City of Malibu

Rebuild Process

Yolanda Bundy, MS, PE, CBO, CFCO
Environmental Sustainability Director
Building Official

www.MalibuRebuilds.org

- ***LICENSES:***

- **Registered Professional Engineer (Civil)– California License**
- **Cal OES Safety Assessment Program-Coordinator**
- **Certified Building Official, International Code Council**
- **Certified Fire Code Official, International Code Council**
- **Plans Examiner, International Code Council**
- **Fire Plans Examiner, International Code Council**
- **Fire Inspector I, International Code Council**
- **Fire Inspector II, International Code Council**

- ***RECENT AWARDS:***

- **SAFER CITY BUILDING OFFICIAL OF THE YEAR (Structural Engineers Association of Southern California) April 2019**

- **BEST PRACTICE EXCELLENCE AWARD "Thomas Fire Recovery" (American Planning Association, California Chapter-Central Coast Section) April 2019**

- ***EDUCATION:***
- **California State University Northridge, Northridge, CA**
- **Master of Science in STRUCTURAL ENGINEERING**

- **California State University Northridge, Northridge, CA**
- **Bachelor of Science in Civil Engineering**


Yolanda Bundy, MS, PE, CBC, CFCO
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Building Official

City of Ventura
Thomas Fire

Thomas Fire

- **Date: December 4, 2017**
- **Location: Ventura, Santa Barbara counties**
- **Acres: 281,893**
- **Structures: 1,063 destroyed**
- **Fatalities: 2**
- **100% contained on January 12, 2018**

Thomas Fire

- Residents caught off guard with wind-driven flames covering hillside.
- Over 104 thousand residents evacuated.
- Fire destroyed homes, apartment complexes and a psychiatric hospital.

Thomas Fire

- **Started December 4, 2017**
- **First reported North of Santa Paula, near Steckel Park and Thomas Aquinas College**
- **Rapid expansion of the blaze attributed to 60 miles per hour Santa Ana winds**

Thomas Fire

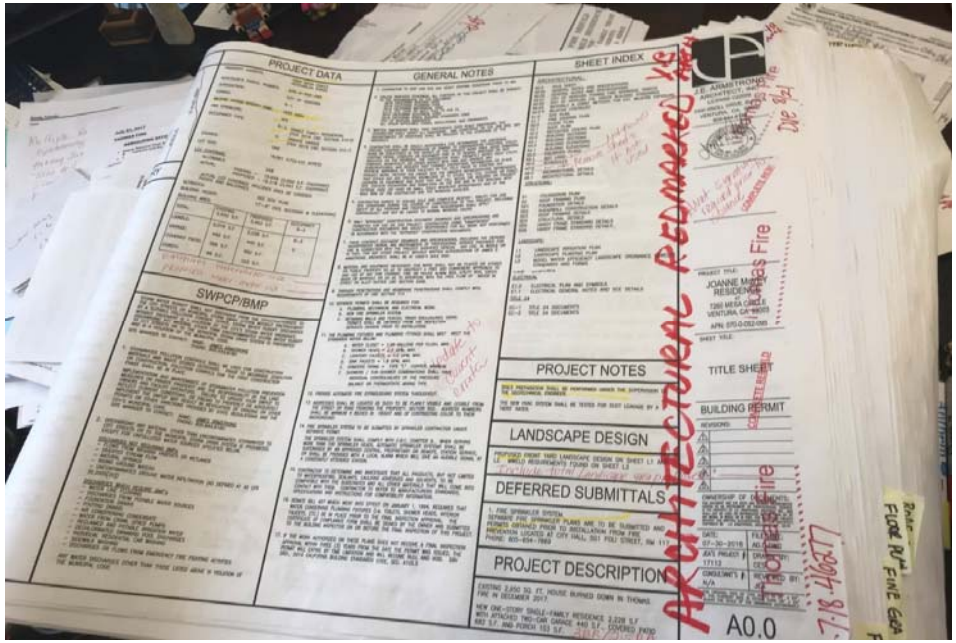
- **Fire traveled 12 miles (19 km) in a few hours.**
- **Many people evacuated with little or no warning**

Thomas Fire

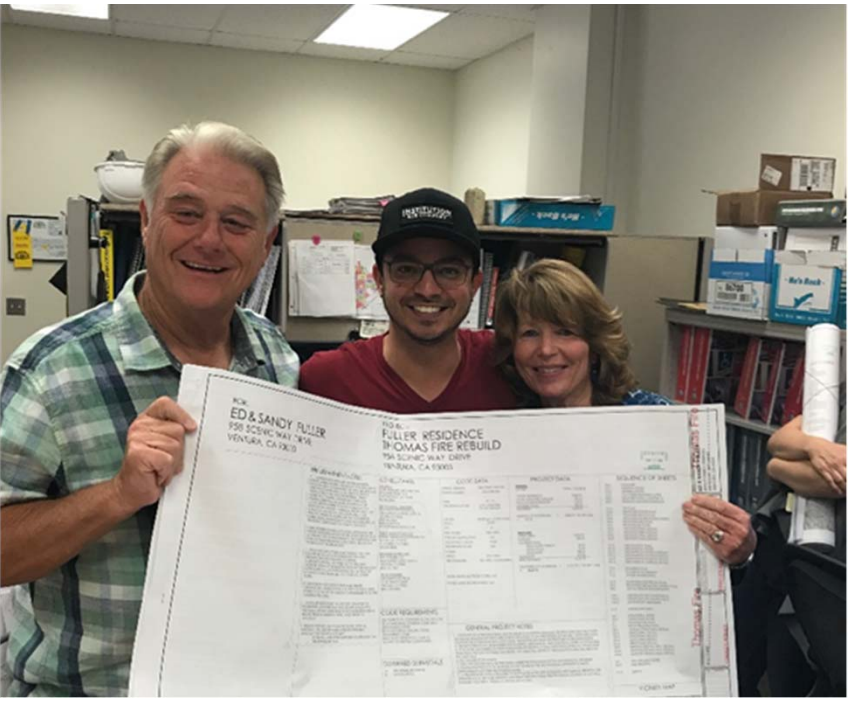
- Impacted Structures
  - 524 Completely Destroyed
  - 128 Damaged

Plan of Action

- One on one meetings with residents
- Streamlined rebuild process
- Created rebuild guidelines



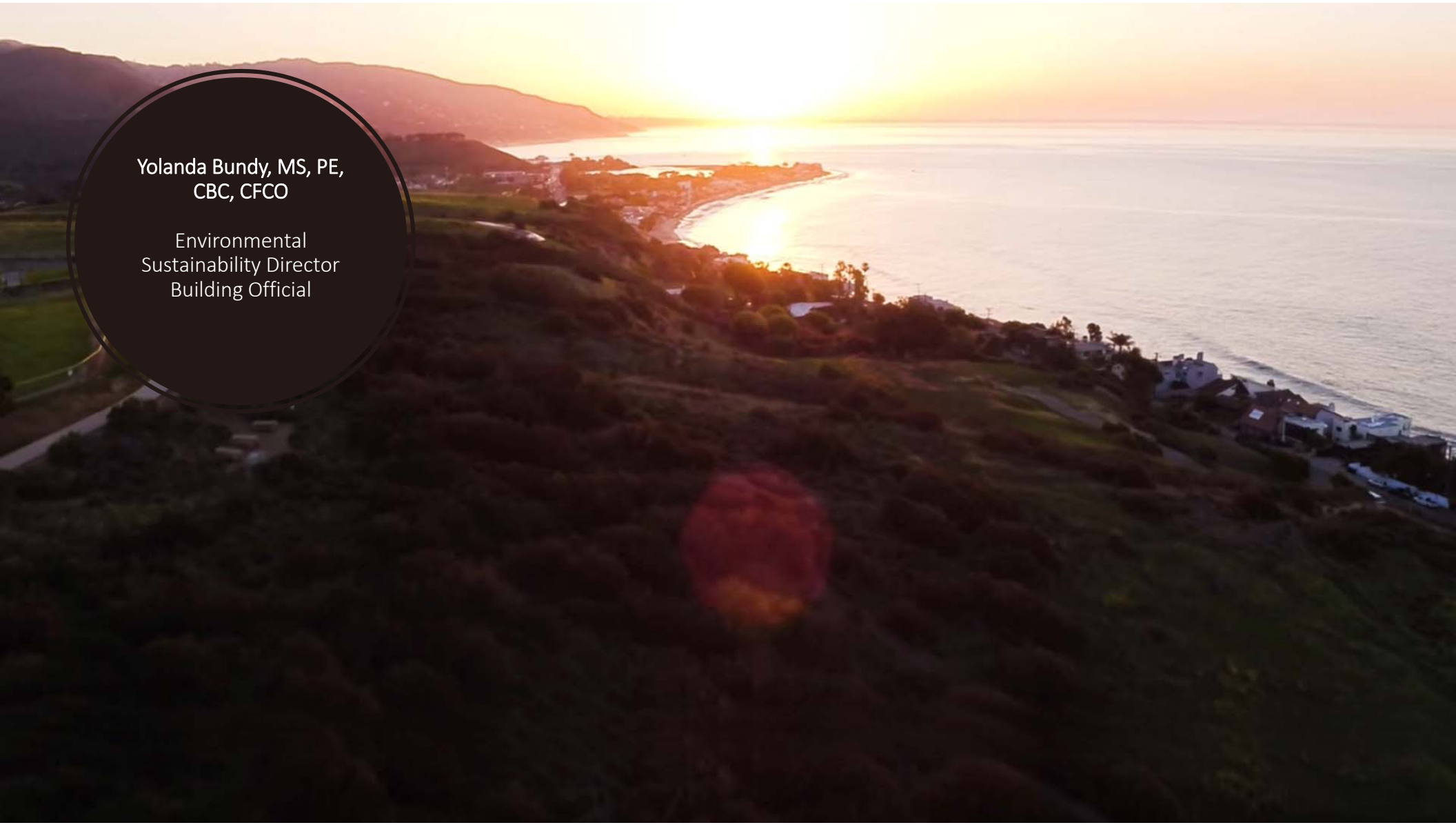
Made Plan Check a Priority



Permit Issuance

- April 18, 2018: first plan submitted
- May 18, 2018: first approval
- Dec. 18, 2018: occupancy allowed

Residents impacted by Thomas Fire are finally home!


Yolanda Bundy, MS, PE, CBC, CFCO
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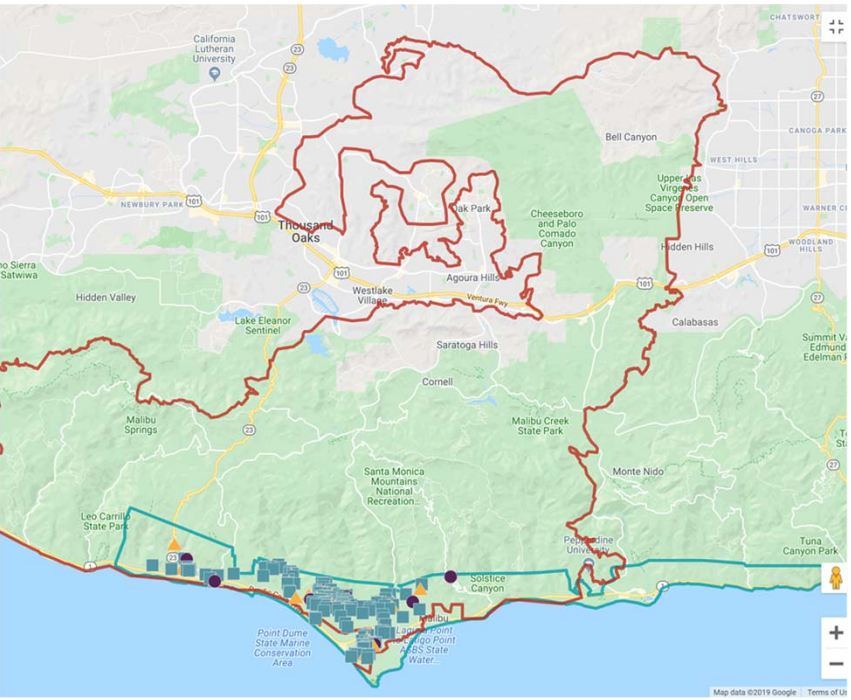
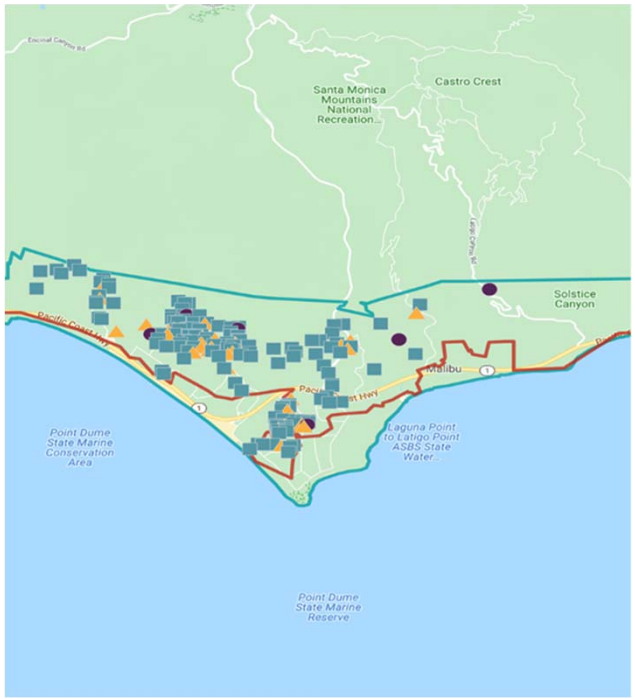
City of Malibu
Woolsey Fire

www.MalibuRebuilds.org



Woolsey Fire

- Date: November 8, 2018
- Location: Malibu, Surrounding Cities and Counties
- Acres: 96,949



Woolsey Fire

- All Malibu residents evacuated
- Over 60 MPH wind speed

Woolsey Fire

- Structures: 1,643 (473 in Malibu)
- Fatalities: 3
- Contained on November 21, 2018

Rebuild Status:

Single Family Residences

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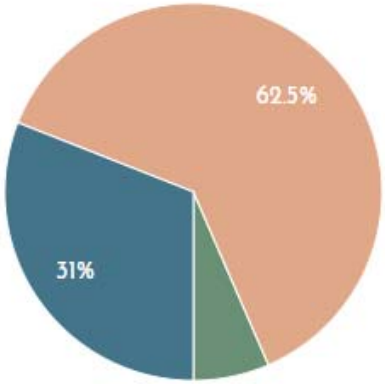
MALIBU REBUILDS

REBUILD CATEGORIES OF SINGLE-FAMILY RESIDENCES

Approved by Planning.



57

Like for Like Rebuild

Rebuild Option 1

Rebuilding same location, same size

115

Like for Like + 10% Rebuild

Rebuild Option 2 & 3

Rebuilding same location + up to 10% more square footage and/or height increase. (expansion must conform to code)

12

Major Change to Residence

Rebuild Option 4 & 5

Rebuilding with significant changes

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MALIBU REBUILDS

REBUILD STATUS OF SINGLE-FAMILY RESIDENCES

Under Planning Review

Projects that have been submitted to Planning and are awaiting approval.

Approved By Planning

Projects that have been approved by Planning.

Building Permits Issued

Projects that have been issued building permits.

Homes Completed

Projects that have been completed.

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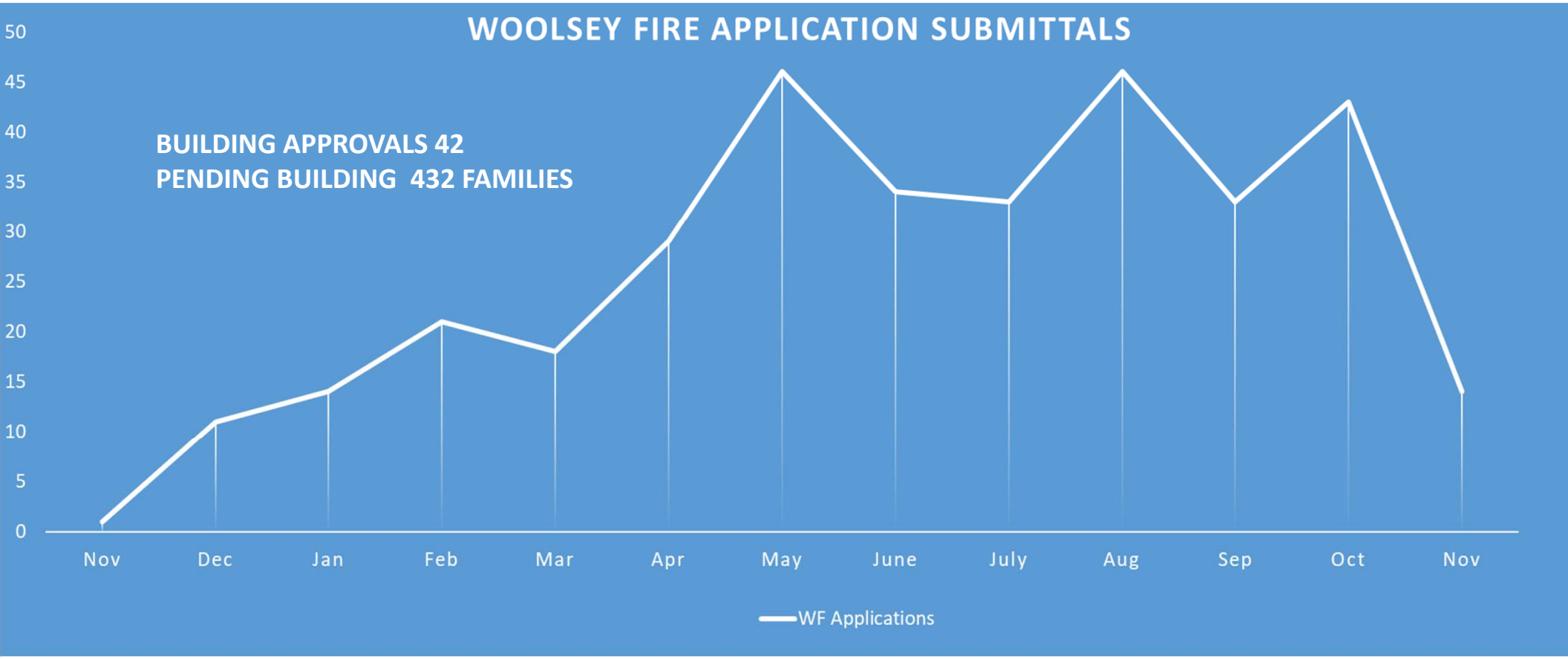

How to Get Ready to Submit

- Meet with Planning Staff, gather general info and checklist, confirm steps
- Visit agencies - PW, EH, Geo, Bio, Fire, LA County Waterworks
- Return to fire rebuild counter for feedback, next steps
- Submit project at fire rebuild counter; if complete, Same day approval! OR Schedule pre-design meeting with Shaveta Sharma, ssharma@malibucity.org for customized advice
- Once your project is approved, see Building and Safety for Building Plan Check requirements & checklist

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Process For Woolsey Fire Rebuilds

What can I build?

Agency Input & Planning Approval

How can I build it?

Building Plan Check Review & Agency Approvals

Construction

Permits & Inspections

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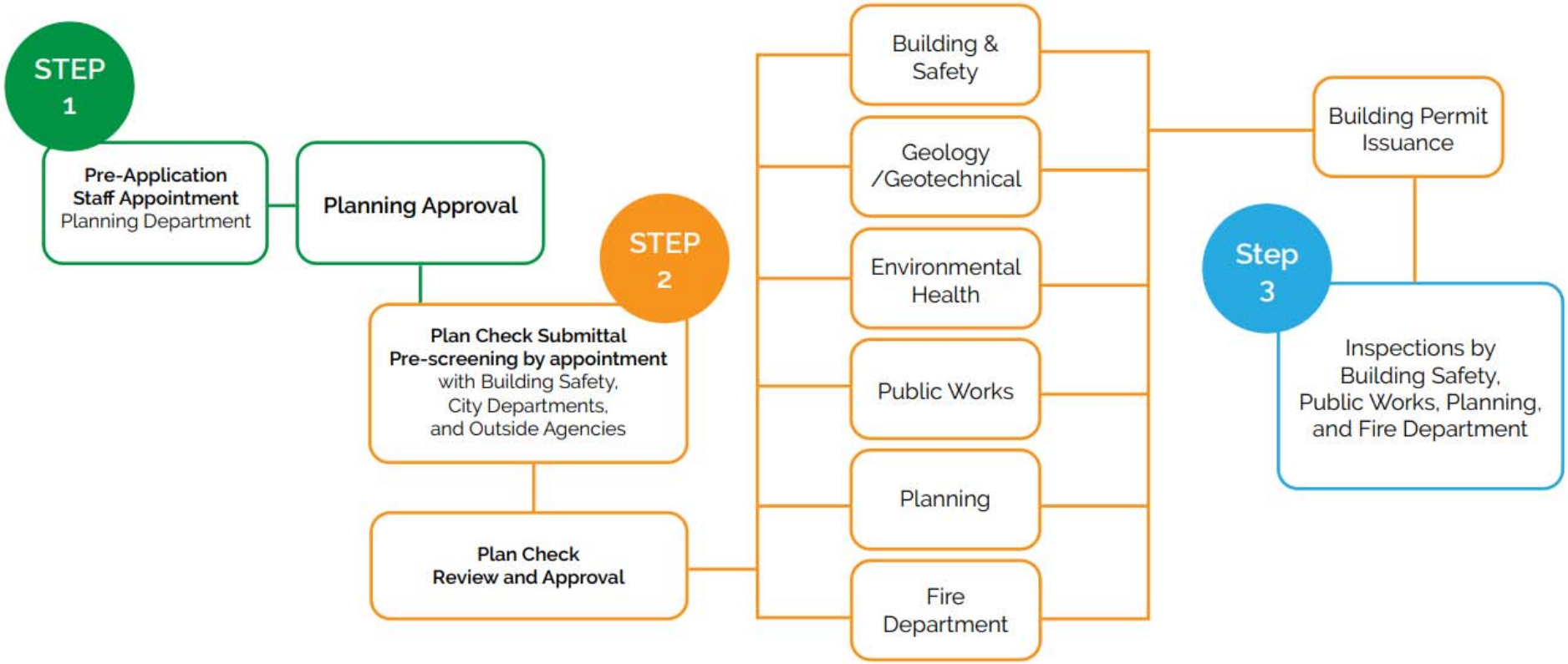
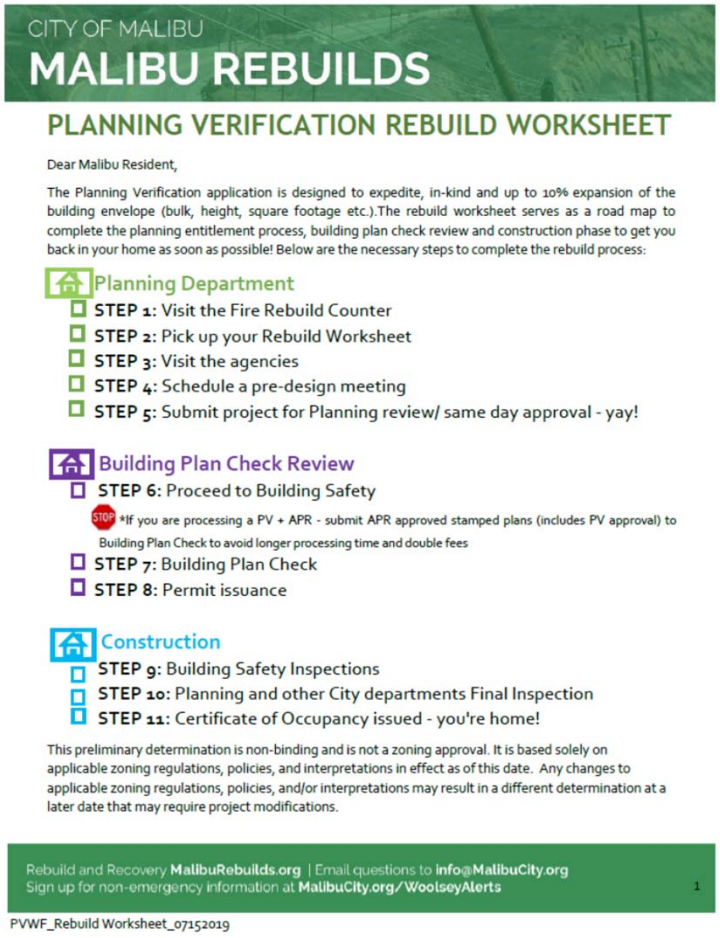


Planning

Ensures conformance to specified Conditions of Approval, if any; and review by City Biologist

Featured Handout:

Planning Verification Rebuild Worksheet



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PLANNING VERIFICATION REBUILD WORKSHEET

Dear Malibu Resident,

The Planning Verification application is designed to expedite, in-kind and up to 10% expansion of the building envelope (bulk, height, square footage etc.).The rebuild worksheet serves as a road map to complete the planning entitlement process, building plan check review and construction phase to get you back in your home as soon as possible! Below are the necessary steps to complete the rebuild process:

Planning Department

- ☐ **STEP 1:** Visit the Fire Rebuild Counter
- ☐ **STEP 2:** Pick up your Rebuild Worksheet
- ☐ **STEP 3:** Visit the agencies
- ☐ **STEP 4:** Schedule a pre-design meeting
- ☐ **STEP 5:** Submit project for Planning review/ same day approval - yay!

Building Plan Check Review

- ☐ **STEP 6:** Proceed to Building Safety

STOP *If you are processing a PV + APR - submit APR approved stamped plans (includes PV approval) to Building Plan Check to avoid longer processing time and double fees

- ☐ **STEP 7:** Building Plan Check
- ☐ **STEP 8:** Permit issuance

Construction

- ☐ **STEP 9:** Building Safety Inspections
- ☐ **STEP 10:** Planning and other City departments Final Inspection
- ☐ **STEP 11:** Certificate of Occupancy issued - you're home!

This preliminary determination is non-binding and is not a zoning approval. It is based solely on applicable zoning regulations, policies, and interpretations in effect as of this date. Any changes to applicable zoning regulations, policies, and/or interpretations may result in a different determination at a later date that may require project modifications.

Rebuild and Recovery **MalibuRebuilds.org** | Email questions to **info@MalibuCity.org**
Sign up for non-emergency information at **MalibuCity.org/WoolseyAlerts** 1

PVWF_Rebuild Worksheet_07152019

Step 1

Planning Approval

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STEP 1 Planning Approval

Conformance to Conditions of Approval, if any; and review by City Biologist

What key info is Planning looking for?

PV

- Documentation verifying existing structure
- 3 sets of plans

PV + 10%

- Documentation verifying existing structure
- Highlight on the plans where the 10% addition is located

PLEASE NOTE:

- Addition must comply with all current City codes and standards
- Conformance review is over the counter; missing info could require revisions

STEP 1 Planning Approval

- Addition beyond 10%: IF outside appeal zone & NO deed restrictions -
  Two steps…
  1) PV for in-kind replacement
  2) APR for addition

- Completely new house/re-design: CDP

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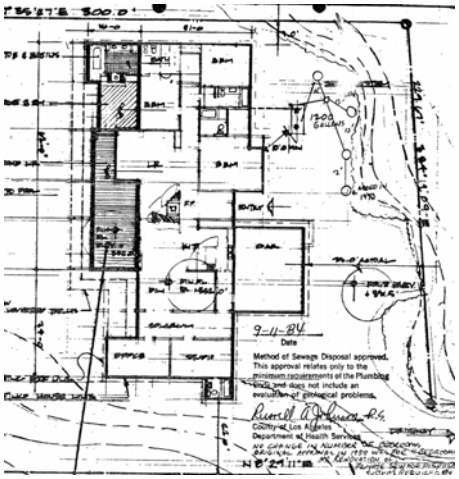
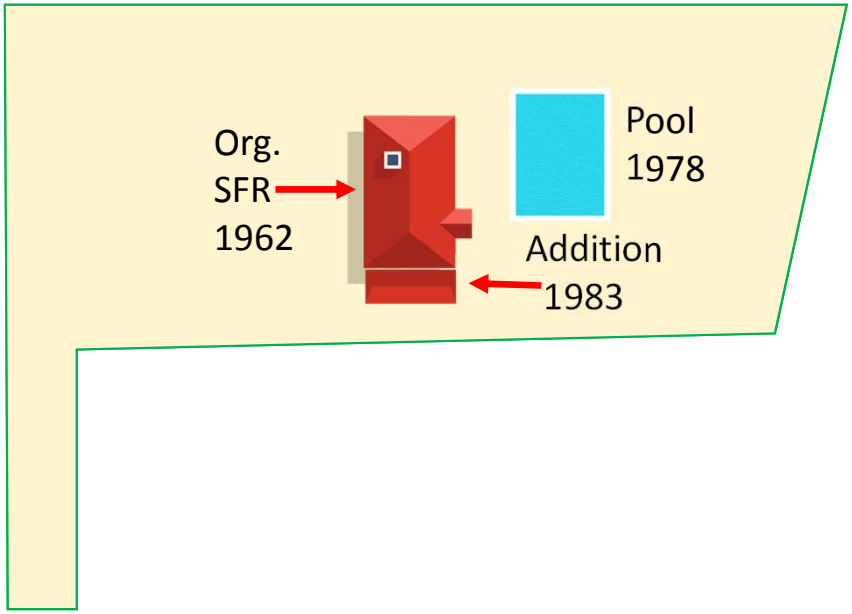
MALIBU REBUILDS

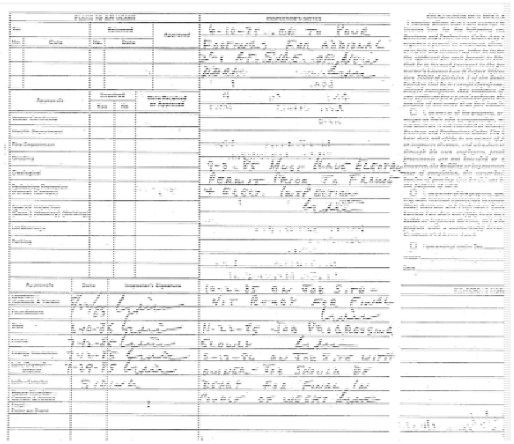
Examples of Info for Planning



Previous stamped and approved plans



Previous finaled permits



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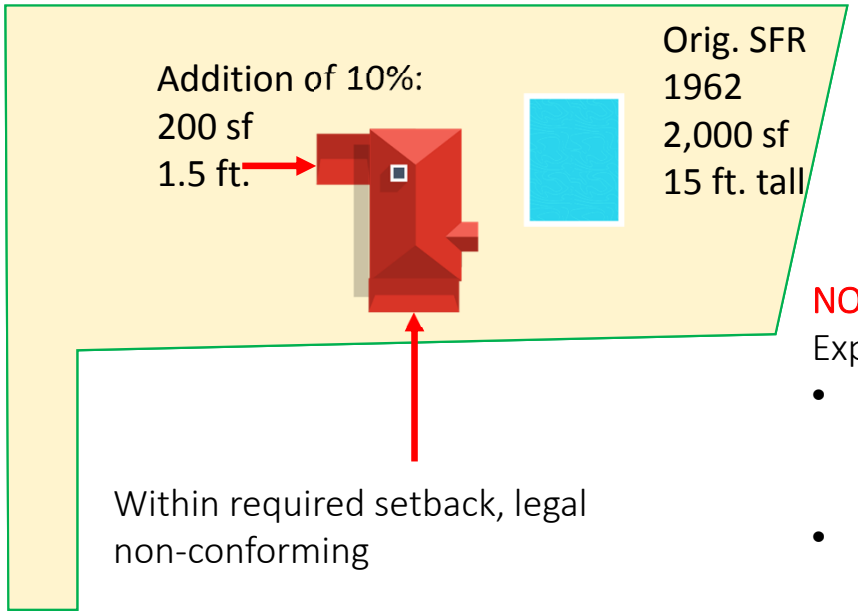
What does +10% mean?

You can also expand any destroyed accessory structures by 10% each



NOTE:

Expansion of 10% is only allowed if:

- New area meets development standards*(cannot expand any non-conformities)*
- Property is under max TDSF and Impermeable

Simplified Planning Process

Simplified planning stage process allows for:

✓ In-kind replacement + up to 10% expansion via administrative PV*
✓ Up to 2 temp housing structures, together max of 1,200 sq. ft.

*PV = Planning Verification

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Fee Waivers for Woolsey Fire Projects

Which fees are being waived?

- Like-for-Like or Like-for-Like plus 10%
- Fees associated with Planning, Building Safety, Biology, Environmental Health, Geotechnical review, public works
- Fees for replacement or upgrade of onsite wastewater treatment systems (OWTS), damaged or destroyed accessory structures, hardscaping, and landscaping

Total amount of fees waived to date: $1,202,918

Building Safety

Reviews construction plans for compliance with building codes and standards; central hub for all agency approvals

Featured Handout:

Residential Building Plan Check

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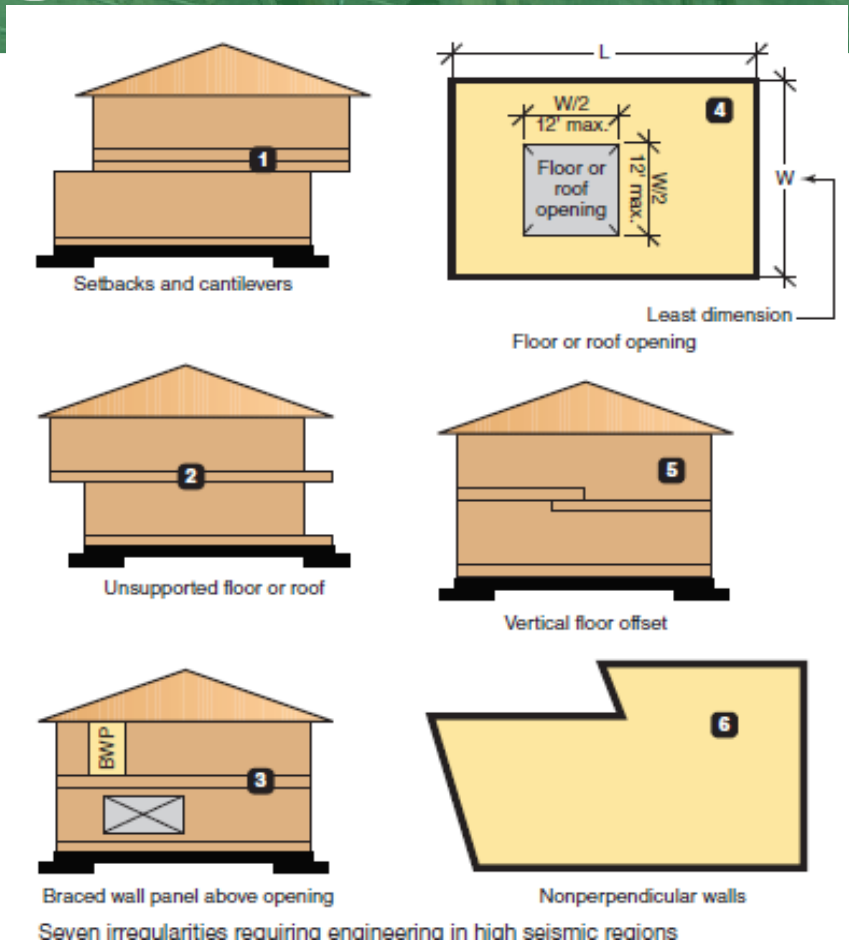
Building Safety

Overview of Process:

- Debris Clearance
- Reinstating Power
- Temporary Housing
- Plan Check



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Debris Clearance

Complete Debris Clearance:
Required for properties with damaged/destroyed primary structures (Opt-in / Opt-out programs)

Debris Removal Operations Center:
Visit the office at 26610 Agoura Road in Calabasas or call 626-979-5370

- 8:00 AM to 5:00 PM Monday - Friday
- 9:00 AM to 12:00 PM Saturday

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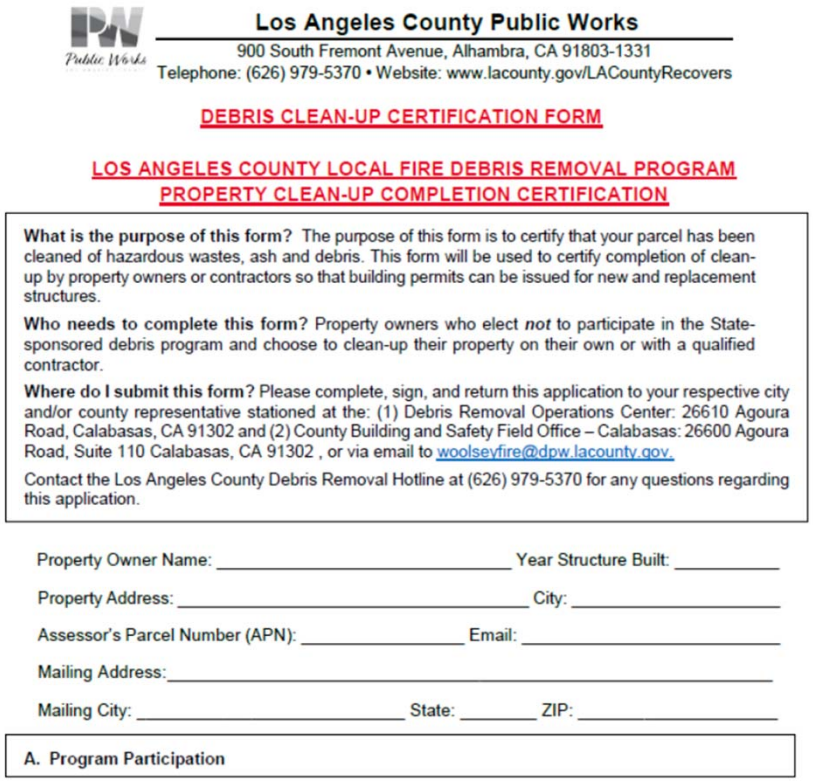
Debris Clearance Documents

Approved reports necessary to obtain permits to rebuild include:

- Foundation report
- Debris removal completion report



Los Angeles County Public Works
900 South Fremont Avenue, Alhambra, CA 91803-1331
Telephone: (626) 979-5370 • Website: www.lacounty.gov/LACountyRecovers

DEBRIS CLEAN-UP CERTIFICATION FORM

LOS ANGELES COUNTY LOCAL FIRE DEBRIS REMOVAL PROGRAM
PROPERTY CLEAN-UP COMPLETION CERTIFICATION

What is the purpose of this form? The purpose of this form is to certify that your parcel has been cleaned of hazardous wastes, ash and debris. This form will be used to certify completion of clean-up by property owners or contractors so that building permits can be issued for new and replacement structures.

Who needs to complete this form? Property owners who elect *not* to participate in the State-sponsored debris program and choose to clean-up their property on their own or with a qualified contractor.

Where do I submit this form? Please complete, sign, and return this application to your respective city and/or county representative stationed at the: (1) Debris Removal Operations Center: 26610 Agoura Road, Calabasas, CA 91302 and (2) County Building and Safety Field Office – Calabasas: 26600 Agoura Road, Suite 110 Calabasas, CA 91302 , or via email to woolseyfire@dpw.lacounty.gov.

Contact the Los Angeles County Debris Removal Hotline at (626) 979-5370 for any questions regarding this application.

Property Owner Name: _____ Year Structure Built: _____

Property Address: _____ City: _____

Assessor's Parcel Number (APN): _____ Email: _____

Mailing Address: _____

Mailing City: _____ State: _____ ZIP: _____

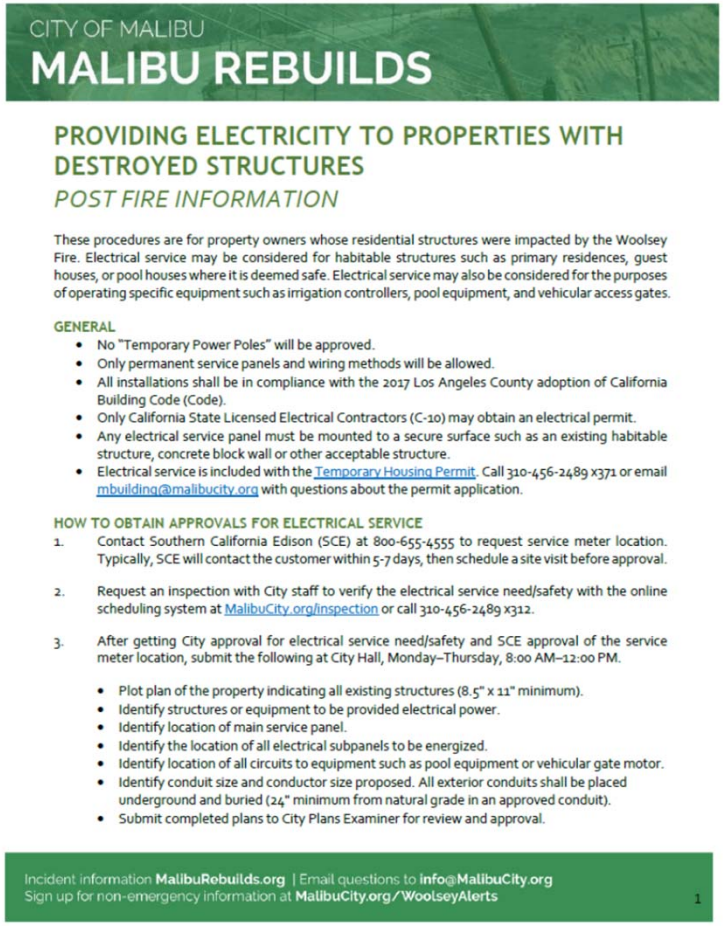
A. Program Participation

Restoring Utilities

General info and process on how to obtain approvals

Featured Handout:

Providing Electricity to Properties with Destroyed Structures



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PROVIDING ELECTRICITY TO PROPERTIES WITH DESTROYED STRUCTURES

POST FIRE INFORMATION

These procedures are for property owners whose residential structures were impacted by the Woolsey Fire. Electrical service may be considered for habitable structures such as primary residences, guest houses, or pool houses where it is deemed safe. Electrical service may also be considered for the purposes of operating specific equipment such as irrigation controllers, pool equipment, and vehicular access gates.

GENERAL

- No "Temporary Power Poles" will be approved.
- Only permanent service panels and wiring methods will be allowed.
- All installations shall be in compliance with the 2017 Los Angeles County adoption of California Building Code (Code).
- Only California State Licensed Electrical Contractors (C-10) may obtain an electrical permit.
- Any electrical service panel must be mounted to a secure surface such as an existing habitable structure, concrete block wall or other acceptable structure.
- Electrical service is included with the Temporary Housing Permit. Call 310-456-2489 x371 or email mbuilding@malibucity.org with questions about the permit application.

HOW TO OBTAIN APPROVALS FOR ELECTRICAL SERVICE

1. Contact Southern California Edison (SCE) at 800-655-4555 to request service meter location. Typically, SCE will contact the customer within 5-7 days, then schedule a site visit before approval.

2. Request an inspection with City staff to verify the electrical service need/safety with the online scheduling system at MalibuCity.org/inspection or call 310-456-2489 x312.

3. After getting City approval for electrical service need/safety and SCE approval of the service meter location, submit the following at City Hall, Monday–Thursday, 8:00 AM–12:00 PM.

    - Plot plan of the property indicating all existing structures (8.5" x 11" minimum).
    - Identify structures or equipment to be provided electrical power.
    - Identify location of main service panel.
    - Identify the location of all electrical subpanels to be energized.
    - Identify location of all circuits to equipment such as pool equipment or vehicular gate motor.
    - Identify conduit size and conductor size proposed. All exterior conduits shall be placed underground and buried (24" minimum from natural grade in an approved conduit).
    - Submit completed plans to City Plans Examiner for review and approval.

Reinstating Power

Meter Replacement – Courtesy inspection by City Building Inspector

Replacement Service Equipment
Call Southern California Edison 800-990-7788 for meter location approval

Permanent Power Requirement

- Initial inspection and permit
- Meter pedestal or pole-mounted meter
- Permanent wiring

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Temporary Housing

Building Safety Permit

- Site plan
- Unit information

Utility Hookups

- Electrical
- Water
- Gas

Inspections

Step 2

Building Plan Check

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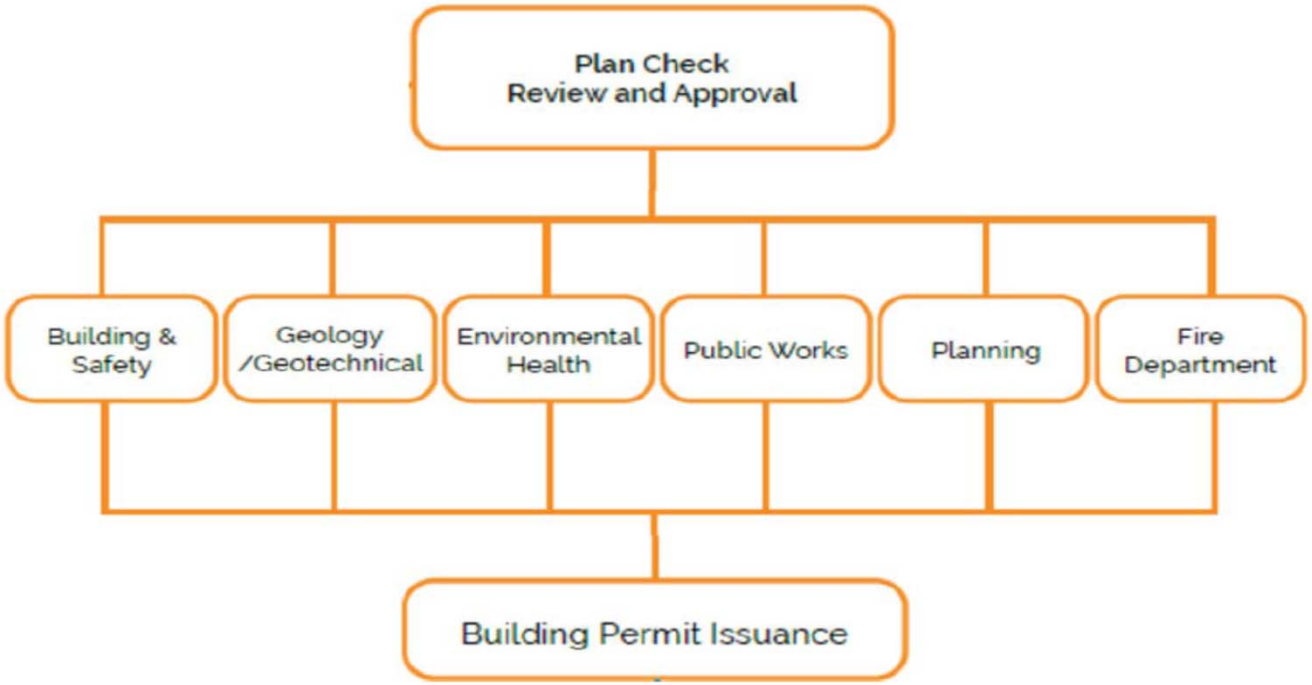
STEP 2 Building Plan Check & Agency Approvals

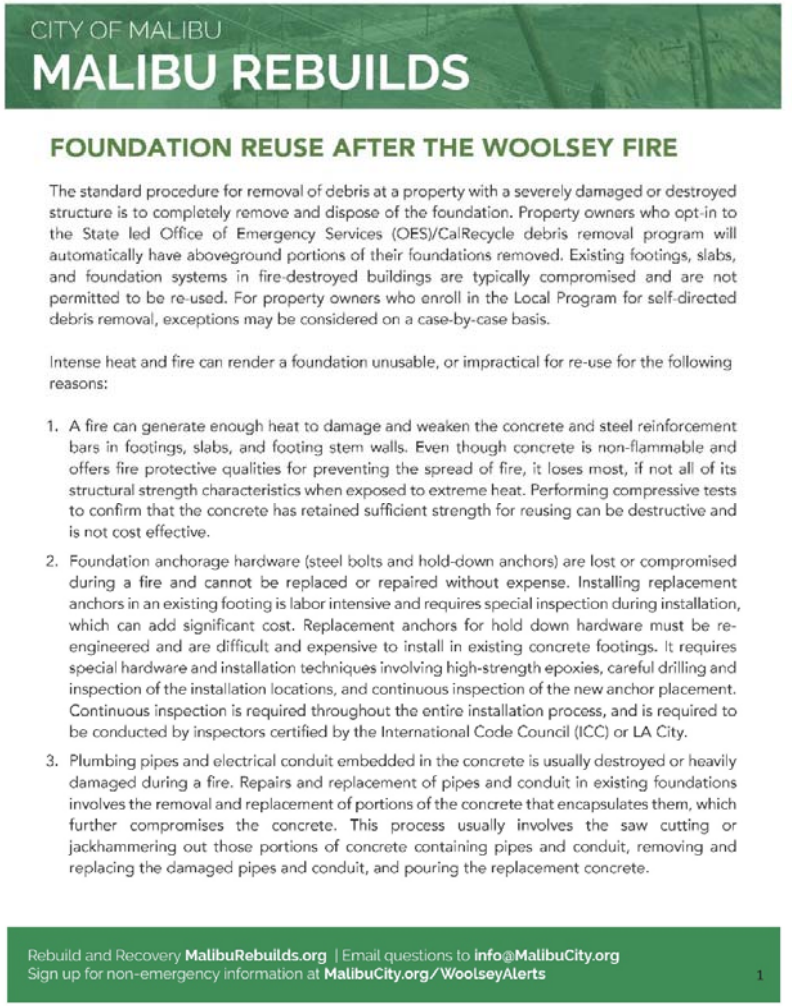


Plan Check

For Plan Check process, provide Foundation Reuse Feasibility Report

Featured Handout:

Foundation Reuse After the Woolsey Fire



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FOUNDATION REUSE AFTER THE WOOLSEY FIRE

The standard procedure for removal of debris at a property with a severely damaged or destroyed structure is to completely remove and dispose of the foundation. Property owners who opt-in to the State led Office of Emergency Services (OES)/CalRecycle debris removal program will automatically have aboveground portions of their foundations removed. Existing footings, slabs, and foundation systems in fire-destroyed buildings are typically compromised and are not permitted to be re-used. For property owners who enroll in the Local Program for self-directed debris removal, exceptions may be considered on a case-by-case basis.

Intense heat and fire can render a foundation unusable, or impractical for re-use for the following reasons:

1. A fire can generate enough heat to damage and weaken the concrete and steel reinforcement bars in footings, slabs, and footing stem walls. Even though concrete is non-flammable and offers fire protective qualities for preventing the spread of fire, it loses most, if not all of its structural strength characteristics when exposed to extreme heat. Performing compressive tests to confirm that the concrete has retained sufficient strength for reusing can be destructive and is not cost effective.
2. Foundation anchorage hardware (steel bolts and hold-down anchors) are lost or compromised during a fire and cannot be replaced or repaired without expense. Installing replacement anchors in an existing footing is labor intensive and requires special inspection during installation, which can add significant cost. Replacement anchors for hold down hardware must be re-engineered and are difficult and expensive to install in existing concrete footings. It requires special hardware and installation techniques involving high-strength epoxies, careful drilling and inspection of the installation locations, and continuous inspection of the new anchor placement. Continuous inspection is required throughout the entire installation process, and is required to be conducted by inspectors certified by the International Code Council (ICC) or LA City.
3. Plumbing pipes and electrical conduit embedded in the concrete is usually destroyed or heavily damaged during a fire. Repairs and replacement of pipes and conduit in existing foundations involves the removal and replacement of portions of the concrete that encapsulates them, which further compromises the concrete. This process usually involves the saw cutting or jackhammering out those portions of concrete containing pipes and conduit, removing and replacing the damaged pipes and conduit, and pouring the replacement concrete.

Rebuild and Recovery **MalibuRebuilds.org** | Email questions to **info@MalibuCity.org**
Sign up for non-emergency information at **MalibuCity.org/WoolseyAlerts** 1

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Plan Check

Building Plans Review

- Foundation reuse feasibility report
- Architectural and Energy
- Structural
- Grading/Drainage

Environmental Health

Reviews functionality and capacity of wastewater system to serve your building(s)

Featured Handout:

Rebuild Review Process for Environmental Health

REBUILD REVIEW PROCESS – Environmental Health (EH)

Rebuild Type	Materials Required	Approval Process
Planning Verification (PVWF) **Temporary Home (THWF)** Utilize existing onsite wastewater treatment system (OWTS)	• Planning Approval – EH conditions • OWTS Assessment Form • OWTS Site Plan • Floor Plan • Fee = $404.00 submitted during Building Plan Check	• Complete any necessary repairs to OWTS • EH reviews during Building Plan Check, issues approved OWTS site plan and stamps plans
Administrative Plan Review (APRWF) Utilize existing onsite wastewater treatment system (OWTS)	• OWTS Assessment Form • OWTS Site Plan • Floor Plan • Submit all documents to Planning • Fee = $806.00 submitted to Planning	• EH reviews during Planning stage • Complete any necessary repairs to OWTS • EH reviews during Building Plan Check and issues final approval
Administrative Plan Review (APRWF) Replace/upgrade OWTS **Coastal Development Permit (DMW) or (CDP)** Replace/upgrade OWTS	• APR/CDP Application Checklist – materials for review • Submit all documents to Planning • Fee = $2115.00 submitted to Planning	• EH reviews during Planning stage for conformance and Building Plan Check stage for approval • All conditions must be met prior to issuance of building permit • Fee = $1510.00 submitted to EH

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Plan Check

Environmental Health

- Onsite Wastewater Treatment Systems (OWTS)
- Capacity and system condition

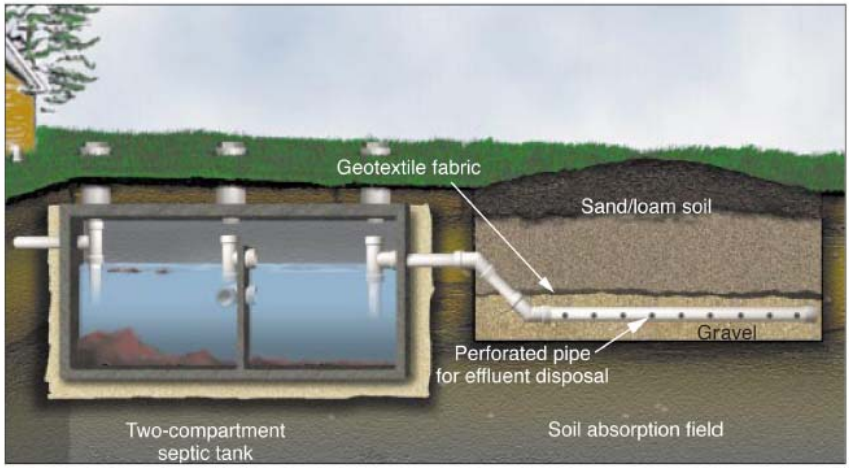

Figure 1: A septic tank and soil absorption field system.

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Environmental Health

Reuse of Existing OWTS

- OWTS Assessment Form
- Site plan with location of OWTS and all structures
- Floor plans and fixture unit worksheet

New OWTS

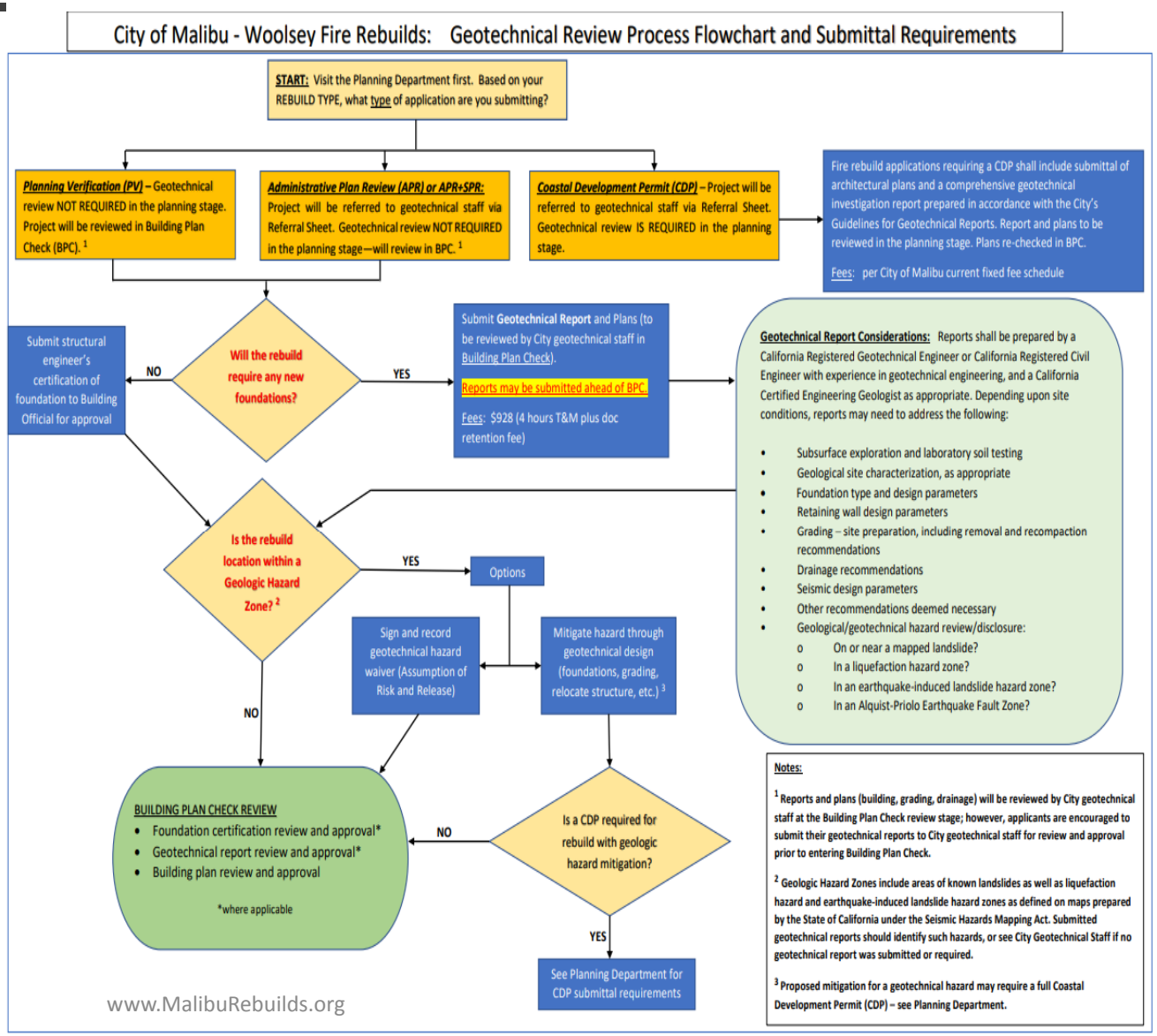
- See Planning project application checklist

Geology / Geotechnical

Reviews geologic and soils engineering reports and plans

Featured Handout:

Geotechnical Review Process Flow Chart and Submittal Requirements



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Plan Check

Geology

- Support for foundation design
- Geotechnical reports

Geology / Geotechnical

Reuse of Existing Foundation

- Approved foundation feasibility report
- Approved foundation repair plan

New Foundation

- Requires Geotechnical report

Public Works

Reviews drainage, grading, erosion control plans, FEMA flood zone regulations

Featured Handout:

Local Storm Water Pollution Prevention Plan Requirements

The Contractor shall implement the following BMPs listed within the table below (check marked) prior to the commencement of any construction activity. Additional BMPs may be required as deemed necessary with onsite inspections or conditions.

LOCAL SWPPP – CONTRACTOR REQUIREMENTS

	Best Management Practices (BMPs)	Project Size/Classification <1 acre	CASQA Handbook
Erosion Control	Scheduling	x	EC-1
	Preservation of Existing Vegetation	x	EC-2
	Hydraulic Mulch		EC-3
	Hydroseeding		EC-4
	Soil Binders		EC-5
	Straw Mulch		EC-6
	Geotextiles		EC-7
	Wood Mulching		EC-8
	Slope Drains		EC-11
Sediment Controls	Silt Fence	x	SE-1
	Sand Bag Barrier	x	SE-8
	Fiber rolls	x	SE-5
	Gravel Bag Berm		SE-6
	Street Sweeping and/ or Vacuum		SE-7
	Storm Drain Inlet Protection	x	SE-10
	Sediment Basin		SE-2
	Check Dam		SE-4
Tracking Control	Stabilized Construction Site Entrance/Exit	x	TC-1
	Stabilized Construction Roadway		TC-2
	Entrance/ Exit Tire Wash		TC-3
Wind Erosion Control	Wind Erosion Controls	x	WE-1
Waste Management	Material Delivery and Storage	x	WM-1
	Stockpile Management	x	WM-3
	Spill Prevention and Control	x	WM-4
	Solid Waste Management	x	WM-5
	Concrete Waste Management	x	WM-8
	Sanitary/Septic Waste Management	x	WM-9
Non-Storm Water Management	Water Conservation Practices	x	NS-1
	Dewatering Operations	x	NS-2
	Vehicle and Equipment Washing	x	NS-8
	Vehicle and Equipment Fueling	x	NS-9
	Vehicle and Equipment Maintenance	x	NS-10

Notes: The BMPs listed above are referencing the California Stormwater BMP Handbooks and BMP Fact Sheets and can be downloaded from the California Stormwater Handbooks at www.casqa.org

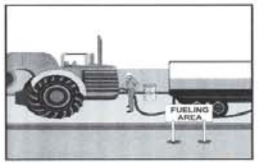
CITY OF MALIBU

MALIBU REBUILDS

Public Works

Reviews drainage, grading, erosion control plans (local SWPPP), stormwater and water quality compliance, FEMA flood zone regulations, and improvements within the public right-of-way

Vehicle and Equipment Fueling NS-9



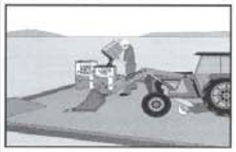
Objectives
- EC Erosion Control
- SE Sediment Control
- TC Tracking Control
- WE Wind Erosion Control
- NS Non-Stormwater Management Control ✓
- WM Waste Management and Materials Pollution Control

Legend: ✓ Primary Objective; ✓ Secondary Objective

Description and Purpose
Vehicle equipment fueling procedures and practices are designed to prevent fuel spills and leaks, and reduce or eliminate contamination of stormwater. This can be accomplished by using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedures.

Targeted Constituents
Sediment; Nutrients; Trash; Metals; Bacteria; Oil and Grease ✓; Organics

Vehicle & Equipment Maintenance NS-10



Objectives
- EC Erosion Control
- SE Sediment Control
- TC Tracking Control
- WE Wind Erosion Control
- NS Non-Stormwater Management Control ✓
- WM Waste Management and Materials Pollution Control

Legend: ✓ Primary Objective; ✓ Secondary Objective

Description and Purpose
Prevent or reduce the contamination of stormwater resulting from vehicle and equipment maintenance by running a "dry and clean site". The best option would be to perform maintenance activities at an offsite facility. If this option is not available then work should be performed in designated areas only, while providing cover for materials stored outside, checking for leaks and spills, and containing and cleaning up spills immediately. Employees and subcontractors must be trained in proper procedures.

Targeted Constituents
Sediment; Nutrients ✓; Trash ✓; Metals; Bacteria; Oil and Grease ✓; Organics ✓

Potential Alternatives

Silt Fence SE-1

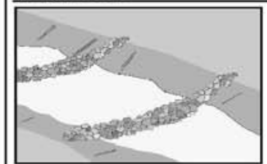
Categories
- EC Erosion Control
- SE Sediment Control ☑
- TC Tracking Control
- WE Wind Erosion Control
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control

Legend: ☐ Primary Category; ☒ Secondary Category

Description and Purpose
A silt fence is made of a woven geotextile that has been entrenched, attached to supporting poles, and sometimes backed by a plastic or wire mesh for support. The silt fence detains water, promoting sedimentation of coarse sediment behind the fence. Silt fence does not retain soil fine particles like clays or silts.

Targeted Constituents
Sediment (coarse sediment) ☑; Nutrients; Trash; Metals; Bacteria; Oil and Grease

Check Dams SE-4



Categories
- EC Erosion Control ☒
- SE Sediment Control ☑
- TC Tracking Control
- WE Wind Erosion Control
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control

Legend: ☐ Primary Category; ☒ Secondary Category

Description and Purpose
A check dam is a small barrier constructed of rock, gravel bags, sandbags, fiber rolls, or other proprietary products, placed across a constructed swale or drainage ditch. Check dams reduce the effective slope of the channel, thereby reducing scour and channel erosion by reducing flow velocity and increasing residence time within the channel, allowing sediment to settle.

Targeted Constituents
Sediment ☑; Nutrients; Trash; Metals; Bacteria; Oil and Grease; Organics

Fiber Rolls or Silt Fence SE-5

Categories
- EC Erosion Control ☒
- SE Sediment Control ☑
- TC Tracking Control
- WE Wind Erosion Control
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control

Legend: ☐ Primary Category; ☒ Secondary Category

Description and Purpose
A fiber roll consists of straw, coir, or other biodegradable materials bound into a tight tubular roll wrapped by netting, which can be photodegradable or natural. Additionally, gravel core fiber rolls are available, which contain an imbedded ballast material such as gravel or sand for additional weight when staking the rolls are not feasible (such as use as inlet protection). When fiber rolls are placed at the toe and on the face of slopes along the contours, they intercept runoff, reduce its flow velocity, release the runoff as sheet flow, and provide removal of sediment from the runoff (through sedimentation). By interrupting the length of a slope, fiber rolls can also reduce sheet and rill erosion until vegetation is established.

Targeted Constituents
Sediment ☑; Nutrients; Trash; Metals; Bacteria; Oil and Grease; Organics

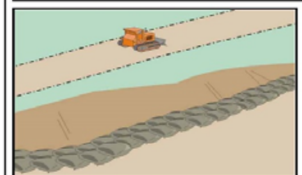
Potential Alternatives
SE-1 Silt Fence

Street Sweeping and Vacuuming SE-7

Categories
- EC Erosion Control
- SE Sediment Control ☒
- TC Tracking Control ☑
- WE Wind Erosion Control
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control

Legend: ☑ Primary Objective; ☒ Secondary Objective

Sandbag Barrier SE-8



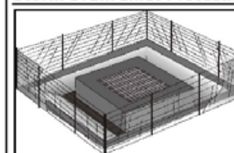
Categories
- EC Erosion Control ☒
- SE Sediment Control ☑
- TC Tracking Control
- WE Wind Erosion Control
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control

Legend: ☐ Primary Category; ☒ Secondary Category

Description and Purpose
A sandbag barrier is a series of sand-filled bags placed on a level contour to intercept or to divert sheet flows. Sandbag barriers placed on a level contour pond sheet flow runoff, allowing sediment to settle out.

Targeted Constituents
Sediment ☑; Nutrients; Trash; Metals

Storm Drain Inlet Protection SE-10



Categories
- EC Erosion Control
- SE Sediment Control ☑
- TC Tracking Control
- WE Wind Erosion Control
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control

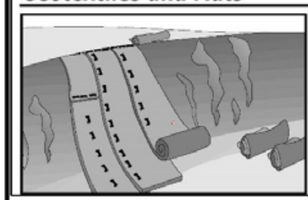
Legend: ☐ Primary Category; ☒ Secondary Category

Description and Purpose
Storm drain inlet protection consists of a sediment filter or an impounding area in, around or upstream of a storm drain, drop inlet, or curb inlet. Storm drain inlet protection measures temporarily pond runoff before it enters the storm drain, allowing sediment to settle. Some filter configurations also remove sediment by filtering, but usually the ponding action results in the greatest sediment reduction. Temporary geotextile storm drain inserts attach underneath storm drain grates to capture and filter storm water.

Targeted Constituents
Sediment ☑; Nutrients; Trash ☒; Metals; Bacteria; Oil and Grease; Organics

Potential Alternatives

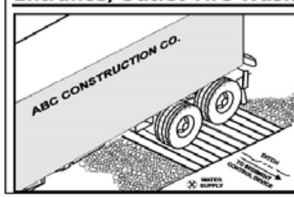
Geotextiles and Mats EC-7



Categories
- EC Erosion Control ☑
- SE Sediment Control
- TC Tracking Control
- WE Wind Erosion Control ☒
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control

Legend: ☑ Primary Category; ☒ Secondary Category

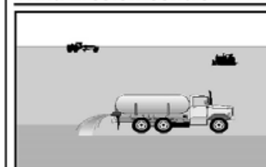
Entrance/Outlet Tire Wash TC-3



Categories
- EC Erosion Control
- SE Sediment Control ☒
- TC Tracking Control ☑
- WE Wind Erosion Control
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control

Legend: ☑ Primary Objective; ☒ Secondary Objective

Wind Erosion Control WE-1



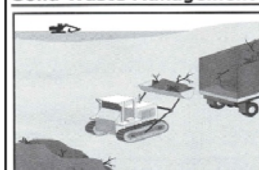
Categories
- EC Erosion Control
- SE Sediment Control ☒
- TC Tracking Control
- WE Wind Erosion Control ☑
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control

Legend: ☐ Primary Category; ☒ Secondary Category

Description and Purpose
Wind erosion or dust control consists of applying water or other chemical dust suppressants as necessary to prevent or alleviate dust nuisance generated by construction activities. Covering small stockpiles or areas is an alternative to applying water or other dust palliatives.

Targeted Constituents
Sediment ☑; Nutrients; Trash; Metals; Bacteria; Oil and Grease

Solid Waste Management WM-5



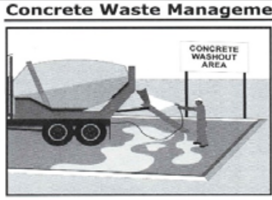
Objectives
- EC Erosion Control
- SE Sediment Control
- TC Tracking Control
- WE Wind Erosion Control
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control ✓

Legend: ✓ Primary Objective; ✓ Secondary Objective

Description and Purpose
Solid waste management procedures and practices are designed to prevent or reduce the discharge of pollutants to stormwater from solid or construction waste by providing designated waste collection areas and containers, arranging for regular disposal, and training employees and subcontractors.

Targeted Constituents
Sediment ✓; Nutrients ✓; Trash ✓; Metals ✓; Bacteria; Oil and Grease ✓

Concrete Waste Management WM-8



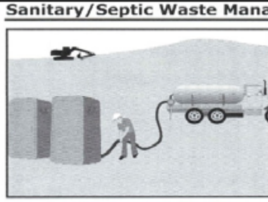
Objectives
- EC Erosion Control
- SE Sediment Control
- TC Tracking Control
- WE Wind Erosion Control
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control ✓

Legend: ✓ Primary Objective; ✓ Secondary Objective

Description and Purpose
Prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite, performing onsite washout in a designated area, and training employee and subcontractors.

Targeted Constituents
Sediment ✓; Nutrients; Trash; Metals ✓; Bacteria

Sanitary/Septic Waste Management WM-9



Objectives
- EC Erosion Control
- SE Sediment Control
- TC Tracking Control
- WE Wind Erosion Control
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control ✓

Legend: ✓ Primary Objective; ✓ Secondary Objective

Description and Purpose
Proper sanitary and septic waste management prevent the discharge of pollutants to stormwater from sanitary and septic waste by providing convenient, well-maintained facilities, and arranging for regular service and disposal.

Targeted Constituents
Sediment; Nutrients ✓; Trash ✓; Metals; Bacteria ✓

Hydroseeding EC-4

Categories
- EC Erosion Control ☑
- SE Sediment Control
- TC Tracking Control
- WE Wind Erosion Control ☒
- NS Non-Stormwater Management Control
- WM Waste Management and Materials Pollution Control

Legend: ☐ Primary Category; ☒ Secondary Category

Description and Purpose
Hydroseeding typically consists of applying a mixture of a hydraulic mulch, seed, fertilizer, and stabilizing emulsion with a hydraulic mulcher, to temporarily protect exposed soils from erosion by water and wind. Hydraulic seeding, or hydroseeding, is simply the method by which temporary or permanent seed is applied to the soil surface.

Targeted Constituents
Sediment ☑; Nutrients; Trash; Metals; Bacteria; Oil and Grease; Organics

Preservation Of Existing Vegetation EC-2

Description and Purpose

Suitable Applications

Targeted Constituents

Potential Alternatives

CASQA

PLAN CHECK # :
PERMIT # :
ADDRESS:

2016 CA RESIDENTIAL CODE
EROSION AND SEDIMENT CONTROL PLAN (ESCP)
"THESE CODE REQUIREMENTS GOVERN ANY ERRORS SHOWN ON OTHER PLANS."
SHEET 2 OF 2

WORK DESCRIPTION:

CITY OF:
MALIBU
23825 STUART RANCH ROAD
MALIBU, CA 90265
310-456-3356

CITY OF MALIBU INCORPORATED MARCH 28 1991

CITY OF MALIBU

MALIBU REBUILDS

FIRE REVIEWS

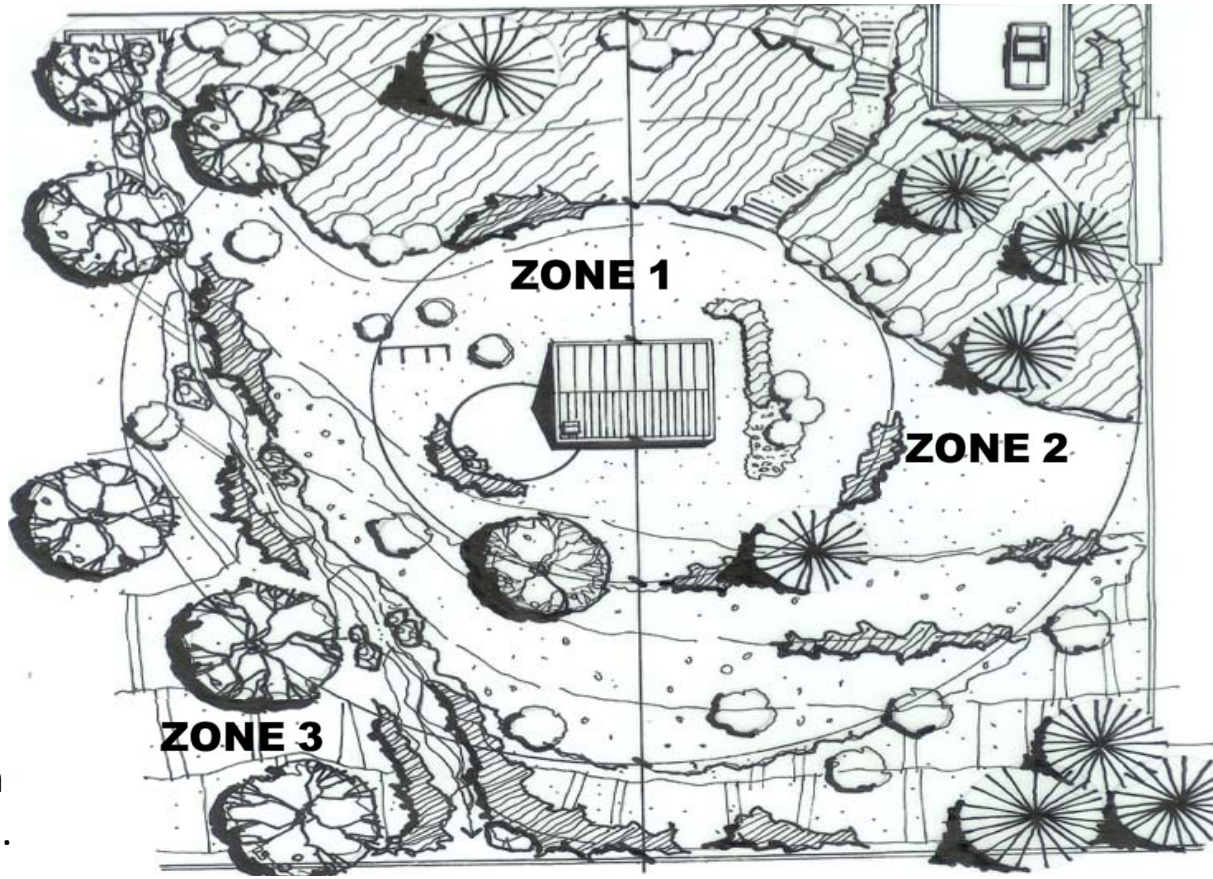
- Fuel Modification

The Garden Zone / Defensible Space

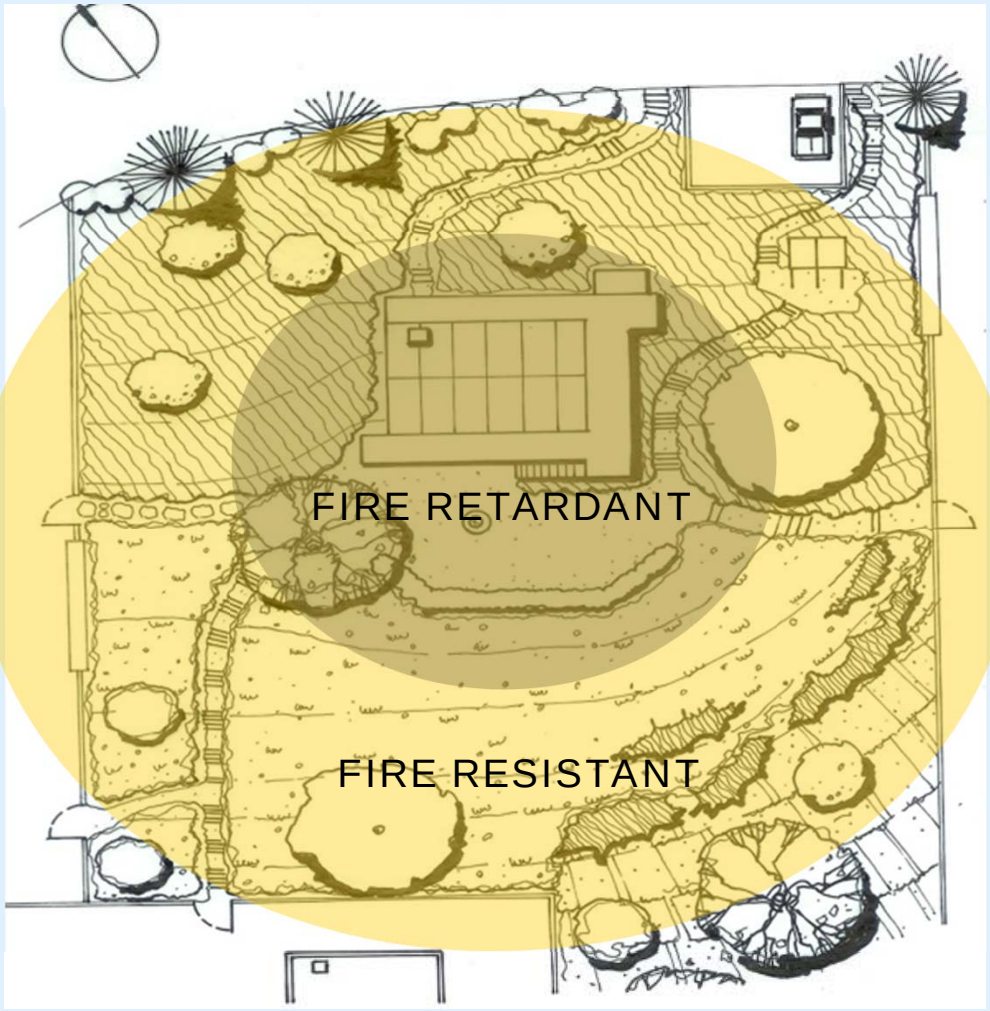
Distance: Extends 30 ft from house or structure.

Primary Goal: Able to withstand flying embers and intense heat. Only zone that selected plants can be dependent on imports, mainly water and fertilizers.

Secondary Goal: This area has to maintain a high recreational, functional and/or economical value.



Less Flammable Plants

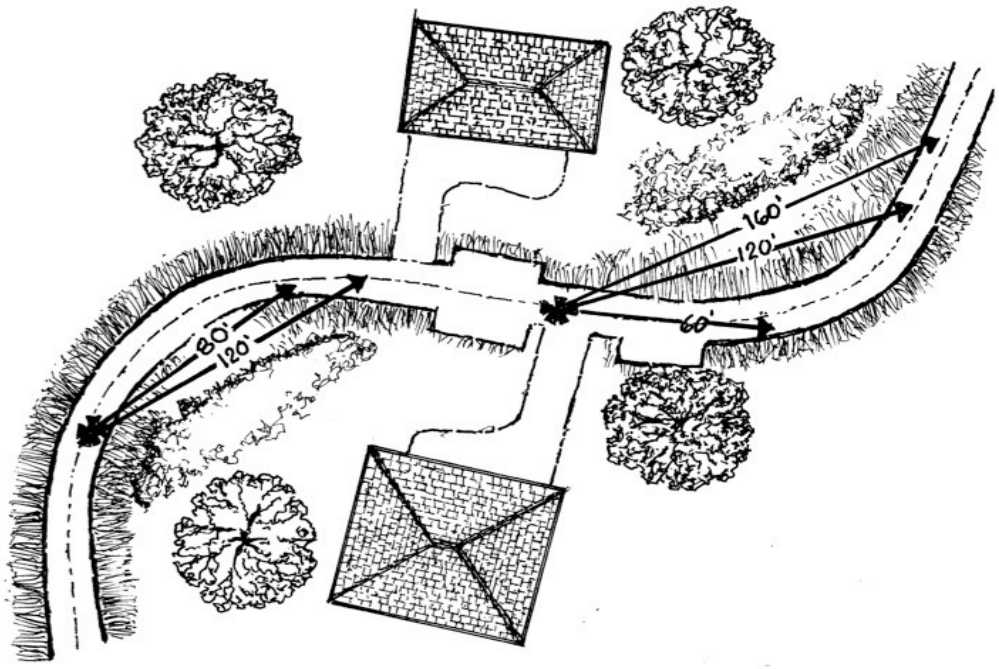


CITY OF MALIBU

MALIBU REBUILDS

FIRE REVIEWS

- Fire Access
- Occupancy approval
- Fire sprinklers



Los Angeles County Fire Department

Reviews for compliance with fire code and fuel modification requirements.

Fire Department plan review and approval is required for the rebuilding of all destroyed structures.

Questions about the plan review process for rebuilding:

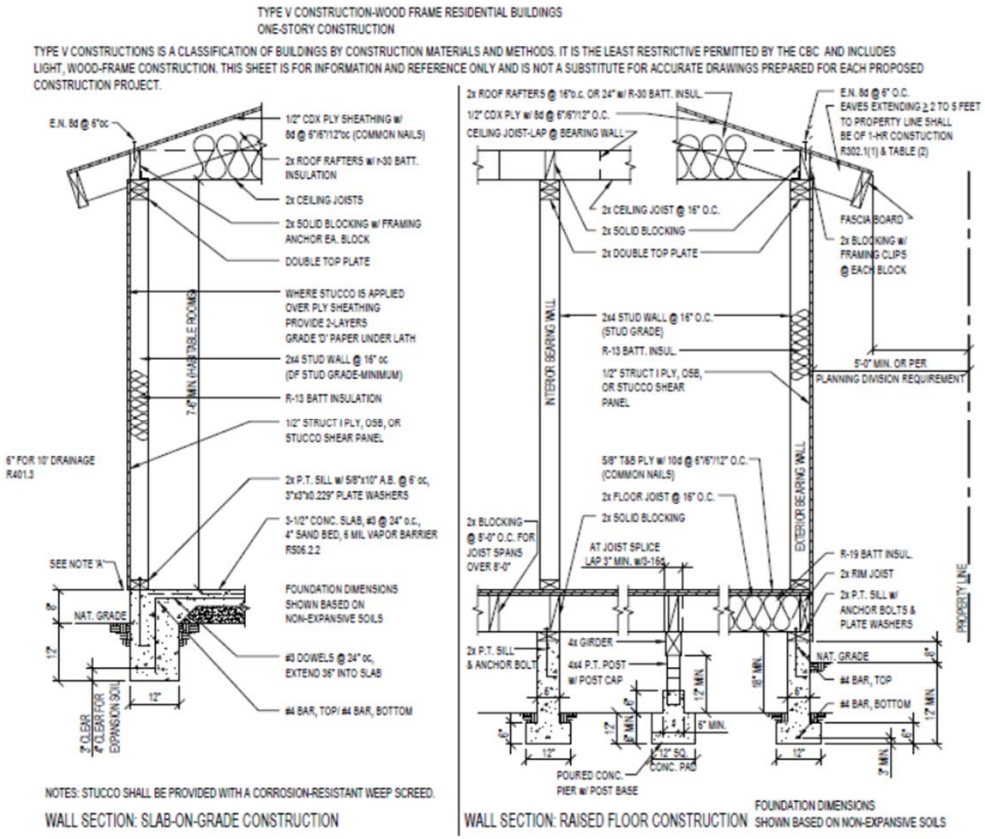
- Chris Kennelly, email christopher.kennelly@fire.lacounty.gov
- Jackie Switzler, email jackie.switzler@fire.lacounty.gov
- Calabasas/Malibu Field Office, 818-880-0341

CITY OF MALIBU

MALIBU REBUILDS

Building Permit Issuance

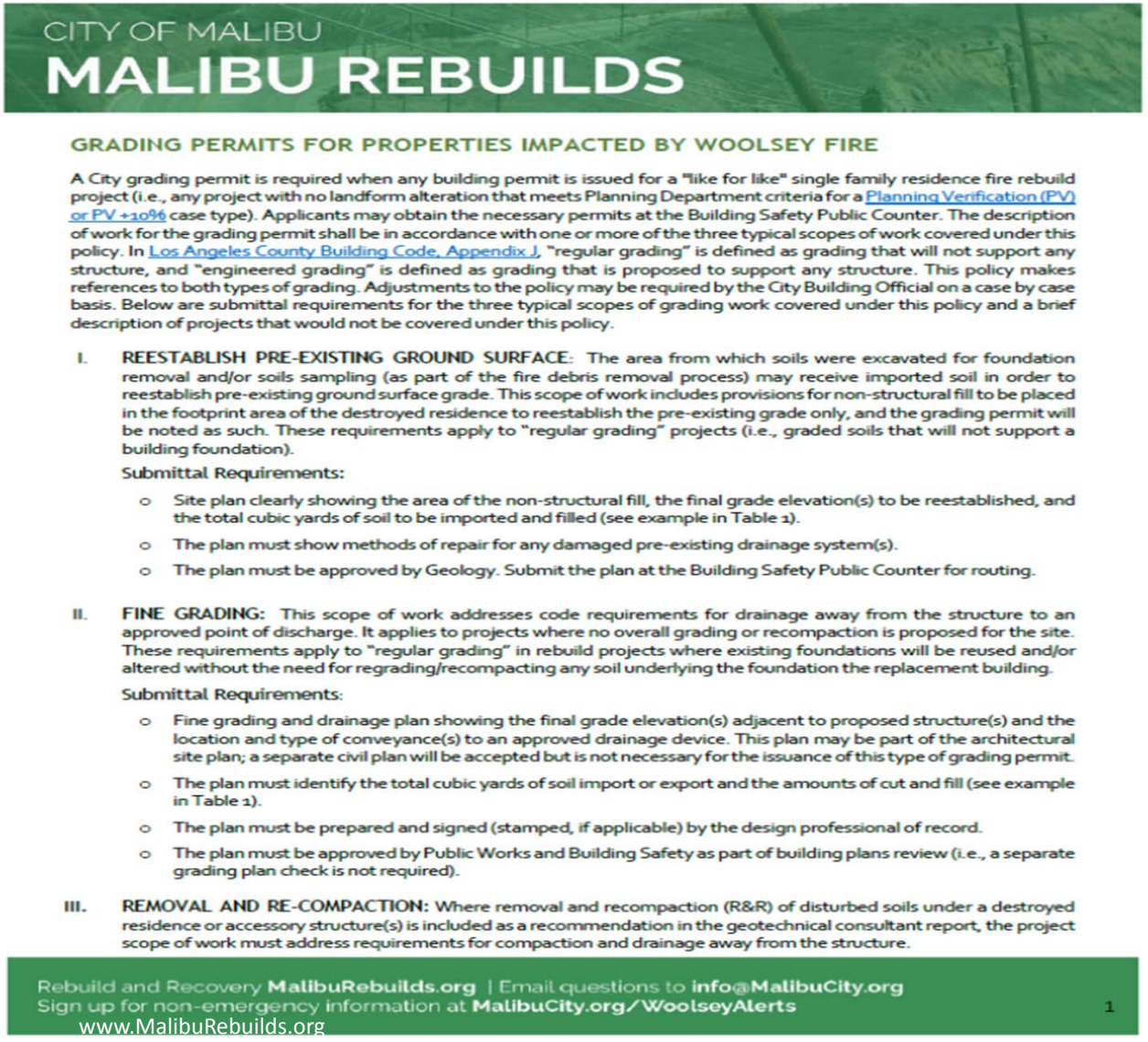
- Building Plans Coordination Service
- Streamlined correction list and Type V Sheets



Additional Handouts

Featured Handout:

Grading Permits for Properties Impacted by Woolsey Fire



CITY OF MALIBU

MALIBU REBUILDS

GRADING PERMITS FOR PROPERTIES IMPACTED BY WOOLSEY FIRE

A City grading permit is required when any building permit is issued for a "like for like" single family residence fire rebuild project (i.e., any project with no landform alteration that meets Planning Department criteria for a Planning Verification (PV) or PV +10% case type). Applicants may obtain the necessary permits at the Building Safety Public Counter. The description of work for the grading permit shall be in accordance with one or more of the three typical scopes of work covered under this policy. In Los Angeles County Building Code, Appendix J, "regular grading" is defined as grading that will not support any structure, and "engineered grading" is defined as grading that is proposed to support any structure. This policy makes references to both types of grading. Adjustments to the policy may be required by the City Building Official on a case by case basis. Below are submittal requirements for the three typical scopes of grading work covered under this policy and a brief description of projects that would not be covered under this policy.

I. **REESTABLISH PRE-EXISTING GROUND SURFACE**: The area from which soils were excavated for foundation removal and/or soils sampling (as part of the fire debris removal process) may receive imported soil in order to reestablish pre-existing ground surface grade. This scope of work includes provisions for non-structural fill to be placed in the footprint area of the destroyed residence to reestablish the pre-existing grade only, and the grading permit will be noted as such. These requirements apply to "regular grading" projects (i.e., graded soils that will not support a building foundation).

Submittal Requirements:

- Site plan clearly showing the area of the non-structural fill, the final grade elevation(s) to be reestablished, and the total cubic yards of soil to be imported and filled (see example in Table 1).
- The plan must show methods of repair for any damaged pre-existing drainage system(s).
- The plan must be approved by Geology. Submit the plan at the Building Safety Public Counter for routing.

II. **FINE GRADING:** This scope of work addresses code requirements for drainage away from the structure to an approved point of discharge. It applies to projects where no overall grading or recompaction is proposed for the site. These requirements apply to "regular grading" in rebuild projects where existing foundations will be reused and/or altered without the need for regrading/recompacting any soil underlying the foundation the replacement building.

Submittal Requirements:

- Fine grading and drainage plan showing the final grade elevation(s) adjacent to proposed structure(s) and the location and type of conveyance(s) to an approved drainage device. This plan may be part of the architectural site plan; a separate civil plan will be accepted but is not necessary for the issuance of this type of grading permit.
- The plan must identify the total cubic yards of soil import or export and the amounts of cut and fill (see example in Table 1).
- The plan must be prepared and signed (stamped, if applicable) by the design professional of record.
- The plan must be approved by Public Works and Building Safety as part of building plans review (i.e., a separate grading plan check is not required).

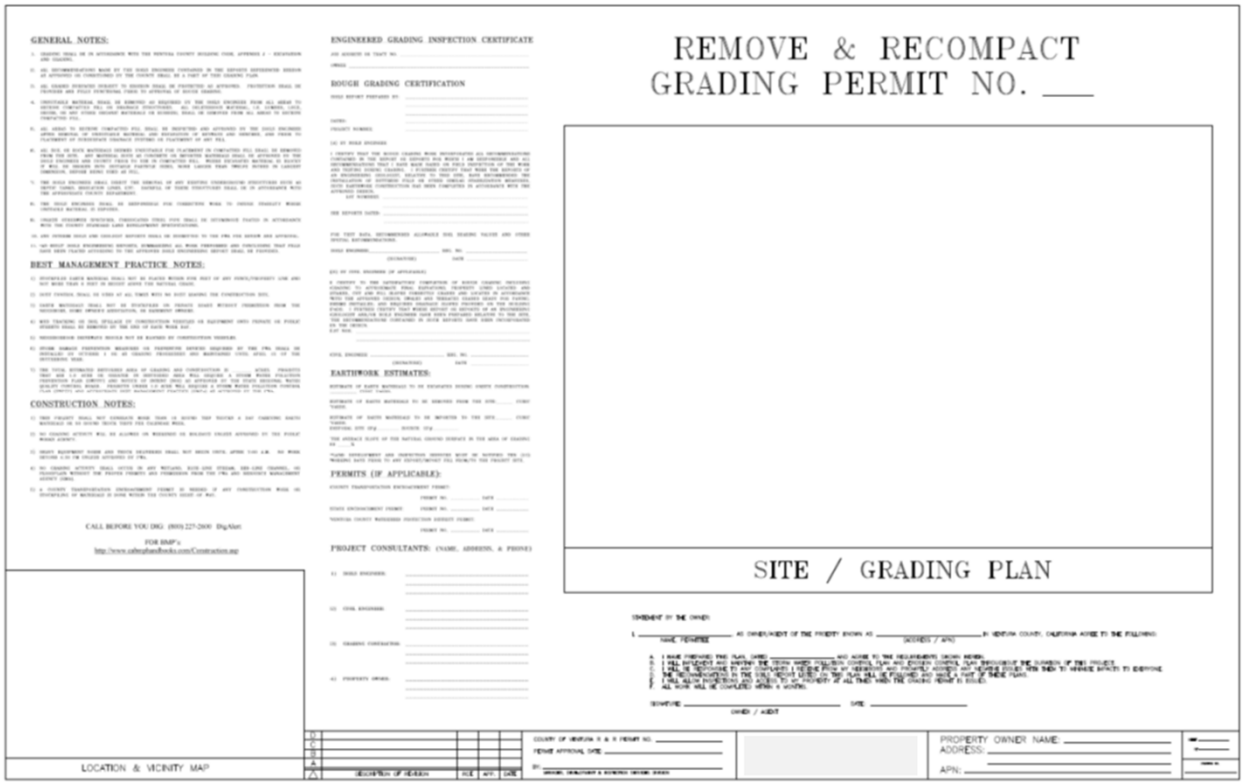
III. **REMOVAL AND RE-COMPACTION:** Where removal and recompaction (R&R) of disturbed soils under a destroyed residence or accessory structure(s) is included as a recommendation in the geotechnical consultant report, the project scope of work must address requirements for compaction and drainage away from the structure.

CITY OF MALIBU

MALIBU REBUILDS

Additional Rebuild Topics and Handouts

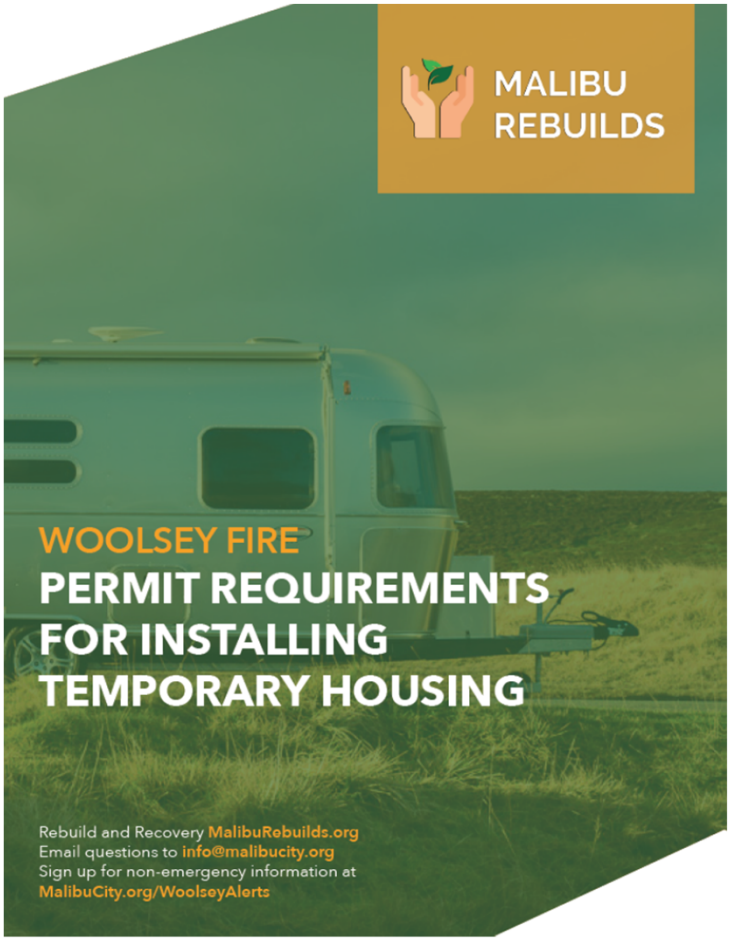
- Grading
- Fine Grading
- R&R
- Full Grading



Additional Handouts

Featured Handout:

Permit Requirements for Installing Temporary Housing



Step 3

Inspections and Occupancy

STEP 3 Construction Inspections and Occupancy

- Building Safety Inspections
- Planning, Public Works, and Fire Department Inspections
- Certificate of Occupancy – you're home!

CITY OF MALIBU

MALIBU REBUILDS

www.MalibuRebuilds.org

Resources

- City Hall – Fire Rebuild Counter
  Monday-Thursday 7:30 AM to 5:30 PM, and Friday 7:30 AM to 4:30 PM
- For information on debris removal, tax relief, mental health resources and more: https://www.lacounty.gov/recovery/
- Forms, handouts, FAQs, and information about the rebuild process: maliburebuilds.org
- To submit a public records request: malibucity/org/records
- Information on debris removal: malibucity.org/Debris
- Sign up for emergency alerts at malibucity.org/alerts

Building Code Updates

EFFECTIVE: January 1, 2020

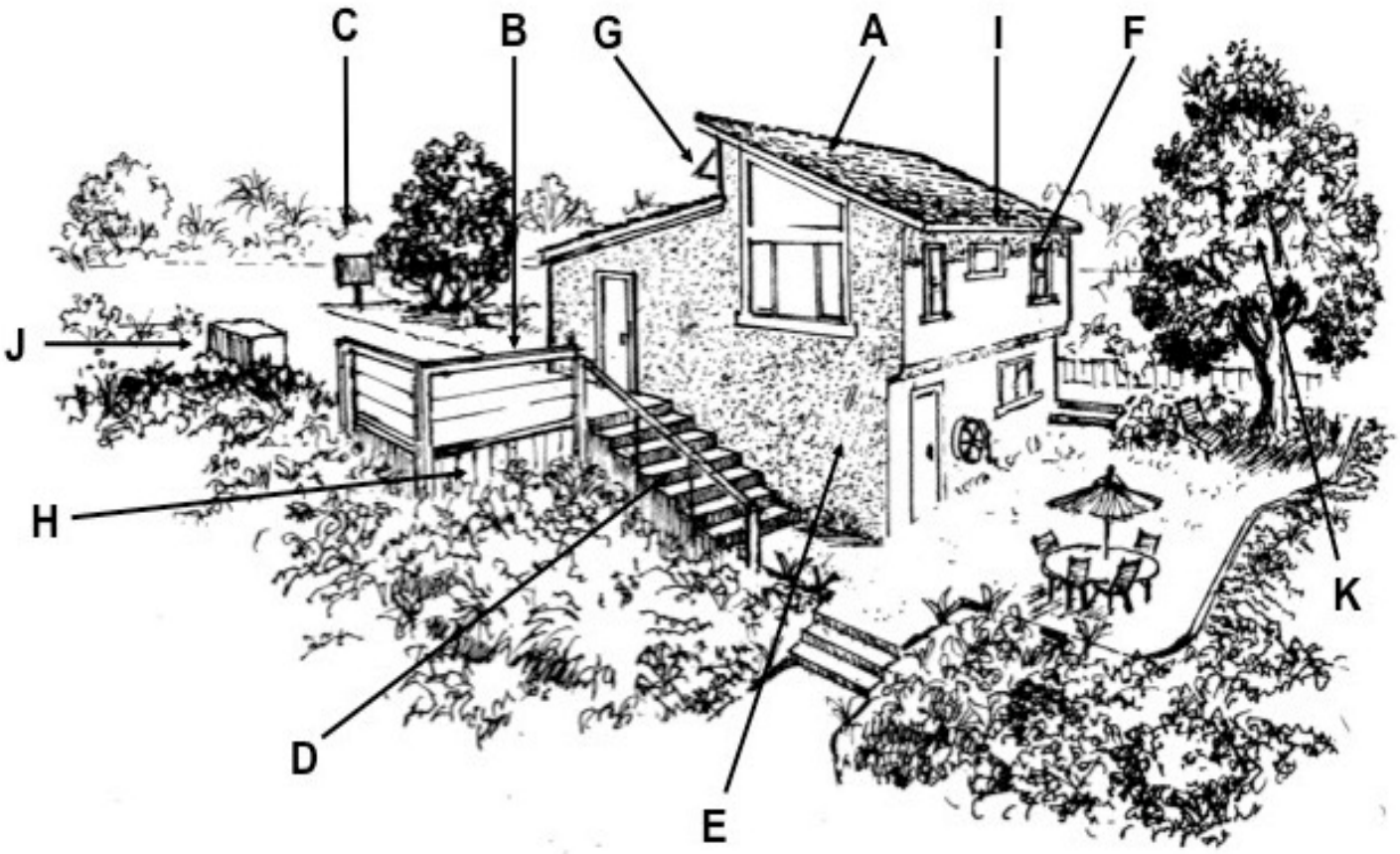
Chapter 7A

- WILDLAND URBAN INTERFACE/HIGH FIRE HAZARD ZONES

CITY OF MALIBU

MALIBU REBUILDS

www.MalibuRebuilds.org



R337.8.2.2

Operable Skylights

CHANGE TYPE: Modification

CHANGE SUMMARY: Operable skylights are allowed to be installed in Fire Severity Zones.

2019 CODE: **[R337.8.2.2]**

R337.8.2.2 Operable Skylights. *Operable skylights shall be protected by a noncombustible mesh screen where the dimensions of the openings in the screen shall not exceed ⅛-inch (3.2 mm).*

R337.8.2.~~2~~3 Structural glass veneer. *The wall assembly behind structural glass veneer shall comply with Section R337.7.3 Exterior Walls.*

CHANGE SIGNIFICANCE: This purpose of the change is to prevent combustible materials, debris, and embers from entering into a functional, open skylight. The way in which they intend to keep these materials out of skylights in Very High Fire Hazard Severity Zones is by installing a noncombustible mesh screen in the operable skylight in new construction.

CBC Chapter 7A will also be regulated within *California Residential Code* (CRC) Section R337, which is a mirrored section within the CRC.

R337.8.4 Garage Door Perimeter Gap

CHANGE TYPE: Modification

CHANGE SUMMARY: The protection of the gap created by the installation of a garage door is included in the CRC.

2019 CODE: ***R337.8.4 Garage Door Perimeter Gap*** ~~***Weather stripping***~~. *Exterior garage doors shall* ~~*be provided with weather stripping to*~~ *resist the intrusion of embers from entering by preventing* ~~*through*~~ *gaps between doors and door openings, at the bottom, sides and tops of doors, from exceeding* ~~*gaps exceed*~~ *⅛-inch (3.2 mm).* ~~*Weather stripping or seals shall be installed on the bottom, sides, and tops of doors to reduce gaps between doors and door openings to ⅛ inch (3.2 mm) or less.*~~ *Gaps between doors and door openings shall be controlled by one of the following methods:*

1. *Weather stripping products made of materials that:(a) have been tested for tensile strength in accordance with ASTM D638 (Standard Test Method for Tensile Properties of Plastics) after exposure to ASTM G155 (Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials) for a period of 2000 hours, where the maximum allowable difference in tensile strength values between exposed and nonexposed samples does not exceed 10 percent, and (b) exhibit a V-2 or better flammability rating when tested to UL 94, Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances.*
2. *Door overlaps onto jambs and headers.*
3. *Garage door jambs and headers covered with metal flashing.*

TITLE 24 CALIFORNIA ENERGY COMMISSION, PART 6 ENERGY CODE CHANGES

On May 9, 2018, the California Energy Commission adopted the 2019 Title 24, Part 6 Energy Code updates that will take effect January 1, 2020. Key changes for new residential and non-residential projects include:

Residential (new ground up construction that has three habitable stories or less from grade):

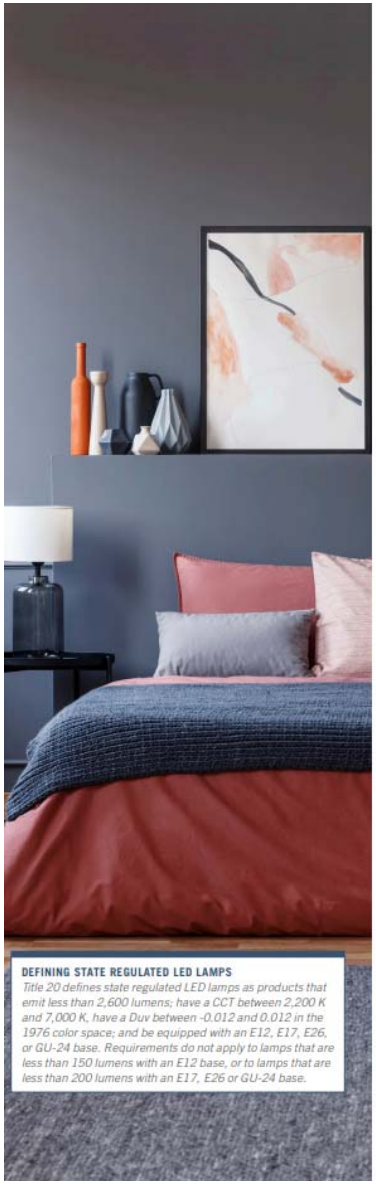
1. The installation of solar photovoltaics will become mandatory.
2. New HERS (Home Energy Rating System) testing for:
   a. Kitchen exhaust hood ventilation test, which must provide 100CFM
   b. Blower door test if utilizing a continuously running exhaust fan per Section 150.0(o)1E,
   c. Quality insulation installation (QII) will be Prescriptively required.
   d. HVAC systems will need to be designed closer to ACCA Manual J, D, & S which means duct sizing may increase, return air sizing may increase, and equipment sizing may decrease. There will need to be enough plenum space to ensure ducts are not smashed or pinched.

   Filter ratings will increase to MERV 13

- **Gov. Newsom Signs Law Exempting Wildfire Victims From California Solar Panel Mandate**

Newsom signed a law (AB 178) that temporarily exempts some homeowners from the new rules if they are rebuilding in an area where the governor has declared a state of emergency. The exemption will end in 2023.

“Many of our communities in California that have been devastated by catastrophic wildfires and floods, particularly the people of Paradise, are desperate to get their lives back on track and to rebuild their homes,” Newsom said in a signing statement. “AB 178 should hasten that effort.”



DEFINING STATE REGULATED LED LAMPS

Title 20 defines state regulated LED lamps as products that emit less than 2,600 lumens; have a CCT between 2,200 K and 7,000 K, have a Duv between -0.012 and 0.012 in the 1976 color space; and be equipped with an E12, E17, E26, or GU-24 base. Requirements do not apply to lamps that are less than 150 lumens with an E12 base, or to lamps that are less than 200 lumens with an E17, E26 or GU-24 base.

WHAT'S NEW IN THE 2019 CODE?

RESIDENTIAL LIGHTING

Changes to mandatory lighting requirements in California's 2019 Building Energy Efficiency Standards

California's new residential Building Energy Efficiency Standards (Energy Standards) take effect on January 1, 2020. The 2019 Energy Standards focus on several key areas to improve the energy efficiency of newly constructed buildings, additions and alterations to existing buildings. The most significant residential efficiency improvements address photovoltaic systems, walls, gas furnaces and lighting. Single-family homes built under the 2019 Energy Standards will use about 7 percent less energy due to energy efficiency measures as compared to homes built under the 2016 standards. Once rooftop solar electricity generation is factored in, homes built under the 2019 Energy Standards will use an estimated 53 percent less energy than those under the 2016 Energy Standards. This will reduce greenhouse gas emissions by an estimated 700,000 metric tons over three years, equivalent to removing 115,000 fossil-fueled cars off the road.

MAJOR CHANGES

NEW LIGHT SOURCE CATEGORIES ADDED

Step lights and path lights are now included in the same category as night lights. Light sources integral to drawers, cabinets and linen closets are now regulated by the Energy Standards. If these light sources are greater than 5 Watts or emit more than 150 lumens, then they must comply with the high-efficacy requirements of **Table 150.0-A**, otherwise the light sources are exempt.

MARKING UPDATE

Light sources meeting the new 2019 JA8 performance requirements must have an approved marking on the light source itself. For products that meet the 2019 requirements, the marking must be 'JA8-2019,' or 'JA8-2019-E' for products that have also passed the Elevated Temperature Life Test.

COLOR QUALITY

JA8 now aligns with the **Appliance Efficiency Regulations (Title 20)** for color rendering index (CRI) requirements of state regulated LED lamps. In addition, the 2019 JA8 now requires that all light sources be capable of providing a correlated color temperature (CCT) of 4,000 Kelvin or less.

This guide is not intended to be used in lieu of California's Building Energy Efficiency Standards, and it is not a substitute for the code itself.

Please visit **www.energy.ca.gov/title24/2019standards** *to download the official 2019*

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CALIFORNIA'S 2019 RESIDENTIAL

BUILDING ENERGY EFFICIENCY STANDARDS

CALIFORNIA ENERGY COMMISSION

The state's energy efficiency standards for new buildings and appliances have saved consumers billions in lower electricity and natural gas bills. The 2019 Building Energy Efficiency Standards for residential buildings includes a first-in-the-nation requirement to install solar photovoltaic systems. Other features enable homes to reduce the electricity demand from the grid, helping to reduce energy bills and the carbon footprint.

$19,000 SAVINGS OVER A 30 YR. MORTGAGE | INITIAL COST $9,500

SOLAR PHOTOVOLTAIC SYSTEM

Promote installing solar photovoltaic systems in newly constructed residential buildings. The systems include smart inverters with optional battery storage. This will increase the self-utilization of the electricity generated to power the home's electricity loads including plug-in appliances. California is the first state in the nation to require smart systems on homes.

DEMAND RESPONSE COMPLIANCE OPTIONS

Encourage battery storage and heat pump water heaters that shift the energy use of the house from peak periods to off-peak periods. Utilities moving to time-of-use pricing assists the grid to meet the state's climate change goals and helps homes reduce energy bills.

HEALTHY INDOOR AIR QUALITY

Enable using highly efficient filters that trap hazardous particulates from both outdoor air and cooking and improve kitchen ventilation systems. Moving air around and in and out of the home while filtering out allergens and other particles makes the home healthier.

BUILDING ENVELOPE

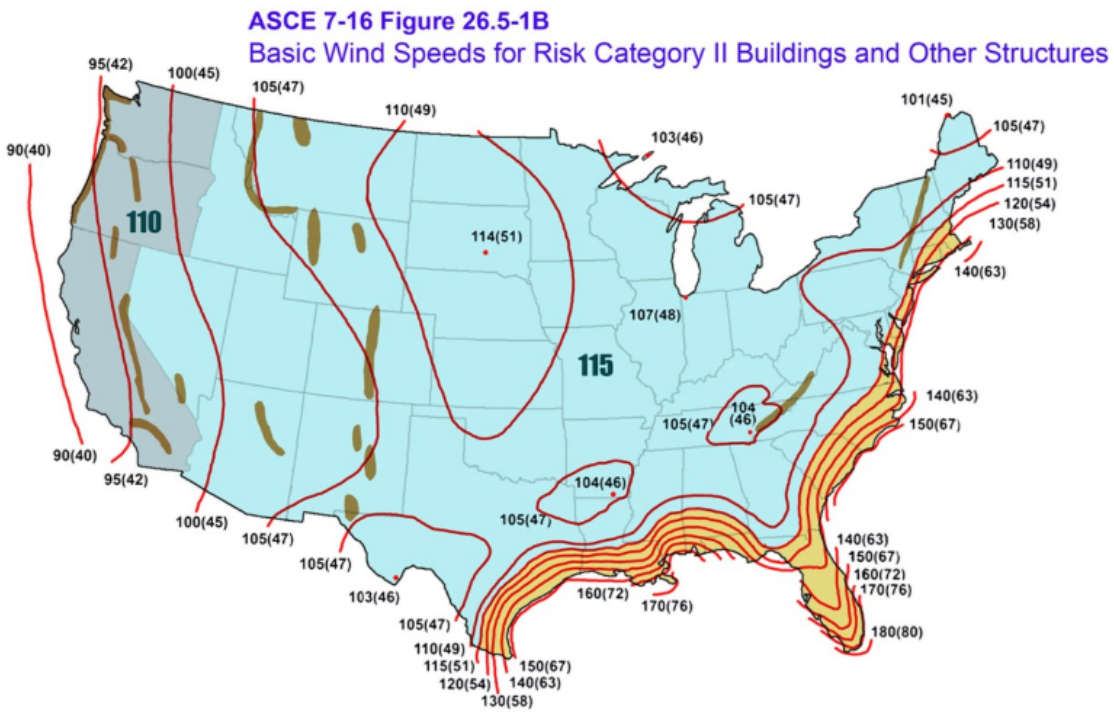
Strengthen insulation in attics, walls and windows to improve comfort and energy savings. Keeping the heat out during the summer and warm air during the winter makes a home more resilient to climate change.

Significant Structural Changes

The 2019 California Building Code (2019 CBC), **NEW Structural reference standards** – for design loads, structural steel, masonry, wood, and cold-formed steel. The reference standard for concrete, ACI 318-14, remains unchanged. Also remaining unchanged is the 2015 edition of the wood standard: *Special Design Provisions for Wind and Seismic.*

The most important changes in the structural provisions of the 2019 CBC/2018 IBC result from the referenced standard for design loads being updated from ASCE 7-10 (including Supplement No 1) to ASCE 7-16. The design wind speed maps as well as the maps for seismic ground motion parameters have changed, along with many other important aspects of design.

Design Wind Speed Map for RC II Buildings



NEW STREAMLINE PROCESS

- NEW PUBLIC COUNTER HOURS 8:00AM-4:00PM
- NEW OVER THE COUNTER REVIEWS FOR SECOND SUBMITTALS ARCHITECTURAL/STRUCTURAL/

  GEOTECHINICAL/GRADING
- NEW FINAL STAMPS COORDINATION

  (INTERDEPARTAMENTAL ROUTING 2-DAYS)
- NEW COORDINATION WITH AGENCIES (SOCALGAS/SCE/FIRE)

WORKING ON

- IN HOUSE FIRE PLAN CHECK REVIEWS (LA COUNTY FIRE)
- ELECTRONIC SUBMITTAL FOR FIRE DEPARTMENT
- CONTINUE OUTREACH TO ARCHITECTS/CONTRACTORS/ENGINEERS
- CONTINUE OUTREACH WITH COMMUNITY MEMBERS
- CONSTRUCTION HOURS
- STAGING OF MATERIALS
- CONSTRUCTION TRAILERS
- METER RELEASES COORDINATION


ATTENTION
All employees & subcontractors
Malibu Municipal Code, Section 8.24.050 (G)
Point Dume
Carbon
Topanga
www.MalibuRebuilds.org

“……Her home was literally Heaven on Earth. Yesterday we were able to pick through what was left of that little piece of Heaven…..and there wasn’t much more than ash. BUT…this coffee cup somehow survived and I take it as a sign that this place will rise from the ashes and be beautiful again. My heart and prayers are with anyone who has been affected by these fires."