To: Margueritte Hickman, Chris Chambers, Alison Lerch (City of Ashland, Fire & Rescue)
Brandon Goldman (City of Ashland, Planning Division)
From: Community Planning Assistance for Wildfire
RE: Preliminary Findings and Recommendations to the Draft Development Standards for Wildfire Lands and Draft Fuel Break and Prohibited Plant List
Date: January 10, 2017

Overview
The City of Ashland is currently engaged with the Community Planning Assistance for Wildfire (CPAW) program to receive focused technical planning assistance to address the growing threat of wildfire to the City of Ashland. As part of this process, CPAW team members Molly Mowery and Kelly Johnston reviewed key draft planning documents under consideration by the City, including the Draft Development Standards for Wildfire Lands (Section 18.3.10.100, dated February 23, 2016), and the Draft Resolution Adopting the City of Ashland Fuel Break and Prohibited Plant List.

This memo provides preliminary findings and recommendations for consideration by the City's planning division and fire department staff. These findings are intended to facilitate additional discussion; any final recommendations to the City will be based on further discussion and information obtained during an anticipated site visit. For questions regarding this memo, contact: Molly Mowery, Wildfire Planning International, molly@wildfireplanning.com, 303-358-9589.

Preliminary Findings and Recommendations

18.3.10.100
A. Requirements for Subdivisions, Performance Standards Developments, Site Design Review or Partitions

A.3.c. It may not be necessary to show the location and dimensions of all structures upon adjoining properties located within 30 ft. of a shared property line in cases where lot sizes are large enough to have an independent defensible space. Instead, we recommend requiring Fire Prevention and Control Plans to show the location and dimensions of all structures within 30 ft. from the primary structure (including accessory structures and structures on neighboring lots within 30 ft.).

A.3.d.vii. The term "heavily forested" seems open for broad interpretation that may cause some confusion. The City should consider setting thresholds that define this term in the document. Alternatively, the City should consider retaining the current definitions of "primary zone" and "secondary zone" by applying subsections 3.d.i to 3.d.vii. to the "primary zone," and reframing subsection 3.d.viii to substitute the term "secondary zone" for "heavily forested". This option allows for an assessment and plan development by a qualified professional which can account for ecosystem and other objectives on large tracts of land.

B. Requirements for Construction of All Structures

B.1. Although "Fuel break" as defined by the City, and consistent with the National Wildfire Coordinating Group's (NWCG) definition, is a completely acceptable term, it may not be the most appropriate term for these development standards. "Fuel break" may be interpreted by the public as significant vegetation removal, creating the image of a substantial visual "break" in vegetation. Considering the public's desire to retain trees, along with the "lighter" approach regarding removal, we recommend using a softer term, such as ""Fuel Treatment Area" or the synonym "Fuel Modification Area", in which both are defined by the NWCG as "Manipulation or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control (e.g., lopping, chipping, crushing, piling and burning)."

B.1.a. The City should consider <u>not</u> including a 200 sq. ft. threshold regarding new construction, additions and conversions, as any addition or new structure within 30 ft. is a hazard to the primary structure, unless mitigated. Alternatively, the City should retain the proposed language, but consider additional language requiring a structure less than 200 sq. ft. be constructed to fire resistant standards, including ignition resistant siding and Class B or better roofing and a horizontal combustible material free zone of five ft. from the furthest horizontal extension of the structure. This will minimize the impact of the new structure contributing to the current fuel complex hazard.

B.2. General Fuel Break Requirements.
Again, we agree with this definition of a fuel break, but are not confident that the current allowances for vegetation retention will result in the creation of fuel breaks. We therefore recommend using the term "Fuel Treatment Area" or the synonym "Fuel Modification Area", in which both are defined by the NWCG as "Manipulation or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control (e.g., lopping, chipping, crushing, piling and burning)."

B.2.a. Consider expanding this provision to include exceptions outside of water resource protection areas for cases when a dead or dying tree can provide ecological benefits. For example: "All standing dead and dying vegetation shall be removed from the property, except when approved to be considered ecologically beneficial."

B.2.b. In general, we recommend the City add an "Acceptable Plant List" to the current "DRAFT Fuel Break Prohibited Plant List". This will not only provide positive guidance, but will also prevent the use of plants and trees that may have been inadvertently overlooked on the "Fuel Modification Prohibited Plant List".

We also recommend that all existing vegetation within five ft. of a structure be removed (measured between the furthest horizontal extension of the structure and the closest horizontal extension of the plant). This is based on current wildfire ignition science[1] which establishes minimum distances for vegetation bordering a structure, including attachments. If compromises

[1] This is based on scientific experiments and case studies conducted by National Institute of Science and Technology, USDA Forest Service and Insurance Institute of Business and Home Safety.

are made to reduce this distance, we recommend that the City consider retaining a five ft. non-combustible surface, while allowing ”Fire-resistant” plants (or plants identified on the proposed “Acceptable Plant List”) to be no closer than three ft. from the closest part of the structure, if siding is “ignition-resistant” or “non-combustible” (meeting testing standards) from grade to eaves (see B.2.c below).

B.2.c. We recommend the City consistently use the term “ignition-resistant,” when referencing construction materials, to align with common definitions and provide definable thresholds (meeting testing requirements) on the products that are being used. As recommended above, we also suggest that the City consider expanding the three ft. border to a five ft. non-combustible border. Again, if compromises are made to reduce this distance, we recommend that the City consider retaining the five ft. non-combustible surface, while allowing “Fire-resistant” plants (or plants identified on the proposed “Acceptable Plant List”) to be no closer than three ft. from the closest part of the structure, if siding is “ignition-resistant” or “non-combustible”.

We also recommend the City consider requiring the removal, or not allowing the placement, of any shrubs within five ft. of windows and the removal of any “Prohibited” plants, shrubs and trees that are within 30 ft. of a window.

Finally, the City should consider requiring the removal of “Prohibited” trees that are within 30 ft. of a window, unless it is a Significant tree, and/or can be pruned so that the crown base is five ft. above the roof deck.

B.2.d. We recommend the City consider adjusting language to require existing “Prohibited” trees within 30 ft. of the structure be removed, with exceptions of those that are significant trees, or where siding is “ignition-resistant” or “non-combustible”. In the case of the exceptions, we recommend that all retained “Prohibited” trees within 30 ft. be pruned to a minimum of five ft. above the roof deck or 1/3 of the tree height, whichever is less.

B.2.e. We recommend the City consider changing this distance to a relative distance of “one crown width” between trees at mature size. This provides a simple relative distance based on the crown size and fuel loading (i.e., crown bulk density) and therefore a relative distance to mitigate potential radiant heat energy and flame length produced by the individual crown. We further recommend that the City consider as similar approach for subsection B.2.e.i., where a group of trees is considered “one crown” and therefore a distance of “one crown width” applies to the group.

B.2.n. The rationale behind this provision is unclear in the text. Is there additional information to add to support the distance of 130 ft.? This may be helpful to further clarify.

B.3.Roofing.
What are the requirements if the roof replacement does not occur within the five year timeframe (i.e., exceeds the five year period stated in the provision)? This may be helpful to further clarify.