



Agenda Item No. 16.

Staff Report

Date: June 14, 2018

To: Mayor Robbins and Council Members

From: Roger Meagor, Ross Valley Fire, Acting Fire Chief
Joe Chinn, Town Manager
Heidi Scoble, Planning Manager
Sal Lucido, Consulting Building Official

Subject: Introduction of Ordinance No. 691 Adopting a Wildland-Urban Interface Map; Amending the Chapters 14.04 (California Fire Code), 15.05 (California Building Code), 15.06 (California Residential Code), and 18.39 (Hillside Lot Regulations) of the Ross Municipal Code; and making findings of fact as to the need for modifications to the California Building and Residential Codes due to local conditions

Recommendation

Consider introduction and first reading of Ordinance No. 691 to adopt a Wildland-Urban Interface Map; amend the Chapters 14.04 (California Fire Code), 15.05 (California Building Code), 15.06 (California Residential Code) and 18.39 (Hillside Lot Regulations) of the Ross Municipal Code; and make findings of fact as to the need for modifications to the California Building and Residential Codes due to local conditions.

Background and Discussion

The Council discussed multiple Wildland-Urban Interface (WUI) maps and code amendment options at the March 8, 2018 Council meeting (staff report and minutes attached). At that meeting, the Council directed staff to bring back the WUI map and Code amendments associated with Option 2. This option includes the adoption a modified WUI Map (attached) that would include those parcels that are classified Hillside Lots (Slope Hazard Stability Zone classifications 3 and 4 and 30% or greater slopes) and parcels that are geographically adjacent to Hillside lots where incorporation into the map makes geographical sense (e.g., may be located on narrow private roads). Currently, the WUI regulations within the California Building Code already applies to all Hillside Lot Ordinance (HLO) parcels.

In addition to adopting the attached WUI Map, Ordinance No. 691 would amend Chapters 15.05 and 15.06 of the Town Code to make local modifications to the Chapter 7A of the California Building Code and Chapter 337 of the California Residential Code, "Materials and Construction Methods for Exterior Wildfire Exposure," in order to apply the Codes to new construction, additions, remodels, alterations, and repairs for all properties in the Town. The effect of the amendments would be similar to designating the entire

Town as WUI for construction purposes, but would not require Vegetation Management Plans or impose defensible space requirements for projects not located in the WUI Map. To modify the California Building and Residential Codes, state law requires the Town Council to make finding of fact that the modifications are reasonably necessary because of local climatic, geological, or topographical conditions. Ordinance No. 691 includes these findings.

The Ordinance also amends the Hillside Lot Regulations in Chapter 18.39 to reference the appropriate WUI regulations, and makes minor amendments to Chapters 14.04, 15.05, 15.06 for code cleanup purposes related to accessory dwelling units.

Assuring the health and safety of the community is one of the overarching goals of the General Plan. Specifically, the General Plan recognizes in Goal 5, "Protecting Community Health and Safety, and Preparing for Emergencies," that one of Ross' greatest assets, its unique and woody tree-covered landscape, could also one of its greatest hazards when it comes to fires. The vision of the General Plan is to minimize the risks of fire danger by emphasizing responsible landscape practices, especially on hillside lots. Accordingly, the following General Plan policies address fire safety:

5.3 Fire Resistant Design. Buildings should be designed to be fire defensive. Designs should minimize risk of fire by a combination of factors including, but not limited to, the use of fire-resistant building materials, fire sprinklers, noncombustible roofing and defensible landscaping space.

5.4 Maintenance and Landscaping for Fire Safety. Ensure that appropriate fire safety and landscaping practices are used to minimize fire danger, especially in steeper areas. Due to the high fire hazard in the steeper areas of Town, special planting and maintenance programs will be required to reduce fire hazards in the hills and wildland areas, including removal of invasive nonnative vegetation such as broom, acacia and eucalyptus.

5.5 Fire Safety in New Development. New construction will adhere to all safety standards contained in the Building and Fire Code. Hazards to life and property shall be minimized by such measures as fire preventive site design, fire resistant landscaping and building materials, and the use of fire suppression techniques and resources.

Adoption of Ordinance No. 691 furthers these policies and will improve fire safety in the community.

Fiscal, resource and timeline impacts

There are no fiscal impacts to the Town associated with this agenda item other than preparing the staff report and modifying the related Codes. There could be additional costs to residents outside of the existing HLO area who will be required to follow WUI construction techniques and materials. Already, though, some developments outside of the HLO area are voluntarily complying with the WUI standards in order to increase their buildings' ability to resist the intrusion of flames or burning embers. In the long term, following the WUI standards may reduce the damage and cost from fires as the Town becomes more fire resistant.

Alternative actions

Various alternatives were discussed at the March 8, 2018 Council meeting.

Environmental review (if applicable)

The adoption of this ordinance is exempt from the California Environmental Quality Act pursuant to Section 15061(b)(3) of Title 14 of the California Code of Regulations because it has no potential for causing a significant effect on the environment. The ordinance sets requirements for compliance with standard codes in effect pursuant to state law. The adoption of this ordinance does not entitle new development or any changes to the physical environment.

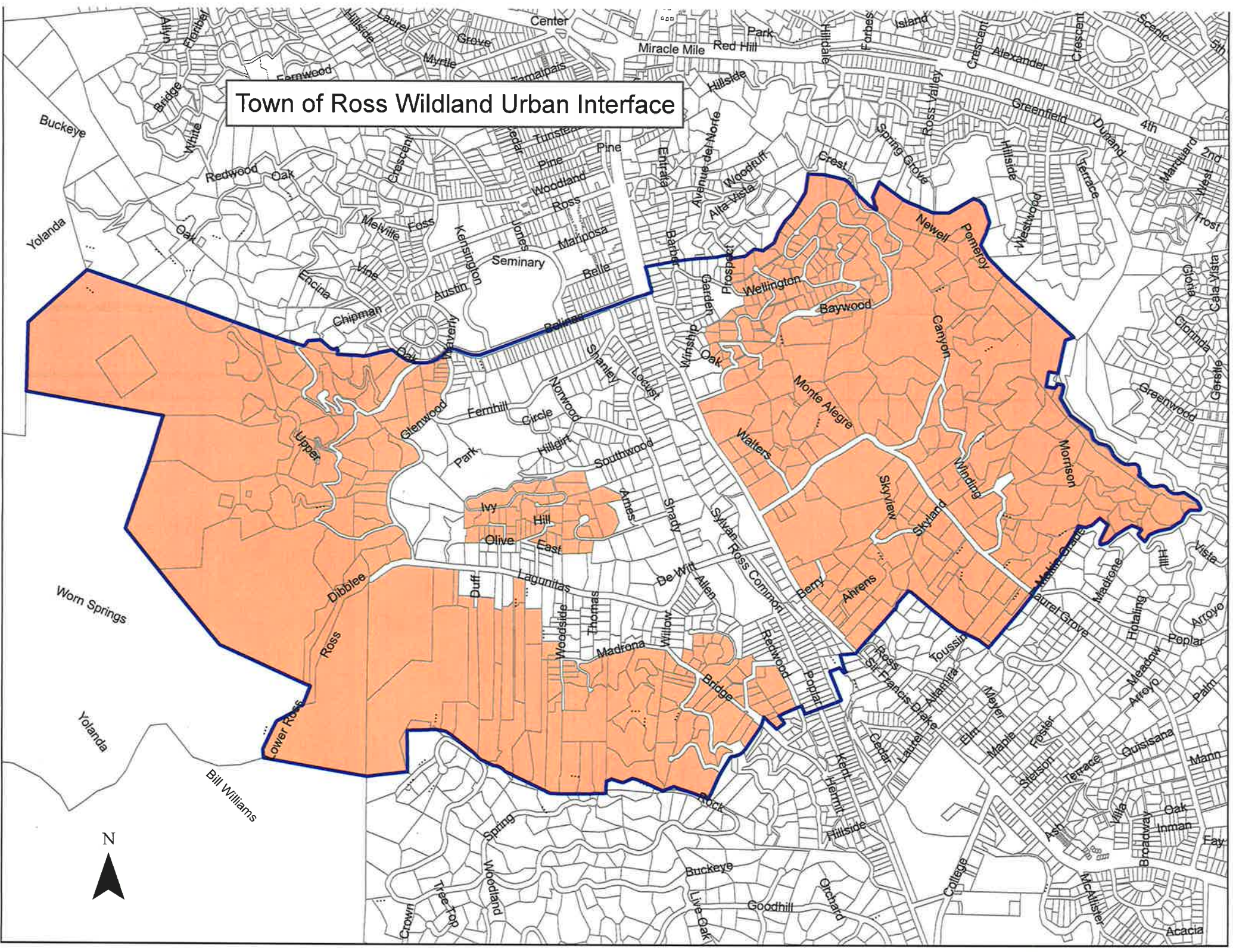
Attachments

- WUI Map
- Ordinance No. 691
- March 8, 2018 staff report
- March 8, 2018 minutes

ATTACHMENT 1

Town of Ross Wildland Urban Interface

The map displays the Town of Ross Wildland Urban Interface (WUI) area, shaded in orange. The area is bounded by a thick blue line. The map includes numerous street names, such as Buckeye, Yolanda, Worn Springs, Bill Williams, and many others. A north arrow is located in the bottom left corner. A title box at the top center reads "Town of Ross Wildland Urban Interface".



ATTACHMENT 2

TOWN OF ROSS

ORDINANCE NO. 691

AN ORDINANCE OF THE TOWN COUNCIL ADOPTING A WILDLAND-URBAN INTERFACE MAP; AMENDING CHAPTERS 14.04 (CALIFORNIA FIRE CODE), 15.05 (CALIFORNIA BUILDING CODE), 15.06 (CALIFORNIA RESIDENTIAL CODE), AND 18.39 (HILLSIDE LOT REGULATIONS) OF THE ROSS MUNICIPAL CODE; AND MAKING FINDINGS OF FACT AS TO THE NEED FOR MODIFICATIONS TO THE CALIFORNIA BUILDING AND RESIDENTIAL CODES DUE TO LOCAL CONDITIONS

WHEREAS, the Legislature has authorized local agencies, pursuant to Public Resources Code Section 4117, to adopt ordinances, rules, or regulations to provide fire prevention restrictions or regulations that are necessary to meet local conditions of weather, vegetation, or other fire hazards; and

WHEREAS, the Legislature has further authorized local agencies, pursuant to Health and Safety Code Sections 17958.5 and 1894.5, to enact modifications to the California Building Standards Code provided that such modifications are more restrictive than those adopted by the State, and are reasonably necessary because of local climatic, geological or topographical conditions; and

WHEREAS, Health and Safety Code Section 17958.7 further provides that a local agency which enacts modifications to those building standards must adopt findings which tie those modifications to such local climatic, geological, or topographical conditions; and

WHEREAS, on November 10, 2016, the Town Council of the Town of Ross adopted by reference the current 2016 California Building Standards Code of Regulations Title 24, as modified by Ordinance Nos. 675 and 676; and

WHEREAS, on March 8, 2018, the Town Council considered various options for designating a Wildland Urban Interface Fire Area for the Town of Ross, along with related code amendments, for the purpose of improving fire safety within the Town, and gave direction to staff to prepare an ordinance.

NOW, THEREFORE, The Town Council of the Town of Ross does ordain as follows:

SECTION 1. The Town Council hereby designates as a Wildland-Urban Interface Fire Area an area within the Town of Ross as shown on a map entitled "Town of Ross Wildland-Urban Interface Map," attached hereto as Exhibit "B", so that the Town may be able to identify measures that will hinder the rate of spread, and reduce the potential intensity, of uncontrolled fires that

threaten to destroy resources, life, or property, and to require that those measures be taken. The Map shall remain on file with the Town Clerk.

SECTION 2. Pursuant to Section 17958.5, 17958.7, and 18941.4 of the California Health and Safety Code, the Town Council finds that, in order to best protect the health, safety, and welfare of the citizens of the Town of Ross, the following modifications to the 2016 California Building Code and the 2016 California Residential Code are necessary because of local climatic, geological, and topographical conditions, as reflected in Exhibit “A” to this Ordinance.

SECTION 3. Within Chapter 15.05 of the Ross Municipal Code, Section 15.05.025 (titled “Section 702A Definitions – Hillside Lot Regulations”) is hereby deleted, and Sections 15.05.025 (“Section 701A.5 Vegetation management compliance”) through 15.05.090 (“Section 1512.1 Requirements”) are hereby renumbered as Sections 15.05.050 through 15.05.110 respectively.

SECTION 4. Within Chapter 15.06 of the Ross Municipal Code, Section 15.06.035 (titled “Section 227.2 Definitions - Hillside Lot Regulations”) is hereby deleted in its entirety, and the following sections are hereby renumbered:

A. Sections 15.06.045 (“Section R313.1 Townhouse automatic fire sprinkler system”) through 15.06.090 (“Section R326.1 Swimming pools, spas and hot tubs”), are renumbered as Sections 15.06.035 through 15.06.075 respectively, excepting Section 15.06.65 (“Section 337.1 Vegetation Management Plan”) which is renumbered as Section 15.06.105.

B. Section 15.06.040 (“Section R337.2 Definitions - Wildland Urban Interface Fire Area”) is renumbered as Section 15.06.110.

C. Section 15.06.095 (“Section R902.1.3 Roof Coverings in All Other Areas”) is renumbered as 15.06.115.

SECTION 5. The following new sections are hereby added to Chapter 15.05 of the Ross Municipal Code, and shall read in their entirety as follows:

“15.05.025 Section 701A.1 Scope – amended.

Section 701A.1, “Scope,” is amended to read as follows:

This Chapter applies to building materials, systems, and/or assemblies used in the exterior design and construction of all new buildings, substantial remodels, additions, remodels, alterations, and repairs within the Town limits.

15.05.030 Section 701A.3 Application – amended.

Section 701A.3, “Application,” is amended by deleting exception number 4, and amending the first paragraph to read as follows:

New buildings, substantial remodels, additions, remodels, alterations, and repairs constructed after the specified application date shall comply with the provisions of this chapter.

15.05.035 Section 701A.3.1 Application date and where required – amended.

The first paragraph of Section 701A.3.1, “Application date and where required,” is amended to read as follows:

New buildings and substantial remodels for which an application for a building permit is submitted on or after July 1, 2008 located in any Fire Hazard Severity Zone, and new buildings and substantial remodels for which an application for a building permit is submitted on or after the effective date of the Town of Ross Wildland-Urban Interface Map, shall comply with all sections of this chapter, including all of the following areas:

15.05.040 Section 701A.3.3 Additions and new buildings – added.

A new subsection 701A.3.3, “Additions and new buildings,” is added to read as follows:

701A.3.3 - Additions and new buildings. Additions located within the Wildland-Urban Interface Fire Area, and new buildings and additions located outside the Wildland-Urban Interface Fire Area, for which an application for a building permit is submitted on or after the effective date of the Town of Ross Wildland-Urban Interface Map, shall comply with the applicable provisions of Sections 705A through 710A.”

15.05.045 Section 701A.3.4 Remodels, alterations, and repairs – added.

A new subsection 701A.3.4, “Remodels, alterations, and repairs,” is added to read as follows:

701A.3.4 - Remodels, alterations, and repairs. For all building remodels, alterations, and repairs for which an application for a building permit is submitted on or after the effective date of the Town of Ross Wildland-Urban Interface Map, excepting substantial remodels located within the Wildland-Urban Interface Fire Area, each individual building element that is remodeled, altered, or repaired shall comply with the applicable provisions of Sections 705A through 710A; provided, however, that where more than 50% of a certain building element is remodeled, altered, or repaired within a 3-year period, whether under single or multiple permits, that entire building element for the building shall be replaced in accordance with Sections 705A through 710A.

Exceptions: Exceptions may be granted upon approval by both the Fire Chief and Building Official.”

SECTION 6. Section 15.05.055 (previously numbered as Section 15.05.035), “Section 702A Definitions – Wildland Urban Interface Fire Area – amended,” is hereby amended to read as follows:

“15.05.055 Section 702A Definitions – Wildland-Urban Interface Fire Area – amended.

The definition of “Wildland-Urban Interface Fire Area” in Section 702A is amended to read as follows:

Wildland-Urban Interface Fire Area is a geographical area identified by the state as a “Fire Hazard Severity Zone” in accordance with Public Resources Code Sections 4201 through

4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. Within the Town of Ross, the Wildland-Urban Interface Fire Area shall include the areas shown on the Wildland-Urban Interface Map adopted by the Town Council and on file with the Town Clerk.”

SECTION 7. Section 15.05.060 (previously numbered as Section 15.05.040), and Section 15.06.025, are hereby amended to read as follows:

“15.05.060 Section 902.1 Definitions – Accessory Dwelling Unit – added.

Section 902.1 – Definitions is amended to add the definition for Accessory Dwelling Unit to read as follows:

Accessory Dwelling Unit – For purposes of this Chapter, Accessory Dwelling Unit shall have the same meaning as in Section 18.42.020 of the Ross Municipal Code.

15.06.025 Section R202 Definitions – Accessory Dwelling Unit – added.

Section R202 – Definitions is amended to add the definition for Accessory Dwelling Unit to read as follows:

Accessory Dwelling Unit – For purposes of this Chapter, Accessory Dwelling Unit shall have the same meaning as in Section 18.42.020 of the Ross Municipal Code.”

SECTION 8. Section 15.05.070 (previously numbered as Section 15.05.050) and Section 15.06.035 (previously numbered 15.06.045) are hereby amended to replace the term “second units” contained within paragraph (2) with the term “accessory dwelling units,” and shall read as follows:

“2. In newly created accessory dwelling units.”

SECTION 9. The following new sections are hereby added to Chapter 15.06 of the Ross Municipal Code, and shall read in their entirety as follows:

“15.06.080 Section R337.1.1 Scope – amended.

Section R337.1.1, “Scope,” is amended to read as follows:

This Chapter applies to building materials, systems, and/or assemblies used in the exterior design and construction of all new buildings, substantial remodels, additions, remodels, alterations, and repairs within the Town limits.

15.06.085 Section R337.1.3 Application – amended.

Section R337.1.3, “Application,” is amended by deleting exception number 4, and amending the first paragraph to read as follows:

New buildings, substantial remodels, additions, remodels, alterations, and repairs constructed after the specified application date shall comply with the provisions of this chapter.

15.06.090 Section R337.1.3.1 Application date and where required – amended.

The first paragraph of Section R337.1.3.1, “Application date and where required,” is amended to read as follows:

New buildings and substantial remodels for which an application for a building permit is submitted on or after July 1, 2008 located in any Fire Hazard Severity Zone, and new buildings and substantial remodels for which an application for a building permit is submitted on or after the effective date of the Town of Ross Wildland-Urban Interface Map, shall comply with all sections of this chapter, including all of the following areas:

15.06.095 Section R337.1.3.2 Additions and new buildings – added.

A new subsection R337.1.3.2, “Additions and new buildings,” is added to read as follows:

R337.1.3.2 - Additions and new buildings. Additions located within the Wildland-Urban Interface Fire Area, and new buildings and additions located outside the Wildland-Urban Interface Fire Area, for which an application for a building permit is submitted on or after the effective date of the Town of Ross Wildland-Urban Interface Map, shall comply with the applicable provisions of Sections R337.5 through R337.10.”

15.06.100 Section R337.1.3.3 Remodels, alterations, and repairs – added.

A new subsection R337.1.3.3, “Remodels, alterations, and repairs,” is added to read as follows:

R337.1.3.3 - Remodels, alterations, and repairs. For all building remodels, alterations, and repairs for which an application for a building permit is submitted on or after the effective date of the Town of Ross Wildland-Urban Interface Map, excepting substantial remodels located in the Wildland-Urban Interface Fire Area, each individual building element that is remodeled, altered, or repaired shall comply with the applicable provisions of Sections R337.5 through R337.10; provided, however, that where more than 50% of a certain building element is remodeled, altered, or repaired within a 3-year period, whether under single or multiple permits, that entire building element for the building shall be replaced in accordance with Sections R337.5 through R337.10.

Exceptions: Exceptions may be granted upon approval by both the Fire Chief and Building Official. ”

SECTION 10. Section 15.06.110 (previously numbered as Section 15.06.040), “Section R337.2 Definitions – Wildland Urban Interface Fire Area – amended,” is hereby amended to read as follows:

“15.06.110 Section R337.2 Definitions – Wildland-Urban Interface Fire Area – amended.

The definition of “Wildland-Urban Interface Fire Area” in Section R337.2 is amended to read as follows:

Wildland-Urban Interface Fire Area is a geographical area identified by the state as a “Fire Hazard Severity Zone” in accordance with Public Resources Code Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. Within the Town of Ross, the Wildland-Urban Interface Fire Area shall include the areas shown on the Wildland-Urban Interface Map adopted by the Town Council and on file with the Town Clerk.”

SECTION 11. Section 14.040.100, “Amendments made to the 2016 Fire Code, 2015 International Fire Code, and 2015 International Wildland-Urban Interface Code,” within Chapter 14.04 of the Ross Municipal Code, is hereby amended as follows:

A. Within the revisions to Section 202 [S] of Chapter 2, the definition of “second unit,” is deleted in its entirety.

B. The following new paragraph shall be inserted after the paragraph revising Section 111.4 of Chapter 1, and before the paragraph revising Section 202 [C] of Chapter 2:

“Section 202 [A] of Chapter 2 is hereby amended by adding the definition of ‘Accessory Dwelling Unit’ as follows:

Accessory Dwelling Unit shall have the same meaning as in Section 18.42.020 of the Ross Municipal Code.”

C. Within the paragraphs revising Section 903.2, paragraph (2) is amended to replace the term “second units” with the term “accessory dwelling units,” and shall read as follows:

“2. In newly created accessory dwelling units.”

SECTION 12. Subsection (g)(6) within Section 18.39.090 of Chapter 18.39 of the Ross Municipal Code is hereby amended to read as follows:

“(6) Development shall adhere to the wildland urban interface building standards within the California Building Standards Code, as amended by Chapters 15.05 and 15.06 of the Ross Municipal Code.”

SECTION 13. Severability. If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The Town Council hereby declares that it would have adopted this ordinance and each section, subsection, clause, phrase, or portion thereof irrespective of the fact that any one or more

sections, subsections, clauses, phrases, or portions thereof may be declared invalid or unconstitutional and, to that end, the provisions hereof are hereby declared severable.

SECTION 14. CEQA. The Town Council finds that the adoption of this ordinance is exempt from the California Environmental Quality Act pursuant to Section 15061(b)(3) of Title 14 of the California Code of Regulations because it has no potential for causing a significant effect on the environment. The ordinance sets requirements for compliance with standard codes in effect pursuant to state law. The adoption of this ordinance does not entitle new development or any changes to the physical environment.

SECTION 15. Certification. The Town Clerk shall certify to the passage and adoption of this Ordinance and shall cause this Ordinance to be posted within 15 days after its passage, in accordance with Section 36933 of the Government Code. The Clerk is further directed to cause a copy of this Ordinance to be filed with the California Building Standards Commission as required by Health and Safety Code Section 17958.7.

SECTION 16. Effective Date. This ordinance shall take effect thirty (30) days after its final passage and adoption, and shall be posted in three public places in Town.

THE FOREGOING ORDINANCE was first read at a regular meeting of the Ross Town Council on the 14th day of June, 2018, and was adopted at a regular meeting of the Ross Town Council on the ____ day of _____, 2018 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Elizabeth Robbins, Mayor

ATTEST:

Linda Lopez, Town Clerk

EXHIBIT A

FINDINGS OF FACT AND NEED FOR CHANGE OR MODIFICATIONS TO THE STATE BUILDING STANDARDS CODE BECAUSE OF LOCAL CONDITIONS

Pursuant to Sections 17958.5, 17958.7, and 18941.5 of the State of California Health and Safety Code, the Town Council of the Town of Ross has determined and finds that the attached changes or modifications to the 2016 California Building Standards Code are needed and are reasonably necessary because of local climatic, geographic and topographic conditions.

PROFILE OF THE TOWN OF ROSS

The Town of Ross encompasses an area of 1.6 square miles with a resident population of approximately 2450. The physical location of the Town is in the central part of Marin County, in the central portion of the Ross Valley.

The placement of commercial development has been limited to the valley floor area with the residential communities extending out and up into the steep canyons and hills which surround the valley on both the north and south sides.

Travel into and out of the area is accomplished through two lane roads, which are the main arteries of commuter traffic to the bay area commercial centers.

The Town Council recognizes the fact that Marin County has been plagued many times in the late 1800's and early 1900's by brush and forest fires which not only threaten destruction, but on a number of occasions devastated large portions of communities. The desire of the community to preserve natural vegetation has resulted in the encroachment of brush and grass on fire roads, trails, breaks and streets within the Town, thus rendering such separations ineffective against the spread of fires and safe egress. Natural growth, which is highly flammable during the drier months of the year, encroaches upon many properties, thus posing a potential fire threat to many structures and creating a substantial hindrance to the control of such fires.

With the given profile of the Town of Ross and the subsequent research being conducted by members of the Ross Valley Fire Department staff, the Town has established certain requirements, which were developed to increase the level of safety and reduce the level of exposure to the citizens of the Town as well as protect the buildings (investments) within its boundaries. The following points were established as factors which caused concern and are herein established and submitted as the "Findings of Fact":

1. CLIMATIC

a. **Precipitation.** The normal year's rainfall is approximately 30 to 50 inches on the average calendar year. The area has been subject to extended periods of drought and less than normal rainfall as well as intense rains, which have caused local flooding and damage from geotechnical

failure (landslides). Approximately ninety percent (90%) of the annual rainfall is experienced during the months of November through April, and 10% from May through October.

b. Relative Humidity. Moisture in the air, also known as relative humidity, changes significantly during any given day. Humidity generally ranges from 50% during daytime hours to 85% at night. It drops to 30% during the summer months and occasionally drops lower. During periods when the area experiences easterly hot, dry winds, the relative humidity drops significantly, thus creating a greater danger.

c. Temperatures. Average summer highs are in the 75 degree to 85 degree range. There are weather periods where temperatures can rapidly reach 100 degrees and have been recorded even higher.

d. Winds. Prevailing winds are generally from the West. However, winds are experienced from virtually every direction at one time or another, due to topography. Velocities are generally in the 5 – 15 mph range, gusting to 10 – 30 mph, particularly during the summer months. Extreme winds, up to 50 mph, have been known to occur.

e. Summary. The climate (weather patterns) within the Town of Ross is predominantly affected by the marine influence of the Pacific Ocean. During the summer months, the southerly exposed slopes and open fields become dry with seasonal grasses, which present a fuel for the rapid spread of fire. The Northerly slopes are heavily wooded and present a moderate to heavy fuel load with respect to fire danger. These local climatic conditions affect the acceleration, intensity, and size of fire in the community. Times of little or no rainfall, of low humidity and high temperatures create extremely hazardous conditions. Furthermore, winds experienced in this area can have a tremendous impact upon structure fires of buildings in close proximity to one another and wildland areas. All water storage and supply comes from reservoirs and lakes within the county, and are affected by the climate accordingly.

2. GEOGRAPHICAL and TOPOGRAPHICAL

a. Geographical Features. The geographical features in and around the Town of Ross are a source of enjoyment for our residents. The hills and valleys give a natural beauty to the area with forested hills and golden yellow meadows leading up to them. These geographic features form the backdrop for the residential and commercial communities and dictate the locations of roadways and building locations. These geographic features also create barriers, which negatively affect accessibility and influence fire behavior during major conflagrations. Many structures (new and old) are constructed of highly combustible material, which offer little resistance to fire and could contribute to the spread of fire. For practical and cost reasons, new structures are built of wood (type V) construction. The potential for conflagration exists with the density of the various specific areas of the Town. The concentrated commercial, as well as residential occupancies, causes concern when considering the “exposure” elements of building to building to grass and brush areas of the Town.

b. Seismic Location. The Town of Ross lies within the recognized seismic zone #4, which is the most dangerous zone. While the area has experienced several significant seismic events, there has been a minimum of damage. The Town sits between two active earthquake faults (San Andreas and Hayward) and numerous potentially active faults. The potential for great damage exists, and must be considered as a real threat to be planned for.

c. Size and Population. The Town of Ross encompasses an area of 1.6 miles with a resident population of approximately 2450. The Town is served by the Ross Valley Fire Department, Marin Municipal Water District, and the Ross Valley Sanitary District. Ross Valley Fire has four (4) stations (two of which are in San Anselmo, one in Fairfax, and one in Ross), 33 fire personnel (serving the Towns of Fairfax, San Anselmo, Ross and the Sleepy Hollow Fire Protection District), with diverse responsibilities including wildland, urban, and paramedical.

d. Roads and Streets. Several of the heavily populated areas have limited roadways and escape routes. The Town of Ross has numerous narrow, winding roads, some barely passable with modern fire apparatus, causes access problems and extended travel times especially in the older hillside sections of the jurisdiction. The accessibility for fire department apparatus is of concern due to the lack of turnouts and roadway widths which increases response time.

e. Topography. The Department's service area is a conglomeration of oak plains, hills, valleys and ridges. The flatter lands are found in the center portion of the service area and approximately half of the residential development is in this area. The other half of the service area with residential development consists of hillsides with slopes ranging from approximately 15-30% and 30+%. These hazardous conditions present an exceptional and continuing fire danger to the residents of the community due to the difficulty of the terrain and topography of the area, much of it consisting of boxed canyons with steep, brush covered slopes; narrow winding streets used by residents of the area and the Fire Department for ingress and egress, steep hills which hinder Fire Department response time; older and inadequate water systems in certain areas of the community; and the location of buildings and structures with relation to these dangerous areas. The water supply for domestic and fire flow systems within this Town are directly affected by the topographical layout of the Town. The supply of water comes from lakes, which are managed by a public utilities district responsible for maintaining an adequate supply. The water distribution system within the Town is very old in some areas served by mains, which are inadequate in size to provide water for fire protection. The valley floor is served by mains which contain an exceptionally large volume of water for fire protection. The Town of Ross has a base elevation of approximately 35 feet and extends to areas in excess of 900 feet above sea level.

f. Vegetation. The Town Council recognizes that the Town of Ross has within its borders and along its boundaries, significant areas of grass, brush and heavily forested lands. In addition, the natural vegetation of the area has been altered by the addition of ornamental trees and shrubs, which are not native and add fuel around the houses and buildings of our community. The south facing exposure is primarily annual grasses, highly flammable brush, with occasional clumps of bay and oak trees in the more sheltered pockets. The north facing slopes are heavily wooded from lower elevations to ridge with oak and bay trees and minor shrubs of the general

chaparral class. Expansion of the residential community into areas of heavier vegetation has resulted in homes existing in close proximity to dense natural foliage. Often such dwellings are completely surrounded by highly combustible vegetation compounding the fire problem from a conflagration point of view. Of particular recent notice is the increase in dead down fuel and ladder accumulation directly associated with sudden oak death syndrome.

Summary

The above local geographic and topographic conditions increase the magnitude, exposure, accessibility problems and fire hazards presented to the Fire Department.

Fire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself.

The valley floor has zones recognized by the Federal Emergency Management Agency as flood zones. During times of intense rainfall, flooding and landslides have occurred which have destroyed structures and threatened lives. Within the past decade, these events have caused the local government to declare disasters and seek state and federal assistance.

Some of the existing structures in the commercial areas of the Town lack the required firewall separation. These structures cause concern to the Fire Department because of the potential for major conflagration. As these structures are replaced, the exposure potential will be significantly reduced.

Several other variables may tend to intensify an incident, such as, the extent of damage to the water system; the extent of roadway damage and/or amount of debris blocking the roadways; climatic conditions (hot, dry weather with high winds); time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours; and the availability of timely mutual aid or military assistance.

Conclusion

Local climatic, geographic and topographic conditions impact fire prevention efforts, and the frequency, spread, acceleration, intensity, and size of fire involving buildings in this community. Further, they impact potential damage to all structures from earthquake and subsequent fire. Therefore it is found to be reasonably necessary that the California Fire Code, International Wildland-Urban Interface Code, and the State Building Standards Code be changed or modified to mitigate the effects of the above conditions.

Furthermore, California Health and Safety Code Section 17958.7 requires that the modification or change be expressly marked and identified as to which each finding refers. Therefore, the Town of Ross finds that the following table provides code sections that have been modified pursuant to Town of Ross Ordinance No. 691, and the associated referenced conditions for modification due to local climatic, geological and topographical reasons.

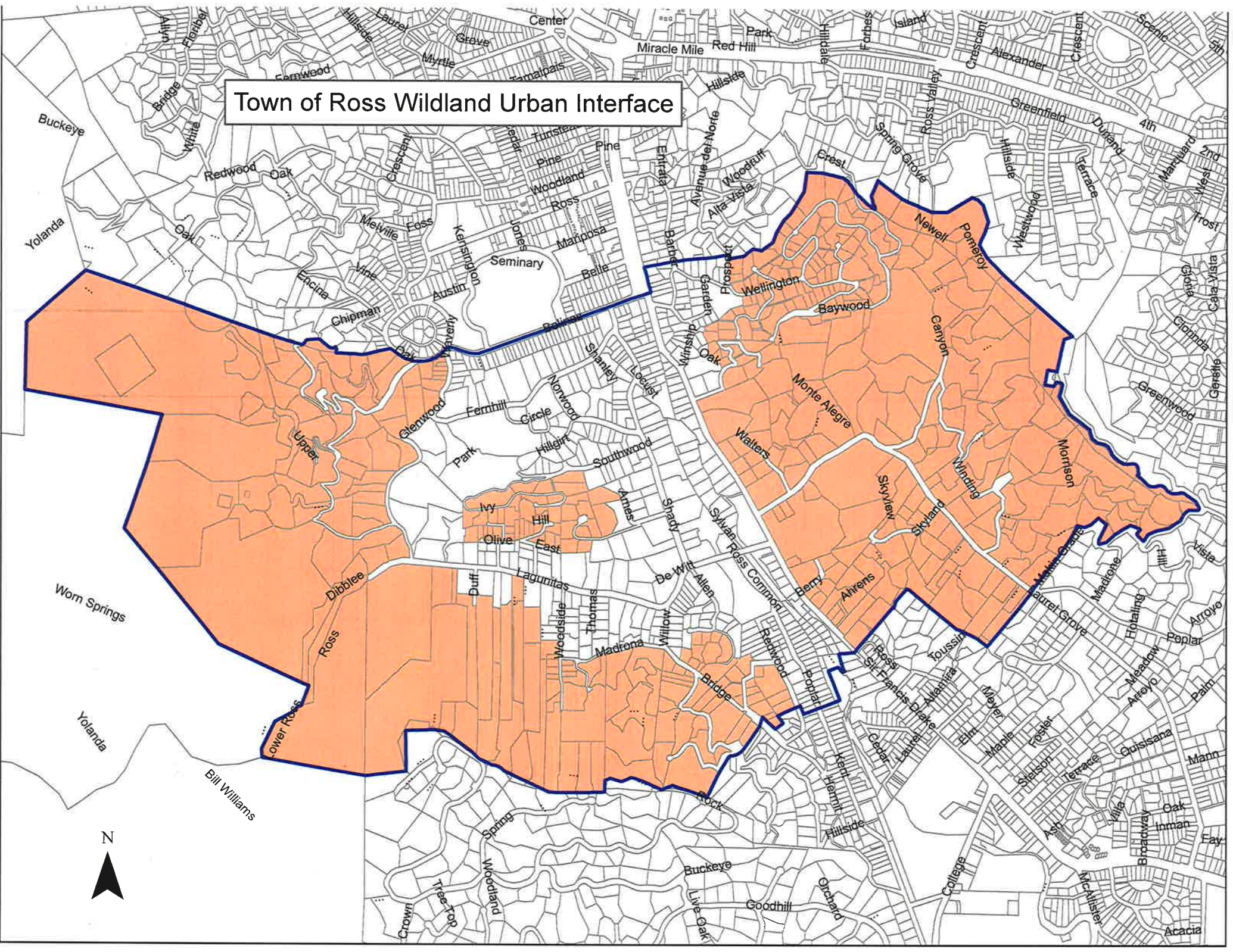
Section Number	Local climatic, geological and topographical conditions
CBC 701A.1	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CBC 701A.3	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CBC 701A.3.1	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CBC 701A.3.3	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CBC 701A.3.4	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CBC 702A	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CRC R337.1.1	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CRC R337.1.3	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CRC R337.1.3.1	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CRC R337.1.3.2	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CRC R337.1.3.3	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f
CRC R337.2	1a, 1b, 1d, 1e, 2a, 2b, 2c, 2d, 2e, 2f

EXHIBIT B

[insert map]

Town of Ross Wildland Urban Interface

The map displays the Town of Ross Wildland Urban Interface, which is shaded in orange and outlined in blue. The interface is divided into three main sections: Upper, Lower, and Central. The map includes numerous street names and neighborhood names, such as Buckeye, Yolanda, Worn Springs, Bill Williams, and various residential streets like Oak, Pine, and Maple. A north arrow is located in the bottom left corner.



ATTACHMENT 3



Agenda Item No. 11.

Staff Report

Date: March 8, 2018

To: Mayor Robbins and Council Members

From: Roger Meagor, Ross Valley Fire, Acting Fire Chief
Joe Chinn, Town Manager
Heidi Scoble, Planning Manager
Sal Lucido, Consulting Building Official

Subject: Designating Wildland-Urban Interface Fire Areas

Recommendation

That the Council consider the proposed options for the designation of Wildland-Urban Interface (WUI) Fire Areas in the Town of Ross, and that the Council directs staff to bring back a preferred option for Council adoption of a map and related codes. Staff recommends that Council approve a map and codes that will significantly improve the fire safety codes in the Town.

Background and Discussion

The Council last discussed Wildland-Urban Interface (WUI) maps and code amendments on December 5, 2016 (staff report and minutes attached). The discussion included that staff would come back with multiple options for a WUI map and code amendments for Town Council to decide between with no consensus on a preferred alternative. In addition, there were questions to get more clarity to reduce the ambiguity in the understanding and interpretation of the codes when possible. The reason for the long delay in bringing this item back to Council is that shortly after the December 2016 Council meeting, then Fire Chief Mark Mills went out on disability and ultimately retired. Town staff believes it would be good to have the WUI map and codes resolved while Acting Fire Chief Roger Meagor, who was the long-time Fire Chief of the Fire JPA before retiring, is at the helm of the Fire JPA.

To provide a framework for the Council decision on WUI regulations some of the factors requiring a decision on are:

1. Adoption and extent of a WUI Map. The Town does not have a current WUI Map. The Town Council should consider adopting a map that covers the entire town and/or a map designating select areas of the Town. Currently, approximately 304 existing parcels fall within areas designated by the Town's Hillside Lot Regulations (Ch. 18.39 of the Ross Municipal Code) where WUI regulations may be applied when a Hillside Lot Permit is being requested. This staff report provides multiple options for maps.

2. WUI Triggers related to substantial remodels (yes or no). The Council will need to determine whether the WUI regulations should apply to new construction or both new construction and substantial remodels. Currently the State only requires WUI regulations be applied to new construction, however, some municipalities in Marin and Marin County (seven or twelve) have adopted regulations to apply to substantial remodels as is recommended by the Ross Valley Fire Department and by Town staff. If WUI triggers are applied to substantial remodels, then clear definitions are needed on what level of remodel triggers what type of WUI improvements (Attachment 1 Frequently Asked question on page 2 shows a proposed list of the WUI requirements related to various types of remodels).
3. Vegetation Management Plans. When a parcel is located within designated WUI area as defined by a WUI Map and the project is either new construction or a substantial remodel as defined in the Town codes, the Ross Valley Fire Department would require a Vegetation Management Plan (VMP). A VMP is essentially an expanded landscape plan whereby fuel clearance (vegetation and tree removal and trimming), defensible space, and new non-pyrophytic landscape plantings would be shown.
4. Defensible Space. All parcels in a designated WUI zone must maintain a 100' defensible space around the home and accessory structures (proper defensible space is described in the WUI Frequently Asked Question Attachment on the bottom of page 1 and top of page 2).

Assuring the health and safety of the community is one of the overarching goals of the General Plan. Specifically, the General Plan recognizes in Goal 5, Protecting Community Health and Safety, and Preparing for Emergencies, that one of Ross' greatest assets, its unique and woody tree-covered landscape, could also one of its greatest hazards when it comes to fires. The vision of the General Plan is to create policies to minimize the risks of fire danger by emphasizing responsible landscape practices, especially on hillside lots. Accordingly, the following General Plan policies have been developed to address fire safety:

5.3 Fire Resistant Design. Buildings should be designed to be fire defensive. Designs should minimize risk of fire by a combination of factors including, but not limited to, the use of fire-resistant building materials, fire sprinklers, noncombustible roofing and defensible landscaping space.

5.4 Maintenance and Landscaping for Fire Safety. Ensure that appropriate fire safety and landscaping practices are used to minimize fire danger, especially in steeper areas. Due to the high fire hazard in the steeper areas of Town, special planting and maintenance programs will be required to reduce fire hazards in the hills and wildland areas, including removal of invasive nonnative vegetation such as broom, acacia and eucalyptus.

5.5 Fire Safety in New Development. New construction will adhere to all safety standards contained in the Building and Fire Code. Hazards to life and property shall be minimized by such measures as fire preventive site design, fire resistant landscaping and building materials, and the use of fire suppression techniques and resources."

The background information concerning the adoption of a Wildland-Urban Interface (WUI) Zone requires the explanation of several critical terms. These definitions are provided by the California Office of the State Fire Marshal (OSFM) and the California Department of Forestry and Fire Protection (Cal Fire).

A *wildfire*, as defined by the State of California, is any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property, or resources. A *wildfire exposure* is a combination of radiant heat,

convective heat, direct flame contact and burning embers being projected by a vegetation fire to a structure and its immediate environment. *Fire Hazard Mapping* is a way to measure the physical fire behavior and predict the damage a fire is likely to cause. Fire hazard measurements include the speed at which a wildfire moves, the amount of heat the fire produces, and most importantly, the burning fire brands that the fire sends ahead of the flaming front.

A *Fire Hazard Model* considers the wildland fuels, topography, weather, and ember production. Fuel is that part of the natural vegetation that burns during the wildfire. The vegetation component of the model predicts the potential fire impact on the vegetation only. The model also considers topography, with consideration to the steepness and aspects of the slopes. Fires have been proven to spread faster as they burn up-slope. The weather (temperature, humidity, and wind) component has a significant influence on fire behavior and spread. Fires spread faster and with more intensity when air temperature is high, relative humidity is low, and the winds are strong.

Finally, the model considers the production of burning firebrands. Firebrands are blown ahead of the main fire, spreading the fire to nearby structures and igniting them from the inside. Firebrands have been recorded being blown over a half mile ahead of the flaming front.

Several factors lead to the ignition of homes during a wildfire event. Research indicates that wildland fires progress from a fire involving wildland vegetation only, to embers and wildland vegetation igniting domestic vegetation, which then ignites the adjacent structure(s). Subsequently, the fire morphs in to a series of structure fires, with involved structures igniting other structures.

In addition to the defensible space available around structures, other factors that lead to structure ignition include the configuration of building elements and the type of construction materials used. For example, Cal Fire's study of the Santa Barbara Paint Fire (5000 acres, 440 houses, 28 apartment complexes) found an 86% survival rate for homes with non-combustible roofs and 30 feet of defensible space. Similarly, research indicates that home ignitability, rather than wildland fuels is the main cause of home losses during WUI fire events. Studies have shown that at the Witch and Guejito fires (San Diego County, 197,000 acres & 1,500 homes destroyed), two out of every three structures destroyed were ignited by embers.

Over the last decade, numerous communities throughout the western United States have been devastated by extreme wildland fires that have destroyed thousands of homes, damaged public infrastructure, disrupted private business, and caused billions of dollars in property damage, suppression and rehabilitation costs. The fires have continued to increase in intensity and frequency as evident in our local geographic area, including the Lake County fires in 2015 and 2016 and the devastating October 2017 Napa-Sonoma fires which resulted in burning 164,004 acres, destroying 7,804 structures and resulted in 44 deaths. The Sonoma County Tubbs is now the most destructive wildfire in California history, 38,807 acres, 5,643 structures destroyed and 22 deaths.

As a result of the 1991 Oakland Hills fire, the "Bates Bill" legislation was approved and required Cal Fire to identify Fire Hazard Severity Zones (FHSZ) in which to implement ignition resistant building standards, defensible space standards and seller's disclosure standards to mitigate the rate of spread and reduce the intensity of uncontrolled fires. In conjunction with identification of Moderate, High, and Very High Fire Hazard Severity Zones, maps were authorized via Title 14 CCR § 1280 and developed depicting the Very High Fire Hazard Severity Zones, as such zones exist both in State Responsibility Areas (SRA) and Local Responsibility Areas (LRA), such as the Town of Ross. The location of the boundaries was developed with recommendations from Cal Fire and the Marin County Fire Plan based on the evaluation of fire history,

fuel growth, density of housing, proposed developments, access, and water supply considerations. It is important to note that the FHSZ maps developed by the State included Moderate to High FHSZ for almost the entire of Town of Ross.

A *Wildland-Urban Interface (WUI)* Fire Area is a geographical area identified by the State as a Fire Hazard Severity Zone in accordance with the Public Resources Code sections 4201 through 4204 and Government Code sections 51175 through 51189 and/or other areas designated by the enforcing agency to be at a significant risk from wildfires following a finding supported by substantial evidence in the record pursuant to the California Fire Code Section 4904.2. The WUI is a combination of structures and wildland areas that could result in a fire crossing over from either format. The fire response requires specific equipment and tactics due to the complexity of the multiple fuel types and topography.

In 2008, in order to address the new requirements of the California Building Standards Commission Wildland Urban Interface Code, the Town Council approved recommendations from staff in the form of Ordinance 611. Ordinance 611 codified and amended Chapters 12.12 (Weeds, Trees, and Vegetation), 15.32 (Report of Residential Building Record), 18.39 (Hillside Lot Regulations), 18.40 (General Regulations), and 18.41 (Design Review) of the Ross Municipal Code relative to either prescriptive WUI standards for those parcels in Town that have an average slope of 30% or greater and are located either wholly or partially within a Slope Hazard Severity Zone 3 or 4 or guidelines to address health and safety hazards related to fire.

Today, building standards relating to the “Hardening of Surfaces”, such as roofs, exterior walls, structure projections and structure openings of new buildings located in a Wildland-Urban Interface Fire Area are set forth in the 2016 California Building Code Chapter 7A and the 2016 California Residential Code Chapter 337 (see Attachment 1 for a complete list of WUI required materials). Additionally, Vegetation Management Plans, defensible space, as well as building standards relating to fire and public safety for roofs, exterior walls, structure projections and structure openings located in a Wildland-Urban Interface are set forth in 2016 California Fire Code Chapter 49. The purpose of these regulations is to establish minimum standards for the protection of life and property by increasing the ability of a new building located in any area designated as a Wildland-Urban Interface Fire Area to resist the intrusion of flame or burning embers projected by a vegetation fire and contribute to a systematic reduction in conflagration losses.

In consideration of the adoption of a WUI Map, staff has prepared the following options for consideration:

Option 1:

This option would leave the requirements as they are today as shown in Attachment 3 relying on the Hillside Lot Ordinance map with no separate WUI map. It would not require any amendments to the Municipal Code. Town staff would continue to enforce WUI related provisions through the following regulations of the Municipal Code:

1. The Town/Ross Valley Fire would be able to enforce defensible spaces around each building and structure in accordance with the vegetation clearance requirements prescribed in California Public Resource Code 4291 and California Government Code 51182 on hillside areas having a slope of thirty percent or greater or partially or wholly within Hazard Zones 3 or 4.
2. Mandatory WUI compliance for Hillside Lot Permits (new construction and additions adding more than 200 square feet of new floor area) per Chapter 18.39 for parcels that are wholly or partially

located within a slope hazard stability zone 3 or 4 and/or having an average slope of 30% or greater. WUI compliance includes compliance with the California Building/Residential Building Codes, Chapter 49 of the California Fire, such as defensible space and the submittal of a vegetation management plan.

3. Title 14 and Title 15 requires fire sprinklers for new construction and substantial remodels and Title 15 requires Class A roofing or Class A by assembly in the entire Town per current Town codes.

Option 2:

This option would include the adoption a modified WUI Map that would include those parcels that are classified Hillside Lots (Slope Hazard Stability Zone classifications 3 and 4 and 30% or greater slopes) and parcels that are geographically adjacent to Hillside lots where incorporation into the map make geographical sense (e.g., may be located on narrow private roads) as shown as Attachment 4

Make local code amendments to require compliance with Building Code Chapter 7A and Residential Code Chapter 337, Materials and Construction Methods for Exterior Wildfire Exposure for new constructions and substantial remodels for all properties in the Town. Adding the amendment would be similar to having the entire Town designated a WUI for construction purposes but would not require Vegetation Management Plans or defensible space requirements for projects not located in the WUI map area.

This option would require amendments to the Hillside Lot regulations per Chapter 18.39 for code cleanup purposes only to reference the appropriate WUI regulations and also include local code amendments to Title 15 (Building Code) and Title 14 (Fire Code)

Option 3A:

This option would include the adoption of a WUI map for the entire Town as shown in Attachment 5. This would be consistent with the draft WUI maps that were developed for Marin County in 2005. It would apply to both new construction and substantial remodels

This option would require amendments to the Hillside Lot regulations per Chapter 18.39 for code cleanup purposes only to reference the appropriate WUI regulations.

If the Council is concerned with this option, an alternative to option 3A would be to require the WUI regulations to new construction projects only. Staff does not support this alternative to option 3A.

Option 3B:

Similar to option 3A, option 3B would include the adoption of a WUI map for the entire Town, less the properties adjacent to the Ross Common right-of-way (e.g., Ross Common, the school, the Post Office and the properties within the CL Zoning District). It would apply to both new construction and substantial remodels, as well as require vegetation management plans for all ministerial and discretionary projects. This option would also require amendments to the Hillside Lot regulations per Chapter 18.39 for code cleanup purposes only.

If the Council is concerned with this option, an alternative to option 3B would be to require the WUI regulations to new construction projects only. Staff does not support this alternative to option 3B.

Conclusion

The Town of Ross already enforces the Hillside Lot Regulations, which requires compliance with California Building Code 7A and California Fire Code Chapter 49, in areas of the Town that exceed 30% slope. Option

1 would leave the requirements as they are today. Options 2 and 3 would expand requirements to additional portions of the Town. Staff recommends that Council approve a map and codes that will significantly improve the fire safety codes in the Town.

Fiscal, resource and timeline impacts

Apart from the staff time to prepare the staff report and letter, there are no fiscal impacts associated with this agenda item.

Alternative actions

Multiple options are presented in this report and staff is available to discuss other alternatives that exist.

Environmental review (if applicable)

N/A

Attachments

1. WUI Frequently Asked Questions
2. WUI Fact Sheet
3. Option 1 – No WUI Map, rely on Hillside Lot Ordinance (HLO) Map
4. Option 2 – WUI Map of Portion of Town
5. Option 3A – WUI Map of Whole Town
6. Option 3B – WUI Map without Ross Common and Downtown
7. Cal Fire Very High Fire Severity Zone Map
8. Staff report and minutes for December 5, 2016

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b. Town Council consideration of adoption of Resolution No. 2042 proclaiming April 2018 to be Fair Housing Month and celebrating the 50th anniversary of the Fair Housing Act.

c. Town Council approval of Master Consultant Services Agreement with Moe Engineering, Inc., for Civil Engineering services.

Mayor Robbins asked for a motion.

Mayor Pro Tempore Kuhl moved and Council Member Brekhus seconded, to adopt the Consent Agenda Items as submitted. Motion carried unanimously.

End of Consent Agenda.

Administrative Agenda.

11. Town Council consideration and direction related to designating Wildland-Urban Interface (WUI) fire map and related fire and building codes.

Town Manager Joe Chinn asked the Council to consider the proposed options for the designation of Wildland-Urban Interface (*WUI*) Fire Areas in the Town of Ross, and that the Council directs staff to bring back a preferred option for Council adoption of a map and related codes. Staff recommends that Council approve a map and codes that will significantly improve the fire safety codes in the Town. Town Manager Chinn provided background information for this item.

Mayor Robbins noted that the WUI map does not include the entire Town, so for Item 4, can the vegetation management plan be enforceable without a WUI map. Planning Manager Heidi Scoble responded in the affirmative. Those requirements are listed in the Municipal Code.

Council Member McMillan asked staff to explain substantial remodel. Roger Meagor, Acting Fire Chief, Ross Valley Fire, explained that a substantial remodel would involve 50% of the structure. Planning Manager Scoble noted that under Ross Municipal Code Chapter 14.04 there is a definition in regard to a substantial remodel.

Council Member Brekhus recalled 50% means, for example, two or more walls touched and the question is does that mean they are adding trim, since this has been interpreted different ways during different times. The Town's definition of substantial remodel is very restrictive. Planning Manager Scoble stated that the definition is also consistent with other municipalities in Marin.

Acting Fire Chief Meagor provided some background to help the Council with their consideration. Fire season ends once they receive a significant amount of rain. June and July may be warm days with a breeze. September and October the vegetation is dry and becomes more flammable, which is when the Town is at its greatest risk. Fire can spread rapidly as occurred in Napa and Sonoma. Defensible space, vegetation management and changes to the structure make it more defensible and better chance to survive. In addition to the defensible space available around structures, other factors that lead to structure ignition include the configuration of building elements and the type of construction materials used. Over the last decade, numerous communities throughout the western United States have been devastated by extreme wildland fires that have destroyed thousands of homes, damaged public infrastructure, disrupted private business, and caused billions of dollars in property damage, suppression and rehabilitation costs.

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As a result of the 1991 Oakland Hills fire, the "Bates Bill" legislation was approved and required Cal Fire to identify Fire Hazard Severity Zones (FHSZ) in which to implement ignition resistant building standards, defensible space standards and seller's disclosure standards to mitigate the rate of spread and reduce the intensity of uncontrolled fires. In conjunction with identification of moderate, high, and very high fire hazard severity zones, maps were developed depicting the very high fire hazard severity zones, as such zones exist both in State Responsibility Areas (SRA) and Local Responsibility Areas (LRA), such as the Town of Ross. The location of the boundaries was developed with recommendations from Cal Fire and the Marin County Fire Plan based on the evaluation of fire history, fuel growth, density of housing, proposed developments, access, and water supply considerations. It is important to note that the FHSZ maps developed by the State included Moderate to High FHSZ for almost the entire of Town of Ross. Today, building standards relating to the "Hardening of Surfaces," such as roofs, exterior walls, structure projections and structure openings of new buildings located in a Wildland-Urban Interface Fire Area are set forth in the 2016 California Building Code Chapter 7A and the 2016 California Residential Code Chapter 337. Additionally, vegetation management plans, defensible space, as well as building standards relating to fire and public safety for roofs, exterior walls, structure projections and structure openings located in a Wildland-Urban Interface are set forth in 2016 California Fire Code Chapter 49. The purpose of these regulations is to establish minimum standards for the protection of life and property by increasing the ability of a new building located in any area designated as a Wildland-Urban Interface Fire Area to resist the intrusion of flame or burning embers projected by a vegetation fire and contribute to a systematic reduction in conflagration losses. Staff then discussed the following options:

Option 1:

This option would leave the requirements as they are today relying on the Hillside Lot Ordinance (HLO) map with no separate WUI map. It would not require any amendments to the Municipal Code. Town staff would continue to enforce WUI related provisions through the following regulations of the Municipal Code:

1. The Town/Ross Valley Fire would be able to enforce defensible spaces around each building and structure in accordance with the vegetation clearance requirements prescribed in California Public Resource Code 4291 and California Government Code 51182 on hillside areas having a slope of thirty percent or greater or partially or wholly within Hazard Zones 3 or 4.
2. Mandatory WUI compliance for Hillside Lot Permits (new construction and additions adding more than 200 square feet of new floor area) per Chapter 18.39 for parcels that are wholly or partially located within a slope hazard stability zone 3 or 4 and/or having an average slope of 30% or greater. WUI compliance includes compliance with the California Building/Residential Building Codes, Chapter 49 of the California Fire, such as defensible space and the submittal of a vegetation management plan.
3. Title 14 and Title 15 requires fire sprinklers for new construction and substantial remodels and Title 15 requires Class A roofing or Class A by assembly in the entire Town per current Town codes.

Option 2:

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This option would include the adoption a modified WUI Map that would include those parcels that are classified Hillside Lots (Slope Hazard Stability Zone classifications 3 and 4 and 30% or greater slopes) and parcels that are geographically adjacent to Hillside lots where incorporation into the map make geographical sense. Make local code amendments to require compliance with Building Code Chapter 7A and Residential Code Chapter 337, Materials and Construction Methods for Exterior Wildfire Exposure for new constructions and substantial remodels for all properties in the Town. Adding the amendment would be similar to having the entire Town designated a WUI for construction purposes but would not require Vegetation Management Plans or defensible space requirements for projects not located in the WUI map area. This option would require amendments to the Hillside Lot regulations per Chapter 18.39 for code cleanup purposes only to reference the appropriate WUI regulations and also include local code amendments to Title 15 (Building Code) and Title 14 (Fire Code).

Town Manager Chinn added that this gets back to structural hardening all over Town for new construction and substantial remodels. Mayor Robbins asked staff if the WUI Map in Option 2 is the red color. Town Manager Chinn noted that it is light red and dark red. The dark red is the added part. This map would add about 150 more parcels to the current HLO map. Council Member Brekhus asked staff to repeat. Planning Manager Scoble noted that currently there are 340 lots within the existing lot map relative to the HLO and this would add about 150 more parcels to that number, which is about 52% of the lots in Ross, about two-thirds of the land area. Council Member Brekhus asked staff under that scenario would the HLO apply to all these newly added parcels. Town Manager Chinn stated they would not change the HLO, this would be for WUI map purposes.

Mayor Pro Tempore Kuhl asked by example, is Bolinas Avenue considered a high-risk area. Town Manager Chinn responded that part of Bolinas is considered high risk. Acting Fire Chief Meagor provided the high-risk map for the Council's consideration and explained that everything in white is not located in high-risk area, which is unincorporated county land. He added that normally the WUI would extend beyond the fire hazard severity zones. Mayor Pro Tempore Kuhl stated Bolinas and Poplar are very dense areas and asked if that is considered for WUI. Acting Fire Chief Meagor responded in the affirmative.

Option 3A:

This option would include the adoption of a WUI map for the entire Town as shown in Attachment 5. This would be consistent with the draft WUI maps that were developed for Marin County in 2005. It would apply to both new construction and substantial remodels. This option would require amendments to the Hillside Lot regulations per Chapter 18.39 for code cleanup purposes only to reference the appropriate WUI regulations. If the Council is concerned with this option, an alternative to option 3A would be to require the WUI regulations to new construction projects only. Staff does not support this alternative to option 3A.

Option 3B:

Similar to option 3A, option 3B would include the adoption of a WUI map for the entire Town, less the properties adjacent to the Ross Common right-of-way (e.g., Ross Common, the school, the Post Office and the properties within the CL Zoning District). The regulations associated with the map would apply to both new construction and substantial remodels, as well as require vegetation management plans for all ministerial and discretionary projects. This option would

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also require amendments to the Hillside Lot regulations per Chapter 18.39 for code cleanup purposes only. If the Council is concerned with this option, an alternative to option 3B would be to require the WUI regulations to new construction projects only. Staff does not support this alternative to option 3B.

Mayor Pro Tempore Kuhl asked if the downtown is less vulnerable. Acting Fire Chief Meagor stated it could be. Having it in the WUI would not create a big impact on vegetation management. It likely would not have a huge impact either way on the overall picture.

Mayor Robbins asked staff if they could have defensible space and hardening of structures without a WUI map. These maps seem to be driven by computer models rather than common sense and asked staff if that would be Option 1. Acting Fire Chief Meagor stated there are a lot of factors, larger parcels with more vegetation. When leaving Ross, there is an obvious vegetation change. North side of San Anselmo is all WUI. The fire code has regulations in designated WUI areas, which is the reason to define it in order to apply the codes. Planning Manager Scoble stated by adopting a WUI map it is a much cleaner code if those provisions are being adopted in regard to defensible space and hardening of structures.

Council Member Brekhus commented on Ross parcel statistics on attachment two and wanted to understand defensible space and the vegetation management plan and how that gets triggered. Acting Fire Chief Meagor explained that the code provides exception for single specimen plants that will not rapidly spread fire to a home. A plant or tree could be next to a house that still meets the requirements of defensible space. They are not talking about removing all vegetation around homes.

Mayor Robbins asked staff about a fence and a hedge and how that factors into this concept of defensible space. Acting Fire Chief Meagor stated fences 15ft from a home are usually not an issue. Hedges that are not highly flammable would not be an issue. Defensible space is not removing all vegetation or fences from homes. It is creating a landscape of plants not highly flammable that are separated, and that are separated from the home along with the hardening and structure components.

Mayor Robbins felt if they have a WUI map for the entire Town then another entity would have the jurisdiction to make a decision about a fence, hedge or plants. Council Member Brekhus stated that every time there is a substantial remodel, the landscape plan is submitted to the fire department, so they are already exercising this authority currently. Town Manager Chinn noted that a vegetation management plan is required in the HLO, not outside the HLO. Acting Fire Chief Meagor added that there is a section in the current code if vegetation would rapidly spread fire to the home, the fire department would make comments and require it to be removed. Council Member Brekhus asked staff how that is different from what is before the Council tonight. Acting Fire Chief Meagor stated defensible space goes further then that and provides a better definition.

Council Member Russell asked staff if there are any examples through local municipalities about exceptions through hardship. There is tension about how this is going to work. Acting Fire Chief Meagor noted that when WUI first came out in 2005-06, there were not a lot of options for construction, but today to meet WUI standards is much easier and simpler. Meager states that there are a variety of fire safe materials that are more readily available. On the vegetation side,

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a builder or homeowner has the ability to modify their plan, possibly less vegetation and more hardening.

Mayor Robbins asked staff if homes are in the WUI could they face higher insurance cost. Acting Fire Chief Meagor added that insurance companies already know the high fire zones whether under WUI or not.

Council Member Brekhus wanted to discuss substantial remodel and wanted further clarification. Planning Manager Scoble read the definition into the record as follows: *"Substantial Remodel shall mean the renovation of any structure, which combined with any additions to the structure, affects a floor area which exceeds fifty percent of the existing floor area of the structure within any 36 month period. When any changes are made in the building, such as walls, columns beams or girders floor or ceiling joists and coverings, roof rafters, roof diaphragms, foundations, piles or retaining walls or similar components, the floor areas of all rooms affected, by such changes shall be included in computing floor areas for the purpose of applying this definition. This definition does not apply to the replacement and upgrading of residential roof coverings."*

Council Member Russell asked if 6 Redwood was subject to WUI what would happen to the trees. Town Manager Chinn felt there might be some bushes on the side and possibly the palm tree that could be affected. It would just depend on the rules. Staff must identify each tree and whether it needs to be removed or limbed up and make somewhat of a judgment call.

Sal Lucido, Contract Building Official, added that 6 Redwood has been issued a building permit, so WUI is approved for the entire Town, it would not retroactively apply to 6 Redwood, but projects that would come after. Rob Bastianon, Ross Valley Fire, stated, for example, at 6 Redwood he would look at existing vegetation, trees, leafy material, and tree trunks themselves. They look for all materials on the *"do not plant list"* that they are trying to remove throughout the entire county and the State of California.

Council Member Brekhus discussed substantial remodel again and if they are replacing exterior doors and windows and touched all four sides of the building, would that trigger sprinkler requirements. Contract Building Official Lucido responded that windows and doors do not trigger substantial remodel unless walls are opened up to make a bigger opening. Just replacing windows and doors is not a trigger and would not count as a substantial remodel. Council Member Brekhus felt changes to walls and coverings would be a trigger. Contract Building Official Lucido responded that wall covering would be sheetrock and not wallpaper. A door being replaced would be replaced in-kind, so there is no change.

Council Member McMillian asked staff if there is push back from other jurisdictions from the vegetation management plan. Contract Building Official Lucido stated that usually when completed it looks like a park-like setting and most residents are happy with the final solution. Council Member McMillian asked if there is an additional cost to a homeowner to comply with the vegetation management plan and hardening surfaces. Contract Building Official Lucido stated that the vegetation plan is done at the time of an application, so all would understand how it would appear. In the past, materials were harder to get. It costs a bit more in regard to tempered glazing. It is a small percentage of the overall cost. Labor cost is the same, so it is just an uptick in material cost.

Council Member McMillian asked staff if hardening of surfaces and the vegetation management plan would have slowed down the spreading of fire that occurred in Napa, Sonoma and Ventura. Acting Fire Chief Meagor responded that it would have an impact on the ability of a home to survive. The condition of the Tubbs Fire was very extreme. Defensible space and hardening of a structure makes a difference. Ross Valley Fire Bastianon was directly affected by the Tubbs Fire. His property was destroyed but not his home. Out of 40 homes in his neighborhood 32 homes were destroyed. Defensible space and hardening of structures would have saved several homes in his neighborhood.

Acting Fire Chief Meagor further noted that the Town already enforces the Hillside Lot Regulations, which requires compliance with California Building Code 7A and California Fire Code Chapter 49, in areas of the Town that exceed 30% slope. Option 1 would leave the requirement as they are today. Options 2 and 3 would expand requirements to additional portions of the Town. Staff recommends that Council approve a map and codes that will significantly improve the fire safety codes in the Town.

Mayor Robbins opened the public hearing on this item.

Charlie Goodman, Ross resident, very interesting discussion and understands the Council is struggling with this decision. They have reworked the ordinance several times in regard to what is allowed in regard to vegetation. The ordinance is very strong, but approving the WUI map does not allow the Council to make decisions about trees and vegetation. He opposed the Council losing the ability to make decisions for the Town. People move to Ross for the trees and vegetation. If they have a fire that starts in Fairfax, there is nothing to stop with wind, it will come through Ross and devastate the entire Ross Valley.

Garil Page, Sleepy Hollow resident, stated they have exceptions for the overall requirements in place. As far as insurance, when located in WUI insurance premiums increase, but if all the defensible space is in place as recommended by the fire department then premiums can decrease, so it is a wash. The defining thing of Ross is the high tree canopy and there is nothing like it in Marin, it is very unique and special.

Peter Nelson, Circle Drive resident, discussed the purple map and it basically covers everything. His experience with insurance and WUI, insurance companies are looking at those maps to determine rates and severity. Adopting some sort of WUI conditions would be positive to residents, not negative. There is a history of the fire department reviewing and making suggestions. He added that 35 lots in the Town have gone through an entire vegetation management plan. He supports being positive and it is important to think about those in the Oakland Hills and the Tubbs fire. They should move and adopt a WUI map that covers the Town, which would leave the Town positive. They need to implement changes that will make the Town safer for the future and managed in a proactively fire safe way and provide defensible space.

Town Clerk Linda Lopez submitted a letter to the Council for their consideration from Scott Lewis, a licensed landscaped architect, who is part of the design team developing design guidelines for the Town of Ross and respectfully recommended that the Council consider Option 1.

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There being no further public testimony on this item, the Mayor closed the public portion and brought the matter back to the Council for discussion and action.

Town Manager Chinn pointed out that the big part is the WUI map and where does the Council want it to apply. Staff is looking for direction from the Council tonight.

Council Member Brekhus believed another option would be to adopt the WUI map but make it consistent with the HLO. Acting Fire Chief Meagor stated that it could be an option. When those parcels were applied it was purely slope driven. From WUI standard there are more elements than just slope. Council Member Brekhus noted that Option 2 takes into consideration other items not just slope. Town Manager Chinn stated they could still harden the entire Town regardless of the map. Mayor Robbins noted that the HLO still has vegetation management requirements.

Council Member Brekhus discussed 73 Winship and asked staff if they would not be required to install tempered windows since they are in the flats. Contract Building Official Lucido explained that they were not in the HLO or WUI, so they were not considered to do tempered glazing. Sprinklers were installed on the new second unit since it was new construction, not in the main residence.

Council Member McMillian felt they have a duty to protect the Town and residents and believed they would be foolish not to adopt the most stringent methods possible. She attended a fire class last week and Native Americans used to burn most of Marin every four or five years until World War One when lumber became very valuable. The normal cycle is fires. The tree canopy is our biggest asset and our biggest liability. They walk a fine line protecting the trees and protecting lives. She also participated in the Board of Supervisors meeting in regard to lessons learned from the North Bay fires. We have climate change, drought and sudden oak death. We would be remiss to not take steps to save our community. She supported Option 3A.

Acting Fire Chief Meagor stated in regard to defensible space, one advantage is education and voluntary compliance to make properties safe. If not in an area that has high fire hazard then defensible space is not going to apply. From a practical standpoint, they never enforced defensible space to the letter of the code when not practical. They try to work with homeowners as well as educate homeowners.

Mayor Pro Tempore Kuhl agreed with Council Member McMillan to adopt Option 3A. Anywhere in Ross they will see slopes that have substantial numbers of trees. They have a risk, but there is no question that they have a risk of something happening that endangers all of their homes. They need to adopt the best they can and that is Option 3A.

Council Member Brekhus struggles with this issue. She wants to adopt something that says what it means and means what it says. She felt the Town already has the tools in place to do what she believed is a reasonable approach. She did not want to give away the Council's authority to make decisions. She supported Option 2 as a good middle ground. She is torn with new construction or substantial remodel. She wanted to see a tightening of new construction to say what it means and means what it says.

Council Member Russell agreed with Council Member Brekhus and supported Option 2. He is uncomfortable giving away discretion, in particular with vegetation management issues. They focus so much on privacy within the Town and trees help mitigate issues.

Mayor Robbins stated the Town and Fire department have the same goals in regard to vegetation management and hardening structures. She preferred to keep within the Town and have the Town enforce these requirements. She supported Option 1, but since she is out voted, she will compromise with Option 2 and it should apply to new construction and substantial remodels.

The Council directed staff to pursue a Municipal Code amendment to Chapter 14.04 in favor of Option 2. Staff will come back to the Council at a future Council meeting to approve the WUI map and related code amendments that correspond to Option 2.

12. Corte Madera Creek flood project update/discussion.

Public Works Director Rich Simonitch explained that the discussion continues in regard to the four to seven options being reviewed. None of the options have reached the cost benefit ratio required to get funding from the federal government to move forward on the project. When they remove or modify portions of one project it adds hidden costs that were otherwise not recognizable, so they have been going back and forth. Everyone is very frustrated. However, a request for proposal for design services went out on February 21, 2018. The proposals for the design of their project are due on April 3rd, 2018 and award of contract is expected June 5th, 2018. Those dates bracket the time period hoping to have the EIR out and 45-day public comment period. It is important to remember, the Ross portion of the project is a small portion of the greater Army Corps project. He believed their project shows up on two of those seven options being considered. He is present to answer any questions from the Council.

Mayor Robbins stated they were told they were approving a concept and there was a lot of flexibility in the design. She asked if the creek had to be pushed so close to Sir Francis Drake. During the walk through county staff stated that the bend in the creek did not add any additional flood benefit, so the creek could remain essentially straight. If they want to look into such flexibility, she asked how do they proceed with a request for this design change. Public Works Director Simonitch responded when the channel is straight the creek flow is faster and better, but that is not the purpose. The purpose is to slow down the water and take advantage of a widened area to slow down the flood. That review would occur more at the initial design presentations. The consultant would bring in during the design process. At the EIR stage, some members feel the creek being so close to properties is an environmental impact that should be considered. Mayor Robbins felt it should be asked sooner. Public Works Director Simonitch stated that the county is listening to requests, but there is no action to take at this point. The project is still in a state of flux. There will be plenty of time to address such issues before building permits are issued. In the design development of a project they can have the county consultant present at the 30% or 60% design stage. They hope the 30% stage will be early 2019 or late 2018.

Mayor Robbins reviewed the county's website about an amended hydrologist contract regarding the Town of Ross and San Anselmo requesting a waiver and other requirements relating to flood walls and surface elevation rising. It sounded like the Town would be liable for floodwater that could happen as a side effect from this project. Public Works Director Simonitch explained that since their project is proposing construction within a regulatory waterway, they must prove to