaneous Combustible Material Removal	The Zone 1 "Miscellaneous Combustible Material Removal" mitigation measure is utilized for the removal of all combustibles items within five feet (5 ft.) from each structure in Zone 1 or to provide desired minimum vertical clearance between lower limbs of aerial fuels or the desired minimum horizontal spacing between trees and shrubs as described in the General Guidelines for Creating Defensible Space, Plant Spacing Guidelines.
DZ1- FRL	Zone 1 Firewood Relocation	*Relocate exposed firewood piles located in Zone 1 which extends five to thirty feet (30 ft.) from each structure that are not completely covered in a fire-resistant material in accordance with PRC 4291  *Firewood will be located a minimum of 30 feet from the primary structure.  *Firewood piles will also be located 30 feet away from adjacent residences, accessory buildings, fences and other miscellaneous structures.
DZ1- FRM	Zone 1 Firewood Removal	*Remove exposed firewood located in Zone 1 which extends five to thirty feet (30 ft.) from each structure and from the property.  *All combustible material removed from the project site will be disposed at an approved facility.

DZ1- FRE	Zone 1 Firewood Fire Resistant Enclosure	*Firewood Fire Resistant Enclosures shall comply with 14 CCR § 1299.03 (3) Relocate exposed firewood piles outside of Zone 1 unless they are completely covered in a fire-resistant material.  *Firewood enclosures less than 120 square feet shall be constructed in accordance with CBC Section 710A Accessory Buildings and Miscellaneous Structures, specifically Section 710A.3.4 Miscellaneous Structures Located 3 Feet (914 mm) or More but Less Than 50 Feet (15 240 mm) and 710A.4 Roof Construction.  *Firewood enclosure doors shall be located away from the primary residence and detached combustible hazards.  *Firewood enclosure vents shall be in accordance with any of the following retrofits, Attics and Rafter Space Flame and Ember Resistant Vent Retrofit (VEN-ARR), Attics and Rafter Space Metal Mesh Vent Retrofit (VEN-ARM) Under-Floor Ventilation Flame and Ember Resistant Vent Retrofit (VEN-UFR) or Under-Floor Ventilation Metal Mesh Vent Retrofit (VEN-UMR).  *Accessory building doors shall not have gaps greater than 1/8 that would be vulnerable to embers.  *The accessory building foundation shall be non-combustible or be enclosed using the ATT-UAR Deck/Stairs/Ramp Unenclosed Area Retrofit.  *This retrofit will also require the Outbuilding Clearance (DZ1-OCT) treatment.
DZ1- FRC	Zone 1 Firewood Fire Resistant Cover	*Firewood Fire Resistant covers shall comply with 14 CCR § 1299.03 (3) Relocate exposed firewood piles outside of Zone 1 unless they are completely covered in a fire-resistant material.  *The firewood covers shall be flame-retardant fabrics or materials approved by the by CAL FIRE Office of the State Fire Marshal (OSFM) in accordance with 19 CCR § 332. Flame Resistance and be tagged and labeled with the Seal of Registration of the OSFM.  *The firewood cover will completely cover the firewood pile with no openings greater than 1/8" that would allow for embers intrusion. The cover will be kept free of debris.  *This retrofit also requires clearance described in DZ1-FWC Firewood Clearance treatment.
DZ1- FWC	Zone 1 Firewood Clearance	*Firewood piles that cannot be relocated more than 30 feet away from a building or structure will require clearance as described in 14 CCR Article 3. Fire Hazard Reduction Around Buildings and Structures § 1299.03 Requirements. (b) Zone 2 Requirements: (C) All exposed wood piles must have a minimum of ten feet (10 ft.) of clearance, down to bare mineral soil, in all directions.  *Firewood piles that cannot be relocated more than 30 feet away from a building or structure will require Fire Resistant covers shall comply with 14 CCR § 1299.03 (3) Relocate exposed firewood piles outside of Zone 1 unless they are completely covered in a fire-resistant material. See DZ1-FRC Firewood Fire Resistant Cover or DZ1-FRE Firewood Fire Resistant Enclosure.
DZ1- FCL	Zone 1 Combustible Fence Clearance	
DZ1- OCT	Zone 1 Outbuilding Clearance	*Outbuildings shall have 10 feet of clearance to bare mineral soil and no flammable vegetation for an additional 10 feet around their exterior, pursuant to 14 CCR § 1299.03(c)(1).

DZ1- RCM	Zone 1 Outbuilding Roof Combustible Material Removal	The "Roof Combustible Material Removal" mitigation measure includes removing all accumulated debris from the roof covering, roof valleys, wall intersections and gutters. Accumulated debris are susceptible to embers and direct flame contact and when ignited can expose combustible building components.
DZ2- GFM	Zone 2 Ground Level Litter or Woody Material Removal	
DZ2- AFM	Zone 2 Cutting of Annual Grass or Forbs Mitigation	*Cutting of Annual Grasses and Forbs in Zone 2 which extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure  *Annual Grasses and Forbs will be mowed or cut and should not exceed 4 inches in height. If there area areas that need to be retained to a height not to exceed 18 inches above the ground, where necessary to stabilize the soil and prevent erosion, the areas will be flagged prior to the initiation of work.  *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).  *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.

DZ2- VRT	Zone 2 Surface Level Vegetation Horizontal Clearance Modification	*Vegetation Removal within Zone 2 which extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure, but not beyond the property line.  *Vegetation horizontal or vertical separation distances shall be incompliance with the Board of Forestry General Guidelines for Creating Defensible Space (Appendix A), Reduced Fuel Zone: Fuel Separation Guidelines and Plant Spacing Guidelines table.  *Groups of vegetation (numerous plants growing together less than 10 feet in total foliage width) may be treated as a single plant.  *Vegetation removal will only be performed on the designated property. Property boundary delineations will be identified prior to the initiation of work. If flagging is required, the property boundary will be identified in red flagging.  *It is the responsibility of the contractor to adhere to local ordinances regulating vegetation removal and to obtaining applicable permits.  *Vegetation will be removed to ground level.  *Areas with equipment or work exclusions will be flagged prior to the initiation of work.  Watershed and Lake Protection Zones (WLPZ) delineations will be identified with blue and white stripe flagging with "Watercourse and Lake Protection Zone" black print.  *All vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.  *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).  *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.
		Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any
DZ2- DDR	Zone 2 Surface Level Dead or Dying Vegetation Removal	14 CCR § 1299.03, (b) Zone 2 Requirements: (A) Dead and dying woody surface fuels and aerial fuels shall be removed.

DZ2- VCL	Zone 2 Tree Vertical Clearance Limbing	*Tree limbing within Zone 2 which extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure. *Lower limbs of trees will be limbed/pruned to at least 6 feet up to 15 feet (or the lower 1/3 branches for small trees).*It is the responsibility of the contractor adhere to local ordinances regulating tree trimming and to obtaining applicable permits. *All vegetation removed from the project site will be disposed at an approved facility.  *Vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure. *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions). *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning.*The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements. *The contractor will be responsible for the safe operation around utilities. The contractor will be responsible for contacting the Underground Service Alert https://www.california811.org/ to assure all utilize qualified tree workers as described in Title 8 California Code of Regulations Section 3420(b). The contractor shall comply with applicable requirements for tree workers identified in Title 8 California Code of Regulations for Tree Work, Maintenance or Removal including sections 3420-3427 & 3458. The contract shall also abide by other requirements in Title 8 California Code of Regulations including, section 2940,2 (Clearances from high-voltage power lines), 3203 (Injury and Illness Prevention), 3328 (Machinery and equipment), 3380 (Personal Protective Devices), 3395 (Heat Illness Prevention), and 3648 (Fall protection). For additional information see t
DZ2- HCL	Zone 2 Tree Horizontal Clearance Limbing	

DZ2- HCF	Zone 2 Horizontal Clearance Tree Felling	*Tree felling for designated trees within Zone 2 which extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure, but not beyond the property line.  *Tree separation distances shall be incompliance with the Board of Forestry General Guidelines for Creating Defensible Space (Appendix A), Reduced Fuel Zone: Fuel Separation guidelines and Plant Spacing Guidelines table.  *Tree felling will only be performed on the designated property. Property boundary delineations will be identified prior to the initiation of work. If flagging is required, the property boundary will be identified in red flagging.  *It is the responsibility of the contractor to adhere to local ordinances regulating tree removal and to obtaining applicable permits.  *Trees designated for removal will be marked with blue tracer paint. Designated trees will have a painted highly visible attention band 2" wide at eye level. The attention mark will be visible from 360 degrees and from at least 50 feet. Cut trees will also have two painted stump marks on all marked trees. The stump marks shall be placed in the furrows of the bark at ground level on the downhill and uphill sides of the trees. Stump marks will touch the ground and be at least 2" wide.  *Tree stumps will be removed to ground level.  *Areas with equipment or work exclusions will be flagged prior to the initiation of work.  Watershed and Lake Protection Zones (WLPZ) delineations will be identified with blue and white stripe flagging with "Watercourse and Lake Protection Zone one delineations will be identified with yellow and white stripe flagging with "Equipment Exclusion Zone delineations will be identified with yellow and white stripe flagging with "Equipment Exclusion Zone of black print.  *All vegetation removed from the project site will be disposed at an approved facility.  *Vegetation removed from the project site will be disposed at an approved facility.  *No operations will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire
DZ2- AFL	Zone 2 Tree Dead or Dying Aerial Material Limbing	14 CCR § 1299.03, (b) Zone 2 Requirements: (A) Dead and dying woody surface fuels and aerial fuels shall be removed.

DZ2- SGM	Zone 2 Snag Mitigation	Snags identified for removal will adhere to the requirements below:*Tree felling will only be performed on the designated property. Property boundary delineations will be identified prior to the initiation of work. If flagging is required, the property boundary will be identified in red flagging. *It is the responsibility of the contractor to adhere to local ordinances regulating tree removal and to obtaining applicable permits. *Snags designated for removal will be marked with blue tracer paint. Designated trees will have a painted highly visible attention band 2" wide at eye level. The attention mark will be visible from 360 degrees and from at least 50 feet. Cut trees will also have two painted stump marks on all marked trees. The stump marks shall be placed in the furrows of the bark at ground level on the downhill and uphill sides of the trees. Stump marks will touch the ground and be at least 2" wide. *Tree stumps will be removed to ground level. *Areas with equipment or work exclusions will be flagged prior to the initiation of work. Watershed and Lake Protection Zones (WLPZ) delineations will be identified with blue and white stripe flagging with "Watercourse and Lake Protection Zone" black print. Equipment Exclusion Zone delineations will be identified with yellow and white stripe flagging with "Equipment Exclusion Zone" black print. *All vegetation removed from the project site will be disposed at an approved facility. *Vegetation chipped on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure. *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions). *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning
DZ2- STM	Zone 2 Stump Mitigation	*Stumps or logs located within Zone 2 which extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.  *Stumps shall be removed, cut or mulched down to ground level.  *All vegetation removed from the project site will be disposed at an approved facility.  *Stump material deposited on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.  *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).  *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.

DZ2- LGM	Zone 2 Log Mitigation	*Logs located within Zone 2 which extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.  *Log material deposited on site may only be distributed in Zone 2 and only to a permitted depth of 3 inches. Zone 2 extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each structure.  *The contractor will be responsible for adhering to requirements outlined in PRC 4427 (Operation of fire causing equipment), PRC 4431 (Gasoline powered saws, etc.; firefighting equipment) and PRC 4442 (Spark arresters or fire prevention measures; requirement; exemptions).  *No operations will be allowed on days identified by the National Weather Service as Fire Weather Watch or Red Flag Warning. The contractor will be responsible for adhering to any local daily Fire Danger and Project Activity Level requirements.  *All vegetation removed from the project site will be disposed at an approved facility.
DZ2- MIS	Zone 2 Miscellaneous Combustible Material Removal	The Zone 2 "Miscellaneous Combustible Material Removal" mitigation measure is utilized for the removal of all combustible items within five feet (5 ft.) from each structure in Zone 2.
DZ2- FWC	Zone 2 Firewood Clearance	Firewood piles are required to have clearance as required by 14 CCR § 1299.03, Article 3 Fire Hazard Reduction Around Buildings and Structures, (b) Zone 2 Requirements: (C) All exposed wood piles must have a minimum of ten feet (10 ft.) of clearance, down to bare mineral soil, in all directions.
DZ2- FCL	Zone 2 Combustible Fence Clearance	
DZ2- OCT	Zone 2 Outbuilding Clearance	*Outbuildings shall have 10 feet of clearance to bare mineral soil and no flammable vegetation for an additional 10 feet around their exterior, pursuant to 14 CCR § 1299.03(c)(1).
DZ2- RCM	Zone 2 Outbuilding Roof Combustible Material Removal	The "Zone 2 Outbuilding Roof Combustible Material Removal" mitigation measure includes removing all accumulated debris from the roof covering, roof valleys, wall intersections, and gutters for outbuildings located in Zone 2. Accumulated debris is susceptible to embers and direct flame contact and when ignited can expose combustible building components.
DSO- BAR	Building Address Retrofit	*Building addressing shall comply with the CFC Section 505 Premises Identification, the CBC Section 502 Building Address, CRC Section R319 Site Address, or equivalent local ordinance.  *The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm).  *Addressing shall also comply with 14 CCR State Minimum Fire Safe Regulations, 14 CCR § 1274.03. Addresses for Buildings additionally require, "Addresses for residential Buildings shall be reflectorized".

DSO- SPR	Street Public Way Address Retrofit	*Building addressing shall comply with the CFC Section 505 Premises Identification, the CBC Section 502 Building Address, CRC Section R319 Site Address, or equivalent local ordinance.  *The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm).  *Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure.  *Addressing shall also comply with 14 CCR State Minimum Fire Safe Regulations, 14 CCR, § 1274.03 Addresses for Buildings and § 1274.04 Address Installation, Location, and Visibility. These regulations require addresses for residential buildings to be reflectorized, address signs along one-way roads shall be visible from both directions, where multiple addresses are required at a single driveway, they shall be mounted on a single sign or post and where a road provides access solely to a single commercial or industrial business, the address sign shall be placed at the nearest Road intersection providing access to that site, or otherwise posted to provide for unobstructed visibility from that intersection.
DSO- CSR	Chimney Spark Arrestor Retrofit	*Chimney Spark Arrestor shall comply with CBC 2113.9.2 Spark Arrestors or CRC R1003.9.2 Spark Arrestors or equivalent local ordinance.
DSO- PTR	Propane Tank Retrofit	*Propane tank relocation shall comply with CFC Chapter 61 - Liquified Petroleum Gases including Section 6104 - Location of LP Gas Containers, Section 6104.3 - Container Location, and Section 6107 - Safety Precautions and Devices. Relocation standards described in Section 6104.3 will also consider distance to adjacent residences.  *If it is not feasible to relocate a propane tank that is too close to a structure, a non-combustible barrier as described by the CBC Chapter 2 Definition "Noncombustible", may be installed between the propane tank and structure in compliance with CFC Chapter 61.
DSO- PTC	Propane Tank Vegetation Clearance	*Vegetation clearance around a propane tank shall comply with 14 CCR § 1299.03 (c)(1) Liquid Propane Gas (LPG) storage tanks shall have the following minimum clearance: ten feet (10 ft.) of clearance to bare mineral soil and no flammable vegetation for an additional ten feet (10 ft.) around their exterior and CFC Chapter 61 - Liquified Petroleum Gases, Section 6107.3 Clearance to Combustibles: Weeds, grass, brush, trash and other combustible materials shall be kept not less than 10 feet (3048 mm) from LP-gas tanks or containers.

DSO- PTE	Propane Tank Screen Retrofit	*The "Propane Tank Screen Retrofit" shall comply with the California Code of Regulations, Article 3. Fire Hazard Reduction Around Buildings and Structures and NFPA 58 Liquefied Petroleum Gas Code.  *Liquid Propane Gas (LPG) storage tanks shall have the following minimum clearance: ten feet (10 ft.) of clearance to bare mineral soil and no flammable vegetation for an additional ten feet (10 ft.) around their exterior (14 CCR § 1299.03) and combustible materials shall not accumulate or be stored within 10 ft of a container (NFPA 58, section 6.5.3.3)  *The propane tank screen will be constructed of noncombustible materials as defined in the California Building Code, Section 202 Definitions.  *The propane tank screen shall comply with the following NFPA 58, Section 6.5.4 Structure Requirements:  1) Clearance shall be provided around the container for inspection and maintenance (3 feet).  2) The structure shall be open on at least one side that includes the longest dimension of the container.  3) The top of the container shall be capable of being wetted by an emergency response hose stream.