

MEMO

TO: Planning Commission

FROM: Mark Castrodale

DATE: October 7, 2021

SUBJ: Wildfire Mitigation Regulations – Staff/PC Proposed Revisions

As previously discussed with the BOCC, the Land Use Department is proposing certain revisions to the County's 'Wildfire Mitigation Regulations'. Although the new code section generally functions as intended, there are certain unintended consequences to the regulations that need to be addressed. Some examples are as follows:

- The wildfire regulations require a high degree of Staff's time, both in the office as well as in the field. Staff time is always at a premium and opportunities to streamline regulations should be considered.
- The wildfire regulations and specifically the 'point system' are far too difficult and convoluted for applicants. Staff spends far too much time explaining the point system and assisting applicants with completing the rating worksheet.
- Current regulations allow for 'combustible siding' with 'defensible space' (ie. *d-space*) and also allow for points where d-space is implemented. Owners and builders are having trouble completing d-space due to the State's recommendation to not cut any trees during summer months. This could delay the ability for Land Use to issue a 'certificate of occupancy' (ie. C.O.), or, require Land Use to issue a C.O. even if the d-space is not complete.
- A 'hard wiring' of regulations to West Region Wildfire Council can cause confusion and sometimes unexpected delays. Efforts should be made to achieve the same or similar goals but to eliminate possible delays and frustration for the applicant.
- Portions of the regulations and related 'worksheet' address: *Slope, Proximity to High Wildfire Risk Topographic Feature or HWRTF*, and *Forest & Fuel Density or Background Fuels*. It is Staff's opinion that these elements should be moved to

an 'educational only' portion of the regulation or worksheet. This proposed change is reflected in the draft.

Land Use Staff and Planning Commission conducted a work session regarding the proposed revisions on October 5th. During the work session, the drafts prepared by Staff were further revised based upon discussion and 'straw votes'. Note that during the hearing any proposed changes may be further revised and final revisions will be sent to the BOCC with a recommendation. Note that the BOCC public hearing on this item is scheduled for November 9th.

Attached are the following documents:

- *Current Land Use Code Section 16 – Wildfire Mitigation Regulations*
- *Current Wildfire Mitigation 'worksheet'*
- *Draft proposed revisions of Section 16 – ie. 'Redline'*
- *Draft proposed revisions to the wildfire 'worksheet'.*
- *Clean draft of Section 16.*
- *Clean draft of the wildfire worksheet.*

Thank you.

att.

LAND USE CODE – SECTION 16
WILDFIRE MITIGATION REG'S
PROPOSED REVISIONS

CURRENT LAND USE CODE

SECTION 16

SECTION 16

WILDFIRE MITIGATION REGULATIONS

16.1 PURPOSE AND LEGISLATIVE INTENT:

The purpose of this Section is to strengthen Ouray County's wildfire resiliency by increasing the likelihood of citizens, first responders, and structures surviving a wildfire. Additionally, these regulations:

- Are based on current science regarding effective wildfire mitigation; and
- Implement one regulation for the entire County, rather than multiple 'risk' zones; and
- Recognize that embers or burning material (*firebrands*) may travel as far as 13 miles; and
- Attempt to balance protection of life and property with individual property rights; and
- Recognize cost factors regarding required constructions methods and elements; and
- Focus not just on the importance of proper construction but also on education.

16.2 APPLICABILITY:

A. These Regulations Apply To:

- (1) All new Dwelling Unit construction requiring a building permit; and
- (2) All additions and exterior remodels to existing Dwelling Units requiring a building permit; and
- (3) All new Accessory Dwelling Units and accessory structures requiring a building permit; and
- (4) All restoration or replacement of existing Dwelling Units, Accessory Dwelling Units, or accessory structures requiring a building permit; and
- (5) New Limited, Regular, Resort/Conference Center, and Vested Property Rights County-Approved Subdivisions/Planned Unit Developments (PUDs) initiated after the date these regulations are adopted.

B. These Regulations Do Not Apply To:

- (1) Vacant land or
- (2) Commercial structures.

C. Non-Conforming Structures

This Section upon adoption shall not make any existing structures non-conforming as set forth in the Non-Conforming Uses, Structures, and Parcels' section of this Code.

16.3 REGULATIONS AND REQUIREMENTS:

- A. All building permit applications for new dwelling unit construction shall include a completed and staff-approved Worksheet and a detailed site plan including the location of all existing or proposed structures as well as all significant vegetation. The submittal of aerial photographs are *strongly encouraged*.
- B. All new dwelling unit construction, including accessory dwelling units must comply with all provisions found in the Required Elements and Scored Elements of the Worksheet.
- C. All new additions of 500 square feet more in size, must meet the Required Elements in the Worksheet with the exception of all of Sections A6 and A7.
- D. Any proposed addition to a dwelling unit, equal to or greater than 50% in size of the existing structure, and at least 1,000 square feet, shall require the entire existing structure to comply with all Mandatory Elements in the Worksheet with the exception all of Sections A6 and A7.
- E. All new attached decks must comply with Section B5.1 of the Worksheet.
- F. All new attached garages must comply with the Required Elements of the Worksheet with the exception of all of Section A7.
- G. Any building permit application for an addition to an existing dwelling unit shall trigger the requirement for a site visit/evaluation of the entire structure and surrounding land area by the Colorado State Forest Service (CSFS), West Region Wildfire Council (WRWC), or other qualified agency or professional. The purpose of the site visit/evaluation is to identify areas of concern and possible opportunities to implement changes or upgrades to reduce the structures ignition vulnerability due to wildfire. Site visit/evaluations conducted by a qualified/accepted agency shall be good for a period of 5-years.
- H. The replacement of existing roofing materials shall require an approved building permit as well as the following: all newly installed roofing material must be 'Class-A' fire resistant, all vent screens must be 1/8" screening or screening otherwise specifically designed to prevent the intrusion of fire embers, approved spark-arrestors must be installed, if a gutter system is to be installed then it must be constructed of ignition-resistant materials.
- I. The installation of a new or replacement wood or pellet burning stove (new or existing construction) shall require the installation of an approved spark-arrestor.
- J. Building permit applications for new detached accessory structures (garage, barn, shed, shop, etc.) must comply with the Required Elements in the worksheet with the exception of all of Section A7.
- K. All new construction, including residential dwelling units, accessory dwellings, attached garages, additions to existing structures, and accessory structures, occurring in the Colona Zone, or any other county-approved high-density zoning district, shall be required to comply *only* with the 'Required Elements' of the Worksheet with the

exception of the 'Defensible Space' provisions listed in Section A2.2 and all provisions listed in A7.1.

16.4 PLANNED UNIT DEVELOPMENTS

- A. Prior to submittal of a Sketch Plan, the application for a PUD shall be referred to the CSFS or WRWC, and the local fire department or fire district for review and recommendations regarding vegetation management outside of the building envelope areas.

All new PUD applications including Limited, Regular, Resort/Conference Center, and Vested Property Rights Subdivisions shall include the following elements regarding wildfire mitigation:

- (1) For internal subdivision roads that are greater than 660-feet in length, a secondary egress method is required (*if feasible*), including road width and adjacent cleared areas, or an internal access road built to accommodate access for emergency response vehicles, including both horizontal and vertical clearance. (i.e. road width and adjacent clearing allows adequate clearance for 2 typical size emergency vehicles to pass)
- (2) PUD applications must include recommendations from the CSFS, the WRWC, or other qualified agency or professional as identified by Staff.
- (3) The Board of County Commissioners may require some or all recommendations from the CSFS, WRWC, or other qualified agency or professional.
- (4) The PUD design shall include open space or non-building area arranged to allow for implementation of a fuel break as described in the 2013 National Fire Protection Association guidelines (fuel breaks typically 30-50 feet wide and located on the perimeter of the PUD).
- (5) Covenants submitted by Applicant or Developer shall include a provision requiring on-going maintenance of the area of the development identified as a fuel break.
- (6) Based on a determination by Land Use Staff, PUDs may require a design such that no houses may be constructed on separate parcels with less than thirty (30) feet of separation, and all building envelopes shall allow for a minimum of one-hundred (100) feet of defensible space around all dwelling units, individually or collectively. Such determination shall be based on forest/fuel concentration, lot size, and overall residential density. Lots created by PUDs/subdivisions approved by the County with a size of two (2) acres or less shall be exempted from this Section, 16.4(A)(6).
- (7) All building envelopes shall avoid, to the greatest degree possible, High Wildfire Risk Topographic Features.

16.5 PROCEDURES

- A. Building permit applications and related reviews regarding wildfire mitigation will be conducted by the County Land Use Department.
- B. Applications requiring assistance by the WRWC, CSFS, should be copied to those agencies as early on in the process as possible to avoid any potential delays.

16.6 EXCEPTIONS/VARIANCES/APPEALS

Any request for an exception, variance, or appeal related to the provisions of this Code Section shall be addressed as provided for in the Exceptions, Special Exceptions, Exemptions, and Variances section of this Code.

16.7 ADMINISTRATION/ENFORCEMENT/FEES

This Section will be administered by the Land Use Department and the costs of implementation will be recovered through fees established by the Board of County Commissioners as a part of PUD and building permit fees. Enforcement of these regulations shall be as provided for in the Administration and Enforcement section of this Code.

16.8 DUTIES/POWERS OF THE RATING ASSESSOR

The Rating Assessor is authorized to interpret and apply the regulations found in this Section. The Rating Assessor shall have the authority to render interpretations and to adopt policies and procedures in order to clarify the application of these regulations. Such interpretations shall be in conformance with the overall intent and purpose of this Section. The Rating Assessor will determine, using his/her best professional judgment, the degree to which a proposed material and/or proposed assembly shall be justifiably considered Ignition Resistant. In cases of restoration or replacement where a property owner may not be able to meet some requirements of the Scored Elements due to conditions beyond their control, the Rating Assessor shall have discretion with respect to compliance with the maximum points allowed.

16.9 WILDFIRE VULNERABILITY RATING SYSTEM WORKSHEET

The regulations in this Section work conjointly with the Worksheet that is attached to this Section as 'Exhibit A' and shall be considered to be part of the regulation in its entirety. The Worksheet may not be amended except through formal approval by the County Planning Commission and the Board of County Commissioners.

Note: *This regulation references the 'Wildfire Vulnerability Rating System Worksheet' or 'Worksheet' which is attached to this Section as 'Exhibit A to Section 16, Wildfire Mitigation Regulations'. This Section and the Worksheet work together to establish the regulations relating to wildfire mitigation in Ouray County.*

LAND USE CODE – SECTION 16
WILDFIRE MITIGATION REG'S
PROPOSED REVISIONS

CURRENT

***WILDFIRE VULNERABILITY
RATING SYSTEM WORKSHEET***

Ouray County Wildfire Vulnerability Rating System Worksheet



Site Address: _____

Parcel Number: _____ Owner Name: _____

Initial Assessment Date: _____ Initial Assessment Completed by: _____

Final Assessment Date: _____ Final Assessment Completed by: _____

This Worksheet has two category sections: **(A) REQUIRED ELEMENTS** and **(B) SCORED ELEMENTS**. Within (A) REQUIRED ELEMENTS, all elements must be marked as "Pass" in order to receive a building permit or certificate of occupancy. Additionally, within (B) SCORED ELEMENTS, a maximum number of **589** will be allowed for construction of a dwelling unit, an accessory dwelling unit, or an accessory structure at the time of the issuance of a Building Permit as well as at the time of the issuance of a Certificate of Occupancy. This rating sheet provides categories with which to calculate the point rating specific to your structure and land. The Rating Assessor will determine, using his/her best professional judgement, the degree to which a proposed material and/or proposed assembly is legitimately considered Ignition Resistant in order to meet the individual required elements as well as the scored elements. The Rating Assessor shall be designated by the County Planning Director.

This Worksheet is part of the Wildfire Mitigation section of the Ouray County Land Use Code. Please refer to this Section of the Code for additional information about the entire wildfire mitigation regulations. This Worksheet is intended to encourage ignition resistant design, construction and landscaping practices in the County. This Wildfire Vulnerability Rating System does not supercede but works in concert with Ouray County's enforcement of the currently adopted building, mechanical, and/or energy codes.

ID	Name	Required	At Building Permit	Prior to C.O.O.
----	------	----------	--------------------	-----------------

CATEGORY A: REQUIRED ELEMENTS

A1.0	Roofing - A description of the roof covering and construction assembly of the roof. Roofing has been shown to have the single most significant impact on the survivability of home during a wildfire.			
A1.1	Class A Roof Covering: The construction of the roof utilizes a roof covering material that has been tested to be a Class A material in accordance with UL 790 (ASTM E108). Some materials may rely on additional underlying materials to improve their fire ratings. Both "by assembly" and "stand-alone" materials are considered acceptable so long as the material has been installed in accordance with their listing and the manufacturers' installation instructions and that the full assembly has been constructed to ensure the Class A rating status has been achieved.	Must Meet Standard A1.1 to Pass	PASS	PASS
A1.2	Class B, C or Unrated Roof Covering: Any roof covering that does not meet the Class A roof covering standards in accordance with UL 790 (ASTM E108).		FAIL	FAIL

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - Adopted 1/28/2020

A2.0	Exterior Cladding & Siding: A description of the materials and construction assembly of the exterior cladding and siding of the building and its resistance to ignition from embers, as well as radiant and convective heat.			
A2.1	Ignition Resistant Siding: The building will feature exterior cladding and siding that are constructed of Ignition Resistant materials. Ignition Resistant materials include, but are not limited to: heavy timber log construction that is 6" in diameter or greater; fiber-cement board, 3 stage stucco, masonry, brick, manufactured stone, etc. The Rating Assessor will determine, using best professional judgement, degree to which a proposed material and proposed assembly is justifiably considered "ignition resistant" to meet this standard.	Must meet Standard A2.1 OR A2.2 to Pass	PASS	PASS
A2.2	Combustible Siding WITH Ember Mitigation AND Defensible Space: The building will feature combustible (non-ignition resistant) exterior cladding and siding; however, measures have been taken to ensure that the base of exterior walls, (where the walls meet the ground, decks or any other horizontal surfaces), as well as junctures between exterior walls and rooflines (e.g. dormers, complex roof features, etc.) and other structural projections, etc. have no less than 6 inches of a non-combustible material (e.g. metal flashing, skirting, concrete foundation, etc.) to reduce the likelihood of ignition from embers AND the property meets the standard for B1.1 (no less than 100') for defensible space to mitigate the risk of ignition from radiant and convective heat sources. If the property owner cannot meet the 100 feet of defensible space criteria they may elect to utilize "Ignition Resistant Siding" (A2.1).		PASS	PASS
A2.3	Combustible (Non-Ignition Resistant) Siding: The building has exterior siding or cladding that does not meet standard A2.1 or does not otherwise meet standard A2.2.		FAIL	FAIL
A3.0	Vents: A description of all vents, including but not limited to attic, soffit, and gable vents. Any vent that connects the outside of the building with the inside of the building is covered under this element unless the vent emanates from a combustion chamber or an ignition-resistant chamber. (eg. clothes dryer or range hood with solid metal duct to the exterior vent)			
A3.1	Ember Resistant Screening: Vents are screened with 1/8" screening, an acceptable louvered venting system (as is common for dryer vents) and/or a similar screening system that has been specifically designed to prevent the intrusion of embers.	Must meet Standard A3.1 to Pass	PASS	PASS
A3.2	Non-Ember Resistant Screening / No Screening: One or more location(s) on the building that connects the outside of the building with the inside of the building either (a) does have any screening or (b) insufficient screening such that it does not meet Standard A3.1.		FAIL	FAIL
A4.0	Chimneys and Other Heating Appliances: Approved spark arresters installed on all wood burning appliances.			
A4.1	Approved Spark Arrester Installed: Approved spark arrester or cap is properly installed on the chimney.	Must meet Standard A4.1 to Pass	PASS	PASS
A4.2	Lack of Approved Spark Arrester: Missing, not properly installed or not meeting Standard A4.1		FAIL	FAIL

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - Adopted 1/28/2020

A5.0	Building Perimeter Hardened Zone: This standard is applicable to the ground level area directly adjacent the building perimeter extending out to 5 feet. The building perimeter includes any attachments, such as combustible decks, combustible fences, attached outbuildings, etc.			
A5.1	5 Foot Hardened Zone: Hardened zone extends out 5 feet from the building perimeter. A hardened zone is void of all combustible fuels including grasses, vegetation, landscape mulch, combustible building materials, etc. The hardened zone must be covered so as to prevent eventual growth of grasses/weeds. A weed barrier fabric and rock/gravel are recommended.	Must have 5'+ hardened zone to pass	PASS	PASS
A5.2	Lack of 5 Foot Hardened Zone: Area within 5 feet of the building perimeter (including attachments) does not meet the standard as defined in A5.1		FAIL	FAIL
A6.0	Exterior Doors: A description of all exterior doors. Doors represent a vulnerable point for fire intrusion.			
A6.1	Ignition Resistant Doors: Exterior doors are ignition resistant or solid core not less than 1 3/4-inches thick, or constructed with aluminum or fiberglass cladding. Windows within doors, and glazed doors, are tempered safety glass or multi-layered glazed panels. Rating Assessor will determine, using best professional judgement, degree to which a proposed material and proposed assembly is justifiably considered "ignition resistant" to meet this standard.	Yes or No	PASS	PASS
A6.2	Non-Ignition Resistant Doors: One or more exterior doors do not meet Standard A6.1.		FAIL	FAIL
A7.0	Private Road & Driveway Emergency Vehicle Access: Private roads and driveways should conform to Ouray County Road Standards as set forth in this Code. <u>EXCEPTION: Homes, driveways, or portions of driveways, located on mining claims above 9480-feet in elevation may be exempt from the "Driveways" standards. Driveway design may require a 'plan and profile' to be prepared by a Colorado State Registered Professional Engineer.</u> Please refer to the High Alpine Development Regulations for more information and applicability.			
A7.1	Driving surface at least twelve feet (12') wide.	Must meet all standards to pass	PASS / FAIL	PASS / FAIL
	Interior radii shall be at least thirty-two feet (32')		PASS / FAIL	PASS / FAIL
	Driveway Opening at least sixteen feet (16') wide		PASS / FAIL	PASS / FAIL
	Grades do not exceed twelve percent (12%)		PASS / FAIL	PASS / FAIL
	Adequate sight distance, angle of approach, crowning/cross sloping, adequate drainage meet County standards.		PASS / FAIL	PASS / FAIL
A8.0	Addressing: The address sign shall adhere to Ouray County Land Use Code and Resolution No. 2017-048 which sets the standard for address signs in the County.			

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - Adopted 1/28/2020

A8.1	Address Sign Visible & Meets Standard: All new address signs installed in the unincorporated portions of Ouray County shall conform to the current standard for address signs as set forth by the Board of County Commissioners.	Must meet Ouray County Address Sign Standard to Pass	PASS / FAIL	PASS / FAIL
A8.2	Address Sign Not Visible OR Does Not Meet Standard: The address sign does not meet the standard for address signs as set forth by the Board of County Commissioners.		FAIL	FAIL
A9.0	Gutter System: A description of the gutter system, including gutters, downspouts and gutter caps, including their materials and construction assembly. Regardless of the installed gutter system, regular maintenance of gutters, to clear them of any accumulated combustible materials, is highly recommended. To reduce maintenance, installation of a non-combustible (ignition-resistant) gutter cap is recommended.			
A9.1	Ignition-Resistent Gutter System: Gutters are made out of ignition-resistant material AND gutters are installed such that the leading edge of the roof is finished with a metal drip edge so that no wood sheathing is exposed. The drip edge extends in to the gutter. If no gutter system is installed, then PASS.	Meets standards	PASS	PASS
A9.2	Wildfire Vulnerable Gutter System: Gutters do not meet the standard as described in A9.1.	Does not meet standards	FAIL	FAIL

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - Adopted 1/28/2020

CATEGORY B: SCORED ELEMENTS				
ID	Name	Points	Building Permit	Prior to Cert. of Occupancy
DEFENSIBLE SPACE ELEMENTS				
B1.0	Defensible Space: A description of the current and/or planned extent and quality of defensible space around the proposed building AND emergency access roads/driveways on the property. Please refer to "Protecting Your Home from Wildfire: Creating Wildfire-Defensible Zones" (CSFS 2012-1) - OR current and relevant replacement of this document - for additional information and standards related to the creation of Defensible Space. Apply same score if current conditions do not exist but a detailed Wildfire Mitigation Defensible Plan has been submitted and demonstrates intention to develop defensible space to these standards. <u>Note that "defensible space" does not mean clearcutting or complete removal of vegetation.</u>			
B1.1	Full Zone 1 (0-30 ft) and Full Zone 2 (30-100 ft): No less than 100 feet of adequate D-Space in all directions around the building.	0		
B1.2	Full Zone 1 (0-30 ft) But Not Full Zone 2 (30-100 ft): No less than 30 feet of adequate D-Space in all directions around the building.	100		
B1.3	Not Full Zone 1 (0-30 ft): Less than 30 feet of adequate D-Space in all directions around the building.	300		
BUILDING SITE ELEMENTS				
B2.0	Slope (Percent/Degrees): A measurement of the slope of the property as it relates to the location of the building. The slope measurement is taken by creating a 300 foot straight-line transect with the center of the building in the middle of the transect and the two ends of the transect are at the highest and lowest elevations possible.			
B2.1	<20% / <11.31°: Measured slope is less than 20%	0		
B2.2	20-45% / 11.31°-24.23°: Measured slope is between 20.0 and 45%	60		
B2.3	>45% / >24.33°: Measured slope is greater than 45%	120		
B3.0	Proximity to High Wildfire Risk Topographic Feature : A measurement of the distance of the edge of the building (including attached decks) to the start of a topographic feature, designated as a High Wildfire Risk Topographic Feature (HWRTF). The Rating Assessor will utilize existing data and best professional judgement to determine existence and proximal location of HWRTF.			
B3.1	> 150' away: Building footprint greater than 150 feet from HWRTF	0		
B3.2	50 - 150' away: Building footprint is between 50 feet and 150 feet from HWRTF.	70		
B3.3	<50' away: Building footprint is less than 50' feet from HWRTF.	140		

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - Adopted 1/28/2020

B4.0	Forest & Fuel Density (aka "Background Fuels"): An estimate measurement of the approximate fuel density (only species that contribute as wildfire fuel) within/beyond Zone 3 (regardless of property boundary). For this purpose, Zone 3 is defined as starting 100 feet away from the building and ending at 350 away from the building in all directions. Emphasis and weight should be placed on forest and fuel locations most likely to impact fire behavior approaching the building.			
B4.1	Light: Predominately grasses and herbaceous plants. Woody fuels, if existing, are sparse and highly isolated	0		
B4.2	Moderate: Well spaced and isolated trees and shrubs mixed with grasses and herbaceous plants. Isolated is defined as a greater than 10 foot (>10') average spacing between edges of crowns (outer most branches of a tree/shrub).	60		
B4.3	Heavy: Trees and shrubs are the predominant cover type and are dense in nature. Dense is defined as less than 10 foot (<10') average spacing between edges of crowns (outer most branches of tree/shrub).	120		

ARCHITECTURAL DESIGN & CONSTRUCTION ELEMENTS

B5.0	Decks and Fencing: A description of the construction materials, design and assembly of the fencing and decks that are attached to the building.			
B5.1	<p>Hardened Decking & Fencing Design/Construction:</p> <p>a) decking composed of composite material; and</p> <p>b) Wood joists are covered with a metal cap or similar covering (foil-faced tape bitumin is also recommended) to reduce ember ignitions on exposed joists between deck boards; and</p> <p>c) gaps between decking boards are 1/4" or more (narrower gaps have been shown to increase fire spread); and</p> <p>d) the decking is not elevated above ground level or, if elevated less than 30-inches from the underside of the framing to ground level, it is completely enclosed such that neither convective nor radiant heat can penetrate the deck from the bottom up OR if full enclosure is not feasible the property meets the requirements of 100 feet of defensible space as defined in B1.1; and</p> <p>e) bottom of deck enclosure (if applicable), where it meets grade, meets ignition resistant standards as described in A2.1; and</p> <p>f) entire area under deck must be covered with a weed barrier and covered with an ignition-resistant material such as crushed rock or gravel; and</p> <p>g) fences, (if present, attached to home are composed of an igation-resistant material), will feature at least 5 feet of ignition-resistant fencing where the fence attaches to the structure to reduce the likelihood of the fence carrying fire to structure.</p> <p>h) hardened zone extends out 5 feet from the deck perimeter, void of all combustible fuels including grasses, vegetation, landscape mulch, combustible building materials, etc. Hardened zone must be covered so as to prevent eventual growth of grasses/weeds. A weed barrier fabric and rock/gravel are recommended.</p>	0		
B5.2	Deck Constructed without Composite Decking: The proposed or built deck conforms with B5.1 in every way (subsections a-h) <u>except</u> subsection (a) related to the requirement for composite materials in deck construction.	90		
B5.3	Non-Ignition Resistant Decking & Fencing: Any attached deck or attached fencing does not completely and entirely conform with B5.1 or 5.2.	180		

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - Adopted 1/28/2020

B6.0	Eaves, Overhangs and Structural Projections: A description of any portion of the attached building where projections or overhangs are part of the design element. These areas are vulnerable to heat and ember collection.			
B6.1	Ignition Resistant Projections: All eaves are soffitted and all eaves, overhangs and structural projections are composed of or enclosed by ignition resistant materials (as described in "Exterior Cladding and Siding" - Section A.2).	0		
B6.2	Non-Ignition Resistant Projections: One or more eaves has an open-eave construction design or one or more eaves, overhangs or structural projections does not otherwise conform with B6.1.	80		

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - Adopted 1/28/2020

B7.0	Windows: A description of all exterior windows. Windows are vulnerable to fire intrusion through window frame failure (primarily due to heat exposure) and glazing (glass surface) failure.			
B7.1	Preferred Exterior Windows: (a) all exterior windows have an 'Insulated Glazing Unit' (IGU) consisting of 2 or 3 panes, and; (b) tempered or laminated glass for one or all panes, and; (C) low-e coating on the inner surface of the exterior pane; and (d) all exterior window frames are composed of Ignition Resistant materials. (Note: If Defensible Space is 30-feet or greater then requirements 'c and d' above are eliminated.)	0		
B7.2	Less Preferred Exterior Windows: (a) All exterior windows have an 'Insulated Glazing Unit' (IGU) consisting of 2 or 3 panes; and (b) all exterior window frames are composed of Ignition Resistant materials. (Note: If Defensible Space is 30-feet or greater then requirement 'b' above is eliminated.)	70		
B7.3	Fire Vulnerable Exterior Windows: Windows do not conform with B7.1 or B7.2	140		

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - Adopted 1/28/2020

EMERGENCY ACCESS ELEMENTS				
B8.0	Driveway Clearances: In addition to Required Element A7.0 "Driveways", this is a description of the driveway's horizontal and vertical clearances which allow for unimpeded emergency response vehicular access. Typical impediments to safe horizontal and vertical access include trees, branches, shrubs, gateways, archways, etc. The horizontal clearance does not require that additional road base material be laid down, instead this is solely looking at the ability for emergency vehicles to access the site.			
Horizontal Clearance	Greater than 24 feet of horizontal clearance has been achieved.	0		
	Less than 24 feet of horizontal clearance has been achieved, however an area along the driveway provides a "pullout" for emergency vehicles. The "pullout" provides at least 24 feet of horizontal clearance (as measured with the driveway and the pullout combined) and is at least 35 feet in length so that two emergency vehicles can pass one another along the driveway. The pullout should be approximately midway between the structure and the access point off of the County Road system.	0		
	Less than 24 feet but greater than 20 feet of horizontal clearance	40		
	Less than 20 feet of horizontal clearance	80		
Vertical Clearance	Greater than 13.5 feet of vertical clearance	0		
	Less than 13.5 feet of vertical clearance	30		
OTHER CONSIDERATIONS - NO SCORE - EDUCATIONAL PURPOSES ONLY				
B9.0	Near Building Combustibles: A description of other combustible materials, vulnerable to ignition, near the building. The emphasis for combustibles is within Zone 1, or zero to thirty feet from the building ANY material that is combustible should be considered. Common combustible materials include (but are not limited to): propane tanks, firewood, woody debris (dead and down sticks, branches, etc.), pine/fir needles, leaves, patio furniture, ornamental wreaths, decorative displays, etc.			
B9.1	Combustible materials are not within 30 feet of any buildings			
B9.2	Combustible material are within 10-30 feet of the building.			
B9.3	Combustible material within 10 feet of the building.			
		No applicable score.		
		Max Points	Site Inspection	Prior to Cert. of Occupancy
Totals		589	0	0
		589 or below	Passing Score	
		590 or Above	Failing Score	

LAND USE CODE – SECTION 16
WILDFIRE MITIGATION REG'S
PROPOSED REVISIONS

REDLINE

LAND USE CODE – SECTION 16

WILDFIRE MITIGATION REG'S

SECTION 16

WILDFIRE MITIGATION REGULATIONS

STAFF PROPOSED REVISIONS

General Questions/Issues:

- *What about Section 9 and visual impact? Trees that provided required screening and then at some point are proposed for removal due to wildfire mitigation efforts? Which regulation trumps in this instance?*
-

16.1 PURPOSE AND LEGISLATIVE INTENT:

The purpose of this Section is to strengthen Ouray County's wildfire resiliency by increasing the likelihood of citizens, first responders, and structures surviving a wildfire. Additionally, these regulations:

- Are based on current science regarding effective wildfire mitigation; and
- Implement one regulation for the entire County, rather than multiple 'risk' zones; and
- Recognize that embers or burning material (*firebrands*) may travel as far as 13 miles; and
- Attempt to balance protection of life and property with individual property rights; and
- Recognize cost factors regarding required constructions methods and elements; and
- Focus not just on the importance of proper construction but also on education.

16.2 APPLICABILITY:

A. These Regulations Apply To:

- (1) All new Dwelling Unit construction requiring a building permit; and
- (2) All additions and exterior remodels to existing Dwelling Units requiring a building permit; and
- (3) All new Accessory Dwelling Units and accessory structures requiring a building permit; and
- (4) All restoration or replacement of existing Dwelling Units, Accessory Dwelling Units, or accessory structures requiring a building permit; and
- (5) New Limited, Regular, Resort/Conference Center, and Vested Property Rights County-Approved Subdivisions/Planned Unit Developments (PUDs) initiated after the date these regulations are adopted.

B. These Regulations Do Not Apply To:

- (1) Vacant land or
- (2) Commercial structures.

C. **Non-Conforming Structures**

This Section upon adoption shall not make any existing structures non-conforming as set forth in the Non-Conforming Uses, Structures, and Parcels' section of this Code.

16.3 REGULATIONS AND REQUIREMENTS:

- A. All building permit applications submitted for new dwelling unit construction shall include a completed Wildfire Addendum to Building Permit and staff approved Worksheet (herein referred to as 'Worksheet') and a detailed site plan including the location of all existing or proposed structures as well as all significant vegetation. The submittal of aerial photographs are strongly encouraged.
- B. All new dwelling unit construction, including (detached) accessory dwelling units (ie. ADUs), must comply with all provisions found in the 'Ouray County Wildfire Building Permit Addendum Worksheet' Section A and Section B. (Note: Defensible Space may or may not be required.) ~~Required Elements and Scored Elements of the Worksheet.~~
- C. All new additions of 500 square feet or more in size, must meet the provisions of Required Elements Section A in the Worksheet, with the exception of Section A7. Requirements, and shall apply to the addition only and not the entire structure.
- D. Any proposed addition to a dwelling unit, equal to or greater than 50% in size of the existing structure, and at least 1,000 square feet, shall require the entire existing structure to comply with all Mandatory Required Elements provisions stated in Section A of the Worksheet with the exception all of Section A7.
- E. All new attached decks (ie. directly abuts home or other structure) must comply with Section B2.1 of the Worksheet.
- F. All new attached fences (ie. directly abuts home or other structure) must comply with section B2.2 of thw Worksheet.
- G. All new attached garages must comply with the Required Elements all provisions stated in Section A of the worksheet with the exception of A7. If new garage as well as the existing structure include combustible siding, then the entire structure must comply with Section A.2.2. New structure must also comply with the following elements from Section B. – B.6, B.7. of the Worksheet with the exception of all of Section A7.
- H. Any building permit application for an addition of any size to an existing dwelling unit shall require the Land Use Department to provide the applicant or property owner with an information packet explaining services provided by the requirement for a site visit/evaluation of the entire structure and surrounding land area by the Colorado State Forest Service (CSFS), and the West Region Wildfire Council (WRWC), or other qualified agency or professional as identified by Staff, regarding

- ~~or other qualified agency or professional. The purpose of the~~ the availability of site visit/evaluations performed by these entities to identify areas of concern and possible opportunities to implement changes or upgrades to reduce ~~a the~~ structures ignition vulnerability due to wildfire. ~~Site visit/evaluations conducted by a qualified/accepted agency shall be good for a period of 5 years.~~
- I. The replacement of existing roofing materials shall require an approved building permit as well as the following: all newly installed roofing material must be ‘Class-A’ fire resistant, all vent screens must be 1/8” screening or screening otherwise specifically designed to prevent the intrusion of fire embers, approved spark-arrestors must be installed, ~~if~~ if a new gutter system is to be installed then it must be constructed of ignition-resistant materials as stated in Section A.9.0 of the Worksheet.
 - J. The installation of a new or replacement wood or pellet burning stove (*new or existing construction*) shall require the installation of an approved spark-arrestor as stated in Section A.4.1 of the Worksheet.
 - K. Building permit applications for new detached accessory structures (*garage, barn, shed, shop, etc.*) 200 square-feet in size or greater must comply with all provisions stated in the Required Elements Section A in of the Worksheet with the exception of all of Section A7.
 - L. All new construction, including residential dwelling units, accessory dwellings, attached garages, additions to existing structures, and accessory structures occurring in the Colona Zone, or any other county-approved high-density zoning district, shall be required to comply with the ‘Required Elements Section A of the Worksheet (only) with the exception of the ‘Defensible Space’ provisions and the requirements of Section A.7.1. ~~with the exception of the ‘Defensible Space’ provisions listed in Section A2.2 and all provisions listed in A7.1.~~

16.4 PLANNED UNIT DEVELOPMENTS

- A. Prior to submittal of a Sketch Plan, the application for a PUD shall be referred to the CSFS or WRWC, and the local fire department or fire district for review and recommendations regarding vegetation management outside of the building envelope areas.

All new PUD applications including Limited, Regular, Resort/Conference Center, and Vested Property Rights Subdivisions shall include the following elements regarding wildfire mitigation:

- (1) For internal subdivision roads that are greater than 660-feet in length, a secondary egress method is required (*if feasible*), including road width and adjacent cleared areas, or an internal access road built to accommodate access for emergency response vehicles, including both horizontal and vertical clearance. (i.e. road width and adjacent clearing allows adequate clearance for 2 typical size emergency vehicles to pass)

- (2) PUD applications must include recommendations from the CSFS, -the WRWC, or other qualified agency or professional as identified by Staff.
- (3) The Board of County Commissioners may require some or all recommendations from the CSFS, WRWC, or other qualified agency or professional.
- (4) The PUD design shall include open space or non-building area arranged to allow for implementation of a fuel break as described in the 2013 National Fire Protection Association guidelines (fuel breaks typically 30-50 feet wide and located on the perimeter of the PUD).
- (5) Covenants submitted by Applicant or Developer shall include a provision requiring on-going maintenance of the area of the development identified as a fuel break.
- (6) Based on a determination by Land Use Staff, PUDs may require a design such that no houses may be constructed on separate parcels with less than thirty (30) feet of separation, and all building envelopes shall allow for a minimum of one-hundred (100) feet of defensible space around all dwelling units, individually or collectively. Such determination shall be based on forest/fuel concentration, lot size, and overall residential density. Lots created by PUDs/subdivisions approved by the County with a size of two (2) acres or less shall be exempted from this Section, 16.4(A)(6).
- (7) All building envelopes shall avoid, to the greatest degree possible, High Wildfire Risk Topographic Features.

16.5 PROCEDURES

- A. Building permit applications and related reviews regarding wildfire mitigation will be conducted by the County Land Use Department.
- B. Applications that may require assistance by the WRWC, CSFS, should be copied to those agencies as a courtesy as early on in the process as possible to avoid any potential delays.

16.6 EXCEPTIONS/VARIANCES/APPEALS

Any request for an exception, variance, or appeal related to the provisions of this Code Section shall be addressed as provided for in the Exceptions, Special Exceptions, Exemptions, and Variances section of this Code.

16.7 ADMINISTRATION/ENFORCEMENT/FEES

This Section will be administered by the Land Use Department and the costs of implementation will be recovered through fees established by the Board of County Commissioners as a part of PUD and building permit fees. Enforcement of these regulations shall be as provided for in the Administration and Enforcement section of this Code.

16.8 DUTIES/POWERS OF THE RATING ASSESSOR

The Rating Assessor is authorized to interpret and apply the regulations found in this Section. The Rating Assessor shall have the authority to render interpretations and to adopt policies and procedures in order to clarify the application of these regulations. Such interpretations shall be in conformance with the overall intent and purpose of this Section. The Rating Assessor will determine, using his/her best professional judgment, the degree to which a proposed material and/or proposed assembly shall be justifiably considered Ignition Resistant. In cases of restoration or replacement where a property owner may not be able to meet some requirements due to conditions beyond their control, the Rating Assessor shall have discretion with respect to compliance.

16.9 **WILDFIRE MITIGATION BUILDING PERMIT ADDENDUM
VULNERABILITY RATING SYSTEM WORKSHEET**

The regulations in this Section work conjointly with the Worksheet that is attached to this Section as 'Exhibit A' and shall be considered to be part of the regulation in its entirety. The Worksheet may not be amended except through formal approval by the County Planning Commission and the Board of County Commissioners.

Note: *This regulation references the 'Wildfire Mitigation Building Permit Addendum Worksheet' or just 'Worksheet' which is attached to this Section as 'Exhibit A to Section 16, Wildfire Mitigation Regulations'. This Section and the Worksheet work together to establish the regulations relating to wildfire mitigation in Ouray County.*

LAND USE CODE – SECTION 16
WILDFIRE MITIGATION REG'S
PROPOSED REVISIONS

- REDLINE -

**WILDFIRE VULNERABILITY
RATING SYSTEM WORKSHEET**

NOW REFERRED TO AS:

***WILDFIRE MITIGATION
BUILDING PERMIT ADDENDUM
WORKSHEET***

Wildfire Mitigation Building Permit Addendum Worksheet



Site Address: _____

Parcel Number: _____ Owner Name: _____

Initial Assessment Date: _____ Initial Assessment Completed by: _____

Final Assessment Date: _____ Final Assessment Completed by: _____

This Worksheet is part of the Wildfire Mitigation section of the Ouray County Land Use Code. Please refer to this Section of the Code for additional information about the entire wildfire mitigation regulations. This Worksheet is intended to encourage ignition resistant design, construction and landscaping practices in the County. These Wildfire Mitigation regulations do not supercede but work in concert with Ouray County's enforcement of the currently adopted building, mechanical, and/or energy codes. The Rating Assessor will determine, using his/her best professional judgement, the degree to which a proposed material and/or proposed assembly is legitimately considered Ignition Resistant in order to meet all required elements in the Worksheet. The Rating Assessor shall be designated by the County Planning Director.

Section A

A1.0	Roofing - A description of the roof covering and construction assembly of the roof. Roofing has been shown to have the single most significant impact on the survivability of home during a wildfire, increasing chance of structure survivability by up to 80%!			
A1.1	<p>Class A Roof Covering: The construction of the roof utilizes a roof covering material that has been tested to be a <u>Class A material</u> in accordance with UL 790 (ASTM E108). Some materials may rely on additional underlying materials to improve their fire ratings. Both "by assembly" and "stand-alone" materials are considered acceptable so long as the material has been installed in accordance with their listing and the manufacturers' installation instructions and the full assembly has been constructed to ensure the Class A rating status has been achieved.</p>	Must Meet Standard A1.1 to Pass	PASS	FAIL
A2.0	<p>Exterior Cladding & Siding: A description of the materials and construction assembly of the exterior cladding and siding of the building and its resistance to ignition from embers, as well as radiant and convective heat. Applicants may choose to construct using 'ignition resistant siding' or may use 'combustible siding'. The proposed use of combustible siding triggers the <u>requirement</u> for 'defensible space' if applicable to the subject lot or parcel. Applicant's choosing to use combustible siding with additional required elements must sign affidavit confirming 'Defensible Space Plan' will be developed by either the Colorado State Forest Service or West Region Wildfire Council and will be implemented within 1-year of issuance of any Certificate of Occupancy. All affidavits will be recorded with the Clerk & Recorder's Office and therefore visible upon any title search. <i>Applicants should be aware that most manufactured or mobile homes utilize combustible siding which triggers the requirement for 'defensible space' as described in Section B.1.0.</i></p>			

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

A2.1	<p>Ignition Resistant Siding: The building will feature exterior cladding and siding that are constructed of Ignition Resistant materials. Ignition Resistant materials include, but are not limited to: heavy timber log construction that is 6" in diameter or greater; fiber-cement board, 3 stage stucco, masonry, brick, manufactured stone, etc. Rating Assesor will determine, using best professional judgement, degree to which a proposed material and proposed assembly is justifiably considered "ignition resistant" to meet this standard.</p>			WILL UTILIZE IGNITION-RESISTENT SIDING
A2.2	<p>Combustible Siding WITH Ember Mitigation AND Defensible Space: The building will feature combustible (ie. <i>non-ignition resistant</i>) exterior cladding and siding; however, measures have been taken to ensure that the base of exterior walls, (where the walls meet the ground, decks or any other horizontal surfaces), as well as junctures between exterior walls and rooflines (e.g. dormers, complex roof features, etc.) and other structural projections, etc. have no less than 6 inches of a non-combustible material (e.g. metal flashing, skirting, concrete foundation, etc.) to reduce the likelihood of ignition from embers AND the property meets the standard stated in B1.1 for defensible space (ie. 100-feet) to mitigate the risk of ignition from radiant and convective heat sources. If the property owner cannot meet the defensible space criteria they may elect to utilize "Ignition Resistant Siding".</p>	Must meet Standard A2.1 OR A2.2 in order to Pass.		WILL USE COMBUSTIBLE SIDING WITH EMBER MITIGATION AND D-SPACE
A2.3	<p>Combustible (Non Ignition Resistant) Siding: The building has exterior siding or cladding that does not meet standard A2.1 or does not otherwise meet standards of A2.2.</p>			FAIL
<p>A3.0 Vents: A description of all vents, including but not limited to attic, soffit, and gable vents. Any vent that connects the outside of the building with the inside of the building is covered under this element unless the vent emanates from a combustion chamber or an ignition-resistant chamber. <i>(ex. clothes dryer or range hood with solid metal duct to the exterior vent)</i></p>				
A3.1	<p>Ember Resistant Screening: Vents are screened with 1/8" screening, an acceptable louvered venting system (as is common for dryer vents) and/or a similar screening system that has been specifically designed to prevent the intrusion of embers.</p>	Must meet Standard A3.1 to Pass	PASS	FAIL
A3.2	<p>Non-Ember Resistant Screening / No Screening: One or more location(s) on the building that connects the outside of the building with the inside of the building either (a) does have any screening or (b) insufficient screening such that it does not meet Standard A3.1.</p>			FAIL
<p>A4.0 Chimneys and Other Heating Appliances: Approved spark arresters required on all wood burning appliances.</p>				
A4.1	<p>Approved Spark Arrester Installed: Approved spark arrester or cap is properly installed on the chimney.</p>	Must meet Standard A4.1 to Pass	PASS	FAIL
A4.2	<p>Lack of Approved Spark Arrester: Missing, not properly installed or not meeting Standard A4.1</p>			FAIL

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

A5.0	Building Perimeter Hardened Zone: This standard is applicable to the ground level area directly adjacent the building perimeter extending out to 5 feet. The building perimeter includes any attachments, such as combustible decks, combustible fences, attached outbuildings, etc.			
A5.1	5 Foot Hardened Zone: Hardened zone extends out 5 feet from the building perimeter. A hardened zone is void of all combustible fuels including grasses, vegetation, landscape mulch, combustible building materials, etc. The hardened zone must be covered so as to prevent eventual growth of grasses/weeds. Minimum standard - Weed barrier fabric and rock/gravel.	Must have 5+ hardened zone to pass	PASS	FAIL
A5.2	Lack of 5 Foot Hardened Zone: Area within 5 feet of the building perimeter (including attachments) does not meet the standard as defined in A5.1			FAIL
A6.0	Exterior Doors: A description of all exterior doors. Doors represent a vulnerable point for fire intrusion.			
A6.1	Ignition Resistant Doors: Exterior doors are ignition resistant or solid core not less than 1 3/4-inches thick, or constructed with aluminum or fiberglass cladding. Windows within doors, and glazed doors, are tempered safety glass or multi-layered glazed panels. County Staff or Rating Assessor will determine, using best professional judgement, the degree to which a proposed material and proposed assembly is justifiably considered ' <i>ignition resistant</i> ' to meet this standard.	All Exterior Doors Must Be Ignition-Resistant	PASS	FAIL
A6.2	Non Ignition Resistant Doors: One or more exterior doors do not meet Standard A6.1.			FAIL
A7.0	Private Road & Driveway Emergency Vehicle Access: Private roads and driveways should conform to Ouray County Road Standards as set forth in this Code. EXCEPTION: Homes, driveways, or portions of driveways, located on mining claims above 9480-feet in elevation may be exempt from these standards. Note: Driveway design may require a ' <i>plan and profile</i> ' to be prepared by a Colorado State Registered Professional Engineer. Please refer to the Ouray County Land Use Code for more information and applicability.			
A7.1	Driving surface at least twelve feet (12') wide.	All new single-family dwellings must meet all standards to pass	PASS	FAIL
	Interior radii shall be at least thirty-two feet (32')		PASS	FAIL
	Driveway Opening at least sixteen feet (16') wide		PASS	FAIL
	Grades do not exceed twelve percent (12%)		PASS	FAIL
	Adequate sight distance, angle of approach, crowning/cross sloping, adequate drainage meet County standards.		PASS	FAIL
A8.0	Addressing: The address sign shall adhere to Ouray County Land Use Code and Resolution No. 2017-048 which sets the standard for address signs in the County.			
A8.1	Address Sign Visible & Meets Standard: All new address signs installed in the unincorporated portions of Ouray County shall conform to the current standard for address signs as set forth by the Board of County Commissioners.	Must meet Ouray County Address Sign	PASS	FAIL

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

A8.2	Address Sign Not Visible OR Does Not Meet Standard: The address sign does not meet the standard for address signs as set forth by the Board of County Commissioners.	Standard to Pass		FAIL
A9.0	Gutter System: A description of any proposed gutter system, including gutters, downspouts and gutter caps, including their materials and construction assembly. Regardless of the installed gutter system, regular maintenance of gutters, to clear them of any accumulated combustible materials, is highly recommended. To reduce maintenance, installation of a non-combustible (ie. <i>ignition-resistant</i>) gutter cap is recommended.			
A9.1	Ignition-Resistent Gutter System: Gutters are made out of ignition-resistant material AND gutters are installed such that the leading edge of the roof is finished with a metal drip edge so that no wood sheathing is exposed. The drip edge extends in to the gutter. If no gutter system is installed, then PASS.	Meets standards	PASS	FAIL
A9.2	Wildfire Vulnerable Gutter System: Gutters do not meet the standard as described in A9.1.	Does not meet standards		FAIL
SECTION B - MAY BE REQUIRED - SEE REGULATIONS AND SECTION HEADINGS				
ID	Name			
DEFENSIBLE SPACE - ONLY WHERE SPECIFICALLY REQUIRED BY LAND USE CODE				
B1.0	Defensible Space: A description of the current and/or planned extent and quality of defensible space around the proposed building. AND emergency access roads/driveways on the property. Please refer to "Protecting Your Home from Wildfire: Creating Wildfire-Defensible Zones" (CSFS 2012-1) - OR current and relevant replacement of this document - for additional information and standards related to the creation of Defensible Space. Apply same score if current conditions do not exist but a detailed Wildfire Mitigation Defensible Plan has been submitted and demonstrates intention to develop defensible space to these standards. Note: <i>Defensible space does not mean clearcutting or complete removal of vegetation!</i>			
B1.1	Full Zone: No less than 100 feet of adequate D-Space in all directions <u>or to the boundary of the subject property.</u>	All New Dwelling Units or Detached Accessory Dwelling		
B1.2	Full Zone 1 (0-30 ft) But Not Full Zone 2 (30-100 ft): No less than 30 feet of adequate D-Space in all directions around the building.		PASS	FAIL
B1.3	Not Full Zone 1 (0-30 ft): Less than 30 feet of adequate D-Space in all directions around the building.			
BUILDING SITE ELEMENTS				

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

B2.0	Slope (Percent/Degrees): A measurement of the slope of the property as it relates to the location of the building. The slope measurement is taken by creating a 300-foot straight line transect with the center of the building in the middle of the transect and the two ends of the transect are at the highest and lowest elevations possible.			
B2.1	<20% / <11.31°: Measured slope is less than 20%	75	Item- Selected/ Score	
B2.2	20-45% / 11.31°-24.23°: Measured slope is between 20.0 and 45%	50		
B2.3	>45% / >24.33°: Measured slope is greater than 45%	25		
B3.0	Proximity to High Wildfire Risk Topographic Feature : A measurement of the distance of the edge of the building (including attached decks) to the start of a topographic feature, designated as a High Wildfire Risk Topographic Feature (HWRTF). The County Staff will utilize existing data and best professional judgement to determine existence and proximal location of HWRTF.			
B3.1	>150' away: Building footprint greater than 150 feet from HWRTF	75	Item- Selected/ Score	
B3.2	50-150' away: Building footprint is between 50 feet and 150 feet from HWRTF.	50		
B3.3	<50' away: Building footprint is less than 50' feet from HWRTF.	25		
B4.0	Forest & Fuel Density (aka "Background Fuels"): An estimate measurement of the approximate fuel density (only species that contribute as wildfire fuel) within/beyond Zone 3 (regardless of property boundary). For this purpose, Zone 3 is defined as starting 100 feet away from the building and ending at 350 away from the building in all directions. Emphasis should be placed on forest and fuel locations most likely to impact fire behavior approaching the building.			
B4.1	Light: Predominately grasses and herbaceous plants. Woody fuels, if existing, are sparse and highly isolated	75	Item- Selected/ Score	
B4.2	Moderate: Well spaced and isolated trees and shrubs mixed with grasses and herbaceous plants. Isolated is defined as a greater than 10 foot (>10') average spacing between edges of crowns (outer most branches of a tree/shrub).	50		
B4.3	Heavy: Trees and shrubs are the predominant cover type and are dense in nature. Dense is defined as less than 10 foot (<10') average spacing between edges of crowns (outer most branches of tree/shrub).	25		
B4.4	Total Score - All 3 Elements:		Pass	Fail
ARCHITECTURAL DESIGN & CONSTRUCTION ELEMENTS				
B5.0	New Decks and Fencing: A description of the construction materials, design and assembly of the fencing and decks that are attached to the building.			

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

<p align="center">B5.1</p>	<p>Hardened Decking Design/Construction:</p> <p>a) decking composed of composite material; and b) Wood joists are covered with a metal cap or similar covering (foil-faced tape bitumin is also recommended) to reduce ember ignitions on exposed joists between deck boards; and c) gaps between decking boards are 1/4" or more (narrower gaps have been shown to increase fire spread); and d) the decking is not elevated above ground level or, if elevated less than 30-inches from the underside of the framing to ground level, it is completely enclosed such that neither convective nor radiant heat can penetrate the deck from the bottom up OR if full enclosure is not feasible the property meets the requirements of 100 feet of defensible space as defined in B1.1; and e) bottom of deck enclosure (if applicable), where it meets grade, meets ignition resistant standards as described in A2.1; and f) entire area under deck must be covered with a weed barrier and covered with an ignition-resistant material such as crushed rock or gravel; and</p>	<p align="center">Requirements for All <u>NEWLY</u> constructed decks.</p>	<p align="center">PASS</p>	<p align="center">FAIL</p>
<p align="center">B5.2</p>	<p>Hardened Fencing Design/Construction:</p> <p>a) fences, (if present, attached to home are composed of an ignition-resistant material), will feature at least 5 feet of ignition-resistant fencing where the fence attaches to the structure to reduce the likelihood of the fence carrying fire to structure. b) hardened zone extends out 5 feet from the deck perimeter, void of all combustible fuels including grasses, vegetation, landscape mulch, combustible building materials, etc. Hardened zone must be covered so as to prevent eventual growth of grasses/weeds. A weed barrier fabric and rock/gravel are recommended.</p>	<p align="center">Requirements for All <u>NEWLY</u> constructed fences. (Note: Where fence is directly adjacent to home or other structure. I.e. Not a 'property line fence'.)</p>	<p align="center">PASS</p>	<p align="center">FAIL</p>
<p align="center">B6.0</p>	<p>Eaves, Overhangs and Structural Projections: A description of any portion of the attached building where projections or overhangs are part of the design element. These areas are vulnerable to heat and ember collection.</p>			
<p align="center">B6.1</p>	<p>Ignition Resistant Projections: All eaves are soffitted and all eaves, overhangs and structural projections are composed of or enclosed by ignition resistant materials (as described in "Exterior Cladding and Siding" - Section A.2).</p>	<p align="center">See Code Section for Applicability</p>	<p align="center">PASS</p>	<p align="center">FAIL</p>
<p align="center">B7.0</p>	<p>Windows: A description of all exterior windows. Windows are vulnerable to fire intrusion through window frame failure (<i>primarily due to heat exposure</i>) and glazing (ie. glass surface) failure.</p>			

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

B7.1	Preferred Exterior Windows: (a) all exterior windows have an 'Insulated Glazing Unit' (IGU) consisting of 2 or 3 panes, and; (b) tempered or laminated glass for one or all panes, and; (C) low-e coating on the inner surface of the exterior pane; and (d) all exterior window frames are composed of Ignition Resistant materials. (Note: If Defensible Space is 30-feet or greater then requirements 'c and d' above are eliminated.)	For Stick-Built Homes	PASS	FAIL
B7.2	Less Preferred Exterior Windows: (a) All exterior windows have an 'Insulated Glazing Unit' (IGU) consisting of 2 or 3 panes; and (b) all exterior window frames are composed of Ignition Resistant materials. (Note: If Defensible Space is 30-feet or greater then requirement 'b' above is eliminated.)	For Manufactured / Modular Homes		
B7.3	Fire Vulnerable Exterior Windows: Windows do not conform with B7.1 or B7.2	For Mobile Homes		

EMERGENCY ACCESS ELEMENTS - NEW PRIMARY DWELLING UNITS ONLY!

B8.0 **Driveway Clearances:** In addition to Required Element A7.0 "Driveways", this is a description of the driveway's horizontal and vertical clearances which allow for unimpeded emergency response vehicular access. Typical impediments to safe horizontal and vertical access include trees, branches, shrubs, gateways, archways, etc. The horizontal clearance does not require that additional road base material be laid down, instead this is solely looking at the ability for emergency vehicles to access the site.

Horizontal Clearance	Greater than 24 feet of horizontal clearance has been achieved.		PASS	FAIL
	Driveway is 24 feet wide, or, if driveway is less than 24 feet wide and at least 200 feet in length, an area along the driveway provides a "pullout" for emergency vehicles. The "pullout" is at least 24 feet wide (as measured with the driveway and the pullout combined) and is at least 35 feet in length if possible so that two emergency vehicles can pass one another along the driveway. The pullout should be approximately midway between the structure and the access point off of the County Road system.			
	Less than 24 feet but greater than 20 feet of horizontal clearance			
	Less than 20 feet of horizontal clearance			

Vertical Clearance	Greater than 13.5 feet of vertical clearance			
	Less than 13.5 feet of vertical clearance			

OTHER ITEMS FOR CONSIDERATION - EDUCATIONAL PURPOSES ONLY!

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

B9.0	<p>Near Building Combustibles: A description of other combustible materials, vulnerable to ignition, near the building. The emphasis for combustibles is within Zone 1, or zero to thirty feet from the building ANY material that is combustible should be considered. Common combustible materials include (but are not limited to): propane tanks, firewood, woody debris (dead and down sticks, branches, etc.), pine/fir needles, leaves, patio furniture, ornamental wreaths, decorative displays, etc.</p>	
B9.1	Combustible materials are not within 30 feet of any buildings	
B9.2	Combustible material are within 10-30 feet of the building.	
B9.3	Combustible material within 10 feet of the building.	

LAND USE CODE – SECTION 16
WILDFIRE MITIGATION REG'S
PROPOSED REVISIONS

LAND USE CODE – SECTION 16

WILDFIRE MITIGATION REG'S

PROPOSED REVISIONS

CLEAN – NO REDLINES

SECTION 16

WILDFIRE MITIGATION REGULATIONS

STAFF PROPOSED REVISIONS

General Questions/Issues:

- *What about Section 9 and visual impact? Trees that provided required screening and then at some point are proposed for removal due to wildfire mitigation efforts? Which regulation trumps in this instance?*
-

16.1 PURPOSE AND LEGISLATIVE INTENT:

The purpose of this Section is to strengthen Ouray County's wildfire resiliency by increasing the likelihood of citizens, first responders, and structures surviving a wildfire. Additionally, these regulations:

- Are based on current science regarding effective wildfire mitigation; and
- Implement one regulation for the entire County, rather than multiple 'risk' zones; and
- Recognize that embers or burning material (*firebrands*) may travel as far as 13 miles; and
- Attempt to balance protection of life and property with individual property rights; and
- Recognize cost factors regarding required constructions methods and elements; and
- Focus not just on the importance of proper construction but also on education.

16.2 APPLICABILITY:

A. These Regulations Apply To:

- (1) All new Dwelling Unit construction requiring a building permit; and
- (2) All additions and exterior remodels to existing Dwelling Units requiring a building permit; and
- (3) All new Accessory Dwelling Units and accessory structures requiring a building permit; and
- (4) All restoration or replacement of existing Dwelling Units, Accessory Dwelling Units, or accessory structures requiring a building permit; and
- (5) New Limited, Regular, Resort/Conference Center, and Vested Property Rights County-Approved Subdivisions/Planned Unit Developments (PUDs) initiated after the date these regulations are adopted.

B. These Regulations Do Not Apply To:

- (1) Vacant land or
- (2) Commercial structures.

C. Non-Conforming Structures

This Section upon adoption shall not make any existing structures non-conforming as set forth in the Non-Conforming Uses, Structures, and Parcels' section of this Code.

16.3 REGULATIONS AND REQUIREMENTS:

- A. All building permit applications submitted for new dwelling unit construction shall include a completed Wildfire Addendum to Building Permit Worksheet (herein referred to as 'Worksheet') and a detailed site plan including the location of all existing or proposed structures as well as all significant vegetation. The submittal of aerial photographs are *strongly encouraged*.
- B. All new dwelling unit construction, including (detached) accessory dwelling units (ie. ADUs), must comply with all provisions found in the 'Ouray County Wildfire Building Permit Addendum Worksheet' **Section A** and **Section B**. (Note: *Defensible Space may or may not be required*).
- C. All new additions of 500 square feet or more in size, must meet the provisions of Section A in the Worksheet, with the exception of Section **A7**. Requirements shall apply to the *addition* only and not the entire structure.
- D. Any proposed addition to a dwelling unit, equal to or greater than 50% in size of the existing structure, and at least 1,000 square feet, shall require the entire existing structure to comply with all provisions stated in Section A of the Worksheet with the exception all of **Section A7**.
- E. All new attached decks (ie. directly abuts home or other structure) must comply with Section **B2.1** of the Worksheet.
- F. All new *attached* fences (ie. directly abuts home or other structure) must comply with section **B2.2** of thw Worksheet.
- G. All new attached garages must comply with the all provisions stated in Section A of the worksheet with the exception of **A7**. If new garage as well as the existing structure include combustible siding, then the entire structure must comply with Section **A.2.2**. New structure must also comply with the following elements from Section **B. – B.6, B.7**.
- H. Any building permit application for an addition of any size to an existing dwelling unit shall require the Land Use Department to provide the applicant or property owner with an information packet explaining services provided by the Colorado State Forest Service (CSFS), and the West Region Wildfire Council (WRWC), or other qualified agency or professional as identified by Staff, regarding the availability of site visit/evaluations performed by these entities to identify areas of concern and possible

opportunities to implement changes or upgrades to reduce a structures ignition vulnerability due to wildfire.

- I. The replacement of existing roofing materials shall require an approved building permit as well as the following: all newly installed roofing material must be ‘Class-A’ fire resistant, all vent screens must be 1/8” screening or screening otherwise specifically designed to prevent the intrusion of fire embers, approved spark-arrestors must be installed. If a new gutter system is to be installed then it must be constructed of ignition-resistant materials as stated in Section **A.9.0** of the Worksheet.
- J. The installation of a new or replacement wood or pellet burning stove (new or existing construction) shall require the installation of an approved spark-arrestor as stated in Section **A.4.1** of the Worksheet.
- K. Building permit applications for new detached accessory structures (garage, barn, shed, shop, etc.) 200 square-feet in size or greater must comply with all provisions stated in Section A of the Worksheet with the exception of all of Section **A7**.
- L. All new construction, including residential dwelling units, accessory dwellings, attached garages, additions to existing structures, and accessory structures occurring in the Colona Zone, or any other county-approved high-density zoning district, shall be required to comply with the **Section A** of the Worksheet (only) with the exception of the ‘Defensible Space’ provisions and the requirements of Section **A.7.1**.

16.4 PLANNED UNIT DEVELOPMENTS

- A. Prior to submittal of a Sketch Plan, the application for a PUD shall be referred to the CSFS or WRWC, and the local fire department or fire district for review and recommendations regarding vegetation management outside of the building envelope areas.

All new PUD applications including Limited, Regular, Resort/Conference Center, and Vested Property Rights Subdivisions shall include the following elements regarding wildfire mitigation:

- (1) For internal subdivision roads that are greater than 660-feet in length, a secondary egress method is required (*if feasible*), including road width and adjacent cleared areas, or an internal access road built to accommodate access for emergency response vehicles, including both horizontal and vertical clearance. (i.e. road width and adjacent clearing allows adequate clearance for 2 typical size emergency vehicles to pass)
- (2) PUD applications must include recommendations from the CSFS, the WRWC, or other qualified agency or professional as identified by Staff.
- (3) The Board of County Commissioners may require some or all recommendations from the CSFS, WRWC, or other qualified agency or professional.
- (4) The PUD design shall include open space or non-building area arranged to allow for implementation of a fuel break as described in the 2013 National Fire

Protection Association guidelines (fuel breaks typically 30-50 feet wide and located on the perimeter of the PUD).

- (5) Covenants submitted by Applicant or Developer shall include a provision requiring on-going maintenance of the area of the development identified as a fuel break.
- (6) Based on a determination by Land Use Staff, PUDs may require a design such that no houses may be constructed on separate parcels with less than thirty (30) feet of separation, and all building envelopes shall allow for a minimum of one-hundred (100) feet of defensible space around all dwelling units, individually or collectively. Such determination shall be based on forest/fuel concentration, lot size, and overall residential density. Lots created by PUDs/subdivisions approved by the County with a size of two (2) acres or less shall be exempted from this Section, **16.4(A)(6)**.
- (7) All building envelopes shall avoid, to the greatest degree possible, High Wildfire Risk Topographic Features.

16.5 PROCEDURES

- A. Building permit applications and related reviews regarding wildfire mitigation will be conducted by the County Land Use Department.
- B. Applications that may require assistance by the WRWC, CSFS, should be copied to those agencies as a courtesy as early on in the process as possible to avoid any potential delays.

16.6 EXCEPTIONS/VARIANCES/APPEALS

Any request for an exception, variance, or appeal related to the provisions of this Code Section shall be addressed as provided for in the Exceptions, Special Exceptions, Exemptions, and Variances section of this Code.

16.7 ADMINISTRATION/ENFORCEMENT/FEES

This Section will be administered by the Land Use Department and the costs of implementation will be recovered through fees established by the Board of County Commissioners as a part of PUD and building permit fees. Enforcement of these regulations shall be as provided for in the Administration and Enforcement section of this Code.

16.8 DUTIES/POWERS OF THE RATING ASSESSOR

The Rating Assessor is authorized to interpret and apply the regulations found in this Section. The Rating Assessor shall have the authority to render interpretations and to adopt policies and procedures in order to clarify the application of these regulations. Such interpretations shall be in conformance with the overall intent and purpose of this Section. The Rating Assessor will determine, using his/her best professional judgment, the degree to which a proposed material and/or proposed assembly shall be justifiably considered Ignition Resistant. In cases of restoration or replacement where a property

owner may not be able to meet some requirements due to conditions beyond their control, the Rating Assessor shall have discretion with respect to compliance.

16.9 **WILDFIRE MITIGATION BUILDING PERMIT ADDENDUM WORKSHEET**

The regulations in this Section work conjointly with the Worksheet that is attached to this Section as 'Exhibit A' and shall be considered to be part of the regulation in its entirety. The Worksheet may not be amended except through formal approval by the County Planning Commission and the Board of County Commissioners.

Note: *This regulation references the 'Wildfire Mitigation Building Permit Addendum Worksheet' or just 'Worksheet' which is attached to this Section as 'Exhibit A to Section 16, Wildfire Mitigation Regulations'. This Section and the Worksheet work together to establish the regulations relating to wildfire mitigation in Ouray County.*

LAND USE CODE – SECTION 16
WILDFIRE MITIGATION REG'S
PROPOSED REVISIONS

LAND USE CODE – SECTION 16
WILDFIRE MITIGATION
BUILDING PERMIT ADDENDUM
WORKSHEET
PROPOSED REVISIONS – CLEAN
NO REDLINES

Wildfire Mitigation Building Permit Addendum Worksheet



Site Address: _____

Parcel Number: _____ Owner Name: _____

Initial Assessment Date: _____ Initial Assessment Completed by: _____

Final Assessment Date: _____ Final Assessment Completed by: _____

This Worksheet is part of the Wildfire Mitigation section of the Ouray County Land Use Code. Please refer to this Section of the Code for additional information about the entire wildfire mitigation regulations. This Worksheet is intended to encourage ignition resistant design, construction and landscaping practices in the County. These Wildfire Mitigation regulations do not supercede but work in concert with Ouray County's enforcement of the currently adopted building, mechanical, and/or energy codes. The Rating Assessor will determine, using his/her best professional judgement, the degree to which a proposed material and/or proposed assembly is legitimately considered Ignition Resistant in order to meet all required elements in the Worksheet. The Rating Assessor shall be designated by the County Planning Director.

Section A

A1.0	Roofing - A description of the roof covering and construction assembly of the roof. Roofing has been shown to have the single most significant impact on the survivability of home during a wildfire, increasing chance of structure survivability by up to 80%!			
A1.1	<p>Class A Roof Covering: The construction of the roof utilizes a roof covering material that has been tested to be a <u>Class A material</u> in accordance with UL 790 (ASTM E108). Some materials may rely on additional underlying materials to improve their fire ratings. Both "by assembly" and "stand-alone" materials are considered acceptable so long as the material has been installed in accordance with their listing and the manufacturers' installation instructions and the full assembly has been constructed to ensure the Class A rating status has been achieved.</p>	Must Meet Standard A1.1 to Pass	PASS	FAIL
A2.0	<p>Exterior Cladding & Siding: A description of the materials and construction assembly of the exterior cladding and siding of the building and its resistance to ignition from embers, as well as radiant and convective heat. Applicants may choose to construct using 'ignition resistant siding' or may use 'combustible siding'. The proposed use of combustible siding triggers the <u>requirement</u> for 'defensible space' if applicable to the subject lot or parcel. Applicant's choosing to use combustible siding with additional required elements must sign affidavit confirming 'Defensible Space Plan' will be developed by either the Colorado State Forest Service or West Region Wildfire Council and will be implemented within 1-year of issuance of any Certificate of Occupancy. All affidavits will be recorded with the Clerk & Recorder's Office and therefore visible upon any title search. <i>Applicants should be aware that most manufactured or mobile homes utilize combustible siding which triggers the requirement for 'defensible space' as described in Section B.1.0.</i></p>			

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

A2.1	<p>Ignition Resistant Siding: The building will feature exterior cladding and siding that are constructed of Ignition Resistant materials. Ignition Resistant materials include, but are not limited to: heavy timber log construction that is 6" in diameter or greater; fiber-cement board, 3 stage stucco, masonry, brick, manufactured stone, etc. Rating Assesor will determine, using best professional judgement, degree to which a proposed material and proposed assembly is justifiably considered "ignition resistant" to meet this standard.</p>			WILL UTILIZE IGNITION-RESISTENT SIDING
A2.2	<p>Combustible Siding WITH Ember Mitigation AND Defensible Space: The building will feature combustible (ie. <i>non-ignition resistant</i>) exterior cladding and siding; however, measures have been taken to ensure that the base of exterior walls, (where the walls meet the ground, decks or any other horizontal surfaces), as well as junctures between exterior walls and rooflines (e.g. dormers, complex roof features, etc.) and other structural projections, etc. have no less than 6 inches of a non-combustible material (e.g. metal flashing, skirting, concrete foundation, etc.) to reduce the likelihood of ignition from embers AND the property meets the standard stated in B1.1 for defensible space (ie. 100-feet) to mitigate the risk of ignition from radiant and convective heat sources. If the property owner cannot meet the defensible space criteria they may elect to utilize "Ignition Resistant Siding".</p>	Must meet Standard A2.1 OR A2.2 in order to Pass.		WILL USE COMBUSTIBLE SIDING WITH EMBER MITIGATION AND D-SPACE
A3.0	<p>Vents: A description of all vents, including but not limited to attic, soffit, and gable vents. Any vent that connects the outside of the building with the inside of the building is covered under this element unless the vent emanates from a combustion chamber or an ignition-resistant chamber. <u>(ex. clothes dryer or range hood with solid metal duct to the exterior vent)</u></p>			
A3.1	<p>Ember Resistant Screening: Vents are screened with 1/8" screening, an acceptable louvered venting system (as is common for dryer vents) and/or a similar screening system that has been specifically designed to prevent the intrusion of embers.</p>	Must meet Standard A3.1 to Pass	PASS	FAIL
A4.0	<p>Chimneys and Other Heating Appliances: Approved spark arresters required on all wood burning appliances.</p>			
A4.1	<p>Approved Spark Arrester Installed: Approved spark arrester or cap is properly installed on the chimney.</p>	Must meet Standard A4.1 to Pass	PASS	FAIL
A5.0	<p>Building Perimeter Hardened Zone: This standard is applicable to the ground level area directly adjacent the building perimeter extending out to 5 feet. The building perimeter includes any attachments, such as combustible decks, combustible fences, attached outbuildings, etc.</p>			
A5.1	<p>5 Foot Hardened Zone: Hardened zone extends out 5 feet from the building perimeter. A hardened zone is void of all combustible fuels including grasses, vegetation, landscape mulch, combustible building materials, etc. The hardened zone must be covered so as to prevent eventual growth of grasses/weeds. Minimum standard - Weed barrier fabric and rock/gravel.</p>	Must have 5'+ hardened zone to pass	PASS	FAIL
A6.0	<p>Exterior Doors: A description of all exterior doors. Doors represent a vulnerable point for fire intrusion.</p>			

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

A6.1	<p>Ignition Resistant Doors: Exterior doors are ignition resistant or solid core not less than 1 3/4-inches thick, or constructed with aluminum or fiberglass cladding. Windows within doors, and glazed doors, are tempered safety glass or multi-layered glazed panels. County Staff or Rating Assessor will determine, using best professional judgement, the degree to which a proposed material and proposed assembly is justifiably considered '<i>ignition resistant</i>' to meet this standard.</p>	All Exterior Doors Must Be Ignition-Resistant	PASS	FAIL
A7.0	<p>Private Road & Driveway Emergency Vehicle Access: Private roads and driveways should conform to Ouray County Road Standards as set forth in this Code. EXCEPTION: Homes, driveways, or portions of driveways, located on mining claims above 9480-feet in elevation may be exempt from these standards. Note: Driveway design may require a '<i>plan and profile</i>' to be prepared by a Colorado State Registered Professional Engineer. Please refer to the Ouray County Land Use Code for more information and applicability.</p>			
A7.1	Driving surface at least twelve feet (12') wide.	All new single-family dwellings must meet all standards to pass	PASS	FAIL
	Interior radii shall be at least thirty-two feet (32')		PASS	FAIL
	Driveway Opening at least sixteen feet (16') wide		PASS	FAIL
	Grades do not exceed twelve percent (12%)		PASS	FAIL
	Adequate sight distance, angle of approach, crowning/cross sloping, adequate drainage meet County standards.		PASS	FAIL
A8.0	<p>Addressing: The address sign shall adhere to Ouray County Land Use Code and Resolution No. 2017-048 which sets the standard for address signs in the County.</p>			
A8.1	<p>Address Sign Visible & Meets Standard: All new address signs installed in the unincorporated portions of Ouray County shall conform to the current standard for address signs as set forth by the Board of County Commissioners.</p>	Must meet Ouray County Address Sign Standard to Pass	PASS	FAIL
A9.0	<p>Gutter System: A description of any proposed gutter system, including gutters, downspouts and gutter caps, including their materials and construction assembly. Regardless of the installed gutter system, regular maintenance of gutters, to clear them of any accumulated combustible materials, is highly recommended. To reduce maintenance, installation of a non-combustible (<i>ie. ignition-resistant</i>) gutter cap is recommended.</p>			
A9.1	<p>Ignition-Resistant Gutter System: Gutters are made out of ignition-resistant material AND gutters are installed such that the leading edge of the roof is finished with a metal drip edge so that no wood sheathing is exposed. The drip edge extends in to the gutter.</p>	Meets standards	PASS	FAIL
<p align="center">SECTION B - MAY BE REQUIRED - SEE REGULATIONS AND SECTION HEADINGS</p>				
ID	Name			
<p align="center">DEFENSIBLE SPACE - ONLY WHERE SPECIFICALLY REQUIRED BY LAND USE CODE</p>				

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

B1.0	<p>Defensible Space: A description of the current and/or planned extent and quality of defensible space around the proposed building. Please refer to "Protecting Your Home from Wildfire: Creating Wildfire-Defensible Zones" (CSFS 2012-1) - OR current and relevant replacement of this document - for additional information and standards related to the creation of Defensible Space. Note: <i>Defensible space does not mean clearcutting or complete removal of vegetation!</i></p>			
B1.1	<p>Full Zone: No less than 100 feet of adequate D-Space in all directions or to the boundary of the subject property.</p>	<p>All New Dwelling Units or Detached Accessory Dwelling</p>	<p>PASS</p>	<p>FAIL</p>
<p>ARCHITECTURAL DESIGN & CONSTRUCTION ELEMENTS</p>				
B2.0	<p>New Decks and Fencing: A description of the construction materials, design and assembly of the fencing and decks that are attached to the building.</p>			
B2.1	<p>Hardened Decking Design/Construction:</p> <ul style="list-style-type: none"> a) decking composed of composite material; and b) Wood joists are covered with a metal cap or similar covering (foil-faced tape bitumin is also recommended) to reduce ember ignitions on exposed joists between deck boards; and c) gaps between decking boards are 1/4" or more (narrower gaps have been shown to increase fire spread); and d) the decking is not elevated above ground level or, if elevated less than 30-inches from the underside of the framing to ground level, it is completely enclosed such that neither convective nor radiant heat can penetrate the deck from the bottom up OR if full enclosure is not feasible the property meets the requirements of 100 feet of defensible space as defined in B1.1; and e) bottom of deck enclosure (if applicable), where it meets grade, meets ignition resistant standards as described in A2.1; and f) entire area under deck must be covered with a weed barrier and covered with an ignition-resistant material such as crushed rock or gravel; and 	<p>Requirements for All <u>NEWLY</u> constructed and attached decks.</p>	<p>PASS</p>	<p>FAIL</p>
B2.2	<p>Hardened Fencing Design/Construction:</p> <ul style="list-style-type: none"> a) fences, (if present, attached to home are composed of an ignition-resistant material), will feature at least 5 feet of ignition-resistant fencing where the fence attaches to the structure to reduce the likelihood of the fence carrying fire to structure. b) hardened zone extends out 5 feet from the deck perimeter, void of all combustible fuels including grasses, vegetation, landscape mulch, combustible building materials, etc. Hardened zone must be covered so as to prevent eventual growth of grasses/weeds. A weed barrier fabric and rock/gravel are recommended. 	<p>Requirements for All <u>NEWLY</u> constructed fences. (Note: Where fence is directly adjacent to home or other structure. I.e. Not a 'property line fence'.)</p>	<p>PASS</p>	<p>FAIL</p>

'Exhibit A' to Section 16, Wildfire Mitigation Regulations - DRAFT REVISIONS 2021

B3.0	Eaves, Overhangs and Structural Projections: A description of any portion of the attached building where projections or overhangs are part of the design element. These areas are vulnerable to heat and ember collection.			
B3.1	Ignition Resistant Projections: All eaves are soffitted and all eaves, overhangs and structural projections are composed of or enclosed by ignition resistant materials (as described in "Exterior Cladding and Siding" - Section A.2).	See Code Section for Applicability	PASS	FAIL
B4.0	Windows: A description of all exterior windows. Windows are vulnerable to fire intrusion through window frame failure (<i>primarily due to heat exposure</i>) and glazing (ie. glass surface) failure.			
B4.1	Preferred Exterior Windows: (a) all exterior windows have an 'Insulated Glazing Unit' (IGU) consisting of 2 or 3 panes, and; (b) tempered or laminated glass for one or all panes, and; (C) low-e coating on the inner surface of the exterior pane; and (d) all exterior window frames are composed of Ignition Resistant materials. (Note: If Defensible Space is 30-feet or greater then requirements 'c and d' above are eliminated.)	For Stick-Built Homes	PASS	FAIL
B4.2	Less Preferred Exterior Windows: (a) All exterior windows have an 'Insulated Glazing Unit' (IGU) consisting of 2 or 3 panes; and (b) all exterior window frames are composed of Ignition Resistant materials.	For Manufactured / Modular Homes		
B4.3	Fire Vulnerable Exterior Windows: Windows do not conform with B7.1 or B7.2	For Mobile Homes		
EMERGENCY ACCESS ELEMENTS - NEW PRIMARY DWELLING UNITS ONLY!				
B5.0	Driveway Clearances: In addition to Required Element A7.0 "Driveways", this is a description of the driveway's horizontal and vertical clearances which allow for unimpeded emergency response vehicular access. Typical impediments to safe horizontal and vertical access include trees, branches, shrubs, gateways, archways, etc. The horizontal clearance does not require that additional road base material be laid down, instead this is solely looking at the ability for emergency vehicles to access the site.			
B5.1	Driveway is 24 feet wide, or, if driveway is less than 24 feet wide and at least 200 feet in length, an area along the driveway provides a "pullout" for emergency vehicles. The "pullout" is at least 24 feet wide (as measured with the driveway and the pullout combined) and is at least 35 feet in length if possible so that two emergency vehicles can pass one another along the driveway. The pullout should be approximately midway between the structure and the access point off of the County Road system.			

PAGE BREAK

OTHER ITEMS FOR CONSIDERATION - EDUCATIONAL PURPOSES ONLY!

INFO 1	NEAR BUILDING COMBUSTIBLES - Combustible materials or items vulnerable to ignition should not be placed adjacent to any structure. Common combustible materials include (but are not limited to) propane tanks, firewood, woody debris (dead and down sticks, branches), pine/fir needles, leaves, patio furniture, ornamental wreaths, decorative displays, etc. should be at least 30-feet from any structure.
INFO 2	BUILDING SITE SLOPE - Wildfires burn up slope faster and more intensely than along flat ground. A steeper slope will result in a faster moving fire with longer flame lengths. A structure situated on on a significant slope, and surrounded by flammable vegetation, is the most dangerous location when it comes to wildfires. Ideally a bulding site should have a slope of 20% or less!
INFO 3	HIGH WILDFIRE RISK TOPOGRAPHIC FEATURE (HWRTF) - The direction and speed of wind can be greatly affected by topography. Ravines, gullies, canyons, etc. will funnel the wind, increase its speed, affecting as well as potentially intensifying fire behavior. It is recommended that structures are placed at a minimum, <u>150-feet</u> from any HWRTF.
INFO 4	FOREST & FUEL DENSITY (ie. BACKGROUND FUELS) - The amount of fuels has a decided affect on wildfire behavior. Very low volumes of fuel can result in a low-intensity, 'creeping' fire. Alternatively, large volumes of fuel may result in a 'blow-up fire' that is difficult to control. Generally, the greater the volume of fuel, the more intense the fire will be. Also, the extent and density of vegetation around a structure can influence the ability of firefighters to prevent it from burning in a wildfire. Ideally, when building in the Wildland Urban Interface (WUI), adjacent vegetation should be predominantly grasses or herbaceous plants and woody fuels, if present, are sparse and highly isolated.

LAND USE CODE – SECTION 16
WILDFIRE MITIGATION REG'S
PROPOSED REVISIONS

**ABSENT PLANNING
COMMISSION MEMBER
COMMENTS**

*(*Participated in work session but not able to be present at hearing.)*

Mark Castrodale

From: RANDY JEN PARKER <parkersl1@msn.com>
Sent: Monday, October 11, 2021 3:25 PM
To: Mark Castrodale
Subject: Re: Proposed Changes to Wildfire Regulations

Sent from [Mail](#) for Windows

Dear Mark:

As I previously advised you I will be traveling back to Ridgway from Sedona, AZ on October 19th. While I will make every effort to attend the public hearing via Zoom, I wanted to make sure I expressed my concerns to you, the Planning Commission and the public. Please share this email with the other Planning Commissioners and make it part of the public record.

My underlying concern is that while I acknowledge and understand the issues which you raised in your September 21, 2021 memo, i.e. 1. The high degree of staff time both in the office and in the field; 2. The point system being difficult and convoluted for applicants; 3. The allowing of combustible siding with defensible space when the d-space has not been completed; and 4. The hard wiring of Western Region Wildfire Council in the current regulations. I am not convinced that the proposed changes can resolve these concerns without negatively impacting the BOCC's stated findings when it adopted the current regulations. The BOCC concluded in the last "whereas" clause in Resolution No. 2020-003:

“...the BOCC finds that the Wildfire Regulations adopted herein strengthen Ouray County's wildfire resiliency by increasing the likelihood of citizens, first responders and structures surviving a wildfire.”

I believe that the County would be better served by delaying a recommendation on the proposed changes to the BOCC until the Planning Commission and the public can hear directly from WRWC on how they, in their expert opinion, believe that these proposed changes will impact the “likelihood of citizens, first responders and structures surviving a wildfire.”

The proposed changes eliminate the point system which required applicants to do a detailed risk assessment for their project with the assistance of staff, the Colorado State Forest Service or the WRWC. This process while time consuming provided a valuable educational component to applicants and builders which, in my opinion, cannot be effectively replaced by merely having the land use staff giving applicants an information packet. I am particularly concerned about how the proposed changes might effect an applicant's understanding of the complex risk factors when considering an addition and/or changes to an existing structure that may currently have significant exposure to wildfire.

While I agree that an immediate solution is needed to address the problems you identified in the current requirement that the applicant's defensible space plan when required by the regulations must be completed before a certificate of occupancy can be issued, I think that the proposed solution of allowing a permanent certificate of occupancy based upon a recorded promise from the applicant that has no specific enforcement consequences from the land use staff is unworkable.

I appreciate your hard work and attempt to resolve these concerns as quickly as possible. As we approach the end of the current building season, I believe we can achieve a better result for the County if we take a little more time to look at alternative ways to address the issues you have raised. Thank you.

Sincerely,