



CITY COUNCIL

WORKSHOP AND REGULAR MEETING AGENDA

May 4, 2022
7:00 PM
202 Railroad Avenue, Rifle, CO

6:00 PM - Workshop Meeting

Discussion and Review

- a. Receive Information on Wildland Urban Interface and Electrical Code Update
- b. Discuss Old Water Plant Property

7:00 PM - Regular Meeting

- 1. **Call to Order**
- 2. **Pledge of Allegiance**
- 3. **Roll Call**
- 4. **Public Comment** *(maximum time permitted for Public Comment is 3 minutes per person)
- 5. **Consent Agenda**
 - 5.a. Consider Minutes of the April 20, 2022, Regular Meeting
 - 5.b. Consider Liquor License Renewal for Thai Chili Bistro, Inc dba Thai Chili Bistro
 - 5.c. Consider Change of Owner for Thai Chili, Bistro, Inc. dba Thai Chili Bistro
 - 5.d. Consider Liquor License Renewal for Rifle Tequila's, Inc dba Tequila's
 - 5.e. Consider Proclamation Recognizing Municipal Clerks Week
 - 5.f. Consider Approval of Purchase of Water Plant Citric Acid
 - 5.g. Consider Purchasing Policy - Ordinance No. 7, Series of 2022 - 2nd Reading
 - 5.h. Consider Approving the Sale of City Property Formally Occupied by the Rifle Animal Shelter - Ordinance No. 8, Series of 2022 - 2nd Reading

6. Action, if any, on Workshop Items

7. Presentation

- 7.a. Receive Update from Imperio Mexican Restaurant
- 7.b. Receive Presentation from the Middle Colorado Watershed Council

8. Regular Agenda

- 8.a. Present Proclamation Recognizing Municipal Clerks Week
- 8.b. Consider Declaration of Fleet Vehicles as Surplus
- 8.c. Consider Change Order No. 8 to 3rd Street and Railroad Avenue Improvements Contract

9. Administrative Reports

- 9.a. Report to City Manager

10. Comments from Mayor and Council

11. Adjournment



Agenda Item #a.

Agenda Item Name:

Receive Information on Wildland Urban Interface and Electrical Code Update

Presenter:

Patrick Waller, Planning Director

Item Description:

Building Department Staff will provide information on adopting the Wildland Urban Interface Building Code and Electrical Code.

Recommended Action:

No Action Needed for a Workshop

Fiscal Impact:

No additional impact to City. Cost concerns from construction are sometimes identified as issues for WUI Code adoption.

Operational Impact:

None. Existing Staff can oversee WUI Code and Electrical inspections are already addressed by the State

Prior Board Motions:

None

Background Information:

Building Staff is presenting information to Council regarding the potential adoption of the Wildland Urban Interface Building Code and National Electrical Code.

Executive Summary:

The purpose of the WUI Code is to help prevent wildland/brush fires from burning into housing areas and subdivisions and to mitigate damage to the areas. The Marshall Fire is a recent example of a brush fire that caused significant damage to large subdivisions, but the threat from wildfire is significant throughout the state and the risk continues to increase.

The national electrical code has not been adopted by the City of Rifle which does not allow the City to address violations as part of the code enforcement process. The City relies on the State for electrical inspections and if there is a problem with an installation or a code enforcement issue the City has to rely on the State for enforcement.

Notification Requirements:

None

Prepared By:

Patrick Waller, Planning Director

Attachments:

1. WUI and Electrical Code Memo
2. Headwaters Economics Report

MEMORANDUM

To: Honorable Mayor and City Council
From: John Nihiser - Building Official, Patrick Waller – Planning Director
Date: April 20, 2022
Subject: WUI Code and National Electric Code Adoption

The City of Rifle, Building Department is holding this Workshop with the Rifle City Council to provide information regarding the potential adoption of the Wildland Urban Interface Code and National Electric Code, to improve the code coverage in the city, and to bring a higher degree of safety, health and general welfare to the citizens of Rifle.

Wildland Urban Interface Code (WUI)

The purpose of the WUI Code is to help prevent wildland/brush fires from burning into housing areas and subdivisions and to mitigate damage to the areas. The Marshall Fire is a recent example of a brush fire that caused significant damage to large subdivisions, but the threat from wildfire is significant throughout the State and the risk continues to increase.

The WUI code is designed to address those areas of new construction which will be located adjacent to wildland areas with natural vegetation which when paired with other conditions like slope, water supply, density of vegetation, steep terrain and access, puts them at risk from a wildfire. Because so much of the City is near these types of areas, the Building Department is recommending that the WUI code be implemented throughout the City.

The major item the code will address is the type of building materials to be used on the exterior of structures in at risk areas. This will include roof coverings (very important), siding, soffit materials, decks and decking materials and roof vents. These items will vary as to what class ignition resistant construction group the area falls into.

Because of the requirements regarding construction with different materials, the most common issue identified with implementing a WUI code is construction cost. However, the City of Rifle doesn't have any class one areas which will help keep costs down and builders in the city are for the most part, already using materials which would fall into the three classes of ignition resistant construction and thus it will likely add little cost to new home construction. One item that will likely increase costs in these areas will be the requirement that decks will need to be built from a composite material like Trex to reduce the flammability of the deck surface from flying ambers rather than wood.

Staff research on the issue includes the review of a research paper by Headwaters Economics (included in the Workshop Packet) that analyzed the costs of WUI Code construction. The research paper concluded that constructing new homes to be wildfire-resistant is not substantially more expensive than traditional home building requirements. Retrofitting existing homes can have much more significant costs; however this wouldn't be required by the WUI Code, unless a renovation involves substantial changes to the exterior of a building. Additionally, the study indicates that building houses to WUI code standards can provide additional benefits such as a longer lifestyle and reduced maintenance.

Additional WUI Code requirements address, defensible space requirements for vegetation distance from structures, emergency vehicle access (similar to existing fire code requirements, water supply, and fire protection items.

The code adoption has the full support of Fire Marshal Orrin Moon and the Colorado River Fire Rescue who will be significantly involved in the administration of the code. The entire WUI code is available for review here: <https://codes.iccsafe.org/content/IWUIC2021P1/preface>.

National Electric Code

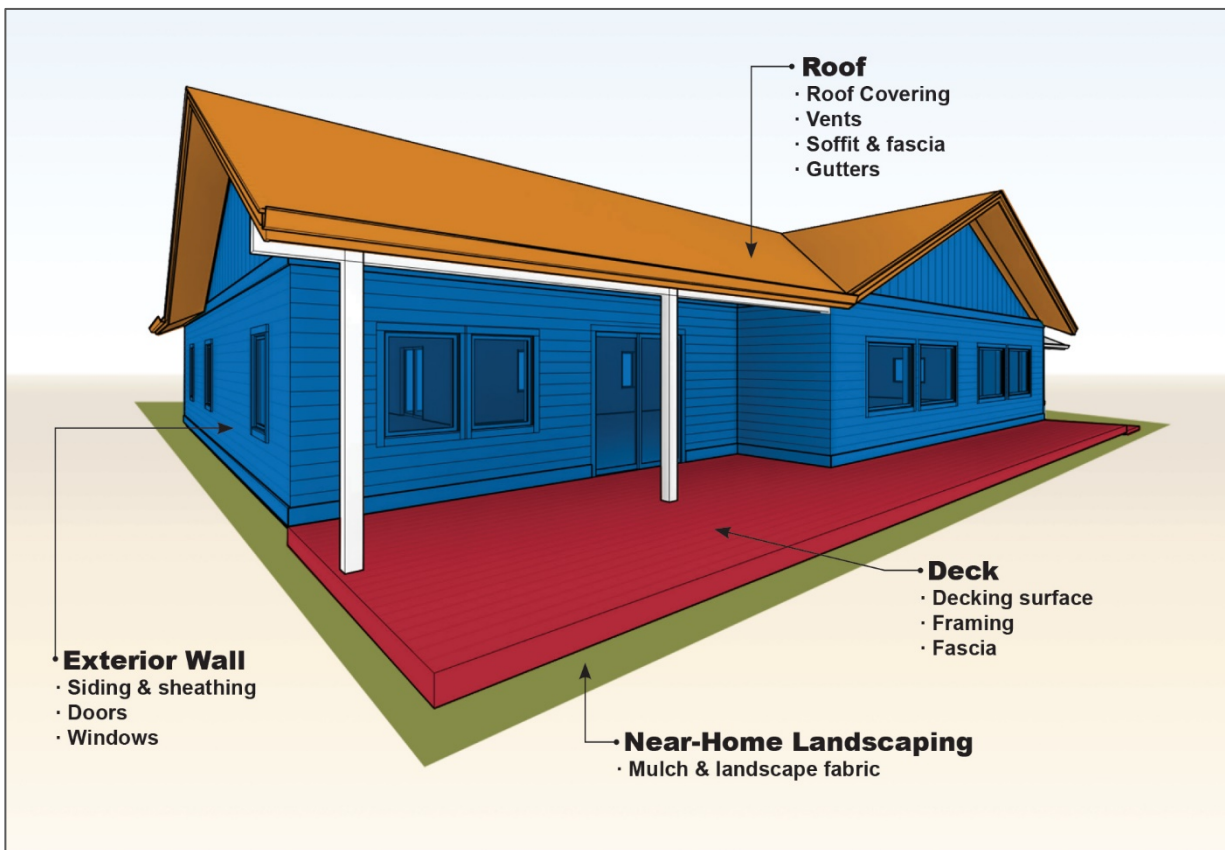
The national electrical code has not been adopted by the City of Rifle which does not allow the City to address violations as part of the code enforcement process. The City relies on the State for electrical inspections and if there is a problem with an installation or a code enforcement issue the City has to rely on the State for enforcement.

The State of Colorado Electrical Inspection Program does a good job on the inspection of electrical installations on a day to day basis, but the State is not always available to address an enforcement issue. As an example, in 2021 the City had a major enforcement problem with a violation regarding an unpermitted manufacturing operation. The unpermitted use included several major electrical code violations. While Colorado River Fire Rescue and the Building Official addressed the issue through a municipal summons, they were unable to include serious electrical code violations because the City had not formally adopted the National Electric Code.

Based on this past experience, the Building Department is requesting that the National Electrical Code is adopted to prevent this type of problem in the future. Both the Fire District and the Building Department are supportive of the adoption and have the ability to inspect and enforce the provisions of the code for violations that result in hazardous conditions.



Building a Wildfire-Resistant Home: Codes and Costs



November 2018

Building a Wildfire-Resistant Home: Codes and Costs

PUBLISHED ONLINE:

<https://headwaterseconomics.org/wildfire/homes-risk/building-costs-codes>

ABOUT HEADWATERS ECONOMICS

[Headwaters Economics](https://headwaterseconomics.org) is an independent, nonprofit research group whose mission is to improve community development and land management decisions.

ABOUT INSURANCE INSTITUTE FOR BUSINESS & HOME SAFETY

The Insurance Institute for Business & Home Safety (IBHS) is an independent, nonprofit, scientific research and communications organization supported solely by property insurers and reinsurers. The mission of the IBHS is to conduct objective, scientific research to identify and promote the most effective ways to strengthen homes, businesses and communities against natural disasters and other causes of loss.

AUTHOR INFORMATION

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ACKNOWLEDGMENTS

This report was made possible through the generous support of the U.S. Forest Service, the LOR Foundation, and the Insurance Institute for Business & Home Safety. It was completed at the request of Park County, Montana as part of the [Community Planning Assistance for Wildfire](#) program, which works with communities to reduce wildfire risks through improved land use planning. We would like to thank Ben Elias and Lee Elder with [Bechtle Architects](#) for their expertise and guidance in the creation of this report, and Mike Burnett, Daniel Gorham, Kelly Johnston, David Shew, and Paul Summerfelt for reviewing earlier drafts of this document. Any errors or omissions are solely the responsibility of Headwaters Economics.



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Bozeman, MT 59771

<https://headwaterseconomics.org>

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I. EXECUTIVE SUMMARY

This study examines the cost differences between a typical home and a home constructed using wildfire-resistant materials and design features. Decades of research and post-fire assessments have provided clear evidence that building materials and design, coupled with landscaping on the property, are the most important factors influencing home survivability during a wildfire. With one-third of all U.S. homes in the wildland-urban interface¹ and more than 35,000 structures lost to wildfire in the last decade,² more communities are considering adopting building codes that require new home construction to meet wildfire-resistant standards.

While codes and standards have been developed for building in wildfire-prone lands, the perceived cost of implementing such regulations is a commonly cited barrier to consideration and adoption by some communities. However, little research has previously examined how much it would actually cost the homeowner or builder to comply with such regulations.

This study compares existing codes and standards for wildfire-resistant construction and estimates cost differences in constructing a wildfire-resistant home compared to a typical home. It also examines the cost of retrofitting a typical home to be more wildfire-resistant. Key findings include:

- A new home built to wildfire-resistant codes can be constructed for roughly the same cost as a typical home.
- Costs vary for retrofitting an existing home to be wildfire-resistant, with some components such as the roof and walls having significant expense. Some of these costs can be divided and prioritized into smaller projects.
- Many wildfire-resistant home features have additional benefits, such as a longer lifecycle and reduced maintenance.

This study was completed in partnership with [The Insurance Institute for Business & Home Safety](#) (IBHS) and was prepared at the request of Park County, Montana, as part of the [Community Planning Assistance for Wildfire](#) (CPAW) program. CPAW is a program of Headwaters Economics and is funded by the U.S. Forest Service, the LOR Foundation, and other private foundations.

Wildfire-Resistant Codes and Standards

While certain jurisdictional codes have been established, three existing statewide or national building codes and standards guide wildfire-resistant construction. They are:

- the International Code Council's International Wildland Urban Interface Code (IWUIC),³
- the National Fire Protection Association's Standard for Reducing Structure Ignition Hazards from Wildland Fire (Standard 1144),⁴ and
- the California Building Code Chapter 7A—Materials and Construction Methods for Exterior Wildfire Exposure.⁵

These three documents address construction requirements of the home by component parts (e.g., roof, walls, etc.) and often provide multiple options for complying with the provision. Many of the requirements in these documents are based on standard laboratory testing methods that evaluate the ability of a material or assembly to resist ignition or fire spread. California is one of only a few states to have adopted a wildfire-related building code at the state level for areas of high hazard, but many cities and counties have adopted portions of the IWUIC or other wildfire-related codes. In some communities, the

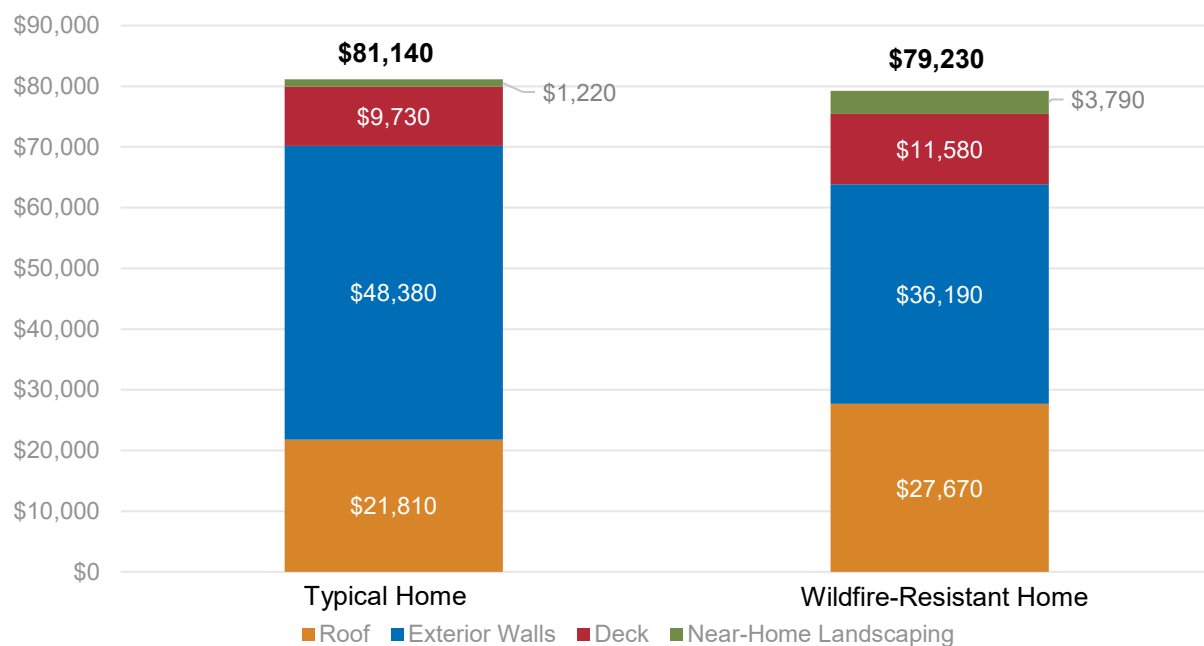
inaccurately assumed cost of constructing a home to comply with a wildfire-resistant building code is a barrier to implementing such codes.

Wildfire-Resistant Construction Costs

To identify whether the cost of constructing to a wildfire-resistant building code differs from typical construction, this study priced new construction and retrofitting expenses for a three-bedroom, 2,500-square-foot, single-story, single-family home representative of wildland-urban interface building styles in southwest Montana, one of the fastest-growing regions in the country. The typical home was assumed to have an asphalt shingle roof, wood siding, dual-pane windows, and a wood deck. Wildfire-resistant materials were selected for similar aesthetics but also comply with wildfire-resistant building codes. Costs were primarily derived from *RSMeans*,⁶ a database that averages material and labor pricing from hundreds of U.S. cities and includes materials, labor, and contractor overhead and profit.

We examined costs in four vulnerable components of the home: the roof (including gutters, vents, and eaves), exterior walls (including windows and doors), decks, and near-home landscaping. Overall, the wildfire-resistant construction cost 2% less than the typical construction (Figure 1.1), with the greatest cost savings resulting from using wildfire-resistant fiber cement siding on exterior walls, in lieu of typical cedar plank siding. While cedar plank siding is typical in the wildland-urban interface of western Montana, fiber cement siding is already a common choice in many regions because of its relative affordability, durability and low maintenance needs. Wildfire-resistant changes to the roof resulted in the largest cost increase, with a 27% increase in gutters, vents, and soffits. The following sections describe the wildfire-resistant mitigations for each component.

Figure 1.1. New construction costs by component in typical home and wildfire-resistant home.

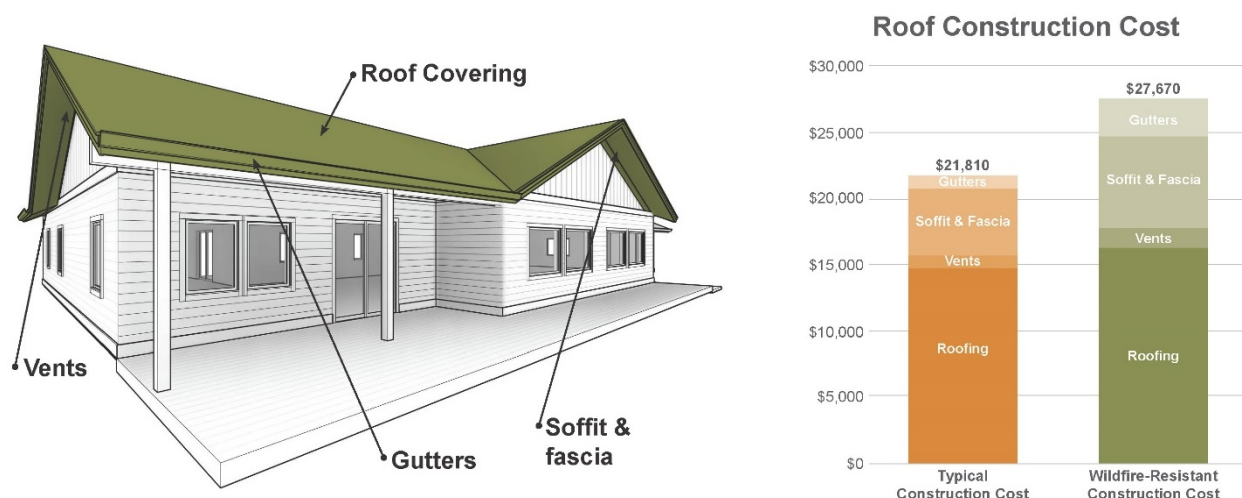


Roof

The roof is arguably the most vulnerable area of the home because of its large surface area. Embers can ignite vegetative debris that has accumulated on the roof surface or in gutters. Embers also can enter the attic through roof and under-eave vents. Also, unenclosed eaves and overhangs can trap embers and heat.

Wildfire-resistant modifications to roofing, vents, fascia, soffits, and gutters added \$5,860 (27%) to the cost of the typical roof (Figure 1.2), assuming both homes use Class A (fire-rated) asphalt composition shingles. Retrofitting an existing roof to be wildfire-resistant approached the cost of new construction, totaling \$22,010 for the model home. However, many of the wildfire-resistant roof materials have longer lifespan and reduced maintenance needs as compared to typical materials.

Figure 1.2. Roof subcomponents and new construction cost.



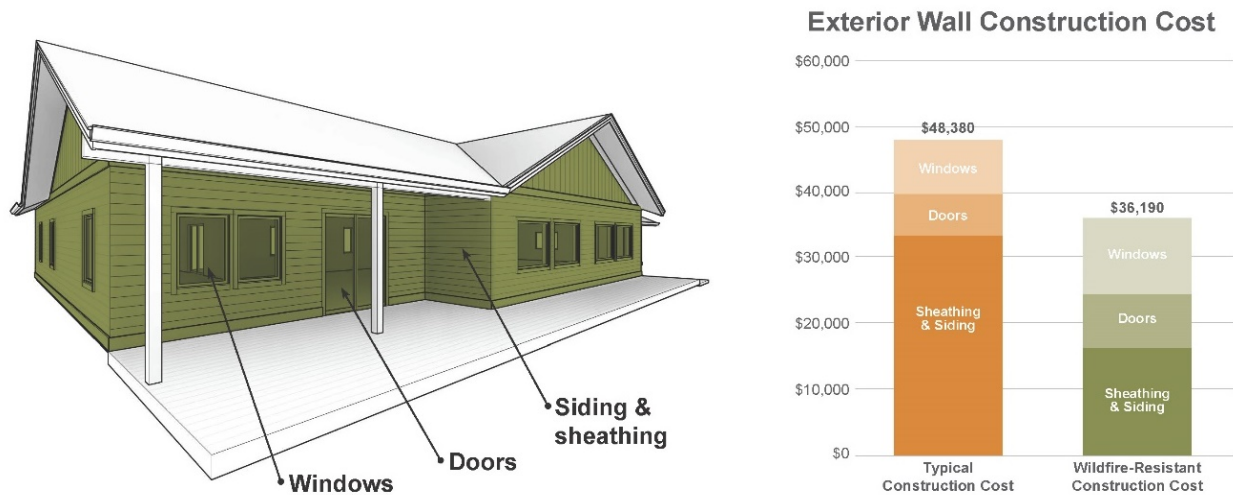
Exterior Walls

Exterior walls are especially vulnerable from exposure to flames or prolonged exposure to radiant heat, such as from burning vegetation or a neighboring home. These exposures can potentially ignite combustible siding products. Some plastic siding products (e.g., vinyl) can also melt, exposing underlying sheathing. Wind-blown embers can accumulate in gaps or pass through openings around windows and doors. Glass in a window or door can break from radiant heat or flame contact, exposing the interior of the home. Wildfire-resistant siding and installation design features, tempered glass in windows, wildfire-resistant doors, and weather-stripping can reduce home vulnerability. The relative importance of each of these items varies depending on home-to-home spacing and location of vegetation on the property. Siting on the property relative to topography and typical wind directions can also be important factors in determining necessary external wall mitigations.

Wildfire-resistant construction for exterior walls was \$12,190 (25%) less expensive than the typical home, with the cost savings resulting from the difference in using wildfire-resistant fiber-cement siding as compared to cedar plank siding (Figure 1.3). Fiber cement siding is already a common siding option in many regions and several styles mimic the look of wood siding. While the change in siding reduced the cost of the wildfire-resistant home, cost increases for other exterior wall features are \$5,370 (29%) more than typical exterior wall features. Retrofitting the exterior walls (including windows and doors) on the

model home totaled \$40,750. Depending on neighboring home spacing, not all retrofitting activities may be necessary, but several of these activities will have added benefits such as improved energy efficiency (e.g., multi-pane windows) and reduced maintenance.

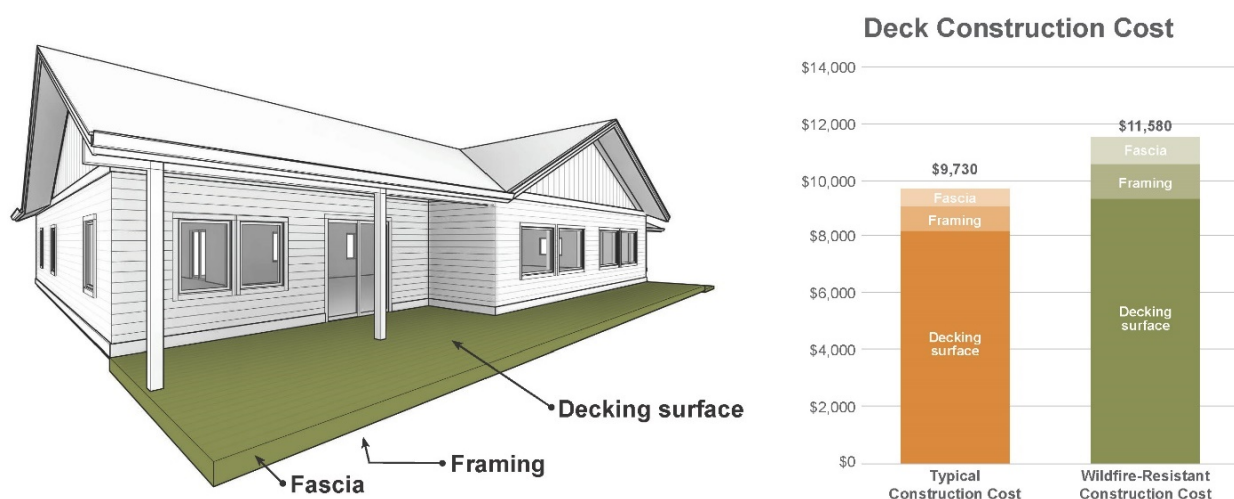
Figure 1.3. Exterior walls subcomponents and new construction cost.



Deck

Embers can ignite vegetative debris or other combustible material stored or accumulated on top of the deck. If ignited, the burning deck could expose walls, windows, and doors to radiant heat. Embers can ignite decking materials directly when they accumulate on the surface of vulnerable decking, typically occurring in the gaps between deck boards. Decks can also ignite from below when vegetation or stored materials ignite beneath the deck. Mitigations to make a deck wildfire-resistant include using wildfire-resistant materials for walking surface (e.g., composite boards), using foil-faced bitumen tape on the top surface of the support joists, and creating a noncombustible zone underneath the deck. The wildfire-resistant deck added \$1,850 (19%) to the cost of the typical deck (Figure 1.4). Some wildfire-resistant decking materials can have a longer lifespan and require less maintenance than typical materials.

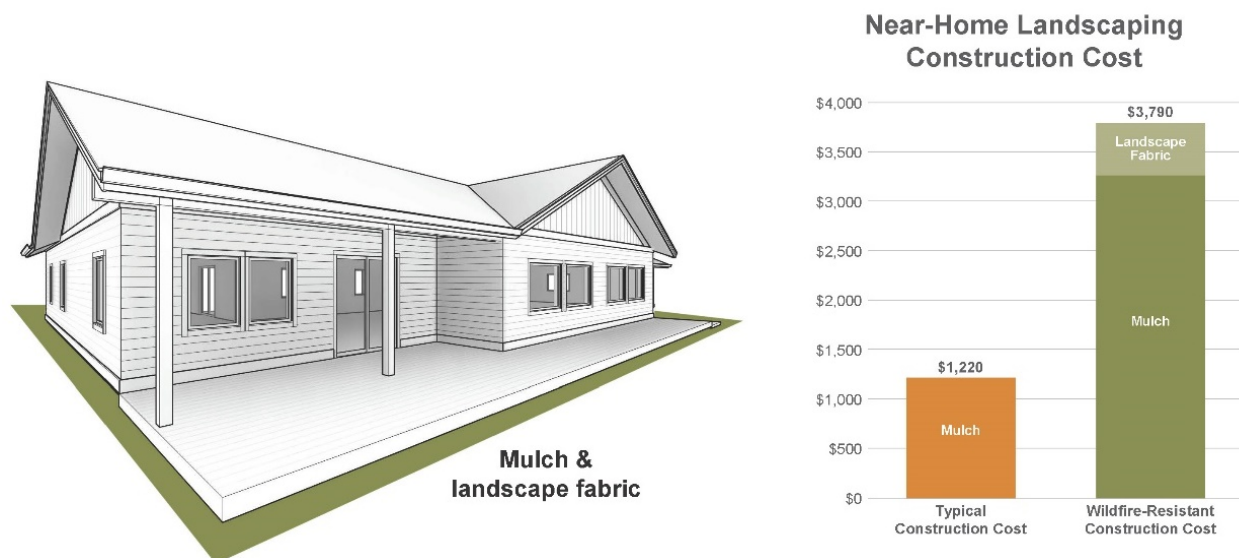
Figure 1.4. Deck subcomponents and new construction cost.



Near-Home Landscaping

If ignited by wind-blown embers, burning vegetation and other combustible materials near the home can allow flames to touch the home or subject it to an extended radiant heat exposure, potentially igniting siding or breaking glass in windows. Maintaining a noncombustible zone of five feet around the entire perimeter of the house and outer edges of the deck can significantly reduce the vulnerability of the home. Mitigations include using rock instead of bark mulch on top of landscape fabric. Placing landscape fabric underneath the area can reduce the growth of weeds, thereby minimizing the maintenance needed by the homeowner. These modifications increased the cost of near-home landscaping by \$2,570 (210%) (Figure 1.5). Rock has a longer lifespan than bark mulch and landscape fabric will reduce the maintenance required in the near-home landscaping area.

Figure 1.5. Near-home landscaping subcomponents and new construction cost.



Constructing a Wildfire-Resistant Home Is Similar in Cost to a Typical Home

Laboratory research and post-fire analysis have determined that local ignitability of the home itself, largely determined by the building materials and design features, is an important factor in determining survivability during a wildfire. Existing codes and standards provide ample guidance for how to construct a wildfire-resistant home and reduce vulnerability. This study demonstrates that a new home can be constructed to such standards for approximately the same cost as a typical home, and some of these materials have added benefits such as longer lifespan and reduced maintenance.

City, county, and state governments must weigh many issues when considering new regulations, but the cost of constructing a home to meet wildfire-resistant building codes need not be a barrier. If communities continue to allow growth in wildfire-prone lands, adopting wildfire-resistant building codes may be one of the most effective tools for reducing home loss. Absent such requirements, homeowners and builders can take steps to protect the home by carefully designing and constructing (or retrofitting) the most vulnerable components—the roof, walls, deck, and landscaping—to be wildfire-resistant. The long-term benefits may include longer lifecycle and reduced maintenance.

As recent wildfire disasters have demonstrated, the converging trends of rapid growth in the wildland-urban interface, fuel accumulation after a century of fire suppression, and a warming climate will make wildfires more costly and dangerous in years to come. Just as the cause of this problem is multipronged, there is no single solution to protecting lives and property, and we must employ a suite of solutions that include land use planning, vegetation management, and emergency preparedness. Constructing homes to be wildfire-resistant is a critical and cost-effective piece of the puzzle.

¹ Radeloff, V.C., D. P. Helmers, H. A. Kramer, M. H. Mockrin, P.M. Alexandre, A. Bar-Massada, V. Butsic, T.J. Hawbaker, s. Martinuzzi, A. D. Syphard, and S. I. Stewart. 2018. Rapid growth of the US wildland-urban interface raises wildfire risk. PNAS. <http://www.pnas.org/content/early/2018/03/06/1718850115.short>

² Derived from National Incident Coordination Center Annual Reports.

<https://www.predictiveservices.nifc.gov/intelligence/intelligence.htm>

³ 2018 International Wildland-Urban Interface Code. 2017. International Code Council, Inc.

⁴ National Fire Protection Association. 2018. NFPA 1144. Standard for Reducing Structure Ignition Hazards from Wildland Fire. 2018 Edition.

⁵ 2016 California State Building Code, Part 2, Volume 1, Chapter 7A.

<https://codes.iccsafe.org/public/chapter/content/9997/>

⁶ RSMeans Online. 2018. Version 8.7. Gordian. <https://www.rsmeans.com/>

II. BACKGROUND

Trends in the Wildland-Urban Interface

Home development in the wildland-urban interface (WUI)—the area where housing and burnable vegetation meet or intermingle—is growing faster than in other land use types in the United States.¹ Homeowners in the WUI often are attracted to the natural scenery, access to public lands, privacy, and a rural lifestyle, but these amenities are accompanied by a rapidly growing risk.

Wildfires in the U.S. are bigger and burn longer than just a few decades ago, and danger to communities is increasing. Since the 1990s, the average acreage burned in U.S. wildfires has more than doubled.² In the western U.S., the average wildfire season is nearly three months longer than in the 1970s,³ and globally it is an average of one month longer.⁴ Since 2000, more than 3,000 U.S. communities saw 100 acre or larger wildfires within 10 miles of town.⁵

Current climate projections are likely to exacerbate the problem in the future. Fuel aridity is increasing in the western U.S. and climate trends are expected to expand the potential for wildfire activity.⁶ Earlier spring snowmelt in the West is also drying fuels in areas previously snow-covered into late spring, expanding the geographic and temporal extent of wildfires.

The spatial and seasonal expansion of wildfire is compounded by the expanding WUI and the increasing presence of people near wildland vegetation. Human-ignited wildfires account for 84% of all U.S. wildfires from 1992-2012, causing wildfires in places and during times of the year that would not typically occur.⁷

Due to these trends, the costs of wildfire in the U.S. are on the rise. In the last decade, federal fire suppression expenditures cost taxpayers an average of \$3.7 billion per year.⁸ Federal managers estimate that 50 to 95% of suppression costs are directly related to protecting homes in the WUI.⁹

While these numbers are staggering, the true costs are even higher. Wildfire suppression represents less than 10% of the full costs of wildfire to communities, and communities bear nearly half of the full costs of wildfire.¹⁰ Long-term damages can have devastating impacts, such as lost business and tax revenue, physical and mental health effects, watershed rehabilitation, and property and infrastructure repairs. Loss of human life in wildfire disasters causes immeasurable harm to families and communities.

Since 2008, wildfires have damaged or destroyed more than 35,000 structures in the U.S.,¹¹ putting insurance claims at \$5.1 billion.¹² Although firefighters successfully control most wildfires, WUI disasters generally occur when extreme weather conditions result in rapid fire spread that overwhelms firefighting resources.

Decades of research and post-fire analyses have resulted in guidance that can reduce the vulnerability of buildings located in wildfire-prone areas and improve their ability to survive when wildfire threatens. Nevertheless, few communities have adopted requirements for wildfire-resistant building materials and design in high-risk areas. Two documents establish model building codes and standards: the National Fire Protection Association's *Standard for Reducing Structure Ignition Hazards from Wildland Fire*¹³ and the International Code Council's *International Wildland-Urban Interface Code (IWUIC)*.¹⁴ Each addresses vulnerabilities of structures subjected to wildfire exposures. Most states have not adopted a building code on a state-wide level, but rather have left local jurisdictions to decide whether and how to adopt such model codes as regulations. California is a notable exception, having adopted *Materials and Construction Methods for Exterior Wildfire Exposure* as Chapter 7A of the state building code in 2008.¹⁵

For some local jurisdictions, a barrier to implementing WUI building regulations is the perceived cost. Although research has shown that the benefits of wildfire-resistant construction far outweigh the costs to a community,¹⁶ little research has examined the immediate costs to homeowners and builders. Communities often assume that implementing wildfire-resistant building regulations will cost too much for homeowners and the homebuilding industry. The purpose of this study is to identify the cost differences of constructing or retrofitting a home to wildfire-resistant standards as compared to a typical home, not built to wildfire-resistant standards.

How Homes Are Lost to Wildfire

Home vulnerability is primarily driven by the home's local ignitability, based on the home materials and design features and landscaping selections and maintenance on the property.¹⁷ Modern wildland fire suppression is extremely successful, quickly controlling 97 to 99% of wildfires.¹⁸ Most WUI disasters occur during the 1 to 3% of events when severe weather conditions and terrain align to create rapid fire growth rates and widespread ember showers leading to extreme fire intensities that overwhelm firefighting capabilities.¹⁹ Post-fire studies have shown that most buildings ignited during a wildfire have been completely destroyed.

Buildings can be ignited from three types of wildfire exposure (listed in order of significance): wind-blown embers (also called firebrands), radiant heat, and direct flame contact.

Embers

Most homes lost in WUI disasters are burned not by the flame front of the wildfire, but rather by direct ember ignition, or from low-intensity fires ignited by embers near the home.²⁰ In dry and windy conditions often associated with extreme weather events, embers can be cast a mile ahead of the fire front, igniting spot fires across broad areas in advance of the wildfire front. In recent post-fire analyses, it was not uncommon to find more than two-thirds of home losses were from embers or low-intensity fires.^{21, 22, 23}

Direct ember ignition can occur when embers enter the building through openings such as vents or an open or broken window. Once inside, embers can ignite furnishings or other combustible materials stored there. Direct ember ignition can also occur when embers accumulate and ignite combustible parts of the building, such as a wood shake roof, combustible decking, or debris accumulated on a roof or in a gutter.

Embers can also result in an indirect ignition scenario if they ignite vegetation or other nearby combustible materials that cause a spot fire, subjecting a portion of a building to either a direct flame contact exposure where the flames touch the building or a radiant heat exposure.

Radiant Heat

Radiant heat can be generated by burning tree canopies or shrubs, landscape vegetation, neighboring buildings, or other nearby fuel. The vulnerability of a building to radiant heat depends on the intensity and duration of the exposure. If the radiant heat level is high enough and the duration long enough, it can result in the ignition of a combustible product (for example, wood siding), or it can break the glass in windows and doors, making ember-ignition of interior materials more likely. Exposures to lower levels of radiant heat can pre-heat materials, making them easier to ignite if exposed to flames.

Direct Flame Contact

Direct flame contact from the wildfire as it passes the property can be the trigger that leads to ignition of a building component, such as combustible siding. Once a building component ignites it is easier for the fire to enter the building through the component or through the stud cavity behind a component, such as wall siding. Fire can also spread vertically up the wall, impinging on and possibly breaking glass in windows or doors, or enter the attic through the eave or eave vent. Once glass breaks, embers can readily enter the building and ignite interior furnishings.

Building Wildfire-Resistant Homes & Communities

Although the factors affecting whether a home survives a wildfire are complex—including weather, topography, fuels, and fire suppression capabilities—empirical research and laboratory experiments have demonstrated that building construction and design play a major role in home survival.^{24, 25} Building wildfire-resistant homes and communities requires addressing all wildfire vulnerabilities, including provisions to make buildings less vulnerable to ember exposures, reducing the opportunity for the fire to reach the building, and minimizing the opportunity for radiant heat exposures from landscaping vegetation, outbuildings, or other nearby combustible materials.

Reducing home losses to wildfire requires a coupled approach, addressing two primary sources of home vulnerability:^{26, 27}

1. The selection, location, and maintenance of vegetation and other combustible materials within approximately 100 feet surrounding the home, referred to as the “home ignition zone” (HIZ).
2. The building materials and design features used in construction of the home itself.

Home Ignition Zone (HIZ)

Developing wildfire-resistant properties for HIZ (also referred to as defensible space) generally involves managing vegetation, landscaping, debris, and other combustible materials (like wood piles and outbuildings) in a 100-foot area around the home. Research has found that defensible space beyond that radius has little effect on a home’s survivability.²⁸ In general, the area is broken into three subzones:²⁹

- Zone 1: 0 to 5 feet;
- Zone 2: 5 to 30 feet; and
- Zone 3: 30 to 100+ feet.

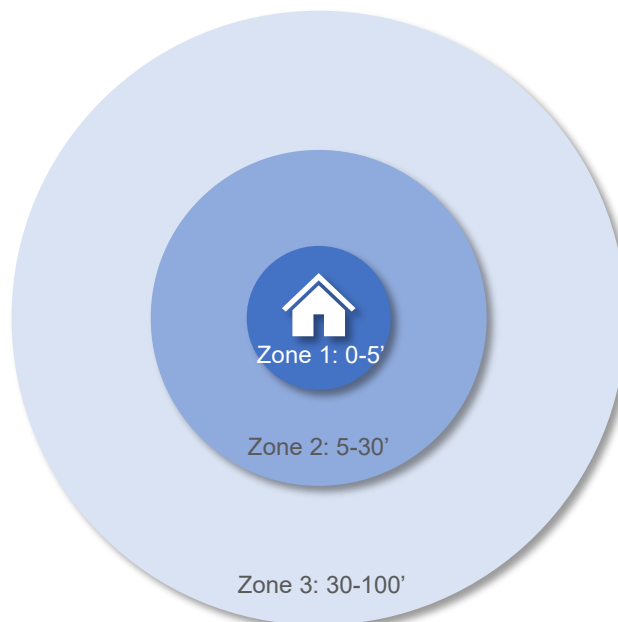


Figure 2.1. The Home Ignition Zone (HIZ), comprising three sub-zones.

The exact recommendations for each zone will vary depending on topography, the siting of the home on the property, and the vegetation type, but the objectives are to reduce the energy of the fire and minimize the chance it will burn directly to the home, and, if present, to allow for safe fire suppression activities to protect the home.

Reducing potential fire energy and spread in Zones 2 and 3 involves carefully selecting and maintaining vegetation, creating separation between plant groupings, and eliminating vertical continuity of fuels, also known as ladder fuels. Information about creating, designing, and maintaining defensible space for different climatic regions, fuel types, and topography is readily available through state and local agencies and will not be further addressed in this report.

Zone 1, also called the near-home zone or the “noncombustible zone,” includes the 0- to 5-foot area immediately adjacent to the home where, if ignited, landscaping and other combustible materials could spread to and ignite the home. The strong likelihood of ember attack in most wildland fire events means that homes are most vulnerable to ignition in this near-home area. Although a completely noncombustible zone is desirable (e.g., use of rock mulch or other hardscape features), vegetation considered to be less combustible could also be used. This “less-combustible” vegetation would be restricted to an irrigated lawn and non-woody, low-growing, herbaceous vegetation, both of which must be well-maintained. Given the ability of wind-blown embers to pass over the defensible space created on most properties, incorporating a noncombustible zone provides additional protection by reducing the opportunity for a flame to directly contact the home as a result of ember-ignited combustibles located immediately adjacent to the home. The near-building zone is described in additional detail in Chapter VIII.

Building Materials & Design Features

The materials used to construct a home and their arrangement and design can have a major influence on survivability. Several components of single-family homes are most vulnerable to wildfire and must therefore be built and designed to specifically withstand ignition from embers, radiant heat, and direct flame contact. These components include:

- Roof, including vents, gutters, and eaves/soffits
- Exterior walls, including siding, windows, and doors
- Decks and other exterior attachments.

Definitions

Many of the terms used to describe favorable performance are used interchangeably, even though they may have different technical definitions. Different wildfire codes may have discrepancies, but are generally based on traditional laboratory tests that determine a material’s response or reaction to fire.

Wildfire-Resistant. A general term used in this report to describe a material and design feature that can reduce the vulnerability of a building to ignite, either from wind-blown embers or other wildfire exposures.

Fire-Resistant. Materials and systems that resist the *spread* of fire from the fire-exposed to a non-exposed side of an assembly (i.e., a wall or roof).

Ignition-Resistant. Material that resists *ignition* or sustained flaming combustion. Materials designated ignition-resistant have passed a standard test that evaluates flame spread on the material.

Noncombustible. Material of which *no part will ignite or burn* when subjected to fire or heat, even after exposure to moisture or the effects of age. Materials designated noncombustible have passed a standard test.

Given the relatively large surface area of the roof, this component generally is considered the most vulnerable. One recent study found that window preparation was especially important, but defensible space in the near-home area was as important as building construction.³⁰ Because of the many complex ways wildfire interacts with the landscape and fuels—including combustible materials used in construction—home vulnerability must be addressed through both property-level landscaping and the building materials and design.

Even if constructed with wildfire-resistant materials and design features, the home and its landscaping must be maintained to retain the necessary level of performance. The potential for extended radiant heat exposure and/or direct flame contact will depend on the defensible space and on the proximity of any neighboring homes or outbuildings. Therefore, overall land use planning decisions—including where homes should or should not be allowed on the landscape, proximity of neighboring homes, and siting of a home on an individual lot relative to neighboring structures, topography, and primary wind direction—are also important factors.

The Costs to Homeowners and Builders

The cost of building a single-family home using wildfire-resistant materials and design has not been previously analyzed in detail. Studies at the individual home level have mostly been tied to creation and management of defensible space. Australian studies have found the cost for retrofitting a home to be wildfire-resilient averaged \$19,000,³¹ and the cost of preparation is approximately \$8,000³² (U.S. 2018 dollars), but most of the modifications were related to management of the vegetation on the property and purchase of equipment to defend the home, not the construction of the home itself. Similarly, little research exists on the effects of WUI regulations on home or property values. A 2017 report by the National Institute of Building Sciences estimated a savings of \$4 for every \$1 of additional construction cost by implementing the IWUIC at the community scale.³³

Researchers have investigated the costs of building codes that address other natural disasters, such as hurricanes and tornadoes. A recent study in Moore, Oklahoma, found that implementation of new regulatory building codes to address severe tornado risk did not impact the quantity of homes sold, price of homes, or the number of permits for construction.³⁴ An analysis of Florida's state building code—implemented after the devastation of Hurricane Andrew—not only was successful in reducing losses by up to 72% from major windstorm events, but also realized a benefit of \$6 for every \$1 of added cost.³⁵

In addition, some research has shown that buyers were willing to pay a premium for safety. In Florida, homes built under more recent, stronger building codes saw a 10% higher price than older homes built before the code change.³⁶ Anecdotal evidence from wildfire-prone areas suggests that some housing markets use wildfire-resistance as an advertising and marketing strategy.

To address the research gap in the cost to construct a home to meet wildfire-resistant building codes, this study compares the three most well-known wildfire-resistant building codes and then examines the cost to build a home to those requirements.

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III. WUI CODES AND STANDARDS

Before examining the cost of constructing a home built to wildfire-resistant standards, it is helpful to understand the primary guiding documents for wildfire-resistant construction in the U.S. This chapter compares the three most well-known building code options for construction in wildfire prone areas: the International Code Council’s Wildland-Urban Interface Code (IWUIC),¹ the National Fire Protection Association Standard for Reducing Structure Ignition Hazards from Wildland Fire (NFPA 1144),² and Chapter 7A in the California Building Code (Materials and Construction Methods for Exterior Wildfire Exposure).³ Even though building codes are generally reserved for new construction or significant remodels that meet certain thresholds, they can be useful for improving resistance to wildfire risks when retrofitting.

This report focuses on the portion of the documents related to building design and construction, although the three codes incorporate additional information related to home survival during wildfire such as infrastructure (like water supply and roads), landscaping and site requirements, and fire protection systems. Some communities may adopt a stand-alone code specifically designed to address wildfire in at-risk portions of the community (generally called a “WUI Code”), but wildfire-related issues may also be incorporated into a variety of other existing regulations (e.g., building codes, zoning regulations, landscaping ordinances).

Few states have adopted wildfire-related codes at the state level, with some notable exceptions. California adopted Chapter 7A as part of the California Building Code in 2008. NFPA 1144 has not been adopted in its entirety by any state. In 2018, the State of Washington adopted portions of the 2018 IWUIC into its building code, specifically those sections related to ignition-resistant construction (IWUIC Section 504).⁴

Similarities Among the Codes

Each of the three wildfire-related documents (IWUIC, NFPA 1144, and California Chapter 7A) is similar in some respects. All acknowledge the importance of vegetation and vegetation management. In the IWUIC, construction requirements are tiered depending on the wildfire hazard zone. These zones typically are referred to as “fire hazard severity zones” – the levels escalate from “moderate” to “very high” or “extreme.”

Construction requirements divide the home or building into component parts (such as roof, exterior wall, vents, and decking) and provide material or assembly (i.e., “system”) options for the component (or assembly). An example of an assembly would be an exterior wall that includes the siding material, sheathing, framing, and other components used in the wall construction. In many cases, multiple options for complying with the provisions for a given component are provided. These options are separated by “or” statements in the code or standard. While these options are compliant, they do not necessarily provide equivalent protection. Table 3.1 summarizes the building requirements for the principal components specified in the IWUIC, NFPA 1144, and Chapter 7A.

Many of the material and assembly requirements in these codes and standards are based on “reaction to fire” and “resistance to fire” standard test methods. “Reaction to fire” standards provide procedures to evaluate whether a material can be considered noncombustible or ignition-resistant. “Resistance to fire”

Codes vs. Standards

Codes are model sets of rules recommended by experts and informed by research. Codes can be adopted by state or local jurisdictions as-is, or customized for local conditions to become law. Codes explain *what* needs to be done.

Standards include definitions, procedures for testing materials, and technical guidelines. They are intended to provide standardization and a common reference, explaining *how* to meet minimum requirements referenced in a building code.

standards provide procedures to evaluate the ability of an assembly to resist fire spread from the fire-exposed side to the non-fire-exposed side.

The response of the building and construction materials to a direct ember exposure is largely either assumed or inferred from flame or radiant heat exposures. Until recently the ability to generate a realistic ember exposure in a laboratory environment has been lacking. Based on efforts by researchers at the National Institute of Standards and Technology (NIST), an apparatus that can generate an ember exposure was developed. This design has now been modified and adopted by others, including the Insurance Institute for Business & Home Safety.⁵ Standard test methods may be developed in the future.

Specifics of Each Code

Each of the three wildfire-related documents (IWUIC, NFPA 1144, and California Chapter 7A) is described and compared below and in Table 3.1

International Code Council: International WUI Code (IWUIC)

Chapter 5 in the IWUIC provides specifications for three ignition-resistant (IR) construction classes, designated IR 1, IR 2, and IR 3. The ignition-resistant class level depends on the fire hazard severity zone, and whether the water supply and defensible space requirements are in compliance. IR 1 has the most restrictive requirements and IR 3 the least restrictive. The three-tier set of requirements is unique to the IWUIC. By comparison, NFPA 1144 and Chapter 7A in the California Building Code have only one level of building construction requirements, which are applicable regardless of the fire hazard severity zone ranking.

The IWUIC provides explicit language about the need to maintain buildings, vegetation, and defensible space. Maintenance is a critical component for homes and landscapes.

NFPA 1144: Standard for Reducing Structure Ignition Hazards from Wildland Fire

NFPA 1144 is designated as a standard, but if adopted by a jurisdiction, it can serve as a building code. This standard provides a methodology for assessing the potential for wildland fire ignition around existing buildings and provides minimum requirements for reducing the potential for ignition. A feature of this standard, as well as other wildfire-related building codes used in the United States, is linking building survival with vegetation selection and placement on the property, and construction materials and design.

This standard provides the user with information to do an assessment of the building components and vegetation on the property (Chapter 4). The assessment results in a list documenting materials and components used on or attached to the building, location on the property relative to topographical features and location on slope, and location of vegetation. The standard also provides specific minimum requirements for new construction (Chapter 5) and information for modifying vegetative fuels in the structure ignition zone.

California Building Code: Chapter 7A

Chapter 7A of the California Building Code was implemented in two phases. It is applicable in all fire hazard severity zones in State Responsibility Areas (SRA) and only in Very High Fire Hazard Severity Zones (VHFHSZ) in Local Responsibility Areas (LRA), as defined by CAL FIRE. In the SRA, fire protection is provided by the state. In LRA, fire protection is not provided by the state, but rather by the local jurisdiction.

Like the other codes and standards, Chapter 7A acknowledges the importance of well-maintained near-home (landscaping) vegetation to a fire-safe building by requiring compliance with Public Resource Code (PRC) 4291 and Government Code (GC) 51182. PRC 4291 applies to SRA land and GC 51182 applies to LRA land.

Building Components

The IWUIC, NFPA 1144, and Chapter 7A typically discriminate between the performance of materials and designs based on the response to direct flame contact or radiant heat exposure. However, as research results provide options, some sections are being added to address ember exposures. Since an ember exposure that results in damage or loss of a building is ultimately caused by a flaming and/or radiant exposure, selecting materials based on these exposures can be useful.

Roofs

Building codes rely on a standard test method to provide a fire rating for roof coverings. This standard test incorporates three separate components to evaluate the fire rating of the covering: (1) fire-resistance (fire-penetration), (2) flame spread, and (3) the ember generation potential of the roof covering and assembly (Figure 3.1). The “Class A” fire rating is the highest level of protection.

This test method does not address vulnerabilities that can occur at the edge of the roof, particularly where a gap occurs between the roof covering and the roof deck. Codes acknowledge this vulnerability and require that any gaps between the roof covering and the roof deck at the edge be plugged with a fire-stop or “bird-stop” material.

Roof vulnerabilities and mitigations are discussed in more detail in Chapter VI.



Figure 3.1. During a standard test to determine the fire rating of a roof covering. For this test, a Class A burning brand (wooden crib) was placed on top of the roof covering. Flames on the underside of the roof indicate that, as constructed, this roof covering is not Class A. Photo: Stephen L. Quarles

Wall and Eave Assemblies

For wall and eave assemblies, building codes provide the option of using noncombustible materials or combustible materials that meet fire-resistance and/or flame spread test procedures. These tests address only one of the vulnerabilities of a wall—the ability of fire to penetrate from the outside to the inside of the building. They do not directly address flame spreading up or laterally over the siding. Depending on the flame spread characteristics of the material, use of the fire-resistance rating to the exclusion of other requirements may just transfer the vulnerability of an exterior wall to another component (e.g., to a window, eave, vent) (Figure 3.2). Therefore, conservative use of combustible materials that meet fire-resistance test procedures is recommended.

Exterior wall vulnerabilities and mitigations are discussed in more detail in Chapter VII.

Decks and Attachments

Treatment of decks and other attachments in the building codes is challenging and complex. Like walls and eave assemblies, building codes provide the option of using noncombustible materials or combustible materials that meet fire-resistance test procedures. There are few noncombustible decking products available. The three wildfire-related documents reviewed in this report treat combustible materials differently.

IWUIC and NFPA 1144 limit combustible decking materials to only those that are ignition-resistant, which excludes the use of the most commonly used decking products (such as solid wood without fire-retardant treatment and plastic composite decking). However, Chapter 7A restricts the use of combustible decking products based on the heat release rate, which is the amount of energy released after the deck is ignited by a specified gas burner. Solid wood and plastic composite decking products comply with Chapter 7A, but not with IWUIC and NFPA 1144.

Chapter 7A explicitly states that only the walking surfaces of the deck are considered in the standard—the structural support members are not. IWUIC and NFPA 1144 both allow the use of a one-hour fire-resistance-rated assembly as one option for complying with the deck requirements. The one-hour-rated assembly implies the use of either a horizontal or vertical deck enclosure, thereby implicitly addressing the support members. Although not explicitly stated, this effectively excludes the use of deck boards unless, for example, a deck platform is placed on top of a lightweight concrete surface. If traditional deck boards were allowed without other ventilation or moisture removal requirements, moisture-related degradation (decay in wood timbers and joists, corrosion of metal fasteners and connectors) would eventually develop in the under-deck area.



Figure 3.2. Vertical flame spread after exterior siding ignites can threaten other components on the wall, such as windows and the under-eave area. Photo: Stephen L. Quarles

Deck vulnerabilities and mitigations are discussed in more detail in Chapter VIII.

Fencing is not addressed in any of the reference codes or standards. Guidance provided by education and outreach organizations state that a noncombustible section of fencing, typically 5 to 8 feet in length, should attach to an exterior wall to stop the spread of fire from the fence to the home.

Vents

Except for Chapter 7A, reducing ember intrusion through vents is accomplished exclusively by specifying maximum mesh size for the screen material and by restricting where vents can be located. The allowable screen mesh size in these documents ranges from about 1/16-inch to 1/4-inch. Chapter 7A specifies screen mesh information, but also allows vents with design features that resist entry of embers and flames. A standard test method to evaluate resistance to embers and flame intrusion has been developed and published by the American Society for Testing and Materials (ASTM) and accepted for use by the California Office of the State Fire Marshal.⁶

NFPA 1144 and IWUIC restrict the use of vents in the under-eave area. Chapter 7A allows the use of vents in under-eave areas if the specified provisions have been met. The restriction of vents in an under-eave area comes largely from anecdotal evidence that these areas would be vulnerable to ember entry. Recent testing at the IBHS Research Center and at NIST has demonstrated that ember entry was more dependent on the eave construction than on the general eave area. Vents in open-eave construction (i.e., vents in the between-joint blocking) were more vulnerable to ember entry than vents located in a soffited eave. Gable end vents were particularly vulnerable to ember entry. This suggests that a design approach to vent location and type in high-hazard areas would also be valuable in minimizing the vulnerability of buildings to wildfire.

Vents are addressed in more detail in Chapter VI in conjunction with roof vulnerabilities and mitigations.

Near-Home Zone

Although the near-home noncombustible zone (the area within a 5-foot perimeter around a house) has been incorporated into educational materials developed and distributed by education and outreach organizations, including IBHS, NFPA-Firewise, and Nevada's Living with Fire, this guidance is not explicitly specified in any of the codes or standards. The vulnerability of the near-home zone is important when considering ember accumulation exposures either on or adjacent to exterior-use materials and assemblies.

Near-home vulnerabilities and mitigations are discussed in more detail in Chapter IX.

¹ 2018 International Wildland-Urban Interface Code. 2017. International Code Council, Inc.

² National Fire Protection Association. 2018. NFPA 1144. Standard for Reducing Structure Ignition Hazards from Wildland Fire. 2018 Edition.

³ 2016 California State Building Code, Part 2, Volume 1, Chapter 7A.

<https://codes.iccsafe.org/public/chapter/content/9997/>

⁴ 2018 Washington State Building Code. Revised Code of Washington, 2018, §19.27.560.

<http://app.leg.wa.gov/RCW/default.aspx?cite=19.27.560>

⁵ Insurance Institute for Business & Home Safety. 2011. Wildfire Demonstration.

<https://disastersafety.org/ibhs/research-center-demo-wildfire-2011/>. Also see video highlights at:

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⁶ ASTM E2886. 2014. Standard Test Method for Evaluating the Ability of Exterior Vents to Resist the Entry of Embers and Direct Flame Impingement. West Conshohocken, PA.

Table 3.1: Comparison of WUI Codes and Standards

Component	IWUIC (2018) (Ignition-Resistant Class 1)	NFPA 1144 (2018)	California Building Code Chapter 7A (2013)
Roof			
Roof	Class A fire-rated covering required. Plug gaps at the end (i.e., bird-stop) and underlayment full length of any valleys.	Class A fire-rated covering required. Roof covering must be tested using all components in the as-built assembly. Where gaps exist between covering and roof deck, a roll-roofing product shall be laid over the entire deck surface and gaps at end and ridge plugged with a noncombustible material.	Requires a fire-rated covering, actual rating (Class A, B or C) dependent on fire hazard severity zone. Plug gaps at ends (i.e., bird-stopped, fire-stopped). A minimum 36-inch-wide cap sheet must be installed under metal valley flashing.
Eaves & Fascia	Eaves and soffits protected by ignition-resistant material or one-hour fire-resistant-rated construction, or 1-inch fire-resistant treated lumber, or ¾-inch plywood. Fascias required, protected by ignition-resistant material or 1-hour fire-resistant-rated construction, or 2-inch dimensional lumber.	Eaves must be enclosed with fire retardant-treated wood, ignition-resistant materials, noncombustible materials, or materials exhibiting resistance to wildfire penetration. Metal drip-edge required on eave edges.	Soffited or open-eave allowed. If open-eave, nominal 2x material required as blocking.
Gutters	Noncombustible gutter (vinyl gutters not allowed). Use of gutter cover is required.	Use of noncombustible gutter and gutter cover device required.	Metal and vinyl gutters allowed. Installation of a gutter cover is required.
Vents	Vents covered by 1/4-inch mesh screen. Vents in exterior walls shall not exceed 144 square inches or shall be designated/approved to prevent flame or ember penetration into the structure. Vents not allowed in under-eave areas. Gable end and dormer vents shall be >10 feet from lot line. Underfloor vent openings located as close to grade as practical.	Vents covered by 1/8-inch mesh screen or use of vents designed to resist flame intrusion and embers. Vents not allowed in under-eave area.	General requirement for vents to resist intrusion of embers and flame through ventilation openings. 1/16- to 1/8-inch mesh screening is specified. Vents not allowed in under-eave area unless vent has been accepted as ember- and flame-resistant.

Component	IWUIC (2018) (Ignition-Resistant Class 1)	NFPA 1144 (2018)	California Building Code Chapter 7A (2013)
Exterior Walls			
Siding	Specifies compliance with one of five methods: 1) one-hour fire-resistant-rated construction, 2) approved noncombustible materials, 3) heavy timber or log wall construction, 4) fire-retardant-treated wood on exterior side (rated for exterior use), or 5) ignition-resistant materials on exterior side.	Specifies ignition-resistant material (including exterior fire-retardant-treated wood) or an assembly with at minimum a one-hour fire rating. Six-inch noncombustible vertical separation required between a horizontal surface and siding.	Four options for compliance: 1) noncombustible material, 2) ignition-resistant material, 3) heavy timber construction, 4) log wall assembly, or 5) assembly complying with State Fire Marshal 12-7A-1 (10-minute direct flame exposure test).
Windows	At a minimum, all windows (including doors and skylights) shall be dual pane (multilayered) with tempered glass, or glass blocks or fire-resistant rated of not less than 20 minutes.	Requires all windows (including in doors and skylights) to be tempered glass, multilayered glazed panels, glass block, or fire-resistance rating of not less than 20 minutes.	Four options for compliance: 1) multi-pane glazing with a minimum of one tempered pane, 2) glass block units, 3) fire-resistance rating of not less than 20 minutes, or 4) meeting performance requirements of SFM 12-7A-2.
Doors	Approved noncombustible construction, solid-core wood not less than 1¾-inches thick, or fire protection rating of not less than 20 minutes.	Solid-core wood not less than 1¾-inches thick, constructed of noncombustible material, or fire protection rating of not less than 20 minutes.	Four options for compliance: 1) Noncombustible exterior surface or cladding, 2) solid core wood meeting thickness specifications, 3) fire resistance rating of not less than 20 minutes, or 4) meeting the performance requirements of SFM Standard 12-7A-1.
Decks			
Decks	One-hour fire-resistant-rated construction, heavy timber construction, or constructed with noncombustible materials, or fire-retardant-treated wood or other ignition-resistant materials. A deck extending over a slope greater than 10% must be enclosed to within 6 inches of the ground using same exterior wall construction standards.	Requires heavy timber, noncombustible materials, fire-retardant-treated wood, or other ignition-resistant material, or be a one-hour fire-resistance-rated assembly.	Only applies to the walking surfaces of the deck. Four options for compliance: 1) ignition-resistant material that complies with SFM Standard 12-7A-4, 2) exterior fire-retardant wood, 3) noncombustible material, or 4) comply with SFM Standard 12-7A-4.
Near-Home Landscaping			
Near-Home Landscaping	Does not explicitly address near-home landscaping but addresses fuel modifications in 30+-foot defensible space area.	Does not explicitly address near-home landscaping but addresses location and maintenance of vegetation in two zones, including from the home to 30-feet, and from 30-feet to 100-feet, or to the property line.	Hazardous vegetation and fuel management required based on different fire hazard severity zones. Does not explicitly address near-home landscaping.

IV. METHODS

This study involves two cost analyses: (1) the cost of constructing a wildfire-resistant home compared to a typical home; and (2) the cost of retrofitting an existing home to be more wildfire-resistant. Similar methods were employed for both analyses. For the wildfire-resistant home, we selected materials that would comply with one or more of the codes or standards described in Chapter III.

Cost Data: *RSMeans*

For both analyses, we used *RSMeans*,¹ a national database of construction materials, labor, and contractor overhead and profit costs. *RSMeans* is updated quarterly, includes average construction cost indices from more than 700 cities, and uses the latest negotiated wages across 21 building trades. It includes national averages as well as cost indices to compare regional variability across the country.

While using a national database like *RSMeans* provided consistency for this study, it also has limitations. The values included in the database are averages and do not reflect local conditions such as product and contractor availability, managerial efficiency, competitive conditions, or local building or union requirements. In reality, many wildland-urban interface communities are growing rapidly and face highly competitive conditions and a short supply of contractors, which may raise overall prices for any style of home—wildfire-resistant or otherwise. Demand for contractors can also be especially high during reconstruction periods following wildfire disasters.

When *RSMeans* provided multiple options for building materials, we used mid-range products typical of construction in southwest Montana. Expert judgment and guidance was provided by Bechtle Architects² in Bozeman, Montana, who queried the *RSMeans* database for this study. In some instances, wildfire-resistant materials were not available in *RSMeans*. For these cases, we acquired pricing directly from the manufacturer or received bids from retailers or local distributors and added labor, overhead, and profit rates at national averages using the appropriate cost indices from *RSMeans*.

The monetized values include only the immediate costs of construction and do not account for long-term maintenance and replacement costs of the features. In many cases, wildfire-resistant materials have added benefits such as reduced maintenance, longer lifespan, and energy efficiency. We have noted where such co-benefits exist, even when they are not fully quantifiable.

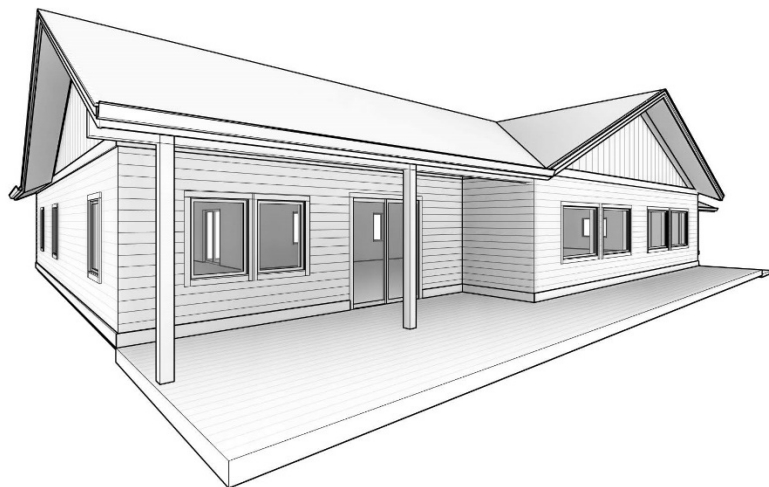


Figure 4.1. Architectural rendering of the home used in this study. The home is representative of typical construction in Park County, Montana and is approximately 2,500 square feet.

Model Home and Selection of Features

To compare costs, we required a baseline home representative of typical building styles found in the wildland-urban interface in southwest Montana, one of the fastest-growing WUI regions in the country. The home used in this study is a mid-range home constructed in 2017 in Park County, Montana. It is a three-bedroom, 2,500-square-foot, single-level, single-family home with two exterior decks and a two-car garage. It was constructed for approximately \$140 per square foot, or a total of \$350,000 (Figure 4.1).³

For the purposes of this analysis, we made many assumptions about the typical home features, some of which would reduce or increase the cost difference with the wildfire-resistant home. We made these assumptions based on expert input about regional preferences for southwest Montana. The primary assumptions include that the typical home has a Class A asphalt roof, cedar plank siding, and a wood deck. Using a home typical of southwest Montana will make the cost comparisons less applicable in other regions due to different aesthetic preferences, climatological differences, functional needs, and local building code requirements. For several features, we include alternative product options to show how different choices and regional preferences may affect cost.

We identified the individual features on the home that make it vulnerable to wildfire, based on the best available science about home ignitions. We included features from four components of the home: roof, exterior walls (including windows and doors), deck, and landscaping.

New Construction Comparison

To compare the cost of constructing a wildfire-resistant home with the typical home, we priced: (a) typical building materials (including labor and contractor overhead and profit) representative of typical WUI construction in southwest Montana, and (b) wildfire-resistant building materials (including labor and contractor overhead and profit) that comply with or exceed the International WUI Code (IWUIC) for the vulnerable features. We did not only price materials, but also included labor and contractor overhead and profit because installation of some wildfire-resistant features may require more labor. We did not compare features that are unlikely to pose wildfire vulnerability issues (for example, the foundation, exterior building sheathing and framing, and interior walls).

This report shows a percentage increase in changing from typical to wildfire-resistant components but does not reflect a percentage increase as related to the entire cost associated with constructing a home. Because we did not evaluate the cost of constructing the entire home using *RSMeans*, it is not possible to extrapolate precisely what percentage of the total home these costs represent. However, the costs associated with constructing wildfire-resistant components represent only a fraction of the total costs of constructing a home.

Retrofit Analysis

To examine the cost of retrofitting vulnerable features in the baseline home with wildfire-resistant materials, we priced: (a) labor costs for demolition of typical building materials (including contractor overhead and profit), and (b) wildfire-resistant building materials (including labor and contractor overhead and profit) that comply with or exceed the IWUIC. Where possible, we include the total cost of retrofitting the feature in the baseline home as well as a per-unit cost.

It is important to note that *RSMeans*' labor costs for demolition do not include disposal costs, onsite retaining of material (i.e., a dumpster), nor do they account for challenges finding contractors willing to

take on small demolition projects. Finding a contractor willing to take on a relatively small job, like swapping out a gutter or roof vent, may be difficult in many markets.

However, some of the retrofitting techniques described here can be combined into a larger job that may be more attractive to contractors or completed independently by handy homeowners. Where possible, we have tried to indicate the difficulty of the retrofitting job for those inclined to D-I-Y. We have also tried to rank retrofitting tasks for each vulnerable feature to help identify where homeowners can achieve the most benefit for the least cost.

¹ RSMeans Online. 2018. Version 8.7. Gordian. <https://www.rsmeans.com/>

² Bechtle Architects: <http://bechtlearchitects.com/>

³ Andrew Ford, Ford Woodworks, LLC, Clyde Park, Montana. Personal communications.

V. RESULTS

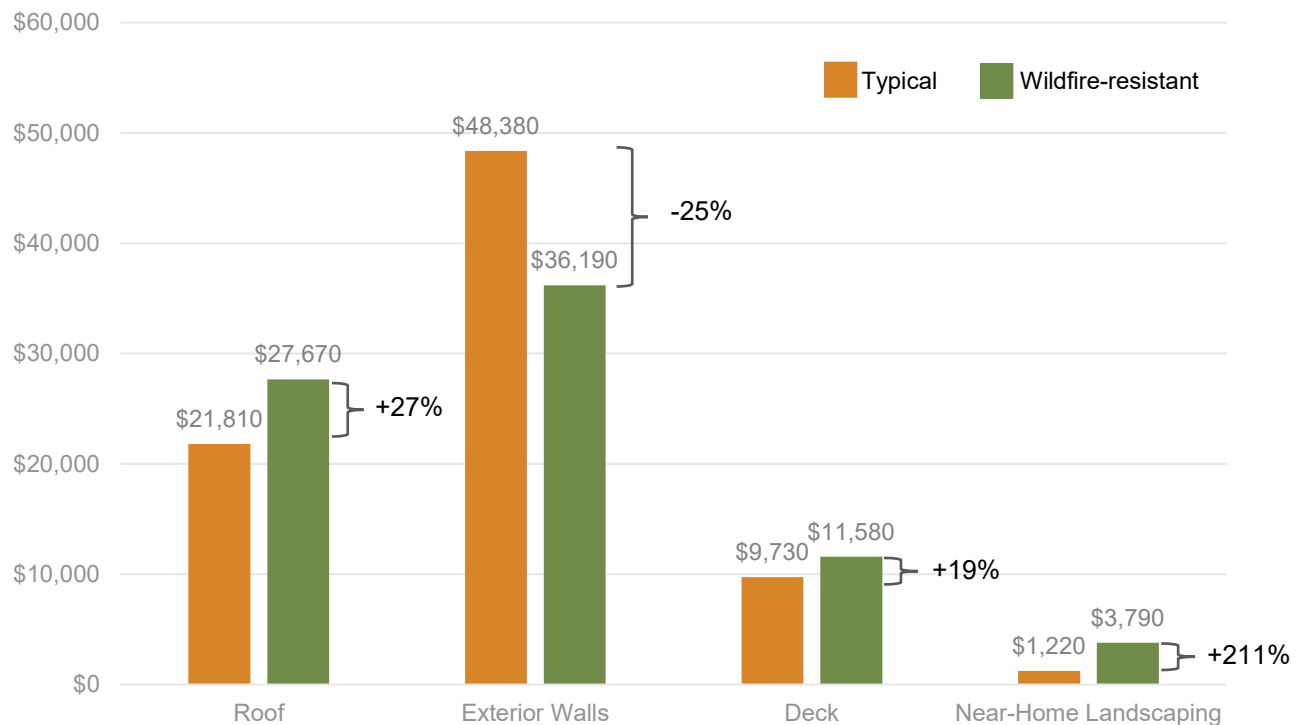
New Construction

This analysis finds that a new home constructed to comply with a wildfire-resistant building code, as defined by the International WUI Code (IWUIC), can be constructed for roughly the same cost as a typical home. In fact, our model wildfire-resistant components cost approximately \$1,910, or 2% less than the typical home (Table 5.1). The roof, deck, and landscaping all added costs, while switching from wood to fiber cement siding for the exterior walls created a cost savings. Proportionally, the wildfire-resistant landscaping saw the greatest increase over the typical home, but in absolute dollars, the roof added the most cost (Figure 5.1).

Table 5.1: Cost and Proportional Difference of Components in New Construction for Typical and Wildfire-Resistant Scenarios

	Typical	Wildfire-Resistant	Difference	
Roof				
Roofing	14,870	16,380	1,510	10%
Vents	930	1,560	630	68%
Soffit & Fascia	5,080	6,970	1,890	37%
Gutters	930	2,760	1,830	197%
Subtotal	\$21,810	\$27,670	\$5,860	27%
Exterior Walls				
Siding	29,930	12,360	(17,570)	-58%
Sheathing	3,810	4,180	370	10%
Doors	6,170	8,120	1,950	32%
Windows	8,470	11,530	3,060	36%
Subtotal	\$48,380	\$36,190	-\$12,190	-25%
Deck				
Decking surface	8,230	9,430	1,200	15%
Framing	930	1,230	300	32%
Fascia	570	920	350	61%
Subtotal	\$9,730	\$11,580	\$1,850	19%
Near-Home Landscaping				
Mulch (bark vs. rock)	1,220	3,250	2030	166%
Landscape Fabric	0	540	540	-
Subtotal	\$1,220	\$3,790	\$2,570	211%
All Components				
Total	\$81,140	\$79,230	-\$1,910	-2%

Figure 5.1. Cost difference and percent change between typical and wildfire-resistant new construction. Orange bars are typical; green bars are wildfire-resistant.



Retrofit

Retrofitting costs for each component are detailed in Table 5.2. The cost of retrofitting the roof and exterior walls for the model home are both substantial if undertaken in whole. Retrofitting the roof, assuming removal of wood shingles and replacement of vents and gutters, approaches the cost of new construction at \$22,000. Retrofitting exterior walls, assuming removal and demolition of vinyl siding and wood-framed windows, came to \$40,350, which is more than the cost of new construction due to the expense of demolition of siding and sheathing. We did not price the cost of retrofitting the deck or landscaping, as these would be similar to new construction, but variable depending on demolition of existing conditions. Although retrofitting the roof or exterior walls in their entirety has substantial costs, there is also significant benefit as these can be especially vulnerable areas of the home.

Further, roof and exterior wall retrofitting can be broken into phases and prioritized based on existing conditions and neighborhood and landscape context. For example, many homes already have asphalt shingles that provide wildfire-resistance, so they would only need new vents and gutters to improve their wildfire-resistance. Homes that are 30 feet or more from neighboring structures and that have well-maintained landscaping are unlikely to be exposed to extended radiant heat and may not need siding to be replaced everywhere on the home. Homeowners may be able to prioritize siding replacement only at locations where radiant heat exposures are more likely (such as where other buildings are nearby, where walls face slopes, or on sides of the home facing common wind aspects) or in areas where flame contact from ember-ignited debris or vegetation is possible (such as at roof-to-wall junctions or within approximately 6 inches of the ground).

Table 5.2: Cost of retrofitting roof and exterior wall from typical to wildfire-resistant. Costs shown are for model home and assume removal of wood shingles on the roof and wood siding on the walls, to be replaced with the same wildfire-resistant materials described in the new construction scenario.

Roof	
Roofing	13,180
Vents	370
Soffit & Fascia	5,600
Gutters	2,860
Subtotal	\$22,010
Exterior Walls	
Sheathing and Siding	20,580
Doors	8,120
Windows	12,050
Subtotal	\$40,750

In the following chapters, detailed analyses of vulnerabilities, mitigations, new construction cost differences, and retrofitting options are provided for each component of the home. Detailed data tables can also be downloaded at <https://headwaterseconomics.org/wildfire/homes-risk/building-costs-codes-appendix>. For the roof, exterior wall, and deck components, prices for alternative materials are included to show the range of potential costs. Prioritization of retrofitting activities and co-benefits are also described.

VI. ROOF VULNERABILITIES, MITIGATIONS, AND COST

This chapter analyzes the vulnerabilities, mitigations, code requirements, and detailed costs related to constructing a wildfire-resistant roof. For the purposes of this study, roof is defined as the peak of the roof ridgeline to and including the gutters and under-eave area. This includes the roofing materials and underlayment, ridge vents, soffit vents, soffit covering, and gutters.

Vulnerabilities

Roof coverings are vulnerable because of their relatively large surface area that can be exposed to wind-blown embers. Complex roof shapes that include dormers, split-level designs, and components with other roof-to-wall junctions increase the vulnerability of the roof because embers can accumulate in these joints. In these same junctions, vegetative debris can also accumulate, providing fuel that is easily ignited by embers (Figure 6.1).

The edge of the roof where a gutter can be attached and locations where the roof intersects with a vent can also be vulnerable locations, particularly when vegetative debris has accumulated in the gutter or at the inlet to the vent (Figure 6.2).

Roof vents are important for circulation of air to remove excess moisture in the attic but are also susceptible to ember and flame entry. The under-eave area is also vulnerable as construction detailing allows embers to be trapped in gaps. An open eave also traps heat, if near home vegetation (or other combustibles) ignite. If under-eave vents are present, they can be an entry point for embers to pass into the attic.



Figure 6.1. Complex roof showing roof-to-siding junction where pine needle debris has accumulated on top of asphalt composition shingle roofing (a Class A fire-rated covering), adjacent to wood shingle siding. The vulnerable component of this roof is the siding, should the pine needle debris ignite. Photo: Stephen L. Quarles



Figure 6.2. Debris accumulation at the entry of a (plastic) ridge vent. Ember ignition of this debris could result in ignition of the ridge vent. Photo: Stephen L. Quarles

There are two types of ventilation openings to provide circulation in attic spaces: one for inlet air and one for exiting air. Inlet air comes from vents located in the under-eave area, at the edge of the roof. Under-eave vents are located either:

- in the blocking, in the case of open-eave construction (Figure 6.3), or
- in the soffit material, in the case of soffit-eave construction (Figure 6.4).

Exiting air leaves through vents located on or near the roof. Exiting air vents are either:

- placed at the ridge of roof (called “ridge vents”),
- placed in an off-ridge location on the roof, or
- located on the exterior walls, at the end of the home (called “gable end vents”).

Ridge and off-ridge vents are considered “through-roof” vents. Embers and flames can enter the attic space of a home through any of these vent openings.

Mitigation

Use of a Class A fire-rated roof covering is the most common mitigation strategy. Depending on the roof covering, an underlayment with an enhanced fire resistance rating may be needed to attain the desired fire rating. In addition, removal of debris from the roof and gutter on a regular basis can reduce the likelihood of ignition of this material from embers when wildfire threatens the house.

Use of flashing where the roof meets other features will help reduce the vulnerability of materials at these locations to flame and radiant heat exposures. Examples include use of 1) metal drip edge at the roof edge (i.e., where gutter meets roof) (Figure 6.5), and 2) metal flashing at the base of the wall



Figure 6.3. Vent located in the blocking space in open-eave construction. Photo: Stephen L. Quarles



Figure 6.4. Under-eave strip vent located in a soffit. Photo: Stephen L. Quarles



Figure 6.5 Metal drip edge installed at the edge of the roof. In this case, the drip edge was part of the gutter. Photo: Stephen L. Quarles

where roof meets siding. Use of a noncombustible material can be necessary to plug gaps that can occur with certain roof coverings that create a gap between the covering and roof deck (e.g., barrel tile). This is sometimes referred to as “bird stopping” (Figure 6.6). Gutter cover devices are sometimes recommended or required to minimize the accumulation of debris in gutters.

Treatment in Codes

Building codes require a specified fire rating for the roof coverings. The specific fire rating depends on the designated fire hazard rating in the area. Because of the widespread availability of Class A roof coverings, these are most commonly used. Building codes also address ember exposures at some roof-to-wall or other roof intersection areas. The most common requirement is for providing bird stops at the roof edge and use of a gutter cover device.



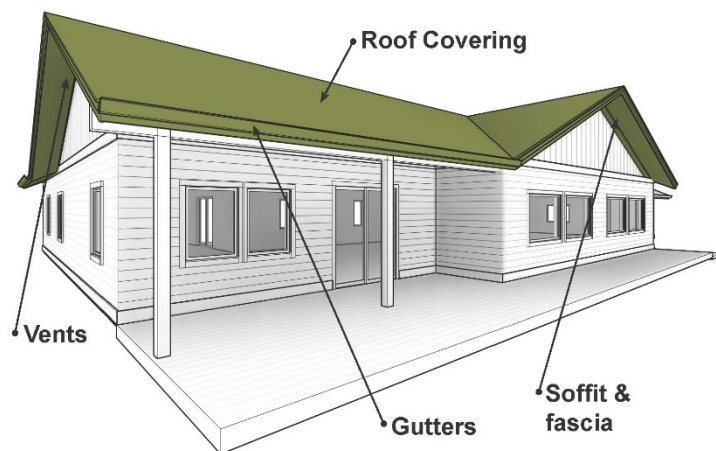
Figure 6.6. Use of a mortar mix to provide an effective “bird stop” at the edge of this barrel style roof (this photograph was taken during a retrofit project while the work was in progress). Photo: Stephen L. Quarles

New Construction Comparison

Four key roof features were modified for wildfire-resistance:

- Roofing and underlayment
- Ridge and soffit vents
- Fascia and soffit covering
- Gutters

Figure 6.7. Roof subcomponents and new construction cost.



A wildfire-resistant roof can be constructed for an approximate 27% increase in cost (Figure 6.7). One of the most expensive features of the roof—the roofing material—was assumed on both the typical and wildfire-resistant home to be Class A asphalt shingles, a fire-resistant material and the most popular roofing material in North America. Wildfire-resistant additions to the roofing underlayment, vents, soffits, and gutters resulted in an increase of \$5,860 or a 27% increase. Several of the materials selected here exceed the requirements of IWUIC, including wildfire-resistant sheathing, membrane, and vents that have been approved in California as being “ember and flame resistant.” More expensive roofing materials that would comply with IWUIC such as metal or clay tiles, or more expensive gutter options, can increase the cost difference to \$33,340, or an increase of 153% (Table 6.1).

The typical sheathing of oriented strand board (OSB) was replaced with CDX plywood underlayment to reduce the potential for fire penetrating into the attic space. In the wildfire-resistant home, mineralized roll roofing was added in the roofing valleys to improve the fire resistance in this area because of the tendency of debris to accumulate in the roof valley area. When a roof covering allows for a gap between the covering and roof deck (e.g., a tile roof), one option to protect the roof deck is to install an asphalt fiberglass composition product.

Ridge and soffit vents in the typical home were replaced with vents designed specifically for fire-resistance that have finer-grained mesh and ember- and flame-resistant features. We examined a variety of manufacturers and found pricing to be in similar ranges. As an alternative to vents, we also priced an unvented attic option, which involves applying spray foam insulation to the underside of the roof deck, making the attic space part of the insulated building enclosure. Although removing vents eliminates the opportunity for ember entry, an unvented attic design can result in moisture-related performance issues.¹ It is important to manage moisture movement from the occupied portion of the home into the attic space. Additional measures—not priced in this study—will be necessary, such as applying a vapor retarder to the ceiling in the occupied portion of the home and sealing all gaps at through-ceiling penetrations.

On the wildfire-resistant home, the soffit was enclosed with fiber cement siding instead of plywood, resulting in a modest price increase. Cedar fascia was replaced with fire-retardant-treated redwood.

Vinyl gutters in the typical home were replaced with aluminum gutters. A metal drip edge was added to provide additional protection against flame and embers at the edge of the roof. A gutter cover device was added to reduce the accumulation of debris in the gutter.

Homes in cold climates will have added expenses for managing snow and ice when gutter cover devices are used. Gutter covers can increase the potential for ice damming and cause the gutter to detach from the building. Although it does not provide any direct benefit from a wildfire vulnerability perspective and may not be necessary in all climates, heat tape is necessary in cold climates and was priced here. Heated gutters were priced as an alternative.

As a complete alternative to gutters, a perimeter drain system was also evaluated. A perimeter drain eliminates the need for gutters and downspouts by using French drains around the perimeter of the house. This requires burying piping around the foundation of the home. Perimeter drain systems are not possible or advisable in all locations, depending on site conditions such as groundwater depth and foundation depth and material, for example. However, they can reduce vulnerability of the gutter by eliminating the ember-ignition likelihood from the accumulation of debris in the gutter.

Retrofit Analysis

Since the roof is one of the most vulnerable areas of the home to wildfire, retrofitting the roof to be more wildfire-resistant can be one of the most cost-effective and important actions a homeowner can take. Depending on which component is replaced and the size of the home, the cost can be as inexpensive as a few hundred dollars, to several thousand (Table 6.2). In the model home, complete retrofit of the entire roof to be wildfire-resistant totaled \$22,010. Individual replacement of features ranged from \$370 for replacing ridge vents to more than \$20,000 for an unvented attic option.

Co-Benefits and Efficiencies

Energy Efficiency

The roof is a key component of a home's natural ability to ventilate and moderate temperatures. A well-insulated and ventilated roof can improve the heating and/or cooling of the home. All of the features included here would contribute to improved venting (except an unvented attic) and efficiency.

Lifespan and Maintenance

Asphalt composition shingle roofs are very low-maintenance and can last several decades.

Gutter cover devices will reduce the amount of gutter cleaning required and can help reduce risk of falls during cleaning because fewer trips up the ladder will be required. When gutter cover devices are used in snowy climates, heat tape or heated gutters may be necessary to reduce the potential for ice damming. Use of heated gutter options require maintenance to ensure proper seasonal operation.

No matter what wildfire-resistant materials are used, none eliminate the need for ongoing maintenance. Homeowners should plan on regularly inspecting and maintaining the roof and gutters to remove accumulated debris.

¹ Quarles, L. and A. TenWolde. 2005. Attic and Crawlspace Ventilation: Implications for Homes Located in the Urban-Wildland Interface. In Conference Proceedings: Woodframe Housing Durability and Disaster Issues, October 2004. Forest Products Society, Madison, WI.

Table 6.1: Roof New Construction						
Feature		Typical	Wildfire-Resistant	Cost Diff.	Percent Diff.	Notes
Roofing	Roof covering	Asphalt shingles, class A architectural	Asphalt shingles, class A architectural	0	0%	
			Alternative: Steel roofing	8,060	86%	A
			Alternative: Clay tile	23,280	250%	A
	Valley flashing	Metal	Metal	0	0%	B
	Sheathing	Oriented strand board (OSB)	CDX Plywood	1,160	25%	
	Roll roofing	(none)	Mineral surface roll roofing in roof valleys	300		
	Membrane	(none)	APP bituminous membrane	40		
	Roofing subtotal			\$1,500 – 24,780	10% - 167%	
Vents	Ridge vents	Flexible roll	Fire- and ember-resistant	-130	-28%	B
	Soffit vents	Aluminum strips	Fire- and ember- resistant with 1/8" mesh screen	760	161%	B
	Vents subtotal			\$630	68%	
Soffit & Fascia	Fascia	Cedar band board	Fire retardant treated redwood	1,280	60%	B
	Soffit covering	Plywood	Fiber cement	620	21%	
	Soffit & fascia subtotal			\$1,900	37%	
Gutters	Gutters	Vinyl	Aluminum	290	31%	
	Drip edge	(none)	Aluminum	750		
	Gutter cover device	(none)	Aluminum mesh	640		
	Heat tape	(none)	Flexible heat tape	150		B, C
	Heated gutter with cover	(none)	Alternative: heated gutter with guard	6,030	649%	A, B
	Perimeter Drain	(none)	Alternative: perimeter drain system	3,760	405%	A, D
	Gutters subtotal			\$1,830 - 6,030	197% - 649%	
TOTAL			\$5,860 - 33,340	27% - 153%		

Download detailed data tables at: <https://headwaterseconomics.org/wildfire/homes-risk/building-costs-codes-appendix>.

Notes

- A. Denotes an alternative to another material; a home would not utilize all materials listed. Totals columns account for range depending on which alternative is selected.
- B. Materials priced from manufacturer, online retailer, or local distributor. Labor priced from RS Means.
- C. Perimeter drain systems are not possible or advisable in all locations, depending on site conditions such as groundwater depth, frequency of wind-driven rain events, foundation depth and material, and site drainage.

Table 6.2: Retrofitting roof features to be wildfire-resistant				
Feature	Description	Cost for model home	DIY	Priority Rank
Roof covering	Removal of existing wood shake roof covering and replacement with Class A roof covering. (Asphalt architectural shingles were priced for this study).	\$13,180	Not recommended	Highest
Vulnerable Roof Vents	Removal of existing vulnerable attic vents and replacement with wildfire-resistant ridge vent, including replacement of surrounding shingles. (Other types of wildfire-resistant attic vents are available but were not priced for this study.)	\$370	Not recommended	High
Gutters	Removal of vinyl gutters and replacement with new metal gutter and gutter cover device.	\$2,110	Moderate skill required	High
Metal Drip Edge	Addition of a metal drip edge where gutter attaches at roof edge.	\$750	Moderate skill required	High
Soffit	Enclosing the roof overhang with wildfire-resistant fiber cement soffit material including needed ventilation.	\$5,600	Not recommended	High
Unvented Attic	As an alternative to ridge or other attic vents. An unvented attic requires removal of insulation in attic and replacement with spray polyurethane foam, as an alternative to replacing vents. Cost varies depending on climate zone and necessary thickness of foam. Cost does not include sealing the ceiling in occupied space below attic. Can be difficult in a retrofit scenario.	\$20,650 - \$32,910	Not recommended	-

VII. EXTERIOR WALLS VULNERABILITIES, MITIGATIONS, AND COST

This chapter analyzes the vulnerabilities, mitigations, code requirements, and costs related to constructing wildfire-resistant exterior walls, including sheathing and siding, doors, and windows.

Vulnerabilities

Exterior walls and components in the wall assembly can be vulnerable if exposed to flames or prolonged exposure to radiant heat from ignited items located relatively close to a home. Combustible items include bark mulch, vegetation, or nearby structures like neighboring homes, tool sheds, and fences. Fire can ignite combustible siding and penetrate gaps or joints in the siding and/or spread vertically and laterally to impinge on other wall components such as windows and the under-eave area. Walls that extend close to the ground (or, as already discussed, close to the roof) can be vulnerable to ignition if embers accumulate at the base of the wall and ignite it or components in the wall assembly (e.g., wood-based sheathing).

Doors and windows can also be vulnerable when exposed to flames or embers. Glass in a window can break from radiant heat or flame contact exposure. When a window is broken, the combustible materials inside the home (e.g., furniture, carpeting, drapes) can be ignited. Wood and vinyl framed windows can be vulnerable, burning or melting when exposed to radiant heat or flames if siding is ignited. However, studies have shown that glass is the most vulnerable component of a window.¹ Doors (including window glass set in doors) and door frames can fail for the same reasons. Small gaps between the door and frame can also create opportunities for wind-blown embers to lodge and ignite the door framing material and potentially the weather sealing material.

Mitigation

To minimize the chance of an ignition from an ember exposure, a vertical noncombustible zone of at least 6 inches should be created between the ground and the start of the siding. Some mitigation strategies for exterior wall features are dependent on home-to-home spacing. If the exterior wall is within 30 feet of neighboring homes, a noncombustible or ignition-resistant material should be used for the siding. In some cases, additional sheathing can provide added protection by enhancing the fire resistance of the wall.

Research has consistently shown that glass is the most vulnerable component of window failure during a fire. Multi-pane tempered glass windows should be used to reduce the likelihood of a window breaking when exposed to radiant heat. Vinyl frames are more susceptible to damage from radiant heat than other frame types. The horizontal interlock member in a vinyl-framed single- or



Figure 7.1. This window frame was exposed to radiant heat. The metal-reinforced member (in the back) did not deform when exposed during the exposure interval. The member without the metal reinforcement deflected downward, allowing insulated glass unit to fall out (without initial glass breakage), exposing the interior of the home. Photo: IBHS.

double-hung window can be vulnerable to radiant heat or direct flame contact if a metal reinforcement member isn't included (Figure 7.1). Aluminum or other metal window screens can help protect against ember entry if the glass breaks or if a window is inadvertently left open. When home-to-home spacing is less than 30 feet, metal shutters can provide added protection from embers, airborne debris, and radiant heat exposures.

Weather stripping around pedestrian and vehicle access doors can reduce the ability of embers to pass through openings between door and jamb but can also be vulnerable if embers accumulate against it and cause it to ignite or melt. The location of weather stripping on outswing doors is more vulnerable than inswing doors. Weather stripping containing fire retardants can reduce the vulnerability of this component.

Regardless of home spacing, mitigation strategies for exterior walls include creation and maintenance of an effective defensible space to reduce the chance of extended radiant heat or flame contact exposure to the siding, including a 0-5-foot noncombustible zone. This strategy is further discussed in a subsequent section.

Treatment in Codes

Code requirements for siding include specifying a noncombustible or ignition-resistant material. A specific kind of gypsum board can be used as an additional sheathing material that will improve the fire resistance of the exterior wall. This type of construction improves the ability of the wall assembly to resist the passage of fire from one side of the wall to the other. Care should be exercised when taking this approach as this is typically taken when a more vulnerable combustible material is used as the siding material. When using this option, siding materials with demonstrated lower flame spread should be used. This option will be problematic since a more vulnerable combustible material will most likely exhibit a higher flame spread.

Code requirements for the exterior wall also include multi-pane tempered glass windows and fire-resistant doors. Codes are typically silent on window frame material, meaning any framing material can be used.

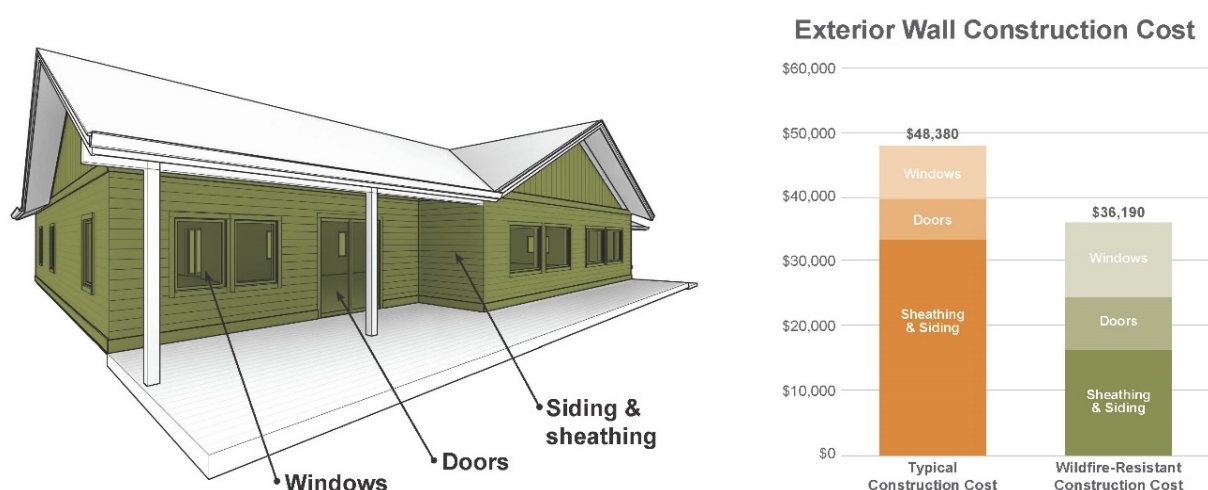
New Construction Comparison

Wildfire-resistant exterior wall features are approximately 75% of the cost of typical features, creating a \$12,190 savings for this model home (Figure 7.2). These savings result primarily from using a fiber cement lap siding in the wildfire-resistant home, which is nearly one-third the cost of the typical cedar lap siding product. Some homeowners may have a preference to the aesthetics of wood siding over fiber cement siding. However, many fiber cement options on the market today mimic the look and texture of natural wood, as did the fiber cement product priced for this study. Alternative siding costs were also examined, including stucco (a 28% savings over cedar lap siding) and fire-retardant-treated cedar lap siding (a 20% additional cost to cedar lap siding). The wildfire-resistant home also uses wildfire-resistant sheathing (CDX plywood instead of typical Oriented Strand Board), which exceeds the requirements in the International WUI Code (IWUIC).

Fire-resistant doors cost 28-37% more, or an increase of \$1,640 to \$2,220, in the model home. The bulk of this cost comes from replacing vinyl-framed deck sliding doors with steel-framed doors. A cost savings was realized from replacing the vinyl garage door with steel. IWUIC is silent on garage doors, so this modification exceeds IWUIC. A range of different front and side door options were also priced, including steel fire doors and fiberglass doors.

Windows cost approximately 36% more, increasing the model home by \$3,060. Most of this increase is from using tempered glass in the windows, which increased their cost by an estimated 25%. This cost may be less for standard-sized windows or more for odd-sized windows, and may be less in markets where tempering is in higher demand or required by code. Tempered glass is specified as a requirement in IWUIC.

Figure 7.2. Exterior walls subcomponents and new construction cost.



Retrofit Analysis

To address the vulnerability of existing exterior walls to wildfire, several important components can be updated in pieces or in whole. Retrofitting the exterior walls of the model home (including doors and windows) to be wildfire-resistant cost \$40,750—more than the cost of new wildfire-resistant construction. Removing all siding and assembly, including vapor barrier and sheathing, and replacing with wildfire-resistant materials varies in cost depending on the type of siding to be removed.

In some situations, not all siding would need to be retrofitted to be wildfire-resistant. The prioritization of retrofitting many exterior wall features is dependent on home-to-home separation and home siting. If home spacing is more than 30 feet and good defensible space is established—including incorporation of the noncombustible near-home landscaping zone—the siding material and underlayment is less of a priority. However, if neighboring homes are closer together, if a home is near a slope, or if a side of the home faces the primary wind direction, noncombustible siding and multi-pane tempered glass windows become more important. Although not included in this cost analysis, metal shutters can provide improved protection from flames and extended radiant heat exposures, especially when neighboring homes are closely spaced, and are a viable alternative to replacing windows.

Co-Benefits and Efficiencies

Energy Efficiency

Heat gain and loss from windows account for 25-30% of residential heating and cooling energy use. Replacing old windows in an existing home with better insulated, multi-pane windows can significantly decrease energy usage. Tempered glass is also safer because it is approximately four times more resistant to heat (compared to annealed glass) and does not form sharp shards when it breaks, but rather breaks into smaller chunks.

Lifespan and Maintenance

In addition to costing considerably less than cedar siding, fiber cement siding can have a longer lifespan and requires less maintenance.

¹ Bowditch, P.A., A.J. Sargeant, J. E. Leonard, and L. Macindoe. 2006. Window and glazing exposure to laboratory-simulated brushfires. Brushfire CRC. East Melbourne, Australia.
<http://www.bushfirecrc.com/publications/citation/bf-1263>

Table 7.1: Exterior Walls New Construction						
Feature		Typical	Wildfire-Resistant	Cost Diff.	Percent Diff.	Notes
Walls	Sheathing	Oriented strand board	CDX Plywood	370	10%	
	Siding	Cedar clapboard siding	Fiber cement lap siding (woodgrain texture for aesthetics)	-17,570	-59%	
			Alternative: Stucco	-8,520	-28%	A
			Alternative: Fire retardant treated cedar horizontal lap siding	5,940	20%	A, B
	Walls Subtotal			-\$17,200 - 6,310	-51% - 19%	
Doors	Front door	Birch solid core	Birch solid core	0	0	
			Steel fire door	330	144%	A, C
			Fiberglass	370	162%	A
	Side door (garage)	Steel insulated	Steel insulated	0	0%	
			Steel fire door	-210	-27%	A
			Fiberglass	-170	-22%	A
	Sliding door (deck)	Vinyl	Aluminum	1,870	94%	B
	Garage Door	Fiberglass	Steel	-490	-17%	
	Weather stripping	Vinyl threshold weather stripping and door sweeps	Silicone, fire-rated weather stripping and aluminum door sweep	100	86%	B
	Garage door bottom	Rubber	Aluminum and neoprene	460	293%	B
Doors Subtotal			\$1,730 - 2,310	28% - 37%		
Windows	Windows	Vinyl frames; dual-pane insulated glass; no screens	Metal-clad wood frames; dual-pane tempered glass; aluminum screens	3,060	36%	B, D
	Windows Subtotal			3,060	36%	
TOTAL				-\$12,410 - 11,680	-26% - 24%	

Download detailed data tables at: <https://headwaterseconomics.org/wildfire/homes-risk/building-costs-codes-appendix>.

Notes

A. Denotes an alternative to another material; a home would not utilize all materials listed. Totals columns account for range depending on which alternative is selected.

B. Materials priced from manufacturer, online retailer, or local distributor. Labor priced from RS Means.

C. Steel fire doors have weather stripping integrated, so cost of weather stripping would be eliminated.

D. Based on pricing from manufacturer, we added 25% to all window cost for tempered glass. We also added 2% for aluminum screens.

Table 7.2: Retrofitting exterior wall features to be wildfire-resistant				
Feature	Description	Cost for model home	DIY	Priority Rank
Siding	Removing existing siding and replacing with fiber-cement. Siding demolition cost varies depending on type to be removed. Siding replacement can also be prioritized in only the most vulnerable locations (e.g., only at roof-to-wall junctions)	\$15,240	Not recommended	High if home-to-home spacing is less than 30 feet
Sheathing and Vapor Barrier	Removing existing vapor barrier and sheathing and replacing with wildfire-resistant materials, as an add-on when replacing siding.	\$5,340	Not recommended	High if home-to-home spacing is less than 30 feet
Doors	Replacing all doors and weather-stripping with wildfire-resistant materials.	\$8,120	Moderate skill required	Moderate priority
Windows	Removing existing windows and replacing with windows with tempered glass. Price varies significantly depending on type of frame to be removed and window sizes. Window demolition cost varies depending on frame type. Cost of new tempered glass window is approximately +25% cost of standard glass.	\$12,050	Not recommended	Higher if home-to-home spacing is less than 30 feet or if defensible space is not established

VIII. DECK VULNERABILITIES, MITIGATIONS, AND COST

This chapter analyzes the vulnerabilities, mitigations, code requirements, and costs related to constructing a wildfire-resistant deck, including the decking (i.e., walking surface), the framing, and the fascia.

Vulnerabilities

Attached decks are a vulnerable component to a home because a burning deck could result in an extended radiant heat exposure to the side of the house. A burning deck could also result in a flame contact exposure to the home. Even if the home has noncombustible siding, the glass in access doors could be vulnerable to breakage, resulting in fire being able to enter the home.

Although metal deck boards are available, most deck board products are combustible (including wood and plastic composite boards). Decks with a noncombustible walking surface, such as light-weight concrete or a flagstone product, are available, but these decks are typically more expensive. Regardless of the walking surface, decks are typically supported by solid wood joists, beams, and columns that have been treated with a preservative to reduce the effects of moisture. Because dual treatments for fire and water are not available, preservative-treated wood members are more commonly used because of the more likely water-related degradation of decks and decking (e.g., from rain or snow).

Decks are vulnerable to wildfire if they are susceptible to ignition from wind-blown embers (firebrands) or from flames impinging from the underside of the deck. A flame contact exposure from the underside of the deck could result from ember-ignited debris or combustible materials stored under the deck or from burning vegetation located downslope from the deck.

Mitigation

When considering ways to make any component better able to resist wildfire exposures, the combination of managing vegetation and the use of wildfire-resistant materials and design features should always be considered. In the case of decks, vegetation management should include location of other combustible materials on the property. To minimize the potential for a flame contact exposure to the underside of the deck, the near-home noncombustible zone should extend under the entire footprint of any attached deck. When a home is located on a slope and an attached deck extends out over that slope, vegetation should be selected, located, and maintained in such a way as to reduce the opportunity for fire to impinge on the underside of the deck.

Regardless of the actions taken to minimize the opportunity for flames to contact the deck, when threatened by a wildfire, it will have to resist ignition from wind-blown embers. Higher-density deck board products, including plastic composites and the tropical hardwood products such as Ipe, are much more resistant to ignition from embers than the lower-density softwood deck board products (such as redwood and cedar) that are more commonly used. Fire-retardant treated (FRT) wood products are also more resistant to ignition from embers.

Deck enclosure is sometimes recommended to reduce the vulnerability of decks to wildfire. Whereas deck enclosure could protect the underside of a deck from a flaming exposure, caution should be used with certain enclosure techniques that can result in water-related degradation of the deck (e.g., fungal decay and insect damage). Such enclosure techniques restrict the ability of wet deck boards and framing members to dry out. They can also result in corroded fasteners.

When using combustible decking products, use of a foil-faced bitumen product, applied to the top surface of the support joists, has been shown to reduce the vulnerability of combustible decking products, particularly the non-fire-retardant treated medium-density solid wood products such as redwood and cedar (Figure 8.1). The foil-faced tape will result in deck boards self-extinguishing before the fire propagates far from the support joists if the deck boards are ignited by embers. The tape should extend about halfway down the side of the joist.



Figure 8.1. Placing foil-faced tape on the top and sides of a deck joist has been shown to reduce vulnerability of deck boards, especially combustible products like cedar or redwood. Photo: IBHS.

Other mitigation strategies for decks include increasing the gap between deck boards (e.g., from 1/8-inch to 1/4-inch) and increasing between-joist spacing from 16-inch on-center to 24-inch on-center. Structural and safety requirements should be confirmed before changing deck board or joist spacing.

Treatment in Codes

The three wildfire reference documents—the IWIUC, NFPA 1144, and California’s Chapter 7A—all have provisions that address the deck. All three focus on the walking surface of the deck, but there are differences in what is permitted by each document.

IWIUC and NFPA 1144 don’t allow for the use of non-fire-retardant treated wood. The only nominally combustible decking products that are allowed are those that qualify as “ignition resistant material.” Currently none of the commercially available plastic composite products comply with this requirement, so technically no non-fire-retardant-treated wood or plastic composite deck board products could be used. Both documents have a provision that allows for a fire-rated assembly to be used (this is referred to as a “one-hour fire rated assembly”) (Figure 8.2). When using deck boards this type of construction would likely make the deck more vulnerable to moisture-related degradation. This leaves few deck options that comply with IWIUC and NFPA 1144.

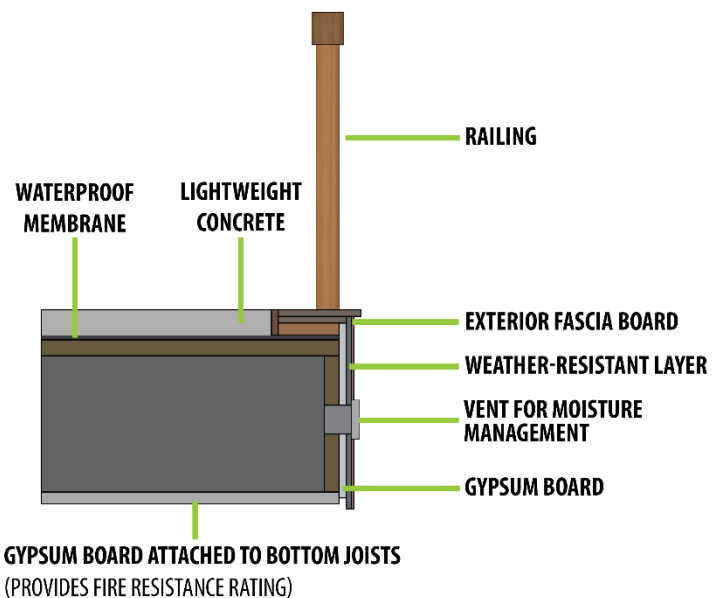


Figure 8.2. One-hour fire rated assembly for a deck.

When using deck boards this type of construction would likely make the deck more vulnerable to moisture-related degradation. This leaves few deck options that comply with IWIUC and NFPA 1144.

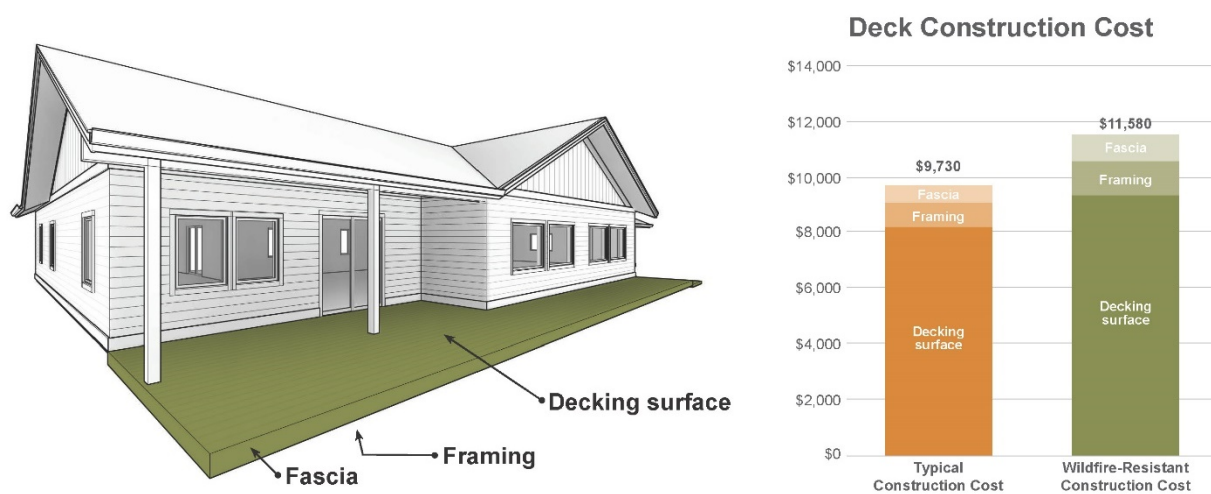
California's Chapter 7A allows for the use of decking products that can pass a performance-based under-deck flame impingement test. Unlike the ICC IWUI Code and NFPA 1144, non-fire-retardant-treated wood and several plastic composite deck board products can comply with the standard test method and are therefore permitted under California's Chapter 7A.

This approach has been controversial. Recent research has demonstrated that some non-fire retardant treated solid wood decking products are more easily ignited by wind-blown embers.¹ Use of foil-faced tape can reduce the vulnerability of these products. Some plastic composite products can be more vulnerable to a flame impingement exposure. To minimize the vulnerability of all combustible decking products, the noncombustible zone must include the entire footprint of the deck.

New Construction Comparison

The cost of a wildfire-resistant deck was 19 to 43% more than the typical deck, increasing the cost by \$1,860 to \$6,060 for the model home (Figure 8.3). This deck would not be compliant with IWUIC or NFPA 1144, but would be compliant with California Chapter 7A.

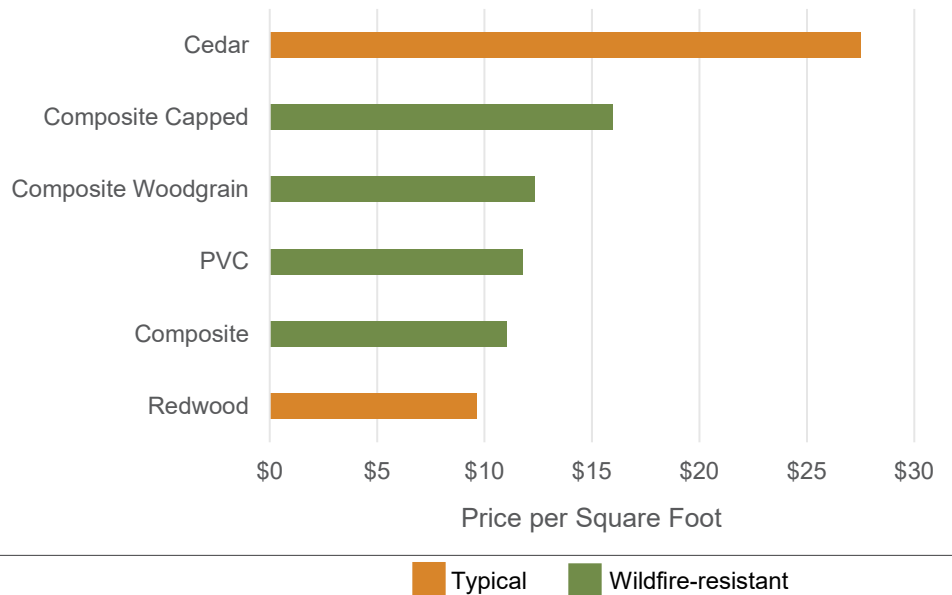
Figure 8.3. Deck subcomponents and new construction cost.



The majority of this price increase resulted from the deck boards. We compared costs of several options for both the typical and wildfire-resistant models and found that prices varied significantly for typical materials, ranging from approximately \$10 per square foot for redwood to \$28 per square foot for cedar, whereas wildfire-resistant materials all fell into the range of \$11 to \$16 per square foot (Figure 8.4).

Moderate price increases were realized from modifications to the deck framing and fascia. Rough-sawn cedar columns visible on the deck were given fire-retardant treatment and foil-faced tape was added to the tops and sides of joists to reduce the likelihood of fire propagating from the anticipated ember exposure. The fascia board was also changed from rough-sawn cedar to fire-retardant-treated redwood.

Figure 8.4. Cost of decking boards per square foot. Orange bars are baseline, non-wildfire-resistant; green bars are more wildfire-resistant. (Wildfire-resistance, in this case, is primarily related to resistance to ember ignition.)



Even the wildfire-resistant (ember-ignition resistant) materials priced here—polyethylene (PE) and PVC composite deck boards—are combustible and would currently only comply with California Chapter 7A—not with IWUIC or NFPA 1144. Prices for materials compliant with IWUIC and NFPA 1144 were difficult to find in the Montana market. Fire-retardant treated (FRT) wood is the most common option that would comply. Some estimates suggest a 20-25% cost increase for treatment, which would put the cost at a similar range to some composite options. However, availability and shipping of FRT deck boards may be challenging in remote, rural markets.

Testing shows that many products are not highly combustible in isolation. Deck fires become large when other fuel sources contribute, such as pine needles that accumulate on deck surfaces and in gaps between deck boards, combustible material stored under or on top of the deck, and decks overhanging slopes with combustible vegetation. Avoiding storage of combustibles under the deck and ongoing maintenance of defensible space are key to deck ignition-resistance.

Solid-surface decks provide an alternative to standard decking boards. These options can provide a noncombustible walking surface. Structural integrity and engineering requirements for sub-framing of a heavier, solid-surface deck are highly dependent on site conditions and local building codes, so they were not priced for this study.

Co-Benefits and Efficiencies

Lifespan and Maintenance

Plastic composite deck boards are reported to require less maintenance than wood deck boards, which can require regular cleaning and refinishing. Some of the composite decking products are resistant to fading and stains, and because of the plastic content are typically more resistant to rot, mold, and insect-related degradation. Some brands come with 25-plus year warranties and are made from recycled plastic and wood.

Regardless of decking materials used, ongoing maintenance of the deck is required. Regularly removing vegetation underneath the deck, as well as from between deck board gaps, is critical. In advance of an approaching wildfire, it is also important to remove furniture and other combustible materials from the surface of the deck.

Table 8.1: Decking New Construction					
Feature	Baseline	Wildfire-Resistant	Cost Diff.	Percent Diff.	Notes
Decking Surface	Redwood decking	Composite (non-capped, non-woodgrain)	1,200	15%	
		Alternative: PVC	1,820	22%	A
		Alternative: Composite Woodgrain	2,310	28%	A
		Alternative: Composite Capped	5,410	66%	A
		Decking Surface Subtotal		\$1,200 - 5,410	15% - 66%
Framing	Preservative - treated lumber	Preservative-treated lumber	0	0%	
	Cedar rough sawn columns (visible on porch)	Exterior fire-retardant treated cedar rough sawn columns	50	19%	B
	(none)	Foil-faced tape for joist top and sides	250		B
	Framing Subtotal		\$300	32%	
	Fascia	Cedar rough sawn band board	Fire-retardant treated redwood band boards	350	59%
Fascia Subtotal		\$350	59%		
Total			\$1,850 - 6,060	19% - 62%	

Download detailed data tables at: <https://headwaterseconomics.org/wildfire/homes-risk/building-costs-codes-appendix>.

Notes

A. Denotes an alternative to another material; a home would not utilize all materials listed. Totals columns account for range depending on which alternative is selected.

B. Materials priced from manufacturer, online retailer, or local distributor. Labor priced from RS Means.

¹ Quarles, S. L. and C. D. Standohar-Alfano. 2017. Ignition potential of decks subject to an ember exposure. Insurance Institute for Business & Home Safety. http://disastersafety.org/wp-content/uploads/2017/10/Deck-Ember-Testing-Report-2017_IBHS.pdf

IX. NEAR-HOME LANDSCAPING VULNERABILITIES, MITIGATIONS, AND COST

This chapter analyzes the vulnerabilities, mitigations, code requirements, and costs related to developing wildfire-resistant near-home landscaping. For the purposes of this study, the near-home landscaping component includes the mulch and landscape fabric in a 5-foot zone immediately around the home, as well as under all attached decks.

Vulnerabilities

Landscaping makes the home vulnerable when, if ignited, it allows fire to burn to the home. Ignition of near-home mulch from ember exposure will allow flames to touch the home, regardless of how well defensible space has been planned and maintained.

Mitigation

Mitigation strategies include selection, placement, and maintenance of vegetation that reduces the chance fire can burn directly to the home. Professionals usually discuss this process by dividing the property into two to three zones where vegetation and other combustible materials are managed in such a way as to reduce the chance that fires can burn to the home. The incorporation of a near-home zone (typically specified as 5 feet wide, extending out from the building), where all combustible materials are removed (e.g., bark mulch, combustible vegetation, and stored materials like firewood) can minimize the opportunity of ignition.

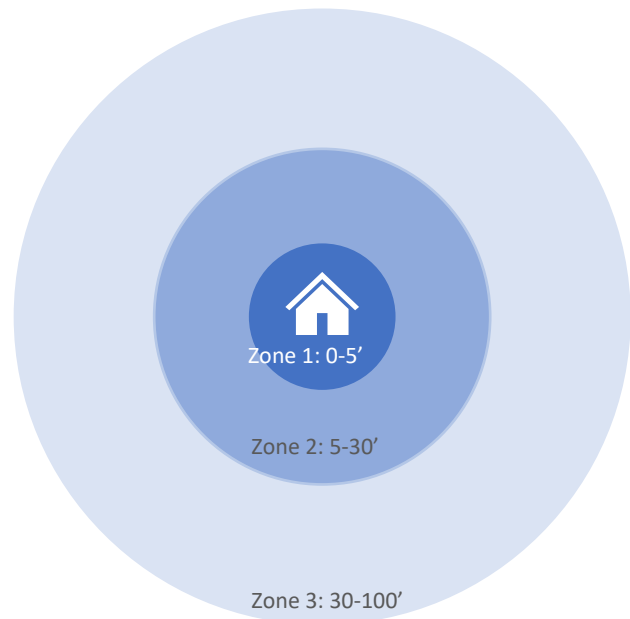


Figure 9.1. Landscaping zones for wildfire-prone areas. All codes lump Zones 1 and 2 into a single description, neglecting to emphasize the importance of the 0-5' near-home landscaping area.

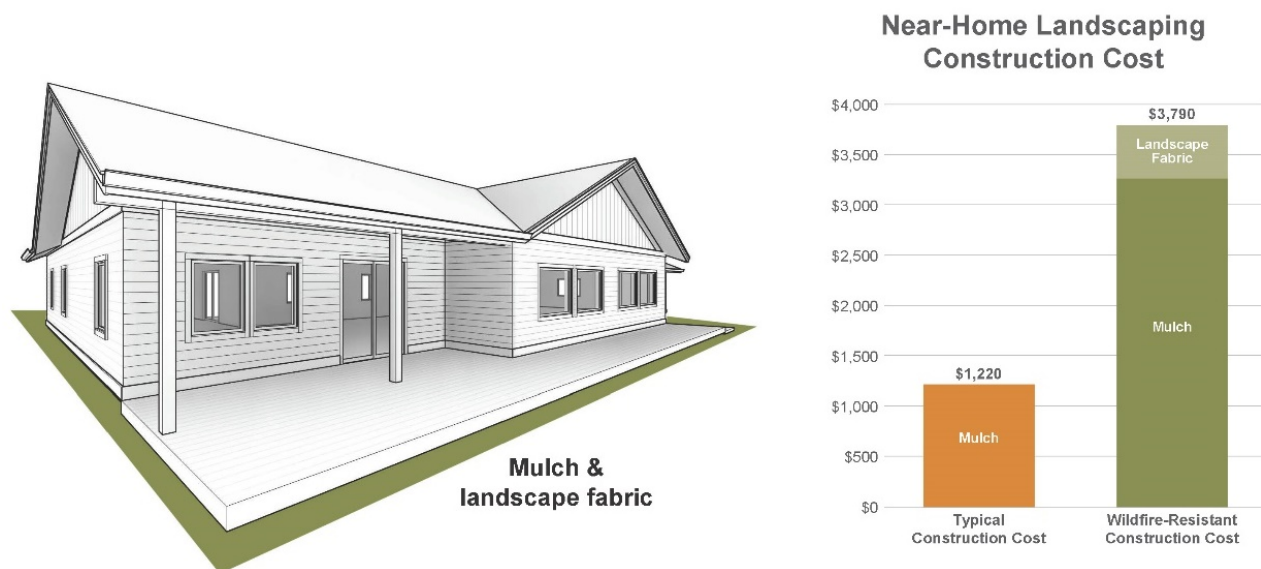
Treatment in Codes

Codes specify development and maintenance of two zones, the first zone being from the edge of the home to 30 feet from the home and the second in the 30- to 100-foot area. It is common for “or to the property line” to be included in the text. None of the major codes require the 0- to 5-foot noncombustible zone (Figure 9.1).

New Construction Comparison

To make the model home wildfire-resistant, bark mulch was replaced with pea gravel. Weed and erosion control fabric was added in a 5-foot zone around the home and in the spaces under the deck. This resulted in a 210% cost increase over the typical materials, or an increase of \$2,570 (Figure 9.2).

Figure 9.2. Near-home landscaping subcomponents and new construction cost.



Co-Benefits and Efficiencies

Lifespan and Maintenance

Compared to organic mulch, pea gravel has a much longer lifespan and requires little to no maintenance, whereas organic mulch will need to be replenished annually as it decomposes. However, organic mulch can be more efficient at maintaining soil temperatures and absorbing water. In drier climates or for xeriscaping, pea gravel can promote healthy soil drainage and prevent unwanted vegetation.

Table 9.1: Landscaping New Construction					
Feature	Typical	Wildfire-Resistant	Cost Diff.	Percent Diff.	Notes
Mulch	Bark mulch	Pea gravel	2,030	166%	
Landscape fabric	(none)	Polypropylene mesh erosion control fabric	540	-	A
TOTAL			\$2,570	210%	

Download detailed data tables at: <https://headwaterseconomics.org/wildfire/homes-risk/building-costs-codes-appendix>.

Notes

A. Includes fabric under the deck.

X. CONCLUSION

Wildfire-Resistant Building Codes and Standards Add Minimal Cost to Homeowners and Builders

Converging trends of hotter, longer, more severe fire seasons and growth in the wildland-urban interface put more people and communities at risk to wildfire disasters. Laboratory research and evidence from post-fire assessments have demonstrated that local ignitability of the home itself and the nearby landscaping are major factors determining home survivability in a wildfire. Three existing building codes and standards provide ample guidance for how to construct wildfire-resistant homes. Such regulations can reduce wildfire loss, and more communities are considering their implementation.

City, county, and state governments must weigh many issues when considering new regulations, but the cost of constructing to comply with wildfire-resistant building codes need not be a barrier. The results of this study demonstrate that the cost of constructing new homes to be wildfire-resistant is not substantively different than the cost of typical construction. Retrofitting existing homes can have substantial costs, but components can be prioritized based on neighborhood and landscape context. Other factors, such as material availability and builder knowledge of wildfire-resistant construction techniques may vary from region to region. For example, IWUIC-compliant decking options were difficult to locate in Montana. However, communities can customize portions of the model codes and standards to address such regional variability. As wildfire-resistant construction becomes more common and in higher demand in wildfire-prone landscapes, these limitations are likely to decrease.

Beyond protecting individual homes, wildfire-related building codes and standards are likely to have many long-term benefits to communities. Reducing wildfire losses can lessen the long-term and profound consequences and disruption borne at the local level following disasters, such as lost business and property tax revenue, physical and mental health impacts, and damage to public infrastructure. Constructing homes to modern wildfire-resistant standards delivers additional benefits to homeowners and the environment, as many components are more sustainable, require reduced maintenance, and provide added energy efficiency.

Key Mitigations Can Be Implemented by Any Builder or Homeowner

Regardless of whether it is required by code within a jurisdiction, individual builders and homeowners can act to mitigate wildfire vulnerabilities with little added cost. Home survival in wildfire-prone areas depends on effective implementation of a coupled approach where 1) vegetation (and other combustible materials) on the property is wisely selected, located, and maintained; and 2) materials and design features of the home are selected that will reduce vulnerability to anticipated wildfire exposures. Homes threatened by wildfires will always be subjected to wind-blown embers. Therefore, all homes in wildfire-prone areas should include design details that minimize vulnerability to embers. The likelihood of a long-term radiant heat or flame contact exposure will be less likely on properties that have developed and continue to maintain an effective defensible space in terms of selection, location, and maintenance of vegetation and other combustible materials on the property.

Roof

The roof—with a large surface area and potential for accumulation of combustible vegetative debris—is one of the most vulnerable parts of a home. Key mitigations for the roof include:

1. Install a Class A fire-rated covering or assembly.
2. Where applicable, install bird stops at roof edge, including any ridges. An additional layer of protection can be attained if a layer of roll roofing is installed over the surface of the roof deck.
3. For complex roof designs where there are junctions between a roof and a wall (e.g., dormers), consider noncombustible siding.
4. The under-eave area should be constructed using a soffited eave design.
5. Both inlet (under-eave) and outlet (roof or gable) vents can be vulnerable to ember entry.
 - Vents should be covered with 1/8- to 1/16-inch noncombustible and corrosion-resistant screening. Vents covered with 1/16-inch screening should be cleaned regularly so that they can perform their moisture management function.
 - Ridge or off-ridge vents are less vulnerable than gable end vents.
 - Use of vents approved by the California Office of the State Fire Marshal Building Materials Listing Program, which have demonstrated a resistance to ember and flame exposures.¹

Exterior Walls

Exterior walls and windows are especially vulnerable when exposed to flames or radiant heat for extended periods, such as from vegetation or neighboring homes that have ignited. Doors and windows can also be vulnerable to wind-blown embers and flames. If there is a home or neighboring building within 30 feet, the potential for radiant heat from that structure—should it ignite—may be enough to ignite siding or break glass in windows, so additional mitigations may be necessary. Key mitigations for exterior walls include:

1. Make sure there is, at a minimum, a 6-inch noncombustible zone at the base of the wall (i.e., between the ground and start of siding).
2. Install multi-pane windows having tempered glass.
3. When vinyl windows are used, make sure single- and double-hung windows include metal reinforcement in interlock members.
4. If there is a home or neighboring building within 30 feet, use ignition-resistant or noncombustible siding and metal shutters.

Decks

Attached decks can ignite from embers landing on top of the deck and from ignited vegetation or materials underneath the deck. An ignited deck provides radiant heat exposure to the home's siding, doors, and windows. Current wildfire codes and standards are inconsistent in their recommendations for decks, but key mitigations for decks include:

1. For deck boards, use noncombustible materials, fire-retardant treated wood, or decking products that meet the requirements of an ignition-resistant material. Non-fire-retardant treated redwood and cedar are vulnerable to ignition from ember exposures. Higher density decking products (e.g., plastic composite or imported tropical hardwood decking products) are less vulnerable to ignition from ember exposures. If used, plastic composite decking products should comply with the requirements of the California Office of the State Fire Marshal Building Materials Listing Program.¹

-
2. To reduce the likelihood of sustained flaming of ignited decking, install deck boards using a 1/4-inch gap between deck boards and install a foil-faced bitumen tape product on the structural support joists.
 3. If an attached deck overhangs a steep slope, particularly with shrub or woodland vegetation that is not on the property or that cannot be maintained, use of a solid surface deck with an enclosed underside is a better option.
 4. Incorporation of a noncombustible zone under the footprint of all attached decks is critical.

Near-Home Landscaping and the Home Ignition Zone

Managing vegetation and other combustible items on the property is important for reducing the energy and potential spread of fire. Regardless of vegetation maintenance and defensible space on the larger property, combustible vegetation and mulch in the near-home, 5-foot area immediately around the home can ignite and allow flames to touch the home. Key mitigations for landscaping include:

1. Follow readily available guidance on creating an effective defensible space on your property in a radius of at least 100 feet from the home (or to the property line).
2. Create a near-home noncombustible zone within 5 feet of the home and under the entire foot print of any attached deck.
3. A noncombustible fence section should be used for 5 to 8 feet where the fence connects to the home.

¹ California Office of the State Fire Marshal Building Materials Listing Program. Available at: http://osfm.fire.ca.gov/strucfireengineer/strucfireengineer_bml





Agenda Item #b.

Agenda Item Name:

Discuss Old Water Plant Property

Presenter:

Tommy Klein, City Manager

Item Description:

Discuss Old Water Plant Property

Recommended Action:

N/A

Fiscal Impact:

N/A

Operational Impact:

None

Prior Board Motions:

None

Background Information:

In 2017, the old water plant located at 1500 Dogwood Drive was decommissioned. The plant sits on 2.14 acres in a neighborhood surrounded by single family homes.

Executive Summary:

In 2017, the old water plant located at 1500 Dogwood Drive was decommissioned. The plant sits on 2.14 acres in a neighborhood surrounded by single-family homes.

In 2022, an environmental assessment of the property was ordered to determine our eligibility for a Brownfield Grant to raze the structures on the parcel. The assessment determined that the plant was not a significant environmental problem - not eligible for the grant. There are likely ceiling and floor tiles that contain asbestos.

The City needs to remove the buildings from the parcel because they are unsightly. Staff seeks direction on the disposition of the property.

Suggestions:

Sell the property as-is with the stipulation that the structures be removed

Remove the buildings at our cost and sell the property

Use the parcel for single-family, attainable housing.
the buyer raze the structures

Transfer the property with the condition that

Transfer the property after the lot is cleared to a builder.

The parcels to the north of the plant are approximately 0.2 acres.

Notification Requirements:

None

Prepared By:

Tommy Klein, City Manager

Attachments:

1. Old Water Plant
2. Plant 1
3. Plant 2
4. Plant 3
5. GarCo Map

Old Water Plant



Summary

- 2.14 Acres
- Surrounded by single family homes
- Desirable neighborhood
- Site is abandoned
- Properties to north - .20 acers

Proposals

- Sell the property as is
- Pay for removal of the building and sell
- Sell the property for attainable housing – single family
 - We obtain grants
 - Leave funding to organization









RIFLE R363278
CITY OF 217710302017



Agenda Item #5.a.

Agenda Item Name:

Consider Minutes of the April 20, 2022, Regular Meeting

Presenter:

Misty Williams, City Clerk

Item Description:

Consider Minutes of the April 20, 2022, Regular Meeting

Recommended Action:

Move to approve the minutes of the April 20, 2022, City Council Regular Meeting

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

Minutes of the April 20, 2022, Regular Meeting

Notification Requirements:

N/A

Prepared By:

Alexis Ramirez, Deputy City Clerk

Attachments:

1. 04.20.2022 DRAFT Minutes



RIFLE CITY COUNCIL

REGULAR MEETING

April 20, 2022

7:00 p.m.

202 Railroad Avenue, Rifle, CO

CALL TO ORDER & ROLL CALL

A regular meeting of the Rifle City Council was called to order at 7:00 p.m. by Mayor Ed Green.

Present at Roll Call:

Mayor Ed Green, Councilor Clint Hostettler, Councilor Alicia Gresley, Councilor Chris Bornholdt, Councilor Sean Strode and Councilor Brian Condie.

Councilor Sean Strode motioned to excuse Councilor Joe Carpenter; seconded by Councilor Clint Hostettler.

Roll Call: Yes - Clint Hostettler, Alicia Gresley, Chris Bornholdt, Sean Strode, Brian Condie and Ed Green. No - None.

Others Present:

City Manager Tommy Klein, City Clerk Misty Williams, City Attorney Jim Neu, Lieutenant Mike Kuper, Rifle Community Television (RCTV) Michael Churchill, Parks and Recreation Director Tom Whitmore, Planning Director Patrick Waller, Finance Director Michelle Duran, Alicia Miller, Eric Marburger, John Savage, Harold Martinez, Terry Paul, Hans Lutgring, and Debbie Wilde.

PUBLIC COMMENT

Comment was heard from Harold Martinez.

CONSENT AGENDA – CONSIDER APPROVING THE FOLLOWING ITEMS:

- A. Consider Minutes of the April 6, 2022, Regular Meeting
- B. Consider Request to Rezone the Farm Development from LDR-PUD, MDR-PUD, CS-PUD and PZ-PUD to Developing Resources – Ordinance No. 4, Series of 2022 – 2nd Reading.
- C. Consider Final Plan and Rezoning Request for North Pastures Filing 7
 - i. Consider Request to Rezone a Portion of North Pastures Filing 7 from Community Service to Medium Density Residential – Ordinance No. 5, Series of 2022 – 2nd Reading
 - ii. Consider Request for Final Approval for North Pastures Filing 7 – Ordinance No. 6 Series of 2022 – 2nd Reading and Subdivision Improvements Agreement

Councilor Clint Hostettler moved to approve Consent Agenda Items A, B, and C; seconded by Councilor Chris Bornholdt.

Roll Call: Yes - Alicia Gresley, Brian Condie, Sean Strode, Chris Bornholdt, Clint Hostettler and Ed Green. No – Alicia Gresley: Consent Agenda Item Cii

PRESENTATION

Present Draft of 2021 Financial Results

Finance Director Michelle Duran presented overview of the 4th quarter 2021 draft financial reports, including the year-to-date sales tax collected, excise tax collected, expenditures, revenues and fund balances.

PUBLIC HEARING

REGULAR AGENDA

Receive Information on Proposed Procurement Code (Purchasing Policy)

City Attorney Jim Neu provided explanation of the process of the updated Proposed Procurement Code. City Attorney Neu stated new Procurement Code would be replacing current Procurement Code that has been in place for 20 years. Phil Vaughan was hired as a consultant and completed Procurement Code. The proposed Procurement Code has an appeals process for vendors that have bid on City projects. Under this version of the code staff may use a web-based service to supplement publication of information on city projects. Definitions were clarified and modifications to format were made to produce a much improved document. Phil Vaughan was present to answer questions from Council. City Attorney Jim Neu has reviewed the final version of the document. If the code meets Council expectations, Staff recommends motion for the next item - Consider Purchasing Policy, Ordinance No. 7, Series of 2022 – 1st Reading.

Consider Purchasing Policy – Ordinance No. 7, Series of 2022 – 1st Reading

AN ORDINANCE OF THE CITY OF RIFLE, COLORADO REPEALING AND REENACTING ARTICLE III (PURCHASING) OF CHAPTER 4 (REVENUE AND FINANCE) OF THE RIFLE MUNICIPAL CODE REGARDING PURCHASING.

Councilor Clint Hostettler moved to approve the Repealing and Reenacting Article III (Purchasing) of Chapter 4 (Revenue and Finance) of the Rifle Municipal Code Regarding Purchasing – Ordinance No. 7, Series of 2022 on 1st reading and order it to be published as required by Charter; seconded by Councilor Sean Strode.

Roll Call: Yes - Sean Strode, Chris Bornholdt, Brian Condie, Clint Hostettler, Alicia Gresley and Ed Green. No - None.

Consider Expenditure for July 3rd and December 3rd Fireworks Shows

Parks and Recreation Director Tom Whitmore explained expenditure request for July 3rd and December 3rd Fireworks Shows. Fireworks shows are a huge boost to bringing people into downtown and are two of the biggest events held throughout the year within the City of Rifle. These events are coordinated in partnership with Colorado River Fire Rescue, Garfield County Fairgrounds staff, Re-2 staff, Rifle PD, City Staff, etc. The Parks and Recreation Department have contracted with J&M Display Fireworks and planned logistics for firework displays. Greater Rifle Improvement Team (GRIT) Advisory Board has committed to fund both shows in the amount of \$30,000.00. Staff recommends approval of expenditure of \$30,000.00 for July 3rd and December 3rd Fireworks Displays.

Councilor Sean Strode moved to approve expenditure of \$30,000.00 for July 3rd and December 3rd for fireworks displays; seconded by Council Alicia Gresley.

Roll Call: Yes - Ed Green, Sean Strode, Alicia Gresley, Clint Hostettler, Chris Bornholdt and Brian Condie. No – None.

Consider Increasing Rose Hill Cemetery Fees

Parks and Recreation Director Tom Whitmore explained request to consider increasing Rose Hill Cemetery Fees. Recently there has been an increasing demand for full burials, grave spaces and columbarium's with the addition of non-resident requests. Staff is currently working on reconfiguring additional burial spaces and is in the preliminary planning for possible expansion operations. In comparison to nearby cemeteries, Staff recommends a cemetery fee increase based on zip code. Adjusting all fees and increasing charges for non-81650 patrons will also increase revenue.

Council determined that further information was necessary before any decisions could be made regarding request – Information requested: Ordinance that reflects rules on 81650 patron relatives, perpetual care of non-81650 patrons and new cemetery fees comparable to area cemeteries.

Consider Funding Mind Springs' Detox Center

Consultant Debbie Wilde and Glenwood Springs Outpatient Program Director Hans Lutgring presented request to consider funding the Community Withdrawal Center operated by Mind Springs' (Social Setting Withdrawal Management) SWIM Center. The Community Withdrawal Center will be a 6-bed facility in Glenwood Springs at 2802 S. Grand Avenue. Mind Springs has purchased the building and will provide services to residents of the facility and walk-ins. Multiple meetings have taken place involving Garfield County and area Municipalities about funding the Detox Center. Staff recommends using a portion of the excise tax, determined by Council, to fund Mind Springs's SWIM Center in 2023 with the addition to utilize Rifle's Opioid Settlement Funds in the amount of \$1,888.00 each year for the same purpose.

Consultant Debbie Wilde answered questions from Council.

Councilor Clint Hostettler moved to approve funding in 2023 for Mind Springs (Social Setting Withdrawal Management) SWIM Center in the total amount of \$40,000.00 from the general fund that will also include Rifle's opioid settlement funds in the amount of \$1,888.00 each year pending the appropriation of funds; seconded by Councilor Alicia Gresley.

Roll Call: Yes - Alicia Gresley, Chris Bornholdt, Clint Hostettler, Ed Green and Brian Condie.

Recused – Sean Strode.

Consider Approving the Sale of City Property Formally Occupied by the Rifle Animal Shelter – Ordinance No. 8, Series of 2022 – 1st Reading

Attorney Jim Neu presented request to approve the sale of city property formally occupied by the Rifle Animal Shelter – Ordinance No. 8, Series of 2022 – 1st Reading. Attorney Neu stated that due to the consensus of City Staff this property is declared surplus. Resolution No. 4, Series of 2022, the City Council authorized the City Manager to take all actions necessary to sell the Property and he engaged a realtor to list the property. Section 13.2 of the Rifle Home Rule Charter requires property used for governmental purposes to only be sold or conveyed by an ordinance passed with an affirmative vote of at least five members of the City Council. The Rifle Animal Shelter was operated by a not-for-profit corporation and the property was never used for governmental purposes; however, not knowing the full history of the use of the property, staff recommends complying with Section 13.2 of the Rifle Home Rule Charter to approve the sale of the Property.

AN ORDINANCE OF THE CITY OF RIFLE, COLORADO, APPROVING THE SALE OF CITY PROPERTY FORMALLY OCCUPIED BY THE RIFLE ANIMAL SHELTER.

Councilor Sean Strode moved to approve the sale of City property formally occupied by the Rifle Animal Shelter – Ordinance No. 8, Series of 2022 on 1st Reading as presented and order it to be published as required by charter; seconded by Councilor Alicia Gresley.

Roll Call: Yes - Alicia Gresley, Ed Green, Brian Condie, Chris Bornholdt, Clint Hostettler and Sean Strode. No - None.

Report to City Manager

Reports were heard from City Manager Tommy Klein.

Comments from Mayor and Council

Comments were heard from Councilor Sean Strobe, Alicia Gresley, Councilor Clint Hostettler and Mayor Ed Green.

EXECUTIVE SESSION

Executive Session for discussion of a personnel matter under C.R.S. Section 24-6-402(4)(f) and not involving: any specific employees who have requested discussion of the matter in open session; any member of this body or any elected official; the appointment of any person to fill an office of this body or of an elected official; or personnel policies that do not require the discussion of matters personal to particular employees (City Manager Six Month Review)

Councilor Sean Strobe moved to go into Executive Session for discussion of a personnel matter under C.R.S. Section 24-6-402(4)(f) for the City Manager's Six Month Review; seconded by Councilor Clint Hostettler.

Roll Call: Yes - Sean Strobe, Brian Condie, Chris Bornholdt, Clint Hostettler, Alicia Gresley and Ed Green; No - None

Adjournment

Meeting adjourned at 8:58 p.m.

Misty Williams
City Clerk

Ed Green
Mayor



Agenda Item #5.b.

Agenda Item Name:

Consider Liquor License Renewal for Thai Chili Bistro, Inc dba Thai Chili Bistro

Presenter:

Misty Williams, City Clerk

Item Description:

Consider Liquor License Renewal for Thai Chili Bistro, Inc dba Thai Chili Bistro

Recommended Action:

Move to approve the Liquor License Renewal for Thai Chili Bistro, Inc dba Thai Chili Bistro

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

None

Background Information:

Thai Chili Bistro, Inc dba Thai Chili Bistro located at 115 East 3rd Street, Rifle, CO has submitted a Hotel & Restaurant Liquor License Renewal Application.

The application is complete and the appropriate fees have been paid.

Executive Summary:

None

Notification Requirements:

None

Prepared By:

Alexis Ramirez, Deputy City Clerk

Attachments:

1. 2022 REDACTED Liquor Renewal Application - Thai Chili

Submit to Local Licensing Authority

RECEIVED

APR 11 2022

City Clerk
 City of Rifle

**THAI CHILI BISTRO
 6082 SOUTH PARIS STREET
 Englewood CO 80111**

Fees Due	
Renewal Fee	550.00
Storage Permit \$100 X _____	\$
Sidewalk Service Area \$75.00	\$
Additional Optional Premise Hotel & Restaurant \$100 X _____	\$
Related Facility - Campus Liquor Complex \$160.00 per facility	\$
Amount Due/Paid	\$

Make check payable to: Colorado Department of Revenue. The State may convert your check to a one-time electronic banking transaction. Your bank account may be debited as early as the same day received by the State. If converted, your check will not be returned. If your check is rejected due to insufficient or uncollected funds, the Department may collect the payment amount directly from your banking account electronically.

Retail Liquor or Fermented Malt Beverage License Renewal Application

Please verify & update all information below

Return to city or county licensing authority by due date

Licensee Name THAI CHILI BISTRO INC		Doing Business As Name (DBA) THAI CHILI BISTRO		
Liquor License # 42-60302-0000	License Type Hotel & Restaurant	Sales Tax License # 42603020000	Expiration Date 05/21/2022	Due Date 04/06/2022
Business Address 115 EAST 3RD STREET Rifle CO 81650-2317				Phone Number 9706258888
Mailing Address 6082 SOUTH PARIS STREET Englewood CO 80111			Email lina.cpa@gmail.com	
Operating Manager Shi Zhong Wang	Date of Birth	Home Address	Phone Number 970-625-8888	
1. Do you have legal possession of the premises at the street address above? ☒ Yes ☐ No Are the premises owned or rented? ☐ Owned ☒ Rented* *If rented, expiration date of lease 10/1/2027				
2. Are you renewing a storage permit, additional optional premises, sidewalk service area, or related facility? If yes, please see the table in upper right hand corner and include all fees due. ☐ Yes ☒ No				
3a. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant, been found in final order of a tax agency to be delinquent in the payment of any state or local taxes, penalties, or interest related to a business? ☐ Yes ☒ No				
3b. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant failed to pay any fees or surcharges imposed pursuant to section 44-3-503, C.R.S.? ☐ Yes ☒ No				
4. Since the date of filing of the last application, has there been any change in financial interest (new notes, loans, owners, etc.) or organizational structure (addition or deletion of officers, directors, managing members or general partners)? If yes, explain in detail and attach a listing of all liquor businesses in which these new lenders, owners (other than licensed financial institutions), officers, directors, managing members, or general partners are materially interested. ☐ Yes ☒ No				
5. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been convicted of a crime? If yes, attach a detailed explanation. ☐ Yes ☒ No				
6. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been denied an alcohol beverage license, had an alcohol beverage license suspended or revoked, or had interest in any entity that had an alcohol beverage license denied, suspended or revoked? If yes, attach a detailed explanation. ☐ Yes ☒ No				
7. Does the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) have a direct or indirect interest in any other Colorado liquor license, including loans to or from any licensee or interest in a loan to any licensee? If yes, attach a detailed explanation. ☐ Yes ☒ No				

Tax Check Authorization, Waiver, and Request to Release Information

I, SHIZHONG WANG am signing this Tax Check Authorization, Waiver and Request to Release Information (hereinafter "Waiver") on behalf of Thai Chili Bistro, INC. (the "Applicant/Licensee") to permit the Colorado Department of Revenue and any other state or local taxing authority to release information and documentation that may otherwise be confidential, as provided below. If I am signing this Waiver for someone other than myself, including on behalf of a business entity, I certify that I have the authority to execute this Waiver on behalf of the Applicant/Licensee.

The Executive Director of the Colorado Department of Revenue is the State Licensing Authority, and oversees the Colorado Liquor Enforcement Division as his or her agents, clerks, and employees. The information and documentation obtained pursuant to this Waiver may be used in connection with the Applicant/Licensee's liquor license application and ongoing licensure by the state and local licensing authorities. The Colorado Liquor Code, section 44-3-101, et seq. ("Liquor Code"), and the Colorado Liquor Rules, 1 CCR 203-2 ("Liquor Rules"), require compliance with certain tax obligations, and set forth the investigative, disciplinary and licensure actions the state and local licensing authorities may take for violations of the Liquor Code and Liquor Rules, including failure to meet tax reporting and payment obligations.

The Waiver is made pursuant to section 39-21-113(4), C.R.S., and any other law, regulation, resolution or ordinance concerning the confidentiality of tax information, or any document, report or return filed in connection with state or local taxes. This Waiver shall be valid until the expiration or revocation of a license, or until both the state and local licensing authorities take final action to approve or deny any application(s) for the renewal of the license, whichever is later. Applicant/Licensee agrees to execute a new waiver for each subsequent licensing period in connection with the renewal of any license, if requested.

By signing below, Applicant/Licensee requests that the Colorado Department of Revenue and any other state or local taxing authority or agency in the possession of tax documents or information, release information and documentation to the Colorado Liquor Enforcement Division, and is duly authorized employees, to act as the Applicant's/Licensee's duly authorized representative under section 39-21-113(4), C.R.S., solely to allow the state and local licensing authorities, and their duly authorized employees, to investigate compliance with the Liquor Code and Liquor Rules. Applicant/Licensee authorizes the state and local licensing authorities, their duly authorized employees, and their legal representatives, to use the information and documentation obtained using this Waiver in any administrative or judicial action regarding the application or license.

Name (Individual/Business) <u>Thai Chili Bistro, INC</u>		Social Security Number/Tax Identification Number <u>76-2197916</u>	
Address <u>115 E 3rd St</u>			
City <u>Rifle,</u>		State <u>CO</u>	Zip <u>81650</u>
Home Phone Number		Business/Work Phone Number <u>970-625-8888</u>	
Printed name of person signing on behalf of the Applicant/Licensee <u>SHIZHONG WANG</u>			
Applicant/Licensee's Signature (Signature authorizing the disclosure of confidential tax information) <u>Shi Zhong Wang</u>			Date signed <u>X 4/11/2022</u>

Privacy Act Statement

Providing your Social Security Number is voluntary and no right, benefit or privilege provided by law will be denied as a result of refusal to disclose it. § 7 of Privacy Act, 5 USCS § 552a (note).

Affirmation & Consent

I declare under penalty of perjury in the second degree that this application and all attachments are true, correct and complete to the best of my knowledge.

Type or Print Name of Applicant/Authorized Agent of Business	Title
SHIZHONG WANG	President
Signature	Date
Shizhong wang	4/11/2022

Report & Approval of City or County Licensing Authority

The foregoing application has been examined and the premises, business conducted and character of the applicant are satisfactory, and we do hereby report that such license, if granted, will comply with the provisions of Title 44, Articles 4 and 3, C.R.S., and Liquor Rules.

Therefore this application is approved.

Local Licensing Authority For		Date
Signature	Title	Attest

Tom Regan Responsible Vendor Training

Responsible Service of Alcohol Certificate

This certificate is awarded to:

Peng Zhang

For completing the course and passing the test for:

COLORADO RESPONSIBLE SERVICE OF ALCOHOL



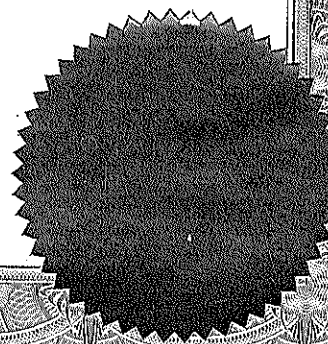
Tom Regan / Certified Instructor

July 11, 2019

Expires 3 years from above date

Score 32/40 80 %

This certificate is valid in the State of Colorado Only





Agenda Item #5.c.

Agenda Item Name:

Consider Change of Owner for Thai Chili, Bistro, Inc. dba Thai Chili Bistro

Presenter:

Misty Williams, City Clerk

Item Description:

Change of Owner for Thai Chili, Bistro, Inc. dba Thai Chili Bistro

Recommended Action:

Approve change of owner for Thai Chili, Bistro, Inc. dba Thai Chili Bistro

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

None

Background Information:

Thai Chili, Bistro, Inc. dba Thai Chili Bistro located at 115 East 3rd Street, Rifle, CO has submitted a Report of Changes (Change of Owner-Hotel and Restaurant Liquor License) application. The former owner was Bing Liu, and the new owner is Shizhong Wang.

The following criteria have been met by the applicant:

- *The application is complete
- *No fees are required with this change

I recommend approval of the Report of Changes (Change of Owner - Hotel and Restaurant) application for Thai Chili, Bistro, Inc. dba Thai Chili Bistro.

Executive Summary:

None

Notification Requirements:

None

Prepared By:

Misty Williams, City Clerk

Attachments:

1. 2022 REDACTED Report of Changes Application - Thai Chili

**Report of Changes
Corporation, Limited Liability Company
and Partnership Liquor and Fermented
Malt Beverage Licenses**

RECEIVED

APR 11 2022

City Clerk
City of Rifle

☐ LLC/Partnership

☒ Corporation See Instructions and Fee Schedule on Page 2

1. Corporate/LLC Partnership Name Thai Chili Bistro, Inc.		2. State Tax Account Number 42603020000		3. State Liquor License Number 42-60302-0000	
4. Trade Name Thai Chili Bistro, Inc.				5. Telephone Number (970) 625-8888	
6. Address of Licensed Premises 115 East 3rd Street		City Rifle	State CO	ZIP 81650	
7. Mailing Address if different than above 6082 South Paris St		City Englewood	State CO	ZIP 80111	
8. LIST ALL officers, directors (corporation) or Managing Members (LLC) or General Partner(s). Each officer, Director, Managing Member or Partner MUST FILL OUT a DR 8404-I (Individual History Record).					
Position Held	Names	Home Address	DOB	Replaces	
President	Shizhong Wang			Bing Liu	
Secretary	Shizhong Wang			Bing Liu	
9. LIST ALL 10% (or more) Stockholders or 10% (or more) Members or 10% (or more) Limited Partners. Each person listed Must Fill out a DR 8404-I (Individual History Record)					
Stockholders/Members/Partners owning 10% (or more) of business	% Owned	Home Address	DOB	Replaces	
Shixhong Wang	100			Bing Liu	
10. Registered Agent			Address For Service		
Oath of Application I declare under penalty of perjury in the second degree that this application and all attachments are true, correct, and complete to the best of my knowledge.					
11. Authorized Signature <i>Shizhong Wang</i>		Title President		Date 04/05/22	
Report of Local Licensing Authority The foregoing changes have been received and examined by the Local Licensing Authority.					
12. Local Licensing Authority For				☐ County ☐ Town/City	
Signature		Title		Date	
Attest				Date	
Do Not Write In This Space – For Department of Revenue Use Only					
Liability Information					
License Account Number	Period	Cash Fund	Total		

Individual History Record

To be completed by the following persons, as applicable: sole proprietors; general partners regardless of percentage ownership, and limited partners owning 10% or more of the partnership; all principal officers of a corporation, all directors of a corporation, and any stockholder of a corporation owning 10% or more of the outstanding stock; managing members or officers of a limited liability company, and members owning 10% or more of the company; and any intended registered manager of Hotel and Restaurant, Tavern and Lodging and Entertainment class of retail license

Notice: This individual history record requires information that is necessary for the licensing investigation or inquiry. All questions must be answered in their entirety or the license application may be delayed or denied. If a question is not applicable, please indicate so by "N/A". **Any deliberate misrepresentation or material omission may jeopardize the license application.** (Please attach a separate sheet if necessary to enable you to answer questions completely)

1. Name of Business Thai ChiliBistro, Inc	Home Phone Number na	Cellular Number na
2. Your Full Name (last, first, middle) Wang, Shizhong	3. List any other names you have used	
4. Mailing address (if different from residence)	Email Address ct.aaron@hotmail.com	

5. List current residence address. Include any previous addresses within the last five years. (Attach separate sheet if necessary)			
Street and Number	City, State, Zip	From	To
Current 40600 Cactus Valley Rd	Hemet, CA 92544	03/01/18	03/31/22
Previous 8481 Weus St	Rosemead, CA 91770	03/01/17	01/18/93

6. List all employment within the last five years. Include any self-employment. (Attach separate sheet if necessary)				
Name of Employer or Business	Address (Street, Number, City, State, Zip)	Position Held	From	To
Huasheng Farm	40600 Cactus Valley Rd, Hemet, CA 92544	owner	03/01/18	03/31/22

7. List the name(s) of relatives working in or holding a financial interest in the Colorado alcohol beverage industry.			
Name of Relative	Relationship to You	Position Held	Name of Licensee
na			

8. Have you ever applied for, held, or had an interest in a Colorado Liquor or Beer License, or loaned money, furniture, fixtures, equipment or inventory to any licensee? (If yes, answer in detail.)	☐ Yes ☒ No

9. Have you ever received a violation notice, suspension, or revocation for a liquor law violation, or have you applied for or been denied a liquor or beer license anywhere in the United States? (If yes, explain in detail.)	☐ Yes ☒ No

10. Have you ever been convicted of a crime or received a suspended sentence, deferred sentence, or forfeited bail for any offense in criminal or military court or do you have any charges pending? (If yes, explain in detail.) ☐ Yes ☒ No

11. Are you currently under probation (supervised or unsupervised), parole, or completing the requirements of a deferred sentence? (If yes, explain in detail.) ☐ Yes ☒ No

12. Have you ever had any professional license suspended, revoked, or denied? (If yes, explain in detail.) ☐ Yes ☒ No

Personal and Financial Information

Unless otherwise provided by law, the personal information required in question #13 will be treated as confidential. The personal information required in question #13 is solely for identification purposes.

13a. Date of Birth		b. Social Security Number		c. Place of Birth		d. U.S. Citizen ☐ Yes ☒ No	
e. If Naturalized, state where				f. When		g. Name of District Court	
h. Naturalization Certificate Number		i. Date of Certification		j. If an Alien, Give Alien's Registration Card Number		k. Permanent Residence Card Number	
l. Height 5'2"	m. Weight 140	n. Hair Color Black	o. Eye Color Brown	p. Gender M	q. Do you have a current Driver's License/ID? If so, give number and state. ☒ Yes ☐ No # _____ State _____ CA		

14. Financial Information.

a. Total purchase price or investment being made by the applying entity, corporation, partnership, limited liability company, other.
\$ 150,000

b. List the total amount of the **personal** investment, made by the person listed on question #2, in this business including any notes, loans, cash, services or equipment, operating capital, stock purchases or fees paid. \$ 130,000

* If corporate investment only please skip to and complete section (d)

** Section b should reflect the total of sections c and e

c. Provide details of the personal investment described in 14b. You must account for all of the sources of this investment. (Attach a separate sheet if needed)

Type: Cash, Services or Equipment	Account Type	Bank Name	Amount
Cash	Checking		\$80,000
Cash	Checking		\$50,000

d. Provide details of the corporate investment described in 14 (a). You must account for all of the sources of this investment. (Attach a separate sheet if needed)

Type: Cash, Services or Equipment	Loans	Account Type	Bank Name	Amount

e. Loan Information (Attach copies of all notes or loans)

Name of Lender	Address	Term	Security	Amount

Oath of Applicant

I declare under penalty of perjury that this application and all attachments are true, correct, and complete to the best of my knowledge.

Authorized Signature <i>Shi Zhong Wang</i>	Print Signature SHI ZHONG WANG	Title President	Date 04/05/22
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Alexis Ramirez

From: Kalina Runyon
Sent: Wednesday, April 20, 2022 9:03 AM
To: Alexis Ramirez
Cc: Misty Williams
Subject: RE: WANG,SHIZHONG DATE OF BIRTH:

Good morning,

No criminal history records exist for Wang, Shizong

Thank you,

**Kalina Runyon | Records Manager
Evidence Custodian/Crime Analyst
Rifle Police Department
201 E. 18th Street
Rifle, CO 81650
Office 970-665-6519
Dispatch 970 665-6500**

"We endeavor to promote the peace, safety, and wellbeing of our community through interaction, education, and enforcement of the law."

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MINUTES OF SPECIAL MEETING

OF THE BOARD OF DIRECTORS

OF

THAI CHILI BISTRO, INC.

Board of Directors of special meeting of the above Captioned Corporation was held on the date, time and at the place set forth in the written waiver of notice signed by all The Directors, fixing such time and place, and pre-fixed to the Minutes of this meeting.

RESOLVED, that Shizhong Wang has elected to be the Director of Thai Chili Bistro, Inc.

RESOLVED, that the following person is hereby elected to the offices set opposite name until the respective successors are elected and qualified:

President - Shizhong Wang

Secretary - Shizhong Wang

RESOLVED, that the Corporation approves the transfer of 100,000 shares of the Corporation's no par value Common Stock from Bing Liu to Shizhong Wang and that said shares be issued fully paid and non-assessable.

RESOLVED, that the appropriate officer of the Corporation be, and they hereby are, authorized and directed to take all such further actions and execute and deliver all such Instruments and documents in the name and on behalf of the Corporation, and under its corporate seal or otherwise, as in their judgment shall be necessary, proper, or advisable in order to fully carry out the intent and to accomplish the purpose of the foregoing resolutions.

RESLOVED, that the Corporation has authorized the president Shizhong Wang to file a Corporate report of Changes for the Corporation to the City of Rifle, CO.

There being no further business to come before the meeting.

X Shizhong Wang

Secretary: Shizhong Wang

Approved: X Shizhong Wang

President: Shizhong Wang

WAIVER OF NOTICE OF SPECIAL MEETING
OF THE
BOARD OF DIRECTORS
OF

Thai Chili Bistros, INC.

WE, the undersigned, being all of the Directors of the Corporation, hereby agree and consent that a special meeting of the Board of Directors of the Corporation be held on the date and time and at the place designated hereunder, and do hereby waive all notice whatsoever of such meeting and of any adjournment or adjournments thereof.

We do further agree and consent that any and all lawful business may be transacted at such meeting or at any adjournment or adjournments thereof as may be deemed advisable by the Directors present thereat. Any business transacted at such meeting or at any adjournment or adjournments thereof shall be as valid and legal and of the same force and effect as if such meeting or adjourned meeting were held after notice.

Place of Meeting : 115 East 3rd Street, Rifle, CO
Date of Meeting : March 31, 2022
Time of Meeting : 10:00 AM
Purpose of Meeting : Approve transfer of corporate stocks
and Electing corporate officer.

Dated: March 31, 2022

X Shizhong Wang
Director Shizhong Wang

Director

Director

STOCK PURCHASE AGREEMENT

THIS STOCK PURCHASE AGREEMENT (this “*Agreement*”) is made and entered into as of March 31, 2022 by and between Bing Liu (“*Seller*”) and Shizhong Wang (“*Buyer*”).

WHEREAS, Buyer desire to purchase from Seller, and Seller desires to sell to Buyer, on the terms and subject to the conditions of this Agreement, 100,000 shares of common stock (the “*Shares*”) in Thai Chili Bistro, Inc., a Colorado corporation (the “*Company*”).

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual promises hereinafter set forth, the parties hereto agree as follows:

ARTICLE I PURCHASE AND SALE OF SHARES

SECTION 1.1. Sale and Purchase of Shares. Subject to the satisfaction or waiver of the conditions set forth in this Agreement, at the Closing (as hereinafter defined), Seller hereby agrees to sell, transfer and convey to Buyer, and Buyer hereby agree to purchase from Seller, the Shares, free and clear of all adverse claims, liens, encumbrances, security interests, title defects, or other restriction or limitation (collectively, “*Liens*”), other than those created by Buyer or pursuant to this Agreement.

SECTION 1.2. Payment of Purchase Price. The aggregate purchase price for the Shares is US\$150,000 (the “*Purchase Price*”).

SECTION 1.3. Closing. The Closing of the purchase and sale of the Shares shall be held on March 31, 2022 (the “*Closing Date*”) at such place as agreed between the parties (the “*Closing*”). At the Closing, Buyer shall deliver to Seller the full Purchase Price.

ARTICLE II REPRESENTATIONS AND WARRANTIES OF SELLER

Seller represents and warrants to Buyer as follows:

SECTION 2.1. No Conflicts. The execution and delivery by Seller of this Agreement and the performance by Seller of its obligations under this Agreement and the consummation of the transactions contemplated hereby will not conflict with or result in a violation or breach of any term or provision of any law, statute, order, judgment or decree applicable to Seller or any of its assets or properties.

SECTION 2.2. Ownership of Shares. As of the date hereof, Seller is the sole owner of, and has good and valid title to the Shares free and clear of any Liens. Seller has, as of the date hereof, full and unrestricted power to sell, assign, transfer and deliver the Shares held by it to Buyer in accordance with the terms of this Agreement, and good and valid title to the Shares will be delivered to Buyer upon sale pursuant hereto free and clear of all Liens, other than Liens created by Buyer or pursuant to this Agreement.

ARTICLE III REPRESENTATIONS AND WARRANTIES OF BUYER

Buyer represents and warrants to Seller as follows:

SECTION 3.1. No Conflicts. The execution and delivery by Buyer of this Agreement and the performance by Buyer of its obligations under this Agreement and the consummation of the transactions contemplated hereby will not conflict with or result in a violation or breach of any term or provision of any law, statute, order, judgment or decree applicable to Buyer or any of its assets or properties.

ARTICLE IV MISCELLANEOUS PROVISIONS

SECTION 4.1. Notices. All notices, requests or other communications required or permitted to be delivered hereunder shall be delivered in writing to such address as a party may from time to time specify in writing. Notices if (i) mailed by certified or registered mail or sent by hand or overnight courier service shall be deemed to have been given when received, and (ii) sent by e-mail or facsimile during the recipient's normal business hours shall be deemed to have been given when sent (and if sent after normal business hours shall be deemed to have been given at the opening of the recipient's business on the next business day).

SECTION 4.2. Further Assurances. The parties hereto shall from time to time, including, without limitation, after the date hereof, execute and deliver all such further documents and do all acts and things as the other party may reasonably require to effectively carry out or better evidence or perfect the full intent and meaning of this Agreement.

SECTION 4.3. Complete Agreement; Counterparts. This Agreement (including the documents referred to herein) constitutes the entire agreement and supersedes all other agreements and understandings, both written and oral, among the parties or any of them, with respect to the subject matter hereof. This Agreement may be executed by any one or more of the parties hereto in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same instrument.

SECTION 4.4. Amendments; No Waiver; Remedies. This Agreement may not be amended, altered or modified except by written instrument duly executed by all the parties hereto. Any agreement on the part of any party to waive (i) any inaccuracies in the representations and warranties contained herein by any other party or in any other document delivered hereto by any party, or (ii) compliance with any of the agreements, covenants or conditions contained herein, shall be valid only if set forth in an instrument in writing signed on behalf of such waiving party. No such waiver shall constitute a waiver of, or estoppel with respect to, any subsequent or other inaccuracy, breach or failure to strictly comply with the provisions of this Agreement. No failure on the part of a party to exercise, and no delay in exercising, any right hereunder shall operate as a waiver thereof; and no single or partial exercise of any right hereunder shall preclude any other or further exercise thereof or the exercise of any other right. The remedies herein provided are cumulative and not exclusive of any remedies provided by law.

SECTION 4.5. Binding Effect; Persons Benefiting. This Agreement shall be binding upon and inure to the benefit of Seller and Buyer and their respective successors and permitted assigns; provided, except as otherwise expressly permitted under this Agreement, no Buyer shall have the right to assign its rights hereunder or any interest herein without the prior written consent of Seller. Nothing in this Agreement is intended or shall be construed to confer upon any person other than the parties hereto

and their respective successors and permitted assigns any right, remedy or claim under or by reason of this Agreement or any part hereof.

SECTION 4.6. Governing Law; Consent to Jurisdiction. This Agreement shall be governed by and construed in accordance with the laws of the State of Colorado, without regard to the principles of conflicts of law of such state. Each party to this Agreement hereby irrevocably agrees that any legal action or proceeding arising out of or relating to this Agreement or any agreements or transactions contemplated hereby may be brought in the courts of the State of Colorado and hereby expressly submits (on a non-exclusive basis) to the personal jurisdiction and venue of such courts for the purposes thereof and expressly waives any claim of improper venue and any claim that such courts are an inconvenient forum. Each party hereby irrevocably consents to the service of process of any of the aforementioned courts in any such suit, action or proceeding by the mailing of copies thereof by registered or certified mail, postage prepaid, to the address referenced in Section 4.1, such service to become effective ten (10) days after such mailing.

SECTION 4.7. Headings. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning of terms contained herein. Unless the context of this Agreement otherwise requires, (i) words of any gender shall be deemed to include each other gender; (ii) words using the singular or plural number shall also include the plural or singular number, respectively; and (iii) references to "hereof," "herein," "hereby" and similar terms shall refer to this entire Agreement unless the context otherwise requires.

SECTION 4.8. Severability. Any term or provision of this Agreement which is invalid, illegal or unenforceable in any jurisdiction shall, as to that jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without rendering invalid, illegal or unenforceable the remaining terms and provisions of this Agreement or affecting the validity, legality or enforceability of any of the terms or provisions of this Agreement in any other jurisdiction; *provided*, that the economic or legal substance of the transactions contemplated hereby is not affected in any manner materially adverse to any party. If any provision of this Agreement is so broad as to be unenforceable, the provision shall be interpreted to be only so broad as is enforceable, subject to the foregoing proviso.

[Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first written above.

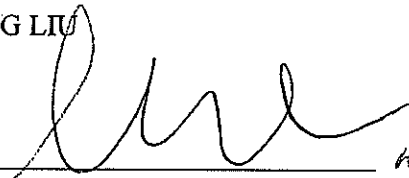
BUYER:

SHIZHONG WANG

Shi Zhong Wang

SELLER:

BING LIU

 10-Apr-2022



Agenda Item #5.d.

Agenda Item Name:

Consider Liquor License Renewal for Rifle Tequila's, Inc dba Tequila's

Presenter:

Misty Williams, City Clerk

Item Description:

Consider Liquor License Renewal for Rifle Tequila's, Inc dba Tequila's

Recommended Action:

Move to approve the Liquor License Renewal for Rifle Tequila's, Inc dba Tequila's

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

None

Background Information:

Rifle Tequila's, Inc dba Tequila's located at 800 Airport Road, Suite 3, Rifle, CO has submitted a Hotel & Restaurant Liquor License Renewal Application.

The application is complete and the appropriate fees have been paid.

Executive Summary:

None

Notification Requirements:

None

Prepared By:

Misty Williams, City Clerk

Attachments:

1. 2022 REDACTED Liquor License Renewal - Tequila's

Submit to Local Licensing Authority

Fees Due	
Annual Renewal Application Fee	\$ 50.00
Renewal Fee	500.00
Storage Permit \$100 X _____	\$
Sidewalk Service Area \$75.00	\$
Additional Optional Premise Hotel & Restaurant \$100 X _____	\$
Related Facility - Campus Liquor Complex \$160.00 per facility	\$
Amount Due/Paid	\$ 550.00

Make check payable to: Colorado Department of Revenue. The State may convert your check to a one-time electronic banking transaction. Your bank account may be debited as early as the same day received by the State. If converted, your check will not be returned. If your check is rejected due to insufficient or uncollected funds, the Department may collect the payment amount directly from your banking account electronically.

Retail Liquor or Fermented Malt Beverage License Renewal Application

Please verify & update all information below

Return to city or county licensing authority by due date

Licensee Name Rifle Tequila's, Inc.			Doing Business As Name (DBA) Tequila's	
Liquor License # 03-06318	License Type H&R	Sales Tax License Number 31534539	Expiration Date 05/17/2022	Due Date
Business Address 800 Airport Road, Suite 3 Rifle, CO 81650				Phone Number 970-665-9082
Mailing Address 800 Airport Road, Suite 3 Rifle, CO 81650			Email tequilasrifle9082@hotmail.com	
Operating Manager Pedro Gomez	Date of Birth	Home Address		Phone Number
1. Do you have legal possession of the premises at the street address above? ☒ Yes ☐ No Are the premises owned or rented? ☐ Owned ☒ Rented* *If rented, expiration date of lease _____				
2. Are you renewing a storage permit, additional optional premises, sidewalk service area, or related facility? If yes, please see the table in upper right hand corner and include all fees due. ☐ Yes ☒ No				
3a. Are you renewing a takeout and/or delivery permit? (Note: must hold a qualifying license type and be authorized for takeout and/or delivery license privileges) ☐ Yes ☒ No				
3b. If so, which are you renewing? ☐ Delivery ☐ Takeout ☐ Both Takeout and Delivery				
4a. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant, been found in final order of a tax agency to be delinquent in the payment of any state or local taxes, penalties, or interest related to a business? ☐ Yes ☒ No				
4b. Since the date of filing of the last application, has the applicant, including its manager, partners, officer, directors, stockholders, members (LLC), managing members (LLC), or any other person with a 10% or greater financial interest in the applicant failed to pay any fees or surcharges imposed pursuant to section 44-3-503, C.R.S.? ☐ Yes ☒ No				
5. Since the date of filing of the last application, has there been any change in financial interest (new notes, loans, owners, etc.) or organizational structure (addition or deletion of officers, directors, managing members or general partners)? If yes, explain in detail and attach a listing of all liquor businesses in which these new lenders, owners (other than licensed financial institutions); officers, directors, managing members, or general partners are materially interested. ☐ Yes ☒ No				
6. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been convicted of a crime? If yes, attach a detailed explanation. ☐ Yes ☒ No				

7. Since the date of filing of the last application, has the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) been denied an alcohol beverage license, had an alcohol beverage license suspended or revoked, or had interest in any entity that had an alcohol beverage license denied, suspended or revoked? If yes, attach a detailed explanation. ☐ Yes ☒ No
8. Does the applicant or any of its agents, owners, managers, partners or lenders (other than licensed financial institutions) have a direct or indirect interest in any other Colorado liquor license, including loans to or from any licensee or interest in a loan to any licensee? If yes, attach a detailed explanation. ☐ Yes ☒ No

Affirmation & Consent

I declare under penalty of perjury in the second degree that this application and all attachments are true, correct and complete to the best of my knowledge.

Type or Print Name of Applicant/Authorized Agent of Business

Pedro Gomez

Title

Manager

Signature

Pedro Gomez

Date

4.29.2022

Report & Approval of City or County Licensing Authority

The foregoing application has been examined and the premises, business conducted and character of the applicant are satisfactory, and we do hereby report that such license, if granted, will comply with the provisions of Title 44, Articles 4 and 3, C.R.S., and Liquor Rules.

Therefore this application is approved.

Local Licensing Authority For

Date

Signature

Title

Attest

Tax Check Authorization, Waiver, and Request to Release Information

I, Pedro Gomez am signing this Tax Check Authorization, Waiver and Request to Release Information (hereinafter "Waiver") on behalf of Rifle Tequila's Inc. dba Tequila's (the "Applicant/Licensee") to permit the Colorado Department of Revenue and any other state or local taxing authority to release information and documentation that may otherwise be confidential, as provided below. If I am signing this Waiver for someone other than myself, including on behalf of a business entity, I certify that I have the authority to execute this Waiver on behalf of the Applicant/Licensee.

The Executive Director of the Colorado Department of Revenue is the State Licensing Authority, and oversees the Colorado Liquor Enforcement Division as his or her agents, clerks, and employees. The information and documentation obtained pursuant to this Waiver may be used in connection with the Applicant/Licensee's liquor license application and ongoing licensure by the state and local licensing authorities. The Colorado Liquor Code, section 44-3-101, et seq. ("Liquor Code"), and the Colorado Liquor Rules, 1 CCR 203-2 ("Liquor Rules"), require compliance with certain tax obligations, and set forth the investigative, disciplinary and licensure actions the state and local licensing authorities may take for violations of the Liquor Code and Liquor Rules, including failure to meet tax reporting and payment obligations.

The Waiver is made pursuant to section 39-21-113(4), C.R.S., and any other law, regulation, resolution or ordinance concerning the confidentiality of tax information, or any document, report or return filed in connection with state or local taxes. This Waiver shall be valid until the expiration or revocation of a license, or until both the state and local licensing authorities take final action to approve or deny any application(s) for the renewal of the license, whichever is later. Applicant/Licensee agrees to execute a new waiver for each subsequent licensing period in connection with the renewal of any license, if requested.

By signing below, Applicant/Licensee requests that the Colorado Department of Revenue and any other state or local taxing authority or agency in the possession of tax documents or information, release information and documentation to the Colorado Liquor Enforcement Division, and is duly authorized employees, to act as the Applicant's/Licensee's duly authorized representative under section 39-21-113(4), C.R.S., solely to allow the state and local licensing authorities, and their duly authorized employees, to investigate compliance with the Liquor Code and Liquor Rules. Applicant/Licensee authorizes the state and local licensing authorities, their duly authorized employees, and their legal representatives, to use the information and documentation obtained using this Waiver in any administrative or judicial action regarding the application or license.

Name (Individual/Business) <u>Rifle Tequila's, Inc. dba Tequila's</u>		Social Security Number/Tax Identification Number	
Address <u>800 Airport Road, Suite 3</u>			
City <u>Rifle</u>		State <u>CO</u>	Zip <u>81650</u>
Home Phone Number <u>970-319-9381</u>		Business/Work Phone Number <u>970-665-9082</u>	
Printed name of person signing on behalf of the Applicant/Licensee <u>Pedro Gomez</u>			
Applicant/Licensee's Signature (Signature authorizing the disclosure of confidential tax information) <u>Pedro Gomez</u>			Date signed <u>4.29.2022</u>

Privacy Act Statement

Providing your Social Security Number is voluntary and no right, benefit or privilege provided by law will be denied as a result of refusal to disclose it. § 7 of Privacy Act, 5 USCS § 552a (note).

Tom Regan Responsible Vendor Training

Responsible Service of Alcohol Certificate

This certificate is awarded to:

Pedro Gomez

For completing the course and passing the test for:

Colorado Responsible Service of Alcohol



Tom Regan / Certified Instructor

October 21, 2019

Expires 3 years from above date

Score 36/40 90%

This certificate is valid in the State of Colorado Only

Tom Regan Responsible Vendor Training

Responsible Service of Alcohol Certificate

This certificate is awarded to:

Francisco Ruiz

For completing the course and passing the test for:

Colorado Responsible Service of Alcohol



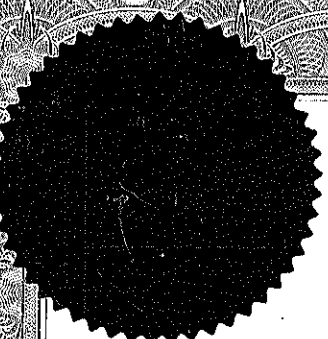
Tom Regan / Certified Instructor

October 21, 2019

Expires 3 years from above date

Score 33/40 83%

This certificate is valid in the State of Colorado Only



Tom Regan Responsible Vendor Training

Responsible Service of Alcohol Certificate

This certificate is awarded to:

Jocelyn Bracamontes

For completing the course and passing the test for:

Colorado Responsible Service of Alcohol



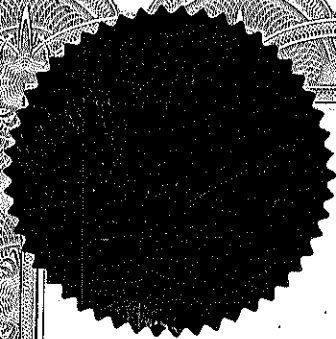
Tom Regan / Certified Instructor

October 21, 2019

Expires 3 years from above date

Score 33/40 83%

This certificate is valid in the State of Colorado Only



Tom Regan Responsible Vendor Training

Responsible Service of Alcohol Certificate

This certificate is awarded to:

Seth Abram Garcia Cortez

For completing the course and passing the test for:

Colorado Responsible Service of Alcohol



Tom Regan / Certified Instructor

October 21, 2019

Expires 3 years from above date

Score 34/40 85%

This certificate is valid in the State of Colorado Only

Tom Regan Responsible Vendor Training

Responsible Service of Alcohol Certificate

This certificate is awarded to:

Alejandra Martinez Perez

For completing the course and passing the test for:

Colorado Responsible Service of Alcohol



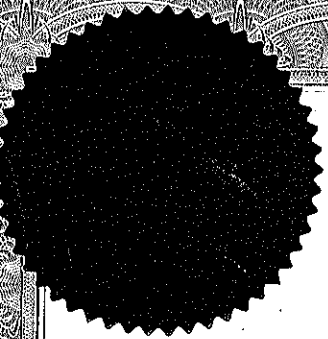
Tom Regan / Certified Instructor

October 21, 2019

Expires 3 years from above date

Score 32/40 80%

This certificate is valid in the State of Colorado Only



Tom Regan Responsible Vendor Training

Responsible Service of Alcohol Certificate

This certificate is awarded to:

Patricia Hernandez

For completing the course and passing the test for:

Colorado Responsible Service of Alcohol



Tom Regan / Certified Instructor

October 21, 2019

Expires 3 years from above date

Score 39/40 98%

This certificate is valid in the State of Colorado Only



Agenda Item #5.e.

Agenda Item Name:

Consider Proclamation Recognizing Municipal Clerks Week

Presenter:

Misty Williams, City Clerk

Item Description:

Proclamation recognizing May 1 through May 7, 2022, as Municipal Clerks Week

Recommended Action:

No action necessary

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

None

Background Information:

The International Institute of Municipal Clerks (IIMC), a professional non-profit association with 14,500 members comprised of City, Town, Township, Village, Borough, Special Districts and Clerk of the Board, Deputy Clerk or Assistant Deputy Clerk and County Clerks throughout the United States, Canada and 15 other countries, announces its 53rd Annual Professional Municipal Clerks Week —May 1 through May 7, 2022.

Executive Summary:

None

Notification Requirements:

None

Prepared By:

Misty Williams, City Clerk

Attachments:

1. Municipal Clerks Week Proclamation



City of Rifle Proclamation

53rd Anniversary of Municipal Clerks Week May 1 - 7, 2022

WHEREAS, the Office of the Municipal Clerk, a time-honored and vital part of local government, exists throughout the world; and

WHEREAS, the Office of the Municipal Clerk is the oldest among public servants; and

WHEREAS, the Office of the Municipal Clerk provides the professional link between the citizens, the local governing bodies and agencies of government at other levels; and

WHEREAS, Municipal Clerks have pledged to be ever mindful of their neutrality and impartiality, rendering equal service to all; and

WHEREAS, the Municipal Clerk serves as the information center on functions of local government and community; and

WHEREAS, Municipal Clerks continually strive to improve the administration of the affairs of the Office of the Municipal Clerk through participation in education programs, seminars, workshops and the annual meetings of their state, province, county and international professional organizations; and

WHEREAS, it is most appropriate that we recognize the accomplishments of the Office of the Municipal Clerk.

Now, Therefore, the City Council of Rifle, Colorado, does recognize the week of May 1 through May 7, 2022, as Municipal Clerks Week, and further extends appreciation to our Municipal Clerk, Misty Williams, our Deputy City Clerk, Alexis Ramirez and to all Municipal Clerks for the vital services they perform and their exemplary dedication to the communities they represent.

Approved by the City Council at a regular meeting this 4th day of May, 2022.

CITY OF RIFLE

Attest::

By:

City Clerk

Mayor



Agenda Item #5.f.

Agenda Item Name:

Consider Approval of Purchase of Water Plant Citric Acid

Presenter:

Robert Burns, Utilities Director

Item Description:

Approve purchase of water plant citric acid

Recommended Action:

Move to approve water plant citric acid

Fiscal Impact:

n/a

Operational Impact:

n/a

Prior Board Motions:

n/a

Background Information:

Citric acid was incorporated as part of the new treatment plant in 2017

Executive Summary:

Citric acid is used for maintenance cleaning of membrane filters.

Notification Requirements:

n/a

Prepared By:

Robert Burns, Utilities Director

Attachments:

1. CONSENT AGENDA - CITRIC ACID



***City of Rifle, Colorado
Utility Department
Clarifier Coating***

To: Tommy Klein, City Manager
From: Robert Burns, Utility Director – Utility Department
Re: May 4th Consent Agenda

Mr. Klein,

Staff will be requesting a purchase order in the amount of \$40,000 for bulk citric acid. This chemical is necessary for maintenance of the membrane filters. Citric acid has seen a dramatic price increase over the last 12 months. Fortunately, we only receive this chemical every 3rd or 4th year.

We are not soliciting pricing at this time due to supply chain issues and shortages of delivery drivers.

Staff does not feel it beneficial to seek other vendors at this time due to the reliable performance of Thatcher Chemical.

Thank you for your consideration.

Robert P. Burns
Utility Director
City of Rifle – Utility Department



**CITY OF RIFLE
PURCHASE REQUEST**

1.	Vendor Name	NEW: W-9 attached ☐
	Thatcher Company	

2.	Vendor Address
	Pob 27407 Salt Lake City UT 84127

3.	For the Purchase of (description)
	bulk citric acid

4.	Amount Requested	Amount Budgeted	Finance Director Verified Funds Avail.
	\$40,000	\$125,000	

5.	Dept. Name	General Ledger Acct #
	UTILITY - WATER	310.4331.400.332

6.	Type of Purchase
☐	Capital Construction
☐	Capital Construction – Change Order
☐	Capital Equipment
☐	Plant Equipment
☒	Materials, supplies, non-profession/technical services (includes computer/software maint.)
☐	Professional Services
☐	Utilities (includes equipment installation and ongoing contracts)
☐	Land, easements, ROW

7.	Purchasing Process Required (Rifle Municipal Code sections for guidance)		
	☐	Cooperative Purchasing:	Sec 4-3-90
	☐	Open Market:	Sec. 4-3-40(c)
	☐	Comparative Pricing:	Sec. 4-3-40(d)
	☐	Request for Proposal:	Sec. 4-3-40(e) (attach bid tab)
	☐	Competitive Sealed Bid:	Sec.4-3-40(f) (attach bid tab & advertisement)
	☒	Sole Source:	Sec. 4-3-40(a) (attach memo)

8.	Authorization Required
	☐ City Manager
	☒ City Council

9.	Signatures		
	Position	Signature	Date
	Department Director	ROBERT BURNS	4/20/2022
	City Manager		
	City Council Approval (meeting date)		
10.	Purchase Order # assigned by Finance		

General summary of purchasing ordinance (Section 4, Art. III)

All requests for the sole source process must comply with code sec. 4-3-40(a)

TYPE OF CONTRACT	ESTIMATED AMOUNT	PROCESS	Purchase Order? Purchase Request?	CITY COUNCIL APPROVAL REQUIRED?
Capital Construction	< \$5,000	Open Market code sec. 4-3-40(c)	> \$5,000 - PO	Yes if over \$25,000 or for any amount from Capital Fund.
	\$5,000-\$20,000	Comparative Pricing code sec 4-3-40(d)	Purchase Request	
	\$20,001-\$100,000	Competitive Bid code Sec 4-3-40(f)		
	> \$100,000	Bonded Competitive Bid		
Capital Construction Change orders	< = 10% of approved contract	When total change orders to date are < 10% - Dept Head or City Manager Approval	Purchase Request	Yes if total change orders to date are greater than 10%
	> 10% of approved contract			
Capital Equipment	< \$5,000	Open Market code sec. 4-3-40(c)	> \$5,000 - PO	Yes if over \$25,000 or for any amount from Capital Fund.
	\$5,000-\$20,000	Comparative Pricing code sec 4-3-40(d)	Purchase Request	
	> \$20,000	Competitive Bid code Sec 4-3-40(f)		
Plant Equipment Replacement (purchases necessary for replacement of existing equipment that is component part of any water, wastewater, or physical plant)	< \$7,500	Open Market code sec. 4-3-40(c)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$75,000
	\$7,500-\$75,000	Comparative Pricing code sec 4-3-40(d)	Purchase Request	
	>\$75,000	Competitive Bid code Sec 4-3-40 (f)		
Materials, Supplies, Non-Professional Services and Technical Services (including software/hardware maintenance technical services)	< \$10,000	Open Market code sec. 4-3-40(c)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$20,000
	>\$10,000	Comparative Pricing code sec 4-3-40(d)	Purchase Request	
Professional Services (note- process for appointed positions such as auditor, attorney, engineer, or municipal judge to be determined by Council)	< \$25,000	Open Market code sec. 4-3-40(c)	All - Purchase Request	Yes if anticipated to exceed \$25,000 per year to a single vendor. Special provisions for professional services sole source in code sec. 4-3-50 (6) **at bottom of table
	> = \$25,000	Written requests for written proposals must be sent to at least 3 firms or individuals		
Utilities including installation of equipment (purchases to secure utility services such as natural gas, electricity, local telephone, water, or sewer)	any amount	Sole Source (negotiations, where appropriate, after good faith determination that only one viable source exists in relevant supply area - keep records for one year)	> \$5,000 - PO >= \$5,000 - Purchase Request	No
Real Property Interest (including easements and rights of way)	any amount	Sole Source (see above)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$5,000.



Agenda Item #5.g.

Agenda Item Name:

Consider Purchasing Policy - Ordinance No. 7, Series of 2022 - 2nd Reading

Presenter:

James S. Neu, City Attorney

Item Description:

Purchasing Policy - Ordinance No. 7, Series of 2022 - 2nd Reading

Recommended Action:

Approve repealing and reenacting Article III (Purchasing) of Chapter 4 (Revenue and Finance) of the Rifle Municipal Code - Ordinance No. 7, Series of 2022 - 2nd Reading

Fiscal Impact:

None

Operational Impact:

The new code provides an appeal process for vendors that have bid on projects. Under this version of the code, staff may use a web-based service to supplement publication of information on our projects.

Prior Board Motions:

None

Background Information:

In 2021, the Council directed staff to draft a new procurement code. Phil Vaughn was hired as a consultant and a completed procurement code is before you tonight to consider.

Executive Summary:

In 2021, the Council directed staff to draft a new procurement code. Phil Vaughn was hired as a consultant and a completed procurement code is before you tonight for consideration. The current code does not address an appeals process for vendors and this version has corrected the deficiency. Definitions were clarified and modifications to the format were made to produce a much-improved document. Mr. Vaughn presented a draft of the code to the staff and minor edits were made. City Attorney Jim Neu has reviewed the final version of the document.

Notification Requirements:

None

Prepared By:

Misty Williams, City Clerk

Attachments:

1. Ordinance No. 7-Purchasing Policy

**CITY OF RIFLE, COLORADO
ORDINANCE NO. 7
SERIES OF 2022**

AN ORDINANCE OF THE CITY OF RIFLE, COLORADO REPEALING AND
REENACTING ARTICLE III (PURCHASING) OF CHAPTER 4 (REVENUE
AND FINANCE) OF THE RIFLE MUNICIPAL CODE REGARDING
PURCHASING.

WHEREAS, the City of Rifle (“Rifle” or the “City”) is a home-rule municipality organized pursuant to Article XX of the Colorado Constitution and with the authority of the Rifle Home Rule Charter; and

WHEREAS, Chapter 4, Article III of the City of Rifle Municipal Code (the “Code”) sets forth the City’s purchasing policy; and

WHEREAS, the City Council finds and determines that the City’s Purchasing Policy is in need of modernization and is in the best interest of the public health, safety and welfare of the citizens of Rifle to repeal and reenact Article III of Chapter 4 of the Code as set forth herein.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF RIFLE, COLORADO, ORDAINS THAT:

1. The foregoing recitals are incorporated by reference as findings and determinations of the City Council.
2. Article III of Chapter 4 of the Code is hereby repealed and reenacted to read as follows:

Division 1- General Provisions

Sec. 4-3-10. Purposes, interpretation of rules.

- (a) Interpretation. This Article shall be construed and applied to promote its underlying purposes and policies.
- (b) Purposes and policies. The purpose of this Article is to prescribe the purchasing procedure that the City will follow in contracting for or constructing public works, purchasing tangible property and insurance policies, and obtaining consulting services. The City Council adopts these rules and regulations pursuant to Section 13.9 of the City Charter.
- (c) The underlying purposes and policies of this Article are:

- (1) To simplify, clarify and standardize the law governing procurement by the City;
- (2) To permit the continued development of procurement policies and practices;
- (3) To provide for increased public confidence in the procedures followed in public procurement;
- (4) To ensure the fair and equitable treatment of all persons who deal with the procurement system of the City;
- (5) To provide increased economy in the City procurement activities and to maximize to the fullest extent practicable the purchasing value of public funds of the City;
- (6) To foster effective broad-based competition within the free enterprise system; and
- (7) To provide safeguards for the maintenance of a procurement system of quality and integrity.

Sec. 4-3-15. Procurement contrary to this Article.

Except as otherwise may be provided by law, it shall be unlawful for any City officer or employee to order a procurement contrary to the provisions of this Article. Any procurement or contract so made shall be void and wholly without effect and shall not be binding upon the City in any manner.

Sec. 4-3-20. Requirement of good faith.

This Article requires all parties involved in the negotiation, performance, or administration of City contracts to act in good faith.

Sec. 4-3-25. Application of this Article.

This Article shall apply to every expenditure of public funds irrespective of their source, by this City, acting through a governmental body as defined herein, under any contract; provided, however this Article shall not apply to either grants or contracts between the City and other

governments and federal assistance monies, for which, if necessary, the City shall adopt specific purchasing policies related to such assistance monies. Nothing in this Article or in regulations promulgated hereunder shall prevent any governmental body from complying with the terms and conditions of any grant, gift, bequest or cooperative agreement.

Sec. 4-3-30. Definitions.

The words defined in this Section shall have the meanings set forth below whenever they appear in this Article, unless: (1) the context in which they are used clearly requires a different meaning; or (2) a different definition is prescribed for a particular Article or provision.

(a) *Brand name* means a specification limited to one (1) or more items by manufacturer's name or catalog number.

(b) *Best interests of the City* means the Procurement Officer will use discretion to choose the action most favorable to the City after considering all alternatives.

(c) *Best value* means that the expected outcome of a purchase provides the greatest overall benefit in response to the solicitation for purchase.

(d) *Business* means any corporation, partnership, individual, sole proprietorship, joint stock company, joint venture or any other private legal entity.

(e) *Change order* means a written order signed by a procurement officer, modifying an existing contract to authorize changes within the scope of work, additions or deletions to the work or an adjustment to any other provision of the contract.

(f) *Construction* means the process of building, altering, repairing, improving or demolishing any public structure or building, or other public improvements of any kind to any public real property. It does not include the routine operations, routine repair, or routine maintenance of existing structures, buildings or real property.

(g) *Contract* means any agreement enforceable by law between the City and one (1) or more outside parties, regardless of form or title, for procurement of supplies, services or construction.

(h) *Contract modification* means any written alteration in specifications, delivery point, rate of delivery, period of performance, price, quantity or other provisions of any contract accomplished by mutual action of the parties to the contract. Before a contract is executed, modifications are

typically processed as an addenda to the invitation for bids or Request for Proposals; after the contract is executed, modifications are processed as change orders.

(i) *Contractor* means any person having a contract with a governmental body.

(j) *Data* means recorded information, regardless of form or characteristic.

(k) *Department head* means the person in charge of each major administrative division of the City who has overall management responsibility for an operation or a group of related operations within a functional area, as determined by the City Manager.

(l) *Designee* means a duly authorized representative of a person holding a superior position.

(m) *Employee* means an individual drawing a salary from a governmental body.

(n) *Governmental body* means any department, commission, council, board, bureau, committee, institution, legislative body, agency, government corporation or other establishment or official of the executive, legislative or judicial branch of this City.

(o) *Grant* means the furnishing by the City of assistance, whether financial or otherwise to any person to support a program authorized by law. It does not include an award whose primary purpose is to procure an end product, whether in the form of supplies, services or construction; a contract resulting from such an award is not a grant but a procurement contract.

(p) *Invitation for bids* means all documents, whether attached or incorporated by reference utilized for soliciting bids.

(q) *Legal services* means the advice, representation, document preparation or related services of an attorney as special counsel provided to the City upon the request of the City Attorney.

(r) *Litigation services* means professional or other services procured by the City Attorney for the purpose of evaluating, preparing, providing or presenting evidence at the trial of any lawsuit to which the City is a party. Litigation services shall not include legal services.

(s) *Local goods* means supplies and materials produced, manufactured, sold, distributed or grown in the City, or for purposes of secondary preference, within Garfield County, that may qualify for certain preferences when bidding or proposing on City contracts.

(t) *Local vendor* means contractors, vendors, suppliers or retailers with a principal place of business located within the City or within a radius of three (3) miles thereof for primary preference, or beyond three (3) miles thereof, but within Garfield County, for purposes of secondary preference. As a principal place of business, the business shall have organizational governance, warehousing operations, and at least 75% of its employees, or materials and supplies are purchased or located within the City or Garfield County, as is necessary for secondary preference. Businesses which maintain satellite offices within the City shall not be considered local for purposes of this definition. If a joint venture or teaming arrangement, including design-build construction, the general or primary contractor team leader shall meet this definition.

(u) *Lowest priced responsive and responsible bidder* means the bidder that meets the requirements and criteria set forth in the solicitation and as further described in Division 3-Source Selection and Contract Formation.

(v) *May* denotes the permissive.

(w) *Person* means any business, individual, union, committee, club, other organization or group of individuals.

(x) *Procurement* means buying, purchasing, renting, leasing or otherwise acquiring any supplies, services or construction. It also includes all functions that pertain to the obtaining of any supply, service or construction, including description of requirements, selection and solicitation of sources, preparation and award of contract and all phases of contract administration. Procurement shall not include the buying, purchasing, renting or leasing of real property.

(aa) *Public notice* shall mean any publication reasonably calculated to inform responsible bidders or offerors. Public notice shall occur for a reasonable time and may be disseminated through any means of mass communication including but not limited to, newspapers, other written publications, posting, television, radio, other broadcasting media, websites, electronic procurement platforms and electronic billboards.

(bb) *Procurement officer* means the City Manager, any Department head, or the City Attorney whenever such person undertakes the duties set forth herein by approving source selection and contract formation for the procurement of any supply, service or construction on behalf of the City.

(cc) *Professional services* means the furnishing of labor, time, effort or expertise by a contractor with specialized knowledge in a field including, but not limited to, accounting, appraisal,

architecture, construction management/owner's representation, engineering, environmental consulting, executive recruiting, finance, land surveying, medicine, public relations/marketing and training specialist.

(aa) *Purchase description* means the words used in a solicitation to describe the supplies, services or construction to be purchased and includes specifications attached to or made part of, the solicitation.

(dd) *Regulation* means a governmental body's statement, having general or particular applicability and future effect, designed to implement, interpret or prescribe law or policy, or describing organization, procedure or practice requirements.

(ee) *Request for Proposals* means all documents, whether attached or incorporated by reference, utilized for soliciting proposals.

(ff) *Responsible bidder or offeror* means a person who has the capability in all respects to perform fully the contract requirements and the integrity and reliability which will assure good faith performance.

(gg) *Responsive bidder* means a person who has submitted a bid which confirms in all material respects to the invitation for bids or request for proposals.

(hh) *Services* means the performance of maintenance or the furnishing of labor, time or effort which does not involve the delivery of a specific end product other than a report or other item which is merely incidental to the performance of the service. Services shall not include services rendered under an employment agreement nor shall it include professional services as that term is defined in this Section.

(ii) *Shall* denotes the imperative.

(jj) *Specification* shall mean any description of the physical or functional characteristics of or the nature of the supply, service or construction item. It may include a description of any requirement for inspecting, testing or preparing a supply, service or construction item for delivery or a procedure for determining whether the requirements are satisfied.

(kk) *Supplies* means all property, including but not limited to equipment, materials, printing, insurance and leases of real property, excluding land or permanent interest in land.

(mm) *Surplus supplies* means any supplies no longer having any use to the City. This includes obsolete supplies, scrap materials and non-expendable supplies that no longer have a useful life or purpose.

(ll) *Using agency* means any governmental body of the City which utilizes any supplies, services, or construction procured under this Code.

Sec. 4-3-35. Public access to procurement information.

Procurement information shall be a public record to the extent provided by law and shall be available to the public as provided by law.

Sec. 4-3-40. Specifications.

(a) Intent. All specifications, including but not limited to design, performance and brand name specifications, shall be drafted so as to provide a clear and concise description of the supply, service or construction desired.

(b) Preparation. Before appropriate approvals are obtained for a procurement in excess of twenty-five thousand dollars (\$25,000), the Procurement Officer shall cause to be prepared written specifications detailing the City's requirements for the supplies, services or construction.

(c) Brand name specifications. A brand name specification may be used when the Procurement Officer has determined that sufficient sources for competition exist for the procurement of the supply and that the use of the brand name specification is not intended to limit or restrict competition. A brand name specification may also be used to describe the standard of quality, performance and other salient characteristics. In such cases, the solicitation shall contain explanatory language that the use of a brand name is for the purpose of describing the standard desired and that the substitution of equivalent supplies is permitted.

Sec. 4-3-45. Waiver of procedures.

Upon a majority vote, the City Council may approve a waiver of any of the provisions of this Article, after consideration of the particular facts and circumstances necessitating the request for waiver. All of the procedures herein may be modified to prevent the loss of any gift or grant to the City.

Sec. 4-3-50. Cooperative purchasing.

The Procurement Officer is authorized to participate in joint bidding with other public agencies or entities when deemed to be in the City's best interests. The Procurement Officer, in his or her sole discretion, may use pricing schedules of higher governmental entities to purchase materials and services based on bids established for that purpose. Cooperative purchasing includes, but is not limited to, platforms such as Sourcewell.

Division 2- Procurement Organization and Authority

Sec. 4-3-110. Authority and duties of the City Manager.

(a) The City Manager shall appoint procurement officers who, because of their particular knowledge and expertise, shall serve as principal procurement officials for the City and perform those duties set forth in this Article with respect to the procurement of specialized supply, service or construction items. (By way of example and not as limitation upon this authority, the specialized supply, service or construction items delegated to a designee may include data processing equipment, motor vehicles, insurance policies, office supplies and furniture and City construction projects.)

Sec. 4-3-115. Duties of department heads and procurement officers.

(a) Duties of department heads. Department heads shall work closely with designees appointed for the procurement of specialized supplies, services or construction, the City Manager and other department heads to ensure compliance by all employees and departments of the City with the provisions of this Article and any regulations which may be promulgated pursuant thereto.

(b) Duties of procurement officers. Except as otherwise provided in this Article, procurement officers shall:

(1) Act to procure for the City the highest quality in supplies, services and construction for the best value and at least expense to the City consistent with the provisions of this Article;

(2) Endeavor to obtain as full and open competition as possible on all purchases and sales;

(3) Establish and maintain programs for the inspection, testing and acceptance of supplies, services and construction;

(4) Explore the possibilities of "bulk purchasing" and "Cooperative purchasing" so as to take full advantage of discounts. Quantities purchased should represent a reasonable

balance based on transportation costs, storage capability and cost, quantity discount, price, budget and cost;

(5) Act so as to procure for the City all federal and state tax exemptions to which it might be entitled;

(6) Cooperate with the Finance Department and other department heads, so as to secure for the City the maximum efficiency in budgeting, accounting, project management and contract management;

(7) Strive to uphold the local preference policy by purchasing goods and services from local vendors as required by this Article;

(8) Have the authority, upon approval of the City Manager, to identify vendors who default on their quotations, to identify irresponsible bidders and to begin disqualification proceedings against them in accordance with this Article;

(9) Endeavor to make purchases of recycled materials and other supplies that preserve, to the maximum extent possible, the environment and minimize energy consumption for their production or use; and

(10) Make a special effort to solicit and encourage local businesses and suppliers to participate in the City's procurement process.

Sec. 4-3-120. Approvals.

No procurement shall be made without the prior written approvals required to be made in accordance with this section.

(a) City Council. All procurements subject to the terms of this Article in excess of twenty-five thousand dollars (\$25,000.00) shall be approved by City Council by motion or resolution.

(b) City Manager. All procurements subject to the terms of this Article which does not exceed twenty-five thousand dollars (\$25,000.00) shall be approved by the City Manager.

(c) Department heads. Department heads shall have the authority to approve procurements in an amount which does not exceed ten thousand dollars (\$10,000.00), without the prior approval of the City Manager or City Council; provided, however that sufficient funds are available in the department head's department budget for the item(s) purchased.

No procurement shall be divided so as to avoid the approvals that would otherwise be required by the above.

Sec. 4-3-125. Formal contract procedure.

Except as otherwise provided herein, all procurement in excess of ten thousand dollars (\$10,000.00), or whenever a department head or City Manager requests the same, shall be purchased by a formal written contract approved and executed by the City Manager or his/her designee.

Division 3-Source Selection and Contract Formation

Sec. 4-3-210. Methods of source selection

(a) Unless otherwise authorized by law, all City contracts greater than fifty-thousand dollars (\$50,000.00) shall be awarded by competitive sealed bidding, pursuant to Section 4-3-215, (Competitive sealed bidding), except as provided in:

- (1) Section 4-3-220 (Competitive sealed proposals); Greater than ten thousand dollars (\$10,000.00) and less than fifty-thousand dollars (\$50,000.00).
- (2) Section 4-3-225 (Small purchases); Less than ten thousand dollars (\$10,000.00).
- (3) Section 4-3-230 (Miscellaneous exemptions);
- (4) Section 4-3-235 (Emergency procurement);

Methods of source selection	Contract limits
Competitive sealed bidding	Greater than \$50,000.00
Competitive sealed proposals	Greater than \$10,000.00 and less than \$50,000.00. *Greater than \$50,000 limit is allowed for Construction Manager/General Contractor proposals, or similar type proposal.
Small purchases	Less than \$10,000.00

(b) The following Local preferences shall be considered in source selection for all City contracts:

Notwithstanding other provisions of this Article, in the awarding of contracts for goods or services, the City Council and Procurement Officer shall provide the following primary and secondary percentage preferences for local goods and services provided by local vendors when quality, delivery time and services are judged by the Procurement Officer to be essentially equal:

<i>Contract Amount</i>	<i>Primary Preference City of Rifle Goods/Vendors</i>	<i>Secondary Preference Garfield County Goods/Vendors</i>
Less than \$1,000	10% discount	5% discount
\$1,001 to \$5,000	8% discount	4% discount
\$5,001 to \$25,000	6% discount	3% discount
\$25,001 to \$100,000	5% discount	2.5% discount
\$100,000 to \$200,000	4% discount	2% discount
\$200,001 to \$500,000	3% discount	1.5% discount
\$500,000 or greater	2% discount	1% discount

(c) For all competitive bonded bid purchases in excess of one hundred thousand dollars (\$100,000.00), the City shall provide these local preference provisions within the "Instructions to Bidders" documents.

(d)Exception: Local preference shall not apply to contracts required by applicable state or federal laws or regulations to be awarded to the "lowest responsible bidder" or to any contracts that are statutorily or otherwise precluded from the use of local vendor preference. No local preference shall apply where grant funds are used which expressly prohibit the use of such local preference.

(e) The Procurement Officer may establish an administrative process to pre-qualify local vendors.

Sec. 4-3-215. Competitive sealed bidding.

(a) Conditions for use. Contracts shall be awarded by competitive sealed bidding except as otherwise provided in Section 4-3-210 (Methods of source selection). Contract amounts greater than fifty-thousand dollars (\$50,000.00).

(b) All Competitive Bids/Proposals must be procured competitively through the solicitation process set forth below. The Department Head shall have:

- (1) An approved budget reflected in the current year. The project shall be planned in advance with a realistic start date to enable the Procurement Officer to strategically solicit vendors to meet the planned start date;
- (2) Department Heads are authorized to start the purchasing process when the amount for the purchase is within the approved annual budget;
- (3) Written specifications or scopes of work/service that is submitted with Purchase Requisition that contains the budget line item;
- (4) A meeting with the Procurement Officer to determine the solicitation method and the appropriate contract terms to plan, schedule and execute the solicitation. Any other affected departments shall be invited to the meeting to ensure proper City coordination. If necessary, the City Attorney may be included to ensure that the proper contract form and terms are approved prior to the solicitation; and
- (5) Upon the completion of the planning and the appropriate solicited process, as set forth below, a Purchase Order will be assigned after the award is approved by City Council. Only then will invoices be paid.

(c) Specifications and Scopes of Work/Services (See also Section 4-3-40. Specifications)

(1) Specifications and Scopes of Work/Services are the core of explaining to vendors what the City needs, with direction to the vendors on how the vendor can meet the need. The specifications and Scopes of Work/Services establish the expectations of both the City and the vendor. The information provided by the City allows the vendor to plan, price, and provide solutions to meet the City's need. The Specifications and Scopes of Work/Service will be incorporated into the contract along with the vendor's bid or proposal.

(a) A specification is a precise description of a commodity's physical characteristics, quality, or desired outcome. Specifications must be written in language that is relevant to, and easily understood by potential suppliers. Specifications can be design or performance. Design specification provides details regarding physical characteristics, materials, and product features. Performance specification describes the desired end result or outcome without specific details about the commodity's physical characteristics or features. Specifications shall describe functions and standards, materials and methods, shipment and delivery, quality assurance, warranties, product, supply, and service specifications.

(b) Brand name or equal specification should explain with reasonable detail that the brand name is used to describe a standard of quality, performance, and characteristics desired in a manner that does not limit competition.

(c) Brand name as a specification should only be used if: no other qualified product will meet the needs of the City, time is of the essence, or the City determines the need for standardization.

(d) The Procurement Officer should make brand name or brand name or equal in a manner that is in the best interests of the City.

(d) Scope of Work/Service provides a supplier with a clear understanding of what the City needs to ensure a successful procurement. A Scope of Work/Service defines the what, where, how, and when of the procurement and allows the supplier information to price the project and ensure competition while meeting the City's needs. It should not be overly restrictive. A proper Scope of Work/Service should address by its terms, risk and the City's tolerance for risk. The Scope of Work/Service will become part of the contract as a performance measure and each party will be bound by its terms. Therefore, the Scope of Work/Service shall describe the work, the physical location, the supplies and equipment, payment rate, acceptance criteria, and any special requirements.

(e) Invitation for bids. An invitation for bids shall be issued and shall include a purchase description and all contractual terms and conditions applicable to the procurement. The purchase description shall seek to promote overall economy for the purposes intended and encourage competition in satisfying the City's needs and it shall not be unduly restrictive. Invitation for bids may be issued via any of the Public Notice methods indicated in this Article. The Invitation for Bids shall specify a public bid opening or an electronic procurement platform bid opening.

(f) Public notice. Adequate public notice of the Invitation for bids shall be given a reasonable time prior to the date set forth therein for the opening of bids. If a state or federal law or regulation controls the procurement process for any particular purchase, adequate public notice may be mandated by applicable state or federal laws or regulations. In the absence of exigent or emergency circumstances described in Section 4-3-235 (Emergency procurement), adequate notice shall mean publication of a public notice which summarizes the Invitation for bids in any one or all of the following platforms for two (2) consecutive weeks with the last publication being not more than one (1) week prior to the date set forth therein for the opening of bids:

- i. a newspaper of general circulation
- ii. The City's website

iii. An electronic procurement platform or website specified for public notification

(g) Bid opening.

i. Public bid opening-Bids shall be opened publicly in the presence of one (1) or more witnesses at the time and place designated in the invitation for bids. The amount of each bid and such other relevant information as may be specified by regulation, together with the name of each bidder shall be recorded; the record and each bid shall be open to public inspection. No statement shall be made regarding the apparent low bid.

ii. Electronic procurement platform bid opening- Bids shall be received and opened by the Procurement Officer. The amount of each bid and such other relevant information as may be specified by regulation, together with the name of each bidder shall be recorded; the record and each bid shall be open to public inspection. No statement shall be made regarding the apparent low bid.

(i) Bid acceptance and bid evaluation. Bids shall be unconditionally accepted without alteration or correction, except as authorized in this Code. Bids shall be evaluated based on the requirements set forth in the invitation for bids, which may include criteria to determine acceptability such as inspection, testing, quality, workmanship, delivery and suitability for a particular purpose. Those criteria that will affect the bid price and be considered in evaluation for award shall be objectively measurable, such as discounts, transportation costs and total or life cycle costs. The invitation for bids shall set forth the evaluation criteria to be used. In addition to the evaluation criteria set forth in the invitation to bid, the following criteria may be considered, in addition to price:

- (1) The ability, capacity and skill of the bidder to perform the contract or provide the service or construction required;
- (2) Whether the bidder can perform the contract or provide the service or construction promptly or within the time specified, without delay or interference;
- (3) The character, integrity, reputation, judgment, experience and efficiency of the bidder;
- (4) The quality of performance of previous contracts or services;
- (5) The previous and existing compliance by the bidder with laws and ordinances relating to the contract or service;
- (6) The sufficiency of the financial resources and ability of the bidder to perform the contract or provide the service or construction;

(7) The quality, availability and adaptability of the supplies, services or construction to the particular use required; and

(8) The ability of the bidder to provide future maintenance and service for the use of the subject of the contract.

(9) The Local Preferences set forth herein.

(j) Correction or withdrawal of bids; cancellation of awards. Correction or withdrawal of inadvertently erroneous bids before or after award or cancellation of awards or contracts based on such bid mistakes, shall be permitted. After bid opening no changes in bid prices or other provisions of bids prejudicial to the interest of the City or fair competition shall be permitted. Except as otherwise provided by regulation, all decisions to permit the correction or withdrawal of bids or to cancel awards or contracts based on bid mistakes, shall be supported by a written determination made by the department head and approved by the City Attorney.

(k) Award. The contract shall be awarded with reasonable promptness by written notice to the lowest priced responsive and responsible bidder whose bid meets the requirements and criteria set forth herein and in the invitation for bids or request for proposals.

Receipt of a singular bid does not automatically require issuance of a new invitation for bids to gain additional bids.

Sec. 4-3-220. Competitive sealed proposals.

(a) Conditions for use. Procurement for the following are eligible for award by competitive sealed proposals:

(1) When the Procurement Officer determines in writing that the use of competitive sealed bidding is either not practicable or not advantageous to the City, a contract may be entered into by competitive sealed proposals; or

(2) For professional services; or

(3) Construction Manager/General Contractor request for proposals, or similar type proposals; or

(4) For contract amounts greater than ten thousand dollars (\$10,000.00) and less than fifty-thousand dollars (\$50,000.00)

(b) Requests for proposals. Requests for proposals shall be approved by the Procurement Officer prior to issuance. Proposals shall be solicited through a Request for Proposals. The Request for Proposals shall seek to promote overall economy for the purposes intended and encourage competition in satisfying the City's needs and it shall not be unduly restrictive.

Requests for proposals may be issued via any of the Public Notice methods indicated in this Article. The Request for proposals shall specify a public bid opening or an electronic procurement platform bid opening.

The following minimum requirements of the Request for proposal are:

- (1) Introduction
- (2) Project Goal and Objectives
- (3) Scope of Work
- (4) General Proposal Requirements
- (5) Proposal Process
- (6) Procurement Timeline
- (7) Questions
- (8) Proposal Submission and Format
- (9) Evaluation criteria
- (10) Local Preference code
- (11) Interviews
- (12) Selection/Post-Selection Process
- (13) Contract/Legal
- (14) Reference and Supporting Documents

(c) Public notice. Adequate public notice of the Request for Proposals shall be given in a reasonable time prior to the date set forth therein for the receipt of

proposals. If a state or federal law or regulation controls the procurement process for any particular purchase, adequate public notice may be mandated by applicable state or federal laws or regulations. In the absence of exigent or emergency circumstances described in Section 4-3-235, (Emergency procurement), adequate notice shall mean publication of a public notice which summarizes the Request for Proposals in any one or all of the following platforms for two (2) consecutive weeks with the last publication being not more than one (1) week prior to the date set forth therein for the opening of bids:

- i. a newspaper of general circulation
- ii. The City's website
- iii. An electronic procurement platform or website specified for public notification

(d) Receipt of proposals.

i. Public proposal opening-Proposals shall be opened so as to avoid disclosure of contents to competing offerors during the process of negotiation. A list of proposals received shall be prepared and shall be open for public inspection after contract award. No statement shall be made regarding the apparent low proposal.

ii. Electronic procurement platform proposal opening- Proposals shall be received and opened by the Procurement Officer. The amount of each proposal and such other relevant information as may be specified by regulation, together with the name of each proposer shall be recorded; the record and each bid shall be open to public inspection after contract award. No statement shall be made regarding the apparent low proposal.

(e) Bid acceptance and bid evaluation. Bids shall be unconditionally accepted without alteration or correction, except as authorized in this Code. Bids shall be evaluated based on the requirements set forth in the invitation for bids, which may include criteria to determine acceptability such as inspection, testing, quality, workmanship, delivery and suitability for a particular purpose. Those criteria that will affect the bid price and be considered in evaluation for award shall be objectively measurable, such as discounts, transportation costs and total or life cycle costs. The invitation for bids shall set forth the evaluation criteria to be used. In addition to the evaluation criteria set forth in the invitation to bid, the following criteria may be considered, in addition to price:

- (1) The ability, capacity and skill of the bidder to perform the contract or provide the service or construction required;

(2) Whether the bidder can perform the contract or provide the service or construction promptly or within the time specified, without delay or interference;

(3) The character, integrity, reputation, judgment, experience and efficiency of the bidder;

(4) The quality of performance of previous contracts or services;

(5) The previous and existing compliance by the bidder with laws and ordinances relating to the contract or service;

(6) The sufficiency of the financial resources and ability of the bidder to perform the contract or provide the service or construction;

(7) The quality, availability and adaptability of the supplies, services or construction to the particular use required; and

(8) The ability of the bidder to provide future maintenance and service for the use of the subject of the contract.

(9) The Local Preferences set forth herein.

(f) The proposals shall be evaluated by a Selection Committee in a fair and objective manner consistent with the evaluation criteria and point value assignment. No additional criteria should be added after proposal submission date. The evaluation process is confidential, and all evaluators on the Selection Committee shall sign a document assuring that the process is confidential at all times. Following the contract award, the scoring, without disclosure of the names, positions, or scores of members of the Selection Committee, shall be public record available for inspection in accordance with state statutes.

(g) The Selection Committee shall be composed of three (3), or more, City employees or a maximum of two (2) non-City employees who are a subject matter expert on the subject addressed in the Request for Proposals. The Selection Committee should have at least one (1) member that is not from the using department. If a City Council member is selected or chooses to serve as a member of the Evaluation Committee, the City Council member shall recuse himself/herself from the final approval of the contract.

(1) Each Selection Committee member shall be assigned a number and receive all proposals with a scoring sheet setting forth the scoring criteria with space allowed for comments;

(2) The scoring by the member must be based solely on the selection criteria and not upon any additional information, including any personal knowledge, research, or relationship;

(3) Once each member has individually scored the proposal, the scoring sheets shall be tallied by the Selection Committee and shall be retained by the Procurement Officer;

(4) Based on the combined scores, a decision shall be reduced to writing with a score, and any written justification for the decision;

(5) The results of the scoring by the Selection Committee shall be verified by the Procurement Officer, and the Procurement Officer shall determine the overall highest rated proposal. If any proposer is a verified local business subject to Local Preference, the Procurement Officer shall assign the percentage preference provided by this Article.

(6) The Selection Committee shall ensure, with a maximum degree of professionalism, an objective and fair evaluation of the proposals under the pre-established criteria of the Request for Proposal.

(7) The Selection Committee may submit clarification questions or perform interviews of proposers that are ranked highest during the evaluation.

After interviews are complete, the Selection Committee shall prepare scoring sheets utilizing the process detailed above in Evaluation Factors.

(h) Discussion with responsible offerors and revisions to proposals. As provided in the Request for Proposals, discussions may be conducted with Responsible offerors. Responsible offerors shall be accorded fair and equal treatment with respect to any opportunity for discussion and revision of proposals and such revisions may be permitted after submission and prior to award for the purpose of obtaining best and final offers. In conducting discussions, there shall be no disclosure of any information derived from proposals submitted by competing offerors.

(i) Award. Award shall be made to the lowest priced responsive and responsible bidder whose proposal is determined in writing to be the most advantageous to the City taking into consideration price and the evaluation factors set forth in the Request for Proposals and the additional criteria set forth above. No other factors or criteria shall be used in the evaluation. The contract file shall contain the basis on which the award is made.

Receipt of a singular bid does not automatically require issuance of a new invitation for bids to gain additional bids.

Sec. 4-3-225. Small purchases.

(a) Small purchases. Any procurement not exceeding ten thousand dollars (\$10,000.00) shall require an informal evaluation of price, quality, convenience and service from any source, and the exercise of sound decision-making by the department head based on such information. Public notice or competitive quotes are not necessary. Department heads are authorized to make Small purchases when the amount to be spent is within an approved budget. Department heads shall ensure that:

- (1) The amount of a purchase cannot be divided in an attempt to qualify as a small purchase;
- (2) He or she is responsible for documenting the standard and method of selecting the vendor. The standard shall follow the principles of objective fairness, cost reasonableness, and best use of public funds;
- (3) Local vendors should be considered to the extent that the vendor meets cost reasonableness; and
- (4) All purchases are properly documented and signed via a vendor invoice, purchase order, proof of purchase, purchasing card statement or vendor contract form that will be maintained within the department.

Sec. 4-2-230. Miscellaneous exemptions.

(a) A contract may be awarded for a supply, service or construction item without competition when the Procurement Officer determines in writing that one (1) or more of the following conditions exist:

- (1) There exists only one (1) responsible source;

(a) Procurements may be made without competition when the Purchasing Officer reasonably determines, after conducting a good faith review of available sources, that there is only one (1) viable source within the relevant supply area with the exclusive capability to provide for the required supply, service or construction item. The Purchasing Officer shall conduct negotiations, as appropriate, as to price, delivery and terms. A record of sole-source procurements shall be maintained for one (1) year from the date of purchase.

The sole source shall be approved in the following manner:

(1) The sole source approval shall be made by the Purchasing Officer only after receipt or completion of a written:

- a) description of the scope of services, work, or specifications,
- b) explanation of why no other supplier will be suitable or acceptable to meet the need of the City and why the supplier possesses an exclusive capability not possessed by other suppliers,
- c) explanation of how cost reasonableness was determined
- d) approval of the Procurement Officer or designee.

(2) The sole source purchase shall meet the requirements of this Article. All sole source purchases in excess of \$25,000 shall be approved by City Council.

(3) Sole Source refers to the supplier, not the product or service. A justification must show that the good or service is only available from a single supplier under the prevailing conditions.

(2) Although there exists more than one (1) responsible source, a competitive process cannot reasonably be used or, if used, will result in a substantially higher cost to the City, will otherwise injure the City's financial interests or will substantially impede the City's administrative functions or the delivery of services to the public or to provide uniform and economical repair and maintenance.

(3) A particular supply or service is required in order to standardize or maintain standardization for the purpose of reducing financial investment or simplifying administration;

(4) The supply is perishable;

(5) The supply qualifies as an object of fine art;

(6) A particular supply is required to match supplies in use;

(7) A particular supply is required to enable use by a specific individual;

(8) A particular supply is prescribed by a professional advisor;

(9) In any case where the City has, within the preceding two (2) years, pursuant to an invitation to bid, awarded a contract for the procurement of any supply, service or construction on a unit price basis, the Procurement Officer may negotiate with the successful bidder for the purchase of additional quantities of the supply, units of service or construction. No such procurement shall be made at a price higher than the previous award.

(b) The Procurement Officer shall submit each determination made under this Section to the City Manager for prior approval.

Sec. 4-3-235. Emergency procurement.

(a) Notwithstanding any other provision of this Article, in the case of an apparent emergency which threatens the public health, welfare or safety requiring the immediate purchase of a supply, service or construction, the City Manager shall have the power to authorize the Procurement Officer to secure the necessary items in the open market without competition up to one hundred thousand dollars (\$100,000.00), and when the purchase cannot reasonably be delayed until one of the following events occur:

(1) A special meeting of the City Council is convened to consider the expenditure, if time allows, or ratify the decision of the Procurement Officer; or

(2) A quorum can be reached where a special meeting call has failed to achieve a quorum.

(b) In no event shall the contract price exceed commercially reasonable prices.

(c) A full written report of the circumstances of all emergency purchases over twenty-five thousand dollars (\$25,000.00) shall be made by the City Manager to the City Council. The report shall be received by the City Council at a regular meeting and such report shall be open to public inspection.

Sec. 4-3-240. Cancellation of invitations for bids or requests for proposals.

An invitation for bids, a Request for Proposals or other solicitation may be canceled or any or all bids or proposals may be rejected in whole or in part as may be specified in the solicitation. The reasons therefor shall be made a part of the contract file.

Receipt of a singular bid does not automatically require cancellation of an invitation to bid or request for proposals and issuance of a new invitation to bid or request for proposals to gain additional bids or proposals.

Sec. 4-3-245. Responsibility of bidders and offerors.

(a) Determination of nonresponsibility. A written determination of nonresponsibility of a bidder or offeror may be made by the Procurement Officer upon reasonable grounds. The unreasonable failure of a bidder or offeror to promptly supply information in connection with an inquiry with respect to responsibility may be grounds for a determination of nonresponsibility with respect to such bidder or offeror.

(b) Disclosure. Pursuant to the Colorado Open Records Act, C.R.S. Section 24-72-200.1 (CORA), any and all of the documents that are submitted to the City may be deemed public records subject to examination and inspection by third parties. The City reserves the right, at its sole discretion, to release for inspection or copying any document, plan, specification, proposal or other writing submitted pursuant to this request.

Sec. 4-3-250. Pre-qualifications of suppliers.

(a) Prospective suppliers may be pre-qualified for particular types of supplies and services. Solicitation mailing lists of potential contractors shall include but shall not be limited to such pre-qualified suppliers for supplies and services.

(b) Prospective contractors may be pre-qualified for construction projects. Issuance of the solicitation to pre-qualified contractors shall be limited to the pre-qualified contractors.

Sec. 4-3-255. Bid security.

(a) Requirement for bid security. When deemed necessary by a department head or the Procurement Officer, bid bonds or other equivalent security shall be required and the invitation for bids or Request for Proposals shall describe the requirements. Bid security shall be a bond provided by a surety company authorized to do business in this state or the equivalent in cash or some other instrument in a form satisfactory to the City.

(b) Amount of security bid. Bid security shall be in an amount equal to at least five percent (5%) of the amount of the bid.

(c) Rejection of bids for noncompliance with bid security requirements. When the invitation for bids requires security, noncompliance requires that the bid be rejected unless it is determined that the bid fails to comply in a nonsubstantial manner with the security requirements.

(d) Withdrawal of bids. After the bids are opened, they shall be irrevocable for the period specified in the invitation for bids, except as provided in Section 4-3-215 (Competitive sealed bidding, correction or withdrawal of bids; cancellation of awards). If a bidder is permitted to withdraw its bid before award, no action shall be had against the bidder or the bid security.

(e) Forfeiture of security. Unsuccessful bidders or offerors shall be entitled to the return of any cash deposit following the execution of an agreement with the successful bidder. Unless a specific extension is granted in writing, a successful bidder or offeror shall forfeit any bid bond or equivalent security required by the procurement officer upon its failure to enter into a contract within fifteen (15) days after the award.

Sec. 4-3-260. Contract performance and payment bonds.

(a) When required; amounts.

(1) For a contract awarded based on a bonded competitive bid, the individual or company contracting with the City shall be required at the time the contract is executed to deliver to the City a contractor's performance bond or a labor and material payment bond in the amount of one hundred percent (100%) of the contract price, with a good and sufficient surety, for approval by the Procurement Officer. Such contractor shall properly perform work required by the contract on behalf of the City, and shall promptly pay all amounts lawfully due to all persons supplying or furnishing labor or materials, used or performed in the prosecution of the work provided for in such contract. Further, the contractor shall indemnify

and hold the City harmless for all payments or liabilities arising from the execution of the terms of the contract.

(b) When deemed necessary by the Procurement Officer or the City Manager, the following bonds or security shall be delivered to the City and shall become binding on the parties upon the execution of the contract:

(1) A performance bond or other security satisfactory to the City, executed by a surety company authorized to do business in this state; and

(2) A payment bond or other security satisfactory to the City, executed by a surety company authorized to do business in this state, for the protection of all persons supplying labor and material to the contractor or its subcontractors for the performance of the work provided for in the contract.

(3) Amount of bonds or other security. The amount of the performance and payment bonds or other security specified above shall be determined by the City Manager. In determining the amounts required, the City Manager shall weigh the following policy considerations:

(a) It is in the City's interest to ensure that construction projects will be completed according to the contract documents without the City having to expend more than the contract amount.

(b) It is in the City's interest to ensure that payment is made for all labor and materials supplied to City construction projects by contractors and subcontractors.

(c) Certain construction projects may be required by state or federal law to be bonded in a particular manner or in a certain amount.

(d) Phasing of bond amounts should be considered, when appropriate, for projects that are constructed in discrete and identifiable phases.

Sec. 4-3-265. Bond forms and copies.

(a) Bond forms. The City Attorney may determine the form of the bonds required by this Article.

(b) Certified copies of bonds. Any person may request and obtain from the City a certified copy of a bond upon payment of the cost of reproduction of the bond and

postage, if any. A certified copy of a bond shall be prima facie evidence of the contents, execution and delivery of the original.

Sec. 4-3-270. Type of contracts.

Any type of contract which will promote the best interests of the City may be used.

Sec. 4-3-275. Multi-term contracts.

(a) Specified period. No contract for supplies, services or construction, including all renewals, shall be made by the City for a period longer than five (5) years, unless authorized by resolution. All contracts extending beyond one (1) year in duration shall be contingent upon and subject to duly enacted appropriations of the City. Contracts for recurring expenditures including, but not limited to, physical maintenance services, snow removal services, electronic data/computer programs and building security systems may be issued for a 3 year term with an option to renew.

(b) Determination prior to use. Prior to the utilization of a multi-year contract, it shall be determined in writing:

- (1) That estimated requirements cover the period of the contract and are reasonably firm and continuing;
- (2) That such a contract will serve the best interests of the City by encouraging effective competition or otherwise promoting economies in City procurement;
- (3) That the contract beyond the first fiscal year shall be expressly contingent upon the annual budgeting and appropriation of sufficient funds on an annual basis or by nonlapsing appropriations; and
- (4) That the contract clearly states that when funds are not appropriated or otherwise made available to support the continuation of the City's performance or obligations in a subsequent fiscal period, the contract shall be canceled.

Sec. 4-3-280. Contract clauses.

The City Attorney may require the inclusion in City contracts of clauses providing for adjustments in prices, time of performance or other contract provisions, as deemed appropriate by the City Attorney and covering the following subjects:

- (1) Liquidated damages as appropriate;

- (2) Bonus to the Contractor for completion of a project earlier than agreed upon;
- (2) Specified excuses for delay or nonperformance;
- (3) Termination of the contract for default;
- (4) Termination of the contract in whole or part for the convenience of the City;
- (5) Non-discrimination;
- (6) Insurance and indemnification requirements;
- (7) Notice of the applicability of the City Procurement Code

Sec. 4-3-285. Contract modifications and change orders; fiscal responsibility.

Every contract modification, change order or contract price adjustment under a contract with the City shall be subject to prior written certification by the Procurement Officer as to the effect of the contract modification, change order or adjustment in contract price on the total project budget or the total contract budget.

In the event that the certification discloses a resulting increase in the total project budget and/or the total contract budget, the Procurement Officer shall not execute or make such contract modification, change order or adjustment in contract price unless sufficient funds are available therefore or the scope of the project or contract is adjusted so as to permit the degree of completion that is feasible within the total project budget and/or total contract budget as it existed prior to the contract modification, change order or adjustment in contract price under consideration.

Sec. 4-3-290. Right to inspect plant.

The City may at reasonable times, inspect the part of the plant or place of business of a contractor or any subcontractor which is related to the performance of any contract awarded or to be awarded by the City.

Sec. 4-3-295. Right to audit records.

The City shall be entitled to audit the books and records of a contractor or any subcontractor under any negotiated contract or subcontract other than a firm fixed-price contract to the extent that such books and records relate to the performance of such

contract or subcontract. Such books and records shall be maintained by the contractor for a period of three (3) years from the date of final payment under the prime contract and by the subcontractor for a period of three (3) years from the date of final payment under the subcontract, unless a shorter period is otherwise authorized in writing.

Sec. 4-3-300. Finality of determinations.

The determinations required by Subsections 4-3-215(j) (Competitive sealed bidding, correction or withdrawal of bids; cancellation of awards), 4-3-220(a) (Competitive sealed proposals, conditions for use), 4-3-220(g) (Competitive sealed proposals, award), Sections 4-3-230 (Miscellaneous exemption), 4-3-235 (Emergency procurement), Subsections 4-3-245(a) (Responsibility of bidders and offerors, determination of nonresponsibility), 4-3-215(k) (Competitive sealed bidding, award), Sections 4-3-270 (Types of contracts) and 4-3-275 (Multi-term contracts determination prior to use) are final and conclusive unless they are clearly erroneous, arbitrary, capricious or contrary to law as determined by a court of competent jurisdiction.

Sec. 4-3-305. Reporting of anti-competitive practices.

When for any reason collusion or other anti-competitive practices are suspected among any bidders or offerors, a notice of the relevant facts shall be transmitted to the City Attorney.

Sec. 4-3-310. Record of procurement actions taken under Miscellaneous exemptions and Emergency procurement.

The Procurement Officer and City Clerk shall maintain a record listing all contracts made under Section 4-3-230 (Miscellaneous exemption) or Section 4-3-235 (Emergency procurement) for a minimum of three (3) years. The record shall contain:

- (1) Each contractor's name;
- (2) The amount and type of each contract; and
- (3) A listing of the supplies, services or construction procured under each contract.

Division 4-Legal and Contractual Remedies

Sec. 4-3-410. Authority to resolve protested solicitations and awards.

(a) Right to protest. Any actual or prospective bidder, offeror or contractor who is aggrieved in connection with the solicitation or award of a contract may protest to the City Manager. The protest shall be submitted in writing within fourteen (14) days after such aggrieved person knows or should have known of the facts giving rise thereto.

(b) Authority to resolve protests. The City Manager or his or her designee shall have the authority, prior to the commencement of an action in court concerning the controversy, to settle and resolve a protest of an aggrieved bidder, offeror or contractor, actual or prospective, concerning the solicitation or award of a contract.

(c) Decision. If the protest is not resolved by mutual agreement, the City Manager, or his or her designee shall promptly issue a decision in writing. The decision shall:

(1) State the reason for the action taken; and

(2) Inform the protestant of its right to administrative review as provided in this Article.

(d) Notice of decision. A copy of the decision under Subsection (c) above shall be mailed or otherwise furnished immediately to the protestant and any other party intervening.

(e) Finality of decision. A decision under Subsection (c) of this Section shall be final and conclusive, unless the protestant appeals administratively to City Council acting as the Procurement Appeals Board.

Sec. 4-3-415. Authority to debar or suspend.

(a) Authority. After reasonable notice to the person involved and reasonable opportunity for that person to be heard, the City Manager, after consultation with the City Attorney, shall have the authority to debar a person for cause from consideration for award of contracts. The debarment shall not be for a period of more than three (3) years. The City Manager, after consultation with the City Attorney, shall also have authority to suspend a person from consideration for award of contracts if there is probable cause for debarment. The suspension shall not be for a period exceeding three (3) months.

(b) Causes for debarment or suspension. The causes for debarment or suspension include the following:

(1) Conviction for commission of a criminal offense as an incident to obtaining or attempting to obtain a public or private contract or subcontract or in the performance of such contract or subcontract;

(2) Conviction under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property or any other offense indicating a lack of business integrity or business honesty which currently, seriously and directly affects responsibility as a City contractor;

(3) Conviction under state or federal antitrust statutes arising out of the submission of bids or proposals;

(4) Violation of contract provisions, as set forth below, of a character which is regarded by the City Manager to be so serious as to justify debarment action:

(A) Deliberate failure without good cause to perform in accordance with the specifications or within the time limit provided in the contract; or

(B) A recent record of failure to perform or of unsatisfactory performance in accordance with the terms of one (1) or more contracts; provided that failure to perform or unsatisfactory performance caused by acts beyond the control of the contractor shall not be considered to be a basis for debarment;

(5) Any other cause the City Manager determines to be so serious and compelling as to affect responsibility as a City contractor, including debarment by another governmental entity or failure to pay any municipal fine, fee, business license or permit; and

(6) For violation of the ethical standards set forth in Division 5 (Ethics in Public Contracting).

(c) Decision. The City Manager shall issue a written decision to debar or suspend. The decision shall:

(1) State the reasons for the action taken; and

(2) Inform the debarred or suspended person involved of its right to administrative review as provided in this Code.

(d) Notice of decision. A copy of the decision under Subsection (c) above shall be mailed or otherwise furnished immediately to the debarred or suspended person and any other party intervening.

(e) Finality of decision. A decision under Subsection (c) above shall be final and conclusive, unless the debarred or suspended person appeals administratively to City Council acting as the Procurement Appeals Board.

Sec. 4-3-420. Authority to resolve contract and breach of contract controversies.

(a) Applicability. This Section applies to controversies between the City and a contractor and which arise under or by virtue of, a contract between them. This includes, without limitation, controversies based upon breach of contract, mistake, misrepresentation or other cause for contract modification or rescission.

This Section is not applicable to contracts for construction that have incorporated contract language and/or general conditions that specifically address resolutions methods for these controversies.

(b) Authority. The City Manager or his or her designee is authorized, prior to commencement of an action in a court concerning the controversy, to settle and resolve a controversy described in Subsection (a) above.

(c) Decision. If such a controversy is not resolved by mutual agreement, the City Manager or his or her designee shall promptly issue a decision in writing. The decision shall:

(1) State the reason for the action taken; and

(2) Inform the contractor of its right to administrative review as provided in this code.

(d) Notice of decision. A copy of the decision under Subsection (c) above shall be mailed or otherwise furnished immediately to the contractor.

(e) Finality of decision. The decision under Subsection (c) above shall be final and conclusive, unless the contractor appeals administratively to City Council acting as the Procurement Appeals Board.

(f) Failure to render timely decisions. The City Manager or his or her designee does shall issue the written decision required under Subsection (c) above within one hundred twenty (120) days after written request for a final decision or within such longer period as may be agreed upon by the parties.

Sec. 4-3-430. Applicability of this Article.

The provisions of this Article apply where it is determined administratively or upon administrative or judicial review, that a solicitation or award of a contract is in violation of law.

Sec. 4-3-435. Remedies prior to award.

If prior to an award it is determined that a solicitation or proposed award of a contract is in violation of law, then the solicitation or proposed award shall be:

- (a) Canceled; or
- (b) Revised to comply with the law.

Sec. 4-3-440. Remedies after an award.

If after an award it is determined that a solicitation or award of a contract is in violation of the law, then:

- (a) If the person awarded the contract has not acted fraudulently or in bad faith:
 - (1) The contract may be ratified and affirmed, provided it is determined that doing so is in the best interests of the City; or
 - (2) The contract may be terminated upon payment of a reasonable profit to the person awarded a contract.
- (b) If the person awarded the contract has acted fraudulently or in bad faith:
 - (1) The contract may be declared null and void; or
 - (2) The contract may be ratified and affirmed if such action is in the best interests of the City, without prejudice to the City's rights to such damages as may be appropriate.

Sec. 4-3-445. Interest.

Interest on amounts ultimately determined to be due to a contractor or the City shall be payable at the statutory rate applicable to judgments from the date the claim arose through the date of decision or judgment, whichever is later.

Sec. 4-3-450. Creation of the Procurement Appeals Board.

The City Council shall act as the Procurement Appeals Board.

Sec. 4-3-455. Decision of the Procurement Appeals Board.

Acting by four (4) or more of its members and with the assistance of the City Attorney, the Procurement Appeals Board shall issue a decision in writing or take other appropriate action on each appeal submitted. A copy of any decision shall be provided to all parties and the City Manager.

Sec. 4-3-450. Jurisdiction of the Procurement Appeals Board.

Unless an action has been initiated previously in court for essentially the same cause of action or unless within fifteen (15) days after the action is brought before the Procurement Appeals Board, written objection is made by either the aggrieved bidder, offeror or contractor, prospective or actual, the board shall have jurisdiction to review and determine de novo:

- (a) Any protest of a solicitation or award of a contract addressed to the board by an aggrieved actual or prospective bidder or offeror or a contractor; and
- (b) Any appeal by an aggrieved party from a determination by the City Manager or a designee which is authorized by:
 - (1) Section 4-3-410 (Authority to resolve protested solicitations and awards);
 - (2) Section 4-3-415 (Authority to debar or suspend); and
 - (3) Section 4-3-420 (Authority to resolve contracts and breach of contract controversies).

Sec. 4-3-455. Protest of solicitations or awards.

- (a) Scope. This Section applies to:
 - (1) A protest of solicitation or award of a contract addressed to the Procurement Appeals Board by an aggrieved actual or prospective bidder or offeror or a contractor; and
 - (2) An appeal addressed to the board of a decision under Subsection 4-3-410(c) (Authority to resolve protested solicitations and awards, decision).

(b) Time limitations on filing a protest or an appeal.

(1) For a protest under this Subsection (1), the aggrieved person shall file a protest with the board within fourteen (14) days after the aggrieved person knew or should have known of the facts and circumstances upon which the protest is based.

(2) For an appeal under this Subsection (2), the aggrieved person shall file an appeal within seven (7) days of the receipt of a decision under Subsection 4-3-410(c) (Authority to resolve protested solicitations and awards, decision).

(c) Decision. On any direct protest under Subsection (a)(1) above or appeal under Subsection (a)(2) above, the Board shall promptly decide whether the solicitation or award was in accordance with the Constitution, statutes, regulations and the terms and conditions of the solicitation. The proceedings shall be de novo. Any prior determinations by administrative officials shall not be final or conclusive.

(d) Standard of review for factual issues. A determination of an issue of fact by the board under Subsection (c) above shall be final and conclusive.

Sec. 4-3-460. Suspension or debarment proceedings.

(a) Scope. This Section applies to a review by the Procurement Appeals Board of a decision under Section 4-3-415, (Authority to debar or suspend).

(b) Time limitation on filing an appeal. The aggrieved person shall file its appeal with the board within thirty (30) days of the receipt of a decision under Subsection 4-3-415(c) (Authority to debar or suspend, decision).

(c) Decision. The board shall promptly decide whether or the extent to which, the debarment or suspension was in accordance with the constitution and statutes of the State and the ordinances and best interests of the City and was fair. The proceedings shall be de novo. Any prior determinations by administrative officials shall not be final or conclusive.

(d) Standard of review for factual issues. A determination of an issue of fact by the board under Subsection (c) above shall be final and conclusive.

Sec. 4-3-465. Contract and breach of contract controversies.

(a) Scope. This Section applies to a review by the Procurement Appeals Board of a decision under Section 4-3-420 (Authority to resolve contract and breach of contract controversies).

(b) Time limitation on filing an appeal. The aggrieved contractor shall file its appeal with the board within thirty (30) days of the receipt of the decision under Subsection 4-3-420(c) (Authority to resolve contract and breach of contract controversies, decision).

(c) Decision. The board shall promptly decide the contract or breach of contract controversy. The proceedings shall be de novo. Any prior determination by administrative officials shall not be final or conclusive.

(d) Standard of review for factual issues. A determination of an issue of fact by the board under Subsection (c) above shall be final and conclusive.

Sec. 4-3-470. Finality of a decision on an issue of law.

A determination by the Procurement Appeals Board on an issue of law shall be final and conclusive.

Sec. 4-3-475. Appeal and review of Procurement Appeals Board decisions.

Any person receiving an adverse decision from the Procurement Appeals Board may initiate an appeal to the courts.

Sec. 4-3-480. Discontinuance of contractor's appeal.

After notice of an appeal to the Procurement Appeals Board has been filed, a contractor may not discontinue such appeal without prejudice, except as authorized by the board.

Division 5-Ethics in Public Contracting

Sec. 4-3-510. Definitions of terms used in this Article.

(a) *Confidential information* means any information which is available to an employee only because of the employee's status as an employee of this City and is not a matter of public knowledge or available to the public on request.

(b) *Conspicuously* means written in such special or distinctive format, print or manner that a reasonable person against whom it is to operate ought to have noticed it.

(c) *Direct or indirect participation* means involvement through decision, approval, disapproval, recommendation, preparation of any part of a purchase request, influencing

the content of any specification or procurement standard, rendering of advice, investigation, auditing or in any other advisory capacity.

(d) *Financial interest* means:

- (1) Ownership of any interest or involvement in any relationship from which or as a result of which, a person within the past year has received or is presently or in the future entitled to receive, more than one dollar (\$1.00) per year or its equivalent;
- (2) Ownership of such interest in any property or any business as may be specified by the City Council; or
- (3) Holding a position in a business such as an officer, director, trustee, partner, employee or the like or holding any position of management.

(e) *Gratuity* means a payment, loan, subscription, advance deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value is received.

(f) *Immediate family* means a spouse, children, parents, brothers or sisters.

(g) *Official responsibility* means direct administrative or operating authority, whether intermediate or final, either exercisable alone or with others, either personally or through subordinates, to approve, disapprove or otherwise direct City action.

(h) *Purchase request* means the document whereby a using agency requests that a contract been entered into for a specified need and may include, but is not limited to, the technical description of the requested item, delivery schedule, transportation, criteria for evaluation, suggested sources of supply and information supplied for the making of any written determination required by this Code.

Sec. 4-3-515. Statement of policy.

Public employment is a public trust. It is the policy of the City to promote and balance the objective of protecting government integrity and the objective of facilitating the recruitment and retention of personnel needed by the City. Such policy is implemented by prescribing essential standards of ethical conduct without creating unnecessary obstacles to entering public service.

Public employees must discharge their duties impartially so as to assure fair, competitive access to governmental procurement by responsible contractors. Moreover, they should conduct themselves in such a manner as to foster public confidence in the integrity of the City procurement organization.

To achieve the purpose of this Article, it is essential that those doing business with the City also observe the ethical standards prescribed herein.

Sec. 4-3-520. General standards of ethical conduct.

(a) General ethical standards for employees. Any attempt to realize personal gain through public employment by conduct inconsistent with the proper discharge of the employee's duties is a breach of a public trust. In order to fulfill this general prescribed standard, employees must also meet the specific standards set forth in this Division 5.

(b) General ethical standards for nonemployees. Any effort to influence any public employee to breach the standards of ethical conduct set forth in this Section and in this Division 5 is also a breach of ethical standards.

Sec. 4-3-525. Employee conflict of interest.

(a) Conflict of interest. Unless a specific exemption is obtained pursuant to this Division 5, it shall be a breach of ethical standards for any employee to participate directly or indirectly in drafting or preparing specifications, obtaining or processing approvals, participating in source selection or contract formation or granting approval for any procurement when the employee knows that:

(1) The employee or any member of the employee's immediate family has a financial interest pertaining to the procurement;

(2) A business or organization in which the employee or any member of the employee's immediate family, has a financial interest pertaining to the procurement; or

(3) Any other person, business or organization with whom the employee or any member of the employee's immediate family is negotiating or has an arrangement concerning prospective employment is involved in the procurement.

(b) Discovery of actual or potential conflict of interest, disqualification and waiver. Upon the discovery of an actual or potential conflict of interest, an employee shall promptly file a written statement of disqualification and shall withdraw from further participation in the transaction involved. The employee may, at the same time, apply to the City Attorney in accordance with this Division 5 for an advisory opinion as to what further participation, if any, the employee may have in the transaction.

(c) Notice. Notice of this prohibition shall be provided in accordance with regulations promulgated by the finance department.

Sec. 4-3-530. Employee disclosure requirements.

(a) Disclosure of benefit received from contract. Any employee who has or obtains any benefit from, any City contract with a business in which the employee has a financial interest shall report such benefit to the City Attorney; provided, however, this Section shall not apply to a contract with a business where the employee's interest in the business

has been placed in a disclosed blind trust or a minority interest in a publicly traded company.

(b) Failure to disclose benefit received. Any employee who knows or should have known of such benefit and fails to report such benefit to the City Attorney, is in breach of the ethical standards of this Section.

(c) Notice. Notice of this requirement shall be provided in accordance with regulations promulgated by City.

Sec. 4-3-535. Gratuities and kickbacks.

(a) Gratuities. It shall be a breach of ethical standards for any person to offer, give or agree to give any employee or former employee or for any employee or former employee to solicit, demand, accept or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy or other particular matter pertaining to any program requirement or a contract or subcontract or to any solicitation or proposal therefor.

(b) Kickbacks. It shall be a breach of ethical standards for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

(c) Contract clause. The prohibition against gratuities and kickbacks prescribed in this Section shall be conspicuously set forth in every contract and solicitation therefor.

Sec. 4-3-540. Prohibition against contingent fees.

(a) Contingent fees. It shall be a breach of ethical standards for a person to be retained or to retain a person, to solicit or secure a City contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except for retention of a bona fide employee, bona fide established commercial selling agencies for the purpose of securing business or a contract for legal services.

(b) Representation of contractor. Every person, before being awarded a City contract, shall represent in writing, that such person has not retained anyone in violation of Subsection (a) above. Failure to do so constitutes a breach of ethical standards.

(c) Contract clause. The representation prescribed in Subsection (b) above shall be conspicuously set forth in every contract and solicitation therefor.

Sec. 4-3-545. Restrictions on employment of present and former employees.

Disqualification of business when an employee has a financial interest. It shall be a breach of ethical standards for a business in which an employee has a financial interest knowingly to act as a principal or as an agent for anyone other than the City, in connection with any:

- (1) Judicial or other proceeding, application, request for a ruling or other determination;
- (2) Contract;
- (3) Claim; or
- (4) Charge or controversy, in which the employee either participates personally and substantially through decision, approval, disapproval, recommendation, the rendering of advice, investigation or otherwise under the provisions of this code or which is the subject of the employee's official responsibility under the provisions of this code, where the City is a party or has direct or substantial interest.

Sec. 4-3-550. Use of confidential information.

It shall be a breach of ethical standards for any employee or former employee knowingly to use confidential information for actual or anticipated personal gain or for the actual or anticipated personal gain of another person.

Sec. 4-3-555. Civil and administrative remedies against employees who breach ethical standards.

(a) Existing remedies not impaired. Civil and administrative remedies against employees which are in existence on the effective date of this Code shall not be impaired.

(b) Supplemental remedies. In addition to existing remedies for breach of the ethical standards of this article or regulations promulgated hereunder, the City Manager may impose any one (1) or more of the following:

- (1) Oral or written warnings or reprimands;
- (2) Suspension with or without pay for a specified period of time; and
- (3) Termination of employment.

(c) Right to recover from employee value received in breach of ethical standards. The value of anything received by an employee in breach of the ethical standards of this article or regulations promulgated hereunder shall be recoverable by the City as provided in this Division 5 (Recovery of value transferred or received in breach of ethical standards).

(d) Due process. All procedures under this Section shall be in accordance with due process requirements and existing law. In addition, notice and an opportunity for a hearing shall be provided prior to imposition of any suspension or termination of employment.

Sec. 4-3-560. Civil and administrative remedies against nonemployees who breach ethical standards.

(a) Existing remedies not impaired. Civil and administrative remedies against nonemployees which are in existence on the effective date of this Code shall not be impaired.

(b) Supplemental remedies. In addition to existing remedies for breach of the ethical standards of this article or regulations promulgated hereunder, the City Manager may impose any one (1) or more of the following:

(1) Written warnings or reprimands;

(2) Termination of transactions; and

(3) Debarment or suspension from being a contractor or subcontractor under City contracts.

(c) Right to recover from nonemployee value transferred in breach of ethical standards. The value of anything transferred in a breach of ethical standards of this article or regulations promulgated hereunder by a nonemployee shall be recoverable by the City as provided in this Division 5 (Recovery of value transferred or received in breach of ethical standards).

(d) Right of the City to debar or suspend. Debarment or suspension may be imposed in accordance with the procedures set forth in this Division 5 (Authority to debar or suspend) for breach of the ethical standards of this article, provided that such action may not be taken without the concurrence of the City Attorney.

(e) Due process. All procedures under this Section shall be in accordance with due process requirements, including but not limited to, a right to notice and an opportunity for a hearing prior to imposition of any termination, debarment or suspension from being a contractor or subcontractor under a City contract.

Sec. 4-3-565. Recovery of value transferred or received in breach of ethical standards.

(a) General provisions. The value of anything transferred or received in breach of the ethical standards of this Article or regulations promulgated hereunder by an employee or a nonemployee may be recovered from both the employee and nonemployee.

(b) Recovery of kickbacks by the City. Upon a showing that a subcontractor made a kickback to a prime contractor or a higher tier subcontractor in connection with the award of a subcontract or order thereunder, it shall be conclusively presumed that the amount

thereof was included in the price of the subcontract or order and ultimately borne by the City and will be recoverable hereunder from the recipient. In addition, said value may also be recovered from the subcontractor making such kickbacks. Recovery from one (1) offending party shall not preclude recovery from the other offending parties.

Sec. 4-3-570. Opinions and waivers.

(a) Advisory opinions. On written request of employees, the City Manager or City Council, the City Attorney may render advisory opinions regarding the appropriateness of the course of conduct to be followed in proposed transactions. Compliance with requirements of a duly promulgated advisory opinion of the City Attorney shall be deemed to constitute compliance with the ethical standards of this Article.

(b) Waiver. On written request of an employee, with the prior concurrence of the City Manager, the City Council may grant an employee a written waiver from the application of this Division 5 (Employee conflict of interest) and grant permission to proceed with the transaction to such extent and upon such terms and conditions as may be specified. Such waiver and permission may be granted when the interests of the City so require or when the ethical conflict is insubstantial or remote.

Division 6-Supply Management

Sec. 4-3-610. Sale of real and personal property

(a) All sales of real property must be approved by City Council. Personal property, such as materials, supplies and equipment, shall be sold as follows:

(1) Any item of personal property must be designated as surplus before it may be sold. Personal property purchased by the City at a cost of twenty-five thousand dollars (\$25,000.00) or more must be declared surplus by the City Council. The City Manager may declare all personal property purchased by the City at a cost of less than twenty-five thousand dollars (\$25,000.00) to be surplus, but nothing in this Section shall prohibit the City Manager from referring surplus designation decisions on such property to the City Council.

(2) The City Manager shall destroy, dispose of, trade, solicit bids, sell, or auction surplus property purchased by the City at a cost of less than ten thousand dollars (\$10,000.00) under the most cost-effective and beneficial option as determined by the City Manager in his or her sole discretion to obtain the best value from the market considering staff resources.

(3) Unless otherwise directed by the City Council, the City Manager shall sell property purchased by the City at a cost of twenty-five thousand dollars (\$25,000.00) or more by conventional auction methods or web-hosted public surplus auctions. When using conventional auction methods, the City Manager shall provide at least ten (10) days' notice in the official newspaper of the City and, optionally, on the City's website. Surplus property shall be sold to the highest responsible bidder. The City Manager may establish minimum bid amounts and reserve prices. If no bids are received by the City in an auction of surplus property, in lieu of undertaking a second auction of the property, the City Manager, at his or her sole discretion, may donate the item to any entity of the City Manager's choosing to which charitable donations may lawfully be made, or if the surplus property is of insignificant or no value, as determined by the City Manager in consultation with appropriate City staff members, the City Manager may order its disposal.

(4) The City Manager shall report to the City Council within thirty (30) days of disposition the manner and terms of all completed dispositions of surplus property.

(5) Property impounded or seized through forfeiture by the Police Department shall be excluded from this Section.

INTRODUCED on April 20, 2022 read by title, passed on first reading, and ordered published as required by the Charter.

INTRODUCED a second time at a regular meeting of the Council of the City of Rifle, Colorado held on May 4, 2022, passed without amendment, approved, and ordered published in full as required by the Charter.

DATED this _____ day of _____, 2022.

CITY OF RIFLE, COLORADO

By _____
Mayor

City of Rifle, Colorado
Ordinance No. 7, Series of 2022
Page 43 of 43

ATTEST:

City Clerk



Agenda Item #5.h.

Agenda Item Name:

Consider Approving the Sale of City Property Formally Occupied by the Rifle Animal Shelter - Ordinance No. 8, Series of 2022 - 2nd Reading

Presenter:

James S. Neu, City Attorney

Item Description:

Consider Approving the Sale of City Property Formally Occupied by the Rifle Animal Shelter - Ordinance No. 8, Series of 2022 - 2nd Reading

Recommended Action:

Move to approve Ordinance No. 8, Series of 2022 on second reading.

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

Please see attached memo

Executive Summary:

Please see attached memo

Notification Requirements:

N/A

Prepared By:

Misty Williams, City Clerk

Attachments:

1. 20220420-Memo-Ordinance No. 8, Series of 2022-Sale of Old Animal Shelter Property
2. Ordinance No. 8-Old Animal Shelter Property Sale

Glenwood Springs – Main Office
201 14th Street, Suite 200
P. O. Drawer 2030
Glenwood Springs, CO 81602

Aspen
323 W. Main Street
Suite 301
Aspen, CO 81611

Montrose
1544 Oxbow Drive
Suite 224
Montrose, CO 81402

James S. Neu
Partner/Shareholder

jsn@mountainlawfirm.com

Direct: 970.928.2121

Office: 970.945.2261

Fax: 970.945.7336

[*Direct Mail to Glenwood Springs](#)

TO: Rifle City Council

FROM: Karp Neu Hanlon, P.C.

RE: Ordinance No. 8, Series of 2022-Sale of Old Animal Shelter Property

DATE: April 15, 2022

The Rifle Animal Shelter recently relocated from property that it leased from the City located at 569 County Road 265 that it had occupied for decades, and staff determined the Property surplus property that the City can dispose of. By Resolution No. 4, Series of 2022, the City Council authorized the City Manager to take all actions necessary to sell the Property and he engaged a realtor to list the Property. The City has received several offers and we'll discuss the details of those offers with Council in your workshop.

Section 13.2 of the Rifle Home Rule Charter requires property used for governmental purposes to only be sold or conveyed by an ordinance passed with an affirmative vote of at least five members of the City Council. The Rifle Animal Shelter was operated by a not-for-profit corporation and the Property was never used for governmental purposes; however, not knowing the full history of the use of the Property, staff recommends complying with Section 13.2 of the Rifle Home Rule Charter to approve the sale of the Property. The approval of Ordinance No. 8, Series of 2022 accomplishes that.

**CITY OF RIFLE, COLORADO
ORDINANCE NO. 8
SERIES OF 2022**

AN ORDINANCE OF THE CITY OF RIFLE, COLORADO, APPROVING THE
SALE OF CITY PROPERTY FORMALLY OCCUPIED BY THE RIFLE
ANIMAL SHELTER.

WHEREAS, the City of Rifle (the “City”) is a home-rule municipality organized pursuant to Article XX of the Colorado Constitution and with the authority of the Rifle Home Rule Charter; and

WHEREAS, the City is the owner of property formally occupied by the Rifle Animal Shelter located at 569 County Road 265, Rifle, Colorado with a Garfield County Assessor Parcel No. 217708400014 (the “Property”) that is not necessary to the governmental functions of the City; and

WHEREAS, Section 13.2 of the Rifle Home Rule Charter requires property used for governmental purposes to only be sold or conveyed by an ordinance passed with an affirmative vote of at least five members of the City Council; and

WHEREAS, the Rifle Animal Shelter was operated by a not-for-profit corporation and the Property was never used for governmental purposes, however the City Council desires to comply with Section 13.2 of the Rifle Home Rule Charter to approve the sale of the Property.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF RIFLE, COLORADO ORDAINS THAT:

1. Recitals. The City Council incorporates the foregoing recitals as conclusions, facts, determinations and findings by the City Council.

2. Approval of Sale of Property. The City Council, with at least five members voting aye, hereby approves the sale of the Property formally occupied by the Rifle Animal Shelter located at 569 County Road 265, Rifle, Colorado with a Garfield County Assessor Parcel No. 217708400014.

3. Authority of City Manager. By Resolution No. 4, Series of 2022, the City Council authorized to take all actions necessary to sell the Property, which authority is hereby confirmed and ratified.

INTRODUCED, on April 20, 2022, read in full, passed on first reading, and ordered published by title as required by the City Charter.

INTRODUCED a second time at a regular meeting of the Council of the City of Rifle, Colorado, held on May 4, 2022, passed without amendments, approved, and ordered published in full as required by the Charter.

DATED this _____ day of _____, 2022.

CITY OF RIFLE, COLORADO

By: _____
Mayor

ATTEST:

City Clerk



Agenda Item #7.a.

Agenda Item Name:

Receive Update from Imperio Mexican Restaurant

Presenter:

Misty Williams, City Clerk

Item Description:

Receive an update from the owners of Imperio Mexican Restaurant regarding upgrades to the property to enhance sound mitigation for live music events.

Recommended Action:

For informational purposes only, no action is necessary.

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

At the March 16, 2022, City Council meeting, as part of the approval for the Transfer of Ownership Liquor License from Mariscos JQ to Imperio Mexican Restaurant, Council requested that the owners of Imperio Mexican Restaurant return a month from that meeting to give an update on sound mitigation improvements.

Notification Requirements:

N/A

Prepared By:

Misty Williams, City Clerk

Attachments:

None



Agenda Item #7.b.

Agenda Item Name:

Receive Presentation from the Middle Colorado Watershed Council

Presenter:

Tommy Klein, City Manager

Item Description:

Receive Presentation from Middle Colorado Watershed Council

Recommended Action:

N/A

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

N/A

Background Information:

Ms. Paula Stepp of the Middle Colorado Watershed Council will present information on the organization, projects and plans.

Executive Summary:

The Middle Colorado Watershed Council is a local 501 (c) organization. The mission of the organization is, "To evaluate, protect, and enhance the health of the middle Colorado river watershed through the cooperative effort of watershed stakeholders."

The MCWC recently received funding to establish additional river monitoring stations along the Colorado river at Silt and Rulison. The group also received funding to, "develop a user-friendly dashboard for the towns' water plants to track water quality and rain events specific to each towns' needs."

Ms. Palua Stepp is the Executive Director of the organization. The City provides the office for the organization at 200 Lyons Park Circle in Rifle (at the rest stop.) Jarred Emmert is on the board and he works on our team as the supervisor of the Rifle wastewater plant.

<https://www.midcowatershed.org/>

Notification Requirements:

None

Prepared By:

Tommy Klein, City Manager

Attachments:

1. MCWC -Rifle Council Watershed Presentation 2022-05



MANAGING THE MIDDLE COLORADO WATERSHED

Rifle City Council, May 2022

IWMP Projects

Fire, Consumptive Use, Water Quality, Recreation, Aquatic

Integrated Water Management Plan

Collaborative effort
in partnership with
the GarPit
Conservation
Districts.

- 23 meetings over 30 months
- 65 stakeholders divided into overlapping groups to address four areas: consumptive use, water quality, aquatic and recreation
- 500 hours donated time
- 55 projects/goals

Post Fire Restoration

Impacts on Downstream Communities

- Health and Safety of Citizens
- Public Water Systems
- Buildings/Infrastructure
- Highway and Rail Damage
- Agriculture Ditches and Headgates
- Fish Population & Riparian Habitat
- Recreation
- Transportation
- Economic Impacts
- Forest Health



Flooding and Debris Flows



- Flooding and debris flow incidents begin in June 2021.
- Mostly cleanup effort with earlier incidents.
- July 29 through July 31 caused major damage to highway infrastructure and trails.

Forest Service: Debris Flows

500-Year Flood Event



Blue Gulch Uplands



Cinnamon Creek

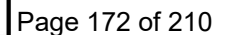
Considering the Future

Planning for the next watershed changing event



- ❑ Redefining priorities and redirecting resources
- ❑ Project goal updates to accommodate changes due to warming and drying temperatures
- ❑ Understanding low soil moisture impacts
- ❑ Increasing pre-fire mitigation activities
- ❑ Applying what we've learned to for the next disaster

Water Quality Monitoring, Soil Moisture Monitors and Rain Gauges



Rifle Island Restoration Partnership



- *Partnership Opportunities: Rivers Edge West, AVLТ, RFOV, Garfield County
- *Clear invasives, Master Planning, coordinated grant opportunities
- *Future Recreational In-Channel Diversion (RICD)

River Stop – 2022 Update



- 200 Lion's Park Circle, Rifle, CO 81650 – Rifle Rest Area

Questions?

Middle Colorado Watershed Council
Paula Stepp/Executive Director
pstepp@midcowatershed.org, 970-404-0162

Please visit our website: www.midcowatershed.org
Follow us on social media: @midcowatershed



Agenda Item #8.a.

Agenda Item Name:

Present Proclamation Recognizing Municipal Clerks Week

Presenter:

Misty Williams, City Clerk

Item Description:

Proclamation recognizing May 1 through May 7, 2022, as Municipal Clerks Week

Recommended Action:

No action necessary

Fiscal Impact:

None

Operational Impact:

None

Prior Board Motions:

None

Background Information:

The International Institute of Municipal Clerks (IIMC), a professional non-profit association with 14,500 members comprised of City, Town, Township, Village, Borough, Special Districts and Clerk of the Board, Deputy Clerk or Assistant Deputy Clerk and County Clerks throughout the United States, Canada and 15 other countries, announces its 53rd Annual Professional Municipal Clerks Week —May 1 through May 7, 2022.

Executive Summary:

None

Notification Requirements:

None

Prepared By:

Misty Williams, City Clerk

Attachments:

1. Municipal Clerks Week Proclamation



City of Rifle Proclamation

53rd Anniversary of Municipal Clerks Week May 1 - 7, 2022

WHEREAS, the Office of the Municipal Clerk, a time-honored and vital part of local government, exists throughout the world; and

WHEREAS, the Office of the Municipal Clerk is the oldest among public servants; and

WHEREAS, the Office of the Municipal Clerk provides the professional link between the citizens, the local governing bodies and agencies of government at other levels; and

WHEREAS, Municipal Clerks have pledged to be ever mindful of their neutrality and impartiality, rendering equal service to all; and

WHEREAS, the Municipal Clerk serves as the information center on functions of local government and community; and

WHEREAS, Municipal Clerks continually strive to improve the administration of the affairs of the Office of the Municipal Clerk through participation in education programs, seminars, workshops and the annual meetings of their state, province, county and international professional organizations; and

WHEREAS, it is most appropriate that we recognize the accomplishments of the Office of the Municipal Clerk.

Now, Therefore, the City Council of Rifle, Colorado, does recognize the week of May 1 through May 7, 2022, as Municipal Clerks Week, and further extends appreciation to our Municipal Clerk, Misty Williams, our Deputy City Clerk, Alexis Ramirez and to all Municipal Clerks for the vital services they perform and their exemplary dedication to the communities they represent.

Approved by the City Council at a regular meeting this 4th day of May, 2022.

CITY OF RIFLE

Attest::

By:

City Clerk

Mayor



Agenda Item #8.b.

Agenda Item Name:

Consider Declaration of Fleet Vehicles as Surplus

Presenter:

Brian Prunty, Public Works Director

Item Description:

Request for City Council to declare Vehicle Unit Numbers 0354, 0590, 1703, 1916, 1924, 4016, 40170, and 40230 as Surplus so they may be disposed of per City Code.

Recommended Action:

Move to approve vehicle unit numbers 0354, 0590, 1703, 1916, 1924, 4016, 40170, and 40230 as Surplus.

Fiscal Impact:

Reduces costs of maintenance and recovers funds for use in future procurement of fleet vehicles.

Operational Impact:

Recovers operational storage area currently being occupied by Out-of-Service vehicles.

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

Per City Code Sec. 4-3-130, this declaration is necessary to dispose of these out-of-service vehicles and provides for their being sold at auction.

Notification Requirements:

N/A

Prepared By:

Brian Prunty, Public Works Director

Attachments:

1. Memo to CC re Spring 2022 Designation of Veh Surplus_bgp
2. Vehicle List Desgntd for Surplus - Spring 2022



TO: Honorable Mayor Green and Councilors
FROM: Brian Prunty, Public Works Director *BGP*
CC: Tommy Klein, City Manager
DATE: April 27, 2022
RE: Declaration of Out of Service Vehicles as Surplus

In accordance with the City of Rifle Code [Sec. 4-3-130] for the Sale of Real and Personal Property, I am requesting that the attached list of vehicles be designated as Surplus.

These vehicles are those that have been or are being replaced by new or lease vehicles, or are no longer suitable for service, or their cost of maintenance and repair exceeds the worth of the vehicle in the service to the City of Rifle.

They will be disposed of by trade-in (Enterprise Fleet Mgmt. auction), public auction, or sealed bid in accordance with the Code. If necessary, one or two may go to salvage. Disposal of these vehicles will reduce maintenance overhead, to include licensing and insurance.

The date of designation shall be May 4, 2022. Funds received from the disposal of these vehicles shall be placed in the Fleet Capital Fund (610-4900) and will fund future vehicle procurement.

Attachment.



City of Rifle

Vehicles for Surplus Designation

No.	ID	Dept	Year	Make	Model	VIN
1	354	O&M	2001	Dodge	RAM 2500	3B75F237X1G732354
2	590	Water	1999	Chevrolet	S-10	1GCCT19W5X8148089
3	1703	Recreation	1991	International	3800 Bus	1HVBBZ7N9MH307452
4	1916	Recreation	2009	StarTrans	President Bus	5B4LP152872001068
5	1924	Recreation	2009	StarTrans	President Bus	5B4LP152772001076
6	4016	Police	2013	Ford	Interceptor SUV	1FM5K8AR1DGA88951
7	40170	Police	2008	Ford	Explorer	1FMEU73E38UB03536
8	40230	Police	2014	Ford	Interceptor SUV	1PM5K8AR2EGA23348



Agenda Item #8.c.

Agenda Item Name:

Consider Change Order No. 8 to 3rd Street and Railroad Avenue Improvements Contract

Presenter:

Brian Prunty, Public Works Director
Craig Spaulding, Civil Engineer

Item Description:

Costs and associated materials costs and Traffic Control Mgmt. modifications as provided in Change Order No. 8 to the contract price for 3rd Street and Railroad Avenue Improvements project.

Recommended Action:

Move to approve material costs and additional Traffic Control Mgmt. associated with Change Order No. 8 to the 3rd Street and Railroad Avenue Improvements contract for the amount of \$192,556.25.

Fiscal Impact:

Street Fund reduction and anticipated Supplemental Request.

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

Change Order No. 8 involves those materials and Traffic Control Mgmt. not paid for under previous Change Orders. While all work was previously authorized, winter conditions have just now allowed for completion.

Executive Summary:

This Change Order details the costs associated with materials and the remainder of Traffic Control Mgmt. incurred in the process of completion of the 3rd Street and Railroad Avenue Improvements (Downtown). These costs reflect discrepancies between plan quantities and field quantities. As a function of the original budget, this brings the project to 6.51% over budget.

Notification Requirements:

N/A

Prepared By:

Brian Prunty, Public Works Director

Attachments:

1. Memo - TKlein re CO 8 Purchase Request_bgp
2. Change Order 8 memo
3. CO 8
4. PURCHASE REQUEST- 3rd_RR - KSK - CO8_signed bgp



TO: Tommy Klein, City Manager
FROM: Brian Prunty, Public Works Director *BGP*
CC: Marcia Johnson, Interim Finance Director
DATE: April 28, 2022
RE: Change Order No. 8 to the 3rd St. & Railroad Ave. Contract

Attached are Change Order documents and a Purchase Request detailing the costs associated with materials and the remainder of Traffic Control Mgmt. incurred in the process of completion of the 3rd Street and Railroad Avenue Improvements (Downtown). These costs reflect discrepancies between plan quantities and field quantities.

The total of Change Orders Nos. 1 – 8 is \$773,048.05, which translates to 20.31% above the original contract price of \$3,807,000.00. Built into the contract to account for unanticipated costs and overruns, we considered 10% (\$380,700) Contingency as appropriate, but knowing that the very nature of such work often demands more funding, we budgeted \$4,300,000 to account for contract shortfalls. So, as a percentage of the contract price plus Contingency, the project stands at 9.37% over original contract, while 6.51% over budget. These figures are well within industry standards for cost overruns.

For those additional costs, we were able, but not limited, to the following: upgrade the paved surface to concrete, add up-lighting in landscape areas, address several unknown existing utility conditions, provide for improvements to weak soil subbases and additional traffic management.

I ask for your approval of the attached Purchase Request for \$192,556.25.



PUBLIC WORKS



TO: Brian Prunty
FROM: Craig Spaulding
DATE: April 28, 2022
RE: Third and Railroad Change Order 8

The following is a request for a change order to the Third and Railroad Contract on the amount of \$192,556.25. This places the total contract at \$4,580,048.05. As seen in the 2020 Street Capital and Maintenance Plan, the original budget for the project was \$7,500,000. This plan was iteratively changed until the final design was at a budgeted \$4,300,000. This number was with all asphalt roadways which were then changed to concrete which was a total add of \$314,859.60. With that said the final project exceeds the initial intent and is still within the overall street plan budget.

Work yet to be completed is the completion of the post office parking lot, some striping, up lights, and final landscaping. KSK has stated that they anticipate these items to be completed by May 13th with the exception of the up lights which are still awaiting delivery.



CITY OF RIFLE
202 RAILROAD AVENUE • P.O. BOX 1908 • RIFLE, CO 81650
WWW.RIFLECO.ORG

Change Order

Order No.: 8

Date: 4/28/22

Agreement Date: April 14, 2021

NAME OF PROJECT: 3rd Street and Railroad Avenue Improvements

OWNER: City of Rifle

CONTRACTOR: KSK, LLC

The following changes are hereby made to the CONTRACT DOCUMENTS: following adds the following quantities to the contract amount:

Line #	Description	Quantity	Unit Price	Total	Previous CMO	CMO #	Change Amount
100	City Parking Lot Material Overages	0	\$0.00	\$9,419.00	\$9,146.88	5 - Whit Parking	\$272.12
200	Post Office/Alley INCOMPLET E	0	\$0.00	\$7,553.00	\$6,888.00	5 - Muck Excava	\$665.00
300	East 3rd Material Overages	0	\$0.00	\$17,106.50	\$5,467.50	5 - E. 3rd Overag	\$11,639.00
400	West 3rd Material Overages	0	\$0.00	\$7,124.37	\$7,124.37	5 - W. 3rd Overag	\$0.00
416A	Handrails	4	\$2,650.00	\$10,600.00	\$10,600.00	5 - Hand Rail	\$0.00
416B	Handrails	2	\$4,250.00	\$8,500.00	\$8,500.00	5 - Hand Rail	\$0.00
422A	Remove Tree & Roots - 1"	6	\$750.00	\$4,500.00	\$4,500.00	5 - Tree Removal	\$0.00
500	Additional Waterline Fittings	0	\$0.00	\$33,155.00	\$6,560.00	5 - Add. Water Fit.	\$26,595.00
500	Water Material Addon and Overages	0	\$0.00	\$27,512.00	\$0.00		\$27,512.00
600	Storm Drain Overages	0	\$0.00	\$16,418.00	\$16,418.00	5 - Roof/Sor m Drain	\$0.00
700	Railroad Ave. Between 3rd and 4th Street Overages	0	\$0.00	\$17,750.50	\$12,625.50	5 - RR Ave. Overag	\$5,125.00
718	Sidewalk Zurn Drain - Railroad	1	\$2,250.00	\$2,250.00			\$2,250.00

	Avenue South of 3rd						
801a	Slab Concrete Removal	880	\$14.00	\$12,320.00	\$12,320.00	5 - Concrete Slab Re	\$0.00
806a	Soil seperator Fabric - RS 580	1855	\$12.00	\$22,260.00	\$21,000.00	5 - Soil Sep Fabric	\$1,260.00
800	Railroad Avenue, 4th Street Intersection Overages	0	\$0.00	\$28,355.50			\$28,355.50
909/919	Permanent Signing Overages	0	\$0.00	\$13,200.00			\$13,200.00
911	Electrical Conduit Over/Under	0	\$0.00	\$1,950.00			\$1,950.00
924	Intersection Cameras	4	\$7,500.00	\$30,000.00	\$30,000.00	5 - 5th Street Camera	\$0.00
929a	Pavement Marking Paint (Parking)	8.4	\$130.00	\$1,092.00			\$1,092.00
900	Traffic Signal, Striping and Signage	0	\$0.00	\$12,831.50	\$10,447.75	5 - Add. Conduit...	\$2,383.75
CMO-TS&L	Meter Pedestal Wiring	0	\$0.00	\$8,426.25	\$8,426.25	2	\$0.00
1003	Splice Vault	2	\$857.00	\$1,714.00			\$1,714.00
1014-1016	Trenching and Conduit Overages	0	\$0.00	\$5,668.00			\$5,668.00
1017-1022	Wiring	0	\$0.00	\$291.00			\$291.00
CMO 1	Meter Pedestal	0	\$0.00	\$14,572.94	\$14,572.94	1	\$0.00
CMO2	Meter Pedestal Wiring	0	\$0.00	\$7,495.95			\$7,495.95
CMO3	Tree Up Lights	16	\$1,500.00	\$24,000.00	\$24,000.00	7 - Up Lights	\$0.00
1100	Irrigation & Landscaping	0	\$0.00	\$735.00	\$735.00	5 - Landscap e Matera	\$0.00
1101/1102	22" and 36" Planter Wall	352	\$145.00	\$51,040.00	\$51,040.00	5 - Landscap e Wall	\$0.00

1103	Stone Wall Finish	138.7	\$11.00	\$1,525.70			\$1,525.70
1104	Cast In Place Wall Cap	159	\$135.00	\$21,465.00	\$5,670.00	5 - Wall Cap	\$15,795.00
1203a	Traffic Control Management Day	75	\$730.00	\$54,750.00	\$29,930.00	7 - TCM	\$24,820.00
1203c	Flagging Hour	482.25	\$32.00	\$15,432.00	\$15,432.00	5 - Flagging Hours	\$0.00
1204A-C	Survey Overages	0	\$0.00	\$11,911.00	\$5,043.00		\$6,868.00
1206a	Potholing	77.5	\$250.00	\$19,375.00	\$15,000.00		\$4,375.00
1206b	Extra Work Temporary Opening of Railroad Avenue	0	\$0.00	\$35,586.52	\$36,129.95	4 & 7	-\$543.43
1211	Bonding (P&P)	0	\$0.00	\$20,658.93	\$18,411.27	7 - Bond	\$2,247.66
303/403 704/804	Asphalt / PCCP	Asphalt Reduction	Asphalt Amended	PCCP Addition	Previous CMO		
		\$230,724.00	\$104,231.60	\$441,352.00	\$314,859.60	3 & 6	\$0.00
Total CMO Request							\$192,556.25
New Contract Amount							\$4,580,048.05

Justification: All items above are discrepancies between plan quantities and field quantities. Some of the items were already encompassed in other change orders as seen in the summary above

Change to CONTRACT PRICE: \$192,556.25

Original CONTRACT PRICE: \$3,807,000.00

Current CONTRACT PRICE adjusted by previous CHANGE ORDER(s) No.(s) 1-7 \$4,387,491.80

The CONTRACT PRICE due to this CHANGE ORDER will be (increased) by: \$192,556.25

The new CONTRACT PRICE, including this CHANGE ORDER, will be: \$4,580,048.05

Change to CONTRACT TIME:

The CONTRACT TIME will be (increased)(decreased) by 0 calendar days.

The date for completion of all WORK will be October 14, 2021

Approvals Required:

To be effective, this ORDER must be approved by the Federal Agency (if applicable), if it changes scope or objective of the WORK, or as may otherwise be required by the Owner.

I hereby accept this order, both as work to be performed and prices on which payment is to be based.

Contractor Representative: _____
Signature Date

Recommended by: _____
Signature Date

Authorized by Owner's
Project Engineer: _____
Signature Date

Approved by Owner
Public Works Director: _____
Signature Date



**CITY OF RIFLE
PURCHASE REQUEST**

1.	Vendor Name	NEW: W-9 attached ☐
	KSK, LLC	

2.	Vendor Address
	PO Box 4768
	Grand Junction, CO 81502

3.	For the Purchase of (description)
	Change to Railroad Avenue & 3rd Street
	Material overages, stair rails, & additional concrete

4.	Amount Requested	Amount Budgeted	Finance Director Verified Funds Avail.
	\$192,556.25	\$4,300,000	

5.	Dept. Name	General Ledger Acct #
	Public Works	201-4313-400-735

6.	Type of Purchase
	☐ Capital Construction
	☒ Capital Construction – Change Order
	☐ Capital Equipment
	☐ Plant Equipment
	☐ Materials, supplies, non-profession/technical services (includes computer/software maint.)
	☐ Professional Services
	☐ Utilities (includes equipment installation)
	☐ Land, easements, ROW

7.	Purchasing Process Required
	☐ Cooperative Purchasing
	☐ Open Market
	☐ Comparative Pricing
	☐ Request for Proposal (attach bid tab)
	☐ Formal Bid (attach bid tab and advertisement)
	☒ Single Source (attach an explanation)

8.	Authorization Required
	☒ City Manager
	☒ City Council

9.	Signatures		
	Position	Signature	Date
	Department Director	<i>Brian Prunty</i>	4/28/2022
	City Manager		
	City Council Approval (meeting date)		
10.	Purchase Order # assigned by Finance		

General summary of purchasing ordinance (Section 4, Art. III)

TYPE OF CONTRACT	ESTIMATED AMOUNT	PROCESS	Purchase Order? Purchase Request?	CITY COUNCIL APPROVAL REQUIRED?
Capital Construction	< \$5,000	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO	Yes if over \$20,000 or for any amount from Capital Fund.
	\$5,000-\$20,000	Comparative Pricing (solicit quotes from 3) vendors/suppliers)	Purchase Request	
	\$20,001-\$100,000	Competitive Bid (see Code Sec 4-3-40)		
	> \$100,000	Bonded Competitive Bid		
Capital Construction Change orders	< = 10% of approved contract	When total change orders to date are < 10% - Dept Head or City Manager Approval	Purchase Request	Yes if total change orders to date are greater than 10%
	> 10% of approved contract			
Capital Equipment	< \$5,000	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO	Yes if over \$20,000 or for any amount from Capital Fund.
	\$5,000-\$20,000	Comparative Pricing (solicit quotes from 3 vendors/suppliers)	Purchase Request	
	> \$20,000	Competitive Bid (see Code Sec 4-3-40)		
Plant Equipment Replacement (purchases necessary for replacement of existing equipment that is component part of any water, wastewater, or physical plant)	< \$7,500	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$75,000
	\$7,500-\$75,000	Comparative Pricing (solicit quotes from 3 vendors/suppliers)	Purchase Request	
	>\$75,000	Competitive Bid (see Code Sec 4-3-40)		
Materials, Supplies, Non- Professional Services and Technical Services (including software/hardware maintenance technical services)	< \$10,000	Open Market (informal evaluation by purchasing agent)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$20,000
	>\$10,000	Comparative Pricing (solicit quotes from 3 vendors/suppliers)	Purchase Request	
Professional Services (note- process for appointed positions such as auditor, attorney, engineer, or municipal judge to be determined by Council)	< \$25,000	Open Market (informal evaluation by purchasing agent)	All - Purchase Request	Yes if anticipated to exceed \$25,000 per year to a single vendor
	> = \$25,000	Written requests for written proposals must be sent to at least 3 firms or individuals		
Utilities including installation of equipment (purchases to secure utility services such as natural gas, electricity, local telephone, water, or sewer)	any amount	Single Source (negotiations, where appropriate, after good faith determination that only one viable source exists in relevant supply area - keep records for one year)	> \$5,000 - PO >= \$5,000 - Purchase Request	No
Real Property Interest (including easements and rights of way)	any amount	Single Source (see above)	> \$5,000 - PO >= \$5,000 - Purchase Request	Yes if over \$5,000.



Agenda Item #9.a.

Agenda Item Name:

Report to City Manager

Presenter:

Tommy Klein, City Manager

Item Description:

Staff report on notable tasks completed within the individual departments.

Recommended Action:

No action necessary

Fiscal Impact:

N/A

Operational Impact:

N/A

Prior Board Motions:

N/A

Background Information:

N/A

Executive Summary:

Work Report to City Manager

04/29/2022

Notification Requirements:

N/A

Prepared By:

Alexis Ramirez, Deputy City Clerk

Attachments:

1. Report to City Manager 04.29.2022
2. City Manager Update - UCR FIRE RESTRICTION IMPLEMENTATION
3. Speeding on W. 16th

WORK REPORT TO CITY MANAGER

04.29.2022

PUBLIC WORKS

- 0.5 MG Airport Water Tank: Currently in bidding phase – ends 5/20/2022; CM/GC contract
- I-70 Exit 90 Gateway Beautification: prepared for May 2 construction; held Pre-construction meeting Wednesday, April 6.
- 5th Street and Ute Avenue Improvements, which includes surface improvements, sidewalk, and water distribution pipeline improvements – pursuing Fall DOLA grant opportunity to pursue design and construction – Spring 2023 construction.
- Park Hill retaining wall for City/Frontella property boundary: received no bids; Craig is planning to release to less specialized contractors to general civil contractors; planning for a May 19th Award and June – July construction.
- Planning for Paradise Island cleanup – targeting a September 2022 work schedule.
- In-house design released for bidding purposes April 29 intended Bid Award Jun 1, 2022:
 - Cemetery Roadway Improvements: Summer Construction (July-August)
 - Airport Road - East Improvements: Summer Construction (June-August)
 - Overlay & HA5 application: late Summer/Fall
 - Rebuild of Intersection W. 3rd/W.2nd Streets & Park Avenue - Summer
 - W. 7th Street Repair – between Moki and Mesa Avenues - Summer
 - Re-surface of the 9th Street Bridge - Summer
- Main Street Revitalization Grant submitted; notice of award May 2022
- Safer Main Street Grant for Whiteriver Roundabout: submitted

The following are projects currently under construction:

- Railroad Avenue Rehabilitation project: Xcel Energy Undergrounding to be completed April 29, 2022; Punch List work: continuation of roadway striping, landscaping, wall facia and features;

RFQ's for Design to be released June 2022 for the following:

- Park'n'Ride & Whiteriver Roundabout
- Railroad Avenue Improvements – 5th to 9th St.
- Morrow/Tripp/Whiteriver (1000 Block) Improvements
- Penwell Finished Water Line Replacement

FLEET

- While we are still experiencing severe in the production/delivery of light wheeled vehicles with our lease vendor, Enterprise Fleet Mgmt. (EFM), EFM provided information that (4) additional Fords were scheduled for production; a July delivery is anticipated; one vehicle (2022 Ranger) was scratched in favor of a 2022 Maverick
- Complete refurbishing of Unit 1001 snowplow bed, conveyor, bed frame: sandblasting, installing new conveyor parts, and coating.
- New WEX-EFM cards are working well; we have better user information, and the system is more easily managed.
- Preparing documents for an Auction of Surplus vehicles; pre-auction May setting up a June Auction

Operations & Maintenance

- Completed Spring Cleanup: process was reduced by four days
- Preparing Procurement documents for purchase: a track-steer loader, and heavy snowplow truck (dual purpose)
- Purchased, but have not received a new Utility Locator
- Python 5000 has sold through Ritchie Bros.; awaiting check.

Two weeks look-ahead

- Closeout and acceptance of 3rd Street and Railroad Improvement project work.
- Street repair projects with hot asphalt
- Development inspection and management of the following:
 - Pioneer Mesa, Phase II
 - North Pasture, Filing VII
 - Wapiti Commons (Habitat for Humanity)

PLANNING

- Staff has hired the consultants for the Island Outreach and Visioning project. They anticipate forming a stakeholder group and beginning meetings in May.
- Habitat for Humanity, Pioneer Mesa Phase 2, and North Pastures Filing 7 are all moving forward with infrastructure installation.
- Staff anticipates releasing the RFP for the Grand Hogback Trail System construction the week of May 6th. It is anticipated that the selection decision will come to Council in June.

PIO

- Continuing updates on website and social media on local issues and citizen concerns. Spring Clean Up has been a very popular topic. People are very grateful that we offer this program.
- Attended Garfield County PIO Group meeting where we discussed the upcoming fire season. We had a presentation from the Upper Colorado River Interagency Fire Management Unit (UCR) which includes Bureau of Land Management and U.S. Forest Service firefighting resources that cover 5.8 million acres along the Interstate 70, Colorado River and Roaring Fork River corridors from the Continental Divide to the Utah state line. The UCR includes the White River National Forest and the BLM's Colorado River Valley and Grand Junction field offices. The UCR cooperates with other federal and state agencies, local communities, and fire departments on a wide range of activities including fuels treatments, fire prevention, and suppression.
 - Surprisingly, this area is actually in better shape than in previous years as far as the upcoming season is concerned (so far!).
 - The presentation was fascinating and summarized the science behind what factors are considered in the drought monitor as well as the factors utilized to determine the various stages of fire restrictions. I've attached a scanned copy of the power point in case anyone is interested. (Excuse my sloppy notes!)
- Press release on new members to Rifle's various boards.
- Press release on grants for the Grand Hogback Trail System.

COURT

- Handled 48 adult cases on April 20th court day.
- Held 3 telephone hearings with inmates in custody.
- Attended CML Statehouse Report Webinar.
- The City was awarded additional DOLA grant money to assist with the expense of appointing attorneys for indigent defendants. The extra \$8000 will help us defray costs. Since inception of the program in 2019, the City has received \$36,280.
- Working with City Attorney to rewrite our harassment ordinance after a Colorado Supreme Court ruling found a similar state statute to be unconstitutionally vague.
- Had a meeting with the Office of Alternate Defense Council. The coordinator was able to provide a list of local attorneys who might be interested in getting on our court appointed list. It's tough to find attorneys in this area willing to represent misdemeanor cases. We will be reaching out to some of the individuals on the list to see if they are willing to help out.

POLICE

- David Adkins is graduating the Academy on the 6th and will start field training the following week
- Nathan Roos and Ethan Turner graduated from the abbreviated academy and are preparing to begin field training.
- We made an offer to Kallie McCain which she accepted. This was the fourth and final open position with RPD. She will work the summer as a CSO then go to Academy in the fall
- Officers assisted the Sheriff's Office on the recent homicide that occurred just outside city limits.

CITY CLERK

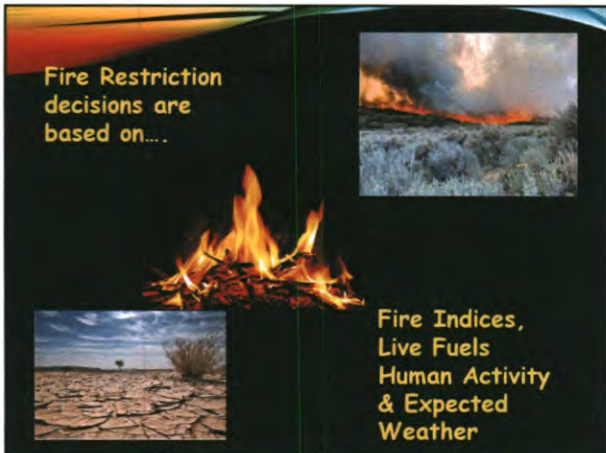
- We attended a Liquor Enforcement Division Special Training in Grand Junction on Thursday April 28th.
- We are proud to announce that the City of Rifle's Building Official John Nihiser has just completed 50 years in his profession.
This is a monumental achievement and we applaud his dedication to safety here in our community as well as the many other municipalities that he has served over his tenure.

CITY MANAGER

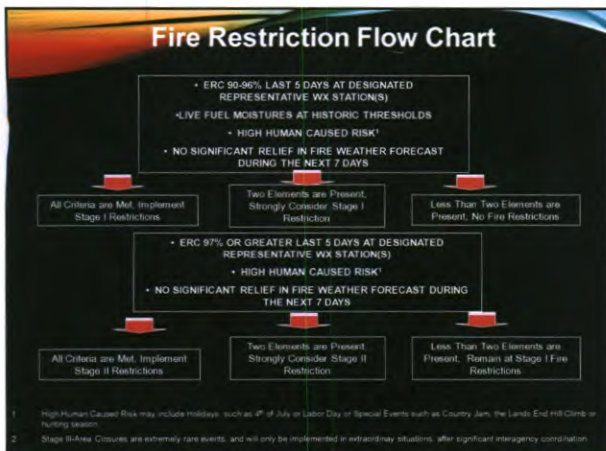
- We are applying for a grant from Xcel to install 2 charging stations in the parking deck.
- Scott Rust accepted the Finance
- Director position and begins on May 16. We are very fortunate to have him on the team again!
- Speeding Study on W. 16th Street – Attached with Memo



1



2



3

Energy Release components
(Fire Indices)

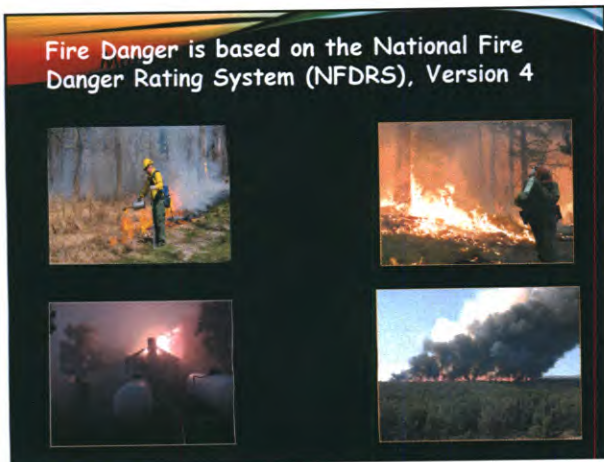
Look at human activity over
last 7 days. May also
use anticipated human
activity (July 4-...)

Two elements Stage I
(discretionary)

If all present, implement
same w/ stage 2

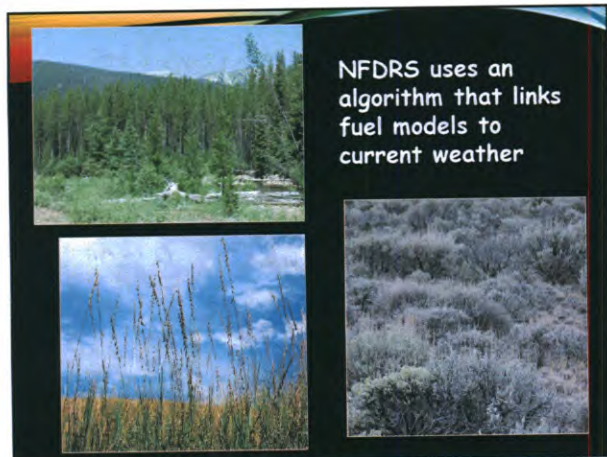
As of right now, COVID not
a factor in fire restrictions
this year

Stage 3- Forest closure. BLM does
not have this



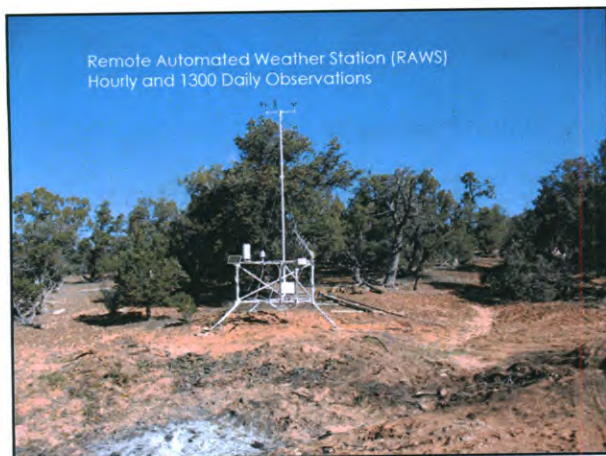
4

Administered by Forest Service



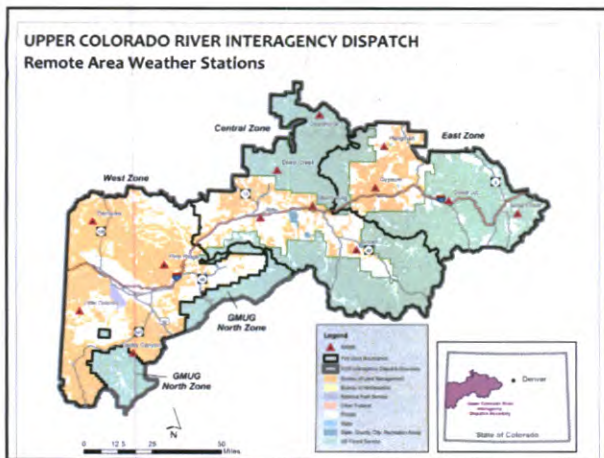
5

Wind, temp, RH, solar radiation, dew point



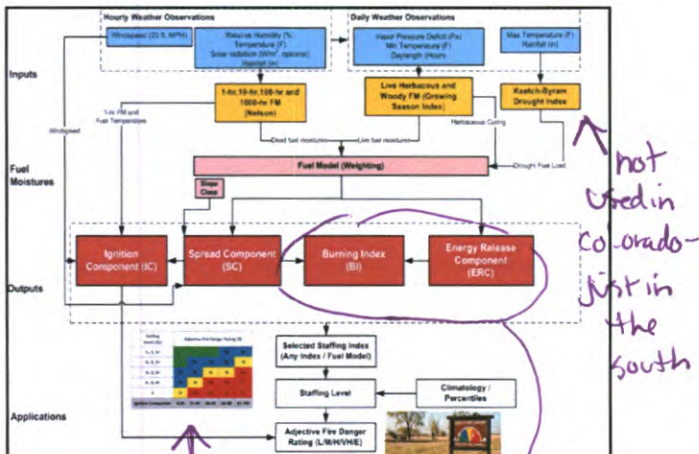
6

Hourly readings
Inspected once a year



7

One in Rifle Airport
24/7

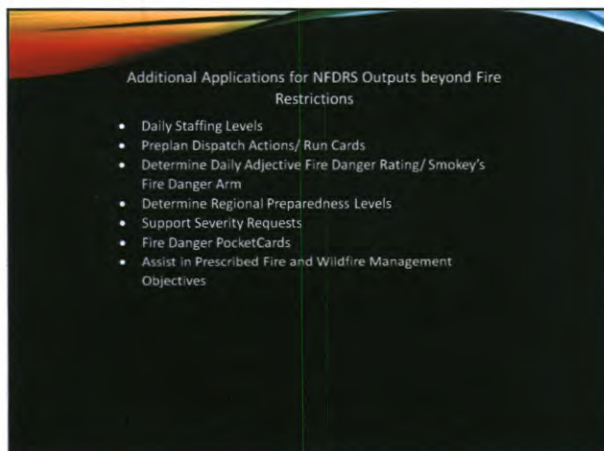


8

Smokey's arm

These are what is posted (how tall is flaming front).

1000 hr is what matters (new of fuels)
(1000 hr fuel) one hour
fire means it takes 1 hr
of rain to mitigate
These live fuel moistures are
weighed and verified

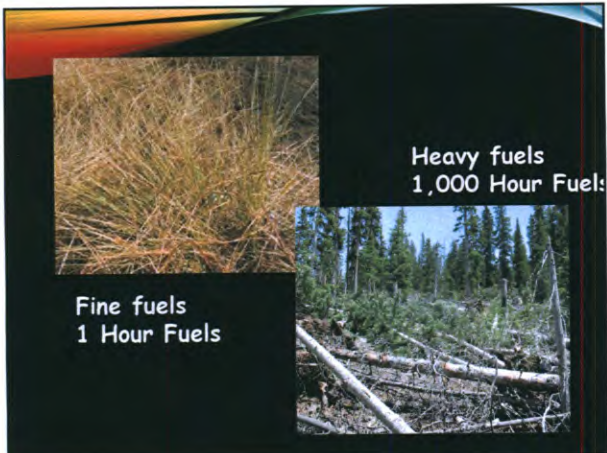


9

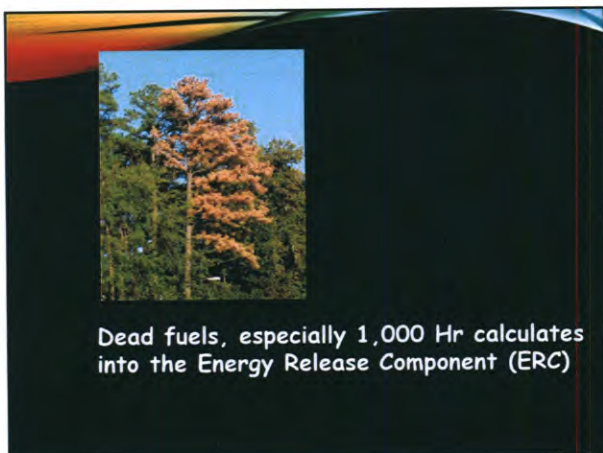


10

Can affect businesses
(no chainsaws...)



11



12

ERC IS RELATED TO THE HEAT ENERGY RELEASED AT THE FLAMING FRONT OF A FIRE.....



13

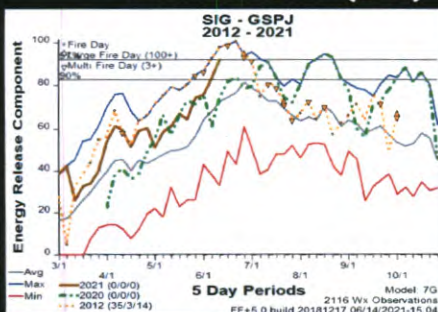
UCR SPECIAL INTEREST GROUPS (SIGS)

Rating Area	SIG/RAWS	Data Years Used	Weighting Factor	Fuel Model	NFDRS Index
Low Elevation	SIG #1 Low Little Dolores Demaree Rifle Pine Ridge	1998-2020	1 1 1	X	ERC
Middle Elevation	SIG #2 Middle Jacks Canyon Gypsum Crown	1998-2020	1 1 1	Y	ERC
High Elevation	SIG #3 High Deep Creek Dowd Junction Soda Creek	2000-2020	1 1 1	Y	ERC

14

Grizzly Creek was at highest indices in recorded history

ENERGY RELEASE COMPONENT (ERC)



15

This is the chart it produces

For PIO questions regarding why we aren't in fire restrictions, refer to Eric and David

MORE IMPORTANTLY, ERC :

- ERC is a cumulative or build-up type of index
- Provides a basis for watching trends over a fire season
- Provides comparisons from year –to –year, we use 10 years of data
- It is a good tracker of drought conditions
- It is not affected by short term changes in weather.(i.e. wind)
- We use percentile "trigger points" in decisions about fire restrictions, severity, resource ordering and preparedness levels.

16

NFDRS AND ERC REFERENCES

<https://www.nw.cg.gov/publications/pms437/fire-danger/nfdrs-system-inputs-outputs#TOC-Observations-and-Forecasts>

<https://www.nw.cg.gov/committees/fire-danger-subcommittee/nfdrs>

17

Live Fuel Moistures



Woody Fuels



Herbaceous Fuels

18

The objectives of fuel moisture sampling and reporting are to:

- Assist in fire behavior predictions for wildfires and fire use
- Provide a basis for severity funding
- Determine whether a site is in prescription for prescribed burning
- Aid in determining post-fire resource effects
- Determine drought or drying trends
- Validate NFDRS calculated outputs

19

Moisture Content (%)	Stage of Vegetative Development
300%	Fresh foliage, annuals developing early in the growing cycle
200%	Maturing foliage, still developing, with full turgor
100%	Mature foliage, new growth complete and comparable to older perennial foliage
50%	Entering dormancy, coloration starting, some leaves may have dropped from stem
30%	Completely cured, treat as dead fuel

20

Duck pond probably at 50%

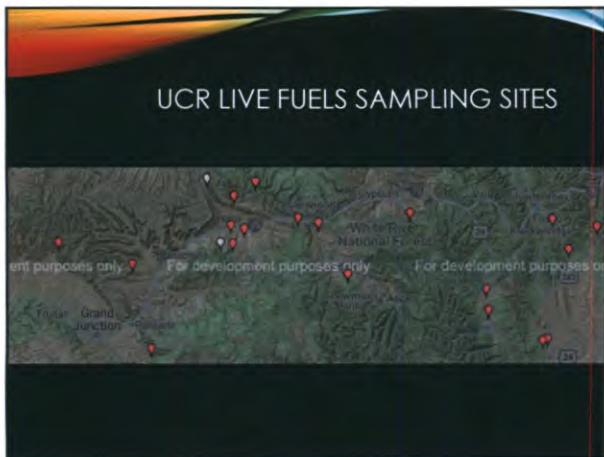
Live Fuels do not have a computational procedure yet to estimate their moisture content. Direct sampling of these fuels is required. There is a standard procedure for collecting, processing, calculating and reporting the fuel's moisture content.

Formula for percent of live fuels moisture content:

$$\frac{\text{Weight of water in sample}}{\text{Dry weight of sample}} (100) = \text{percent moisture content}$$

21

Formula for determination



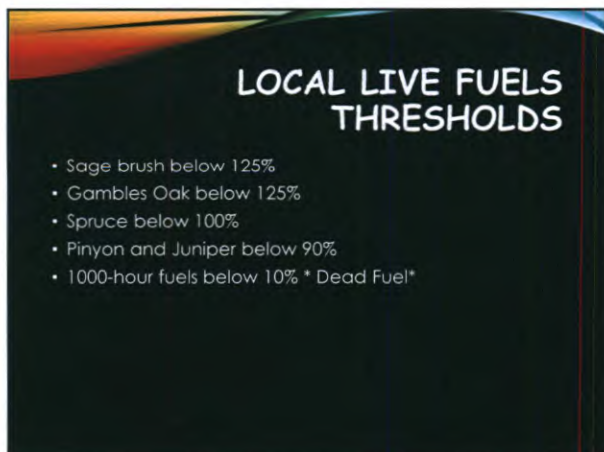
22

Rifle airport, grass mesa
(white ones no longer in use)

Fuels Sample Site/County	Fuels Gathered	Creation Date
Bureau Mountain, Garfield	Engelmann Spruce, 1,000-hour	2004
Crown, Pitkin	Gambel Oak, Threeflip Sage	2004
Demaree, Garfield	Utah Juniper, Gambel Oak, Black Sagebrush	1999
Garfield County Airport, Garfield	Threeflip Sagebrush, 1,000-hour	2009
Grass Mesa, Garfield	Gambel Oak, Threeflip Sagebrush	2004
Hardyville, Eagle	Rocky Mt Juniper, Gambel Oak, Twonneedle Pinyon, Threeflip Sagebrush, 1,000-hour	2009
Lookout Mountain, Garfield	Douglas Fir, 1,000-hour	2004
Middle Rifle Creek, Garfield	Rocky Mt Juniper, Twonneedle Pinyon, Threeflip Sagebrush	2011
Soda Creek, Summit	Subalpine Fir, Lodgepole Pine, Threeflip Sagebrush, Engelmann Spruce, 1,000-hour	2009
South Canyon, Garfield	Gambel Oak	2011
Spear Hunter, Mesa	Utah Juniper, Gambel Oak, Black Sagebrush	1999
West Elk, Garfield	Subalpine Fir, 1,000-hour	2001

23

Gathered twice a month
beginning mid to late
May



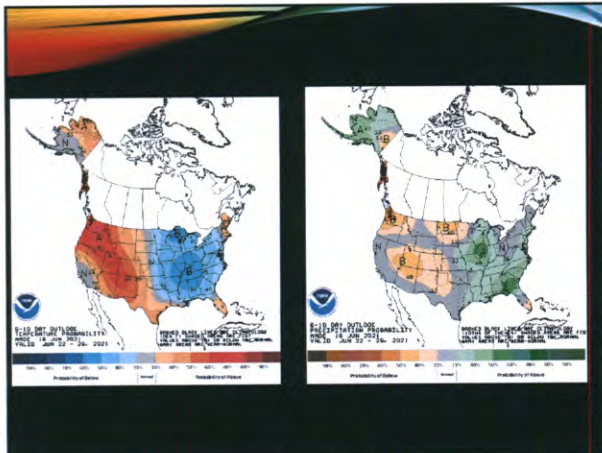
24

These are "watchout"
levels

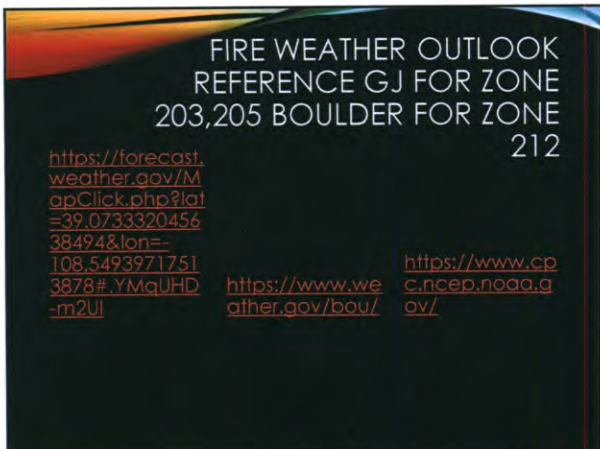


28

They view by fire zone



29

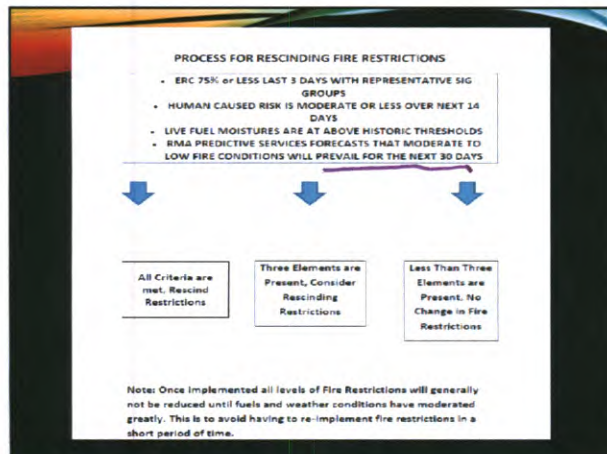


30

HUMAN RISK, CURRENT AND/OR EXPECTED

How many Human Caused fires has there been within the last 7 days. What has the Fire Behavior been, drain on resources. Is there a planned event coming up. 4th of July, Labor Day, Festivals

31



32

*Helps prevent yo-yo effect
which is why they are fairly strict*

All factors are considered. Decisions on Fire Restrictions must use fire science, good judgement and communications throughout the Fire Restrictions process.

33



MEMORANDUM

TO: HONORABLE MAYOR AND COUNCIL
FROM: TOMMY KLEIN
DATE: APRIL 26, 2022
RE: CITIZEN SPEEDING CONCERN ON W. 16TH STREET

At the two previous Council meetings, a citizen presented information on a speeding issue on W. 16th Street.

The Garfield County Sheriff's Office conducted a speed survey on W. 16th Street from 9:00 am Thursday, April 14, 2022, through 8:35 am Thursday, April 21, 2022. In my opinion, the sample size was large enough to establish a basis for informed decisions.

Number of Vehicles Measured: 10,317
Posted Speed: 25 mph
Mean Speed: 26 mph
85% Speed: 30.65 mph
95% Speed 34.11 mph

The percentage of vehicles traveling above 35 mph was 3.8%. Only .76% vehicles in the survey were operating in excess of 40 mph.

The 85th percentile speed is a measurement used by traffic engineers to determine the speed limit for a roadway. Based on the measurements, the posted speed limit for this section of roadway could be 30 mph and comply with safety standards. I do not favor an adjustment in the current posted speed limit of 25 mph for the section of W. 16th Street in Rifle proper.

It is my view that this issue can only be addressed effectively by the county. Effective speed enforcement by the Rifle Police Department is not possible. A RADAR reading outside of the





municipal limits cannot be used by a Rifle officer to stop a violator. A Rifle officer that clocks a speeder in the City limits cannot pursue and stop a vehicle in the county. Speeding alone is a petty offense. The Sheriff does not wish to deputize Rifle officers for the purpose of enforcing traffic laws on this roadway which is understandable since there is considerable legal risks for assuming responsibility for a law enforcement officer's actions.

The section of W. 16th Street (County Road 265) west of 1625 Howard Avenue is in the County. If a decision were made to place speed calming infrastructure in the area, the County would be responsible.

If this roadway were in Rifle city limits, I would not recommend traffic calming outside of periodic speed enforcement during periods when violations are most likely to occur. Based on the data collected, violations occur most frequently between:

0200-0300
0500-0900
1100-1200
1500-1700

In the past, Rifle police have tried to address the citizen's concerns despite the fact that the issues occurs outside of their jurisdiction. They have parked a police vehicle on W. 16th Street and Howard and have deployed a speed message board in the same area on multiple occasions.

The chief advised the citizen to attend the next BOCC meeting. I left a voicemail asking for him to call me if he has questions.

