

# **WILDFIRE PROTECTION PLAN**

**CRYSTAL PARK SITE #221  
6165 WATERFALL LOOP.  
MANITOU SPRINGS, CO**

**DEVELOPED FOR OWNERS:**

**JON BELLEAU**

**CHRIST FAULK**

Prepared by

**PALACE  
HOMES, INC**

May 8, 2024

Submitted to

**El Paso County Land Use Office, the Crystal Park Fire Department and  
the Crystal Park Architectural Control Committee**

## **WILDFIRE PROTECTION PLAN**

This wildfire protection plan is submitted to the Land Use Office of the El Paso County Colorado: County Zoning Department, the Crystal Park Architectural Control Committee and the Crystal Park Fire Department to satisfy the requirements of the entities in regard to planning for wildfire protection and mitigation in connection with construction of new homes within the wildland-urban interface characteristic of much of El Paso County.

### **Property Subject to Plan**

This plan is presented in connection with the planned construction of a new home referenced above.

**The site plan for the proposed home, including contour plot lines, is attached.**

Application for a building permit for the home is in process.

In developing this plan it was necessary to determine the required allocation of defensible space around the proposed home site and to identify the vegetation and forest characteristics in the immediate surroundings.

Drawing upon the information presented in Colorado State Forest Service "The Home Ignition Zone: A guide to preparing your home for wildfire and creating a defensible space", an inspection of the site and surrounding terrain has been conducted and the attached site plan has been developed in accordance with the guidance of the subject fact sheet specifically relating to the property's **Three Defensible Zones**.

Most importantly, the homeowner needs to recognize that firefighters will always do their best to protect you and your home. **But ultimately, it is the responsibility of the property owner to protect their family's lives, animals and property from Wildfire.**

### **Structural Ignitability**

Use of fire-resistant building materials is greatly encouraged in Crystal Park to the degree that all new construction or reroofing is required to be a Class "A" material. Most decks are highly combustible heat traps. For this reason, patios are preferred or even concrete decks with steel supports. Exterior walls of non-combustible materials such as stucco or concrete boards are a good choice. The roof eaves and fascia can also be stucco or other fire-resistant materials. Finally, windows are one of the weakest parts of a home and should be given careful consideration. For more information, refer to

the CSFS Fire Wise Construction: Site Design and Building Materials at [www.csfs.colostate.edu](http://www.csfs.colostate.edu). Go to publications (Home Ignition Zone Guide **Defensible Space**

Defensible space is the area around a home that has been modified to reduce fire hazard. It will give your home a fighting chance against a wildfire. This entails developing three zones around all structures on the property as follows.

Within these Defensible Zones, the following will be accomplished: In accordance with the guidelines of “*The Home Ignition Zone*” by Colorado State Forest Service.

**Defensible Space Management Zone 1: 0 – 5 ft.** This zone is designated to prevent flames from coming in direct contact with the structure, Use nonflammable, hard surface materials in this zone, such as rock, gravel, cement, bare earth or stone/concrete pavers.

**CRITICAL STEPS:**

- Remove all flammable vegetation, including shrubs, slash, mulch and other woody debris.
- Do not store firewood or other combustible materials inside this zone.
- Prune tree branches hanging over the roof and remove all fuels within 10 feet of the chimney.
- Regularly remove all pine needles and other debris from the roof, deck and gutters.
- Rake and dispose of pine needles, dead leaves, mulch and other organic debris within 5 feet of all decks and structures. Farther than 5 feet from structures, raking material will not significantly reduce the likelihood of ignition and can negatively affect other trees,
- Do not use space under decks for storage.

**Defensible Space Management Zone 2: 5 – 30 ft.** This zone is designed to give an approaching fire less fuel, which will reduce its intensity as it gets nearer to your home or any structures.

**CRITICAL STEPS**

- Mow grasses to 4 inches tall or less.
- Avoid large accumulations of surface fuels such as logs, branches, slash and mulch.
- Remove enough trees to create a least 10 feet of space between crowns. Measure from the outermost branch of one tree to the nearest branch on the next tree.
- Small groups of two or three trees may be left in some areas on Zone 2. Spacing of 30 feet\* should be maintained between remaining tree groups to ensure fire doesn't jump from one group to another.
- Remove ladder fuels under remaining trees. This is any vegetation that can bring fire from the ground up into taller fuels.
- Prune tree branches to a height of 6-10 feet\* from the ground or a third of the total height of the tree, whichever is less.

- Remove stressed, diseased, dead or dying trees and shrubs. This reduces the amount of vegetation available to burn and improves forest health.
- Common ground junipers should be removed whenever possible because they are highly flammable and tend to hold a layer of flammable material beneath them.
- You can keep isolated shrubs in Zone 2, as long as they are not growing under trees. Keep shrubs at least 10 feet\* away from the edge of tree branches.
- Periodically prune and maintain shrubs to prevent excessive growth. Remove dead stems annually.
- Spacing between clumps of shrubs should be at least 2 ½ times\* their mature height. Each clump should have a diameter no more than twice the mature height of the vegetation. Example: For shrubs that grow 6 feet tall, space clumps 15 feet apart or more (measure from the edge of the crowns of vegetation clumps). Each clump of these shrubs should not exceed 12 feet in diameter.

*\* Horizontal spacing recommendations are minimums and can be increased to reduce potential fire behavior, particularly on slopes. Consult a forestry, fire or natural resources professional for guidance with spacing on slopes.*

**Defensible Space Management Zone 3: 30-100 ft.** This zone focuses on mitigation that keeps fire on the ground, but it's also a space to make choices that can improve forest health. Healthy forests include trees of multiple ages, sizes and species, where adequate growing room is maintained over time.

If the distance of 100 feet to the edge of Zone 3 stretches beyond your property lines, it's encouraged to work with adjoining property owners to complete an appropriate defensible space. If your house is on steep slopes or has certain topographic considerations, this zone may be larger.

### **CRITICAL STEPS**

- Mow grasses is not necessary in Zone 3.
- Watch for hazards associated with ladder fuels. The chance of a surface fire climbing into trees is reduced in a forest where surface fuels are widely separated, and low tree branches are removed.
- Tree crown spacing of 6-10 feet is suggested. Consider creating opening or meadows between small clumps of trees so fire must transition to the ground to keep moving.
- Any approved method of slash treatment is acceptable in this zone, including removal, piling and burning, lop and scatter, or mulching. Lop-and-scatter or mulching treatments should be minimized in favor of treatments that reduce the amount of woody material in the zone. The further this material is from, the home, the better.

## **Other Recommendations**

### **Water Supply**

Crystal Park has several cisterns installed around the Park for the express purpose of firefighting. Owner to verify cistern locations.

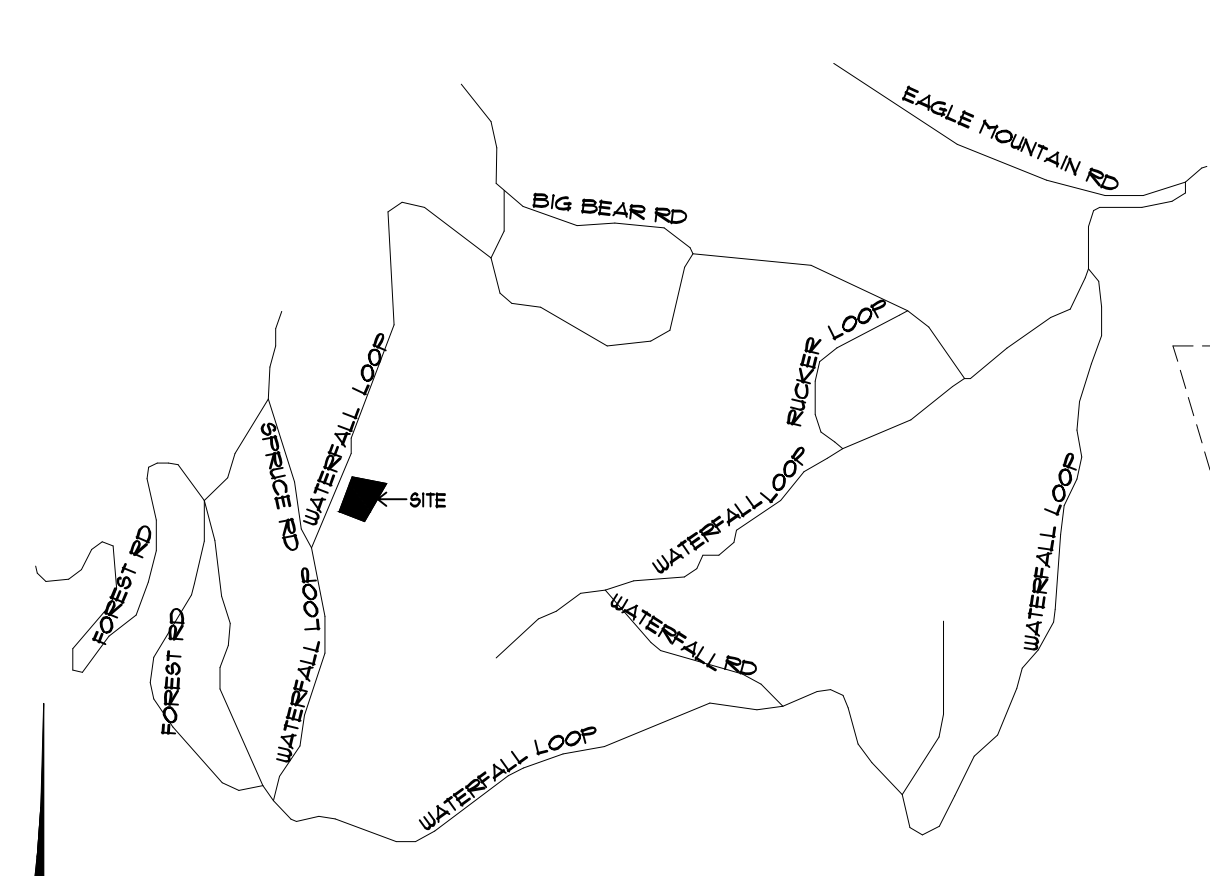
### **Recommendations for Specific Forest Types**

The above recommendations refer primarily to Ponderosa pine, Douglas fir and mixed conifer ecosystems.

Please refer to additional recommendations below:

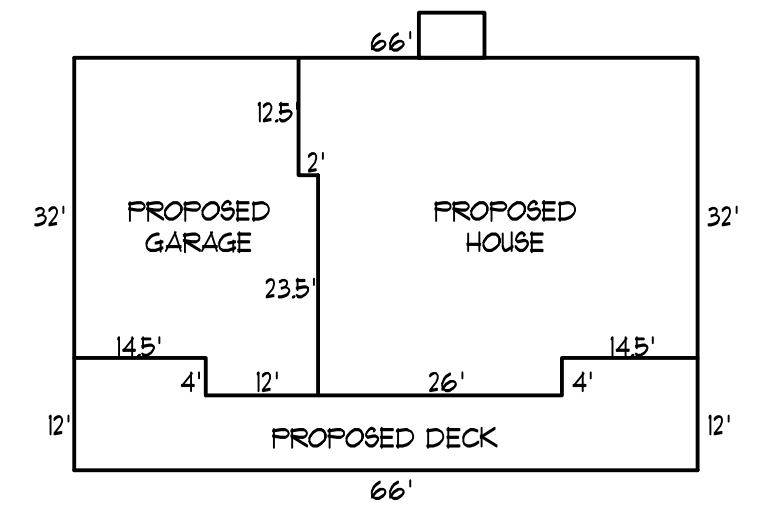
### **Implementation**

This plan is to be affected and provisions implemented on the site by the time of construction completion. This does not include adjacent sites within the boundary of the Defensible Space Management Zones owned by others, nor common ground owned by Crystal Park. The owner is encouraged to work with adjoining property owners to complete the defensible space. The area owned by Crystal Park within the Defensible Space Management Zones may be brought into compliance with the Owner's Protection Plan by mutual agreement with Crystal Park. The owner is encouraged to contact the Crystal Park Forestry Committee (through the Crystal Park Office 719-685-9729) for further information.



**VICINITY MAP**

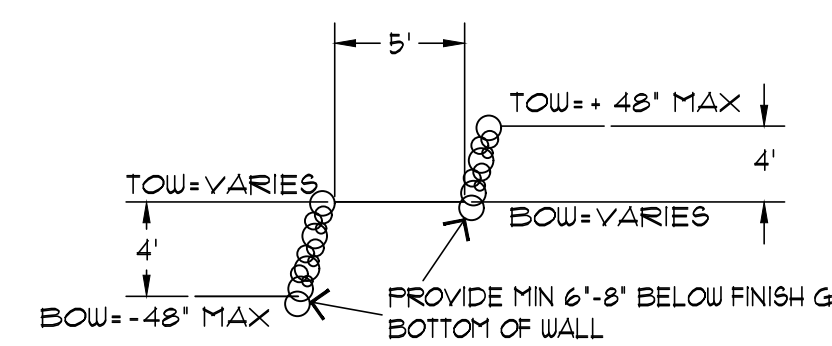
NO SCALE



**HOUSE FOOTPRINT**

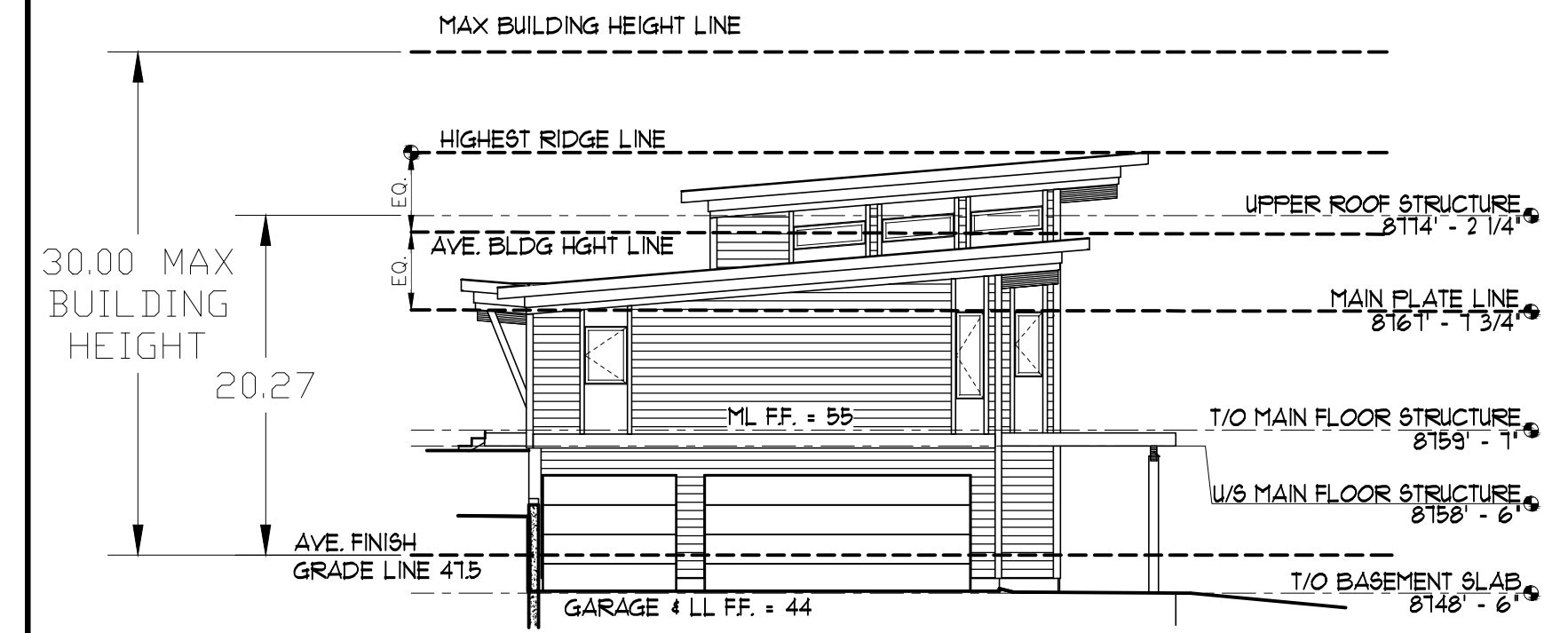
NO SCALE

NOTE: IN MOST CASES THE RETAINING WALLS ARE ONLY ONE TIER. TWO TIERS SHOWN FOR WORST CASE SCENARIO.



**RETAINING WALL SECTION**

NTS

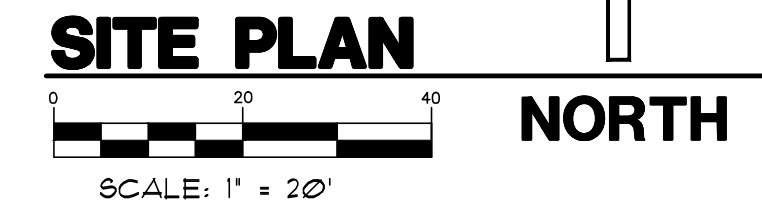
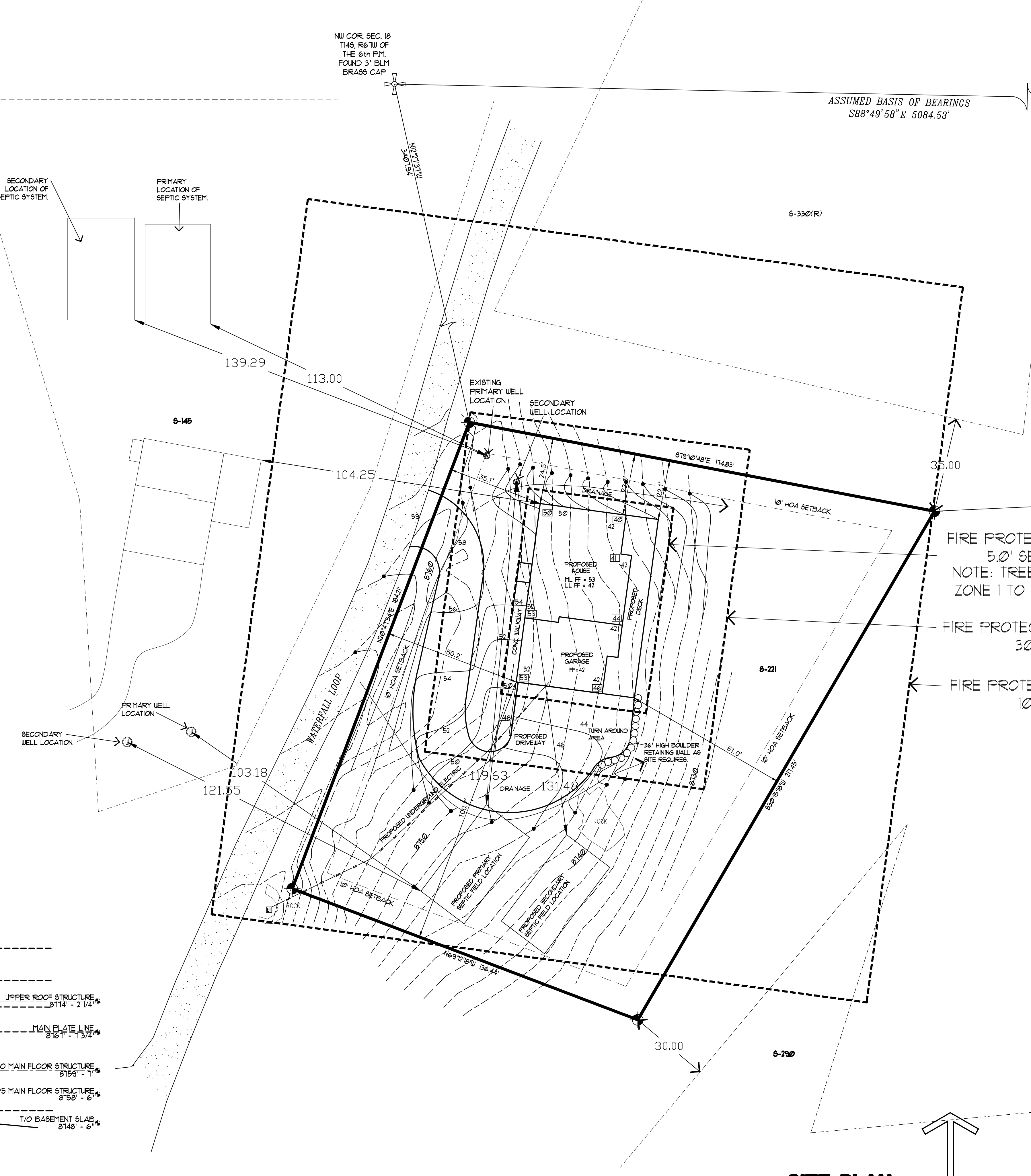


**AVERAGE GRADE CALCULATION**

54x1 = 54
32x1 = 32
20x1 = 20
44x4 = 176
3327 = 414

**HOUSE ELEVATION/HEIGHT**

SCALE: 1" = 10'



**SITE PLAN**

SCALE: 1" = 20'

**SITE INFO:**

**ADDRESS:**  
6165 SPRUCE ROAD (WATERFALL LOOP)  
MANTOU SPRINGS, COLORADO 80829

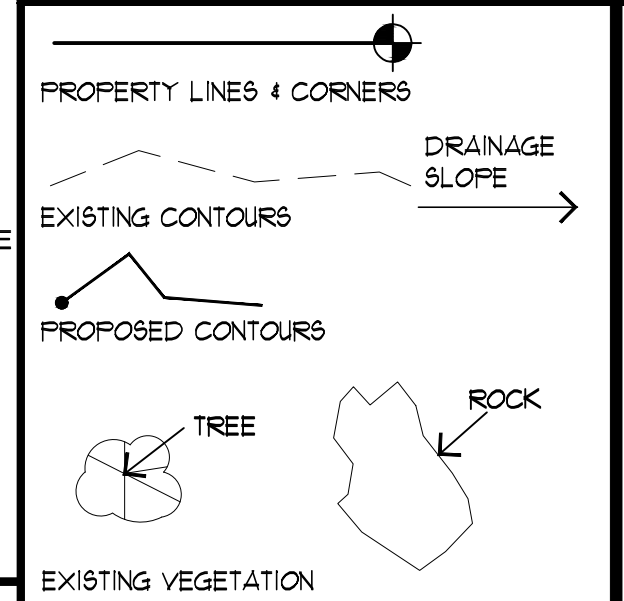
**LEGAL:**  
S-221(R) SITE ADDITION TO CRYSTAL PARK SUBDIVISION NO. 2 LOCATED IN THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER (NW1/4 SW1/4) OF SECTION 18, TOWNSHIP 14 SOUTH, RANGE 61 WEST OF THE 6th P.M., COUNTY OF EL PASO, STATE OF COLORADO.

**SITE DATA:**  
LOT SIZE = 30492 SQFT  
BUILDING FOOTPRINT =  
HOUSE = 2340 SQFT  
GARAGE = 841 SQFT  
DECK = 646 SQFT  
TOTAL = 0000 SQFT  
LOT COVERAGE = 7.6%  
ZONING = FUD  
TAX SCHEDULE #:  
BUILDING HEIGHT = SEE ELEVATIONS

**SITE NOTES:**

- 1) Topographic information is to be supplied by others. See below for info.
- 2) Dashed lines indicate existing contours. Solid lines indicate proposed contours.
- 3) Contractor to verify easements.
- 4) Contractor to limit cut and fill areas and limit material and vehicle storage to the building areas in order to minimize vegetation and site disturbance.
- 5) Flag "Limits of Disturbance" prior to excavation.
- 6) Final landscaping to be determined by the Contractor/Owner(s). It shall minimize impact to the site. All landscaping to be completed by the Contractor/Owner(s).
- 7) Use wattles and silt fencing to minimize erosion during construction. Also stabilize area with seeded blankets for erosion control as necessary.
- 8) Earth materials are not to be stockpiled on streets or sidewalks, but on site or staging areas.
- 9) Contractor is required to provide positive drainage away from and around structure in all directions as shown.
- 10) Any boulder retaining walls shown shall be 48" max high and 48"-60" min apart laterally if (2) or more retaining walls exist. Or retaining walls shall be engineered by a licensed CO soils engineer.
- 11) General Contractor, Subcontractors, Suppliers, and Owner(s) shall familiarize themselves & verify all notes, dimensions and information on drawing(s) prior to starting construction. It shall be the responsibility of those parties to report any changes and/or discrepancies to the Designer. Questions regarding these drawings such as: drawing interpretation, dimensions, notes, scale and other similar questions shall be brought to the attention of the Designer immediately in writing. Failure to do any of the above shall relieve the designer of any errors. Designer shall not be responsible for any changes not noted in writing to this plan.

**SITE LEGEND:**



PROJECT BENCHMARK: RAMPART'S SURVEY CONTROL POINT 31 DERIVED FROM AN OPUS SOLUTION ELEVATION = 8495.02'

SITE BENCHMARK: SURVEY CONTROL POINT AS SHOWN HEREON.

ALL ELEVATIONS ARE BASED UPON NAVD83 VERTICAL DATUM.

NOTE: ALL LINEAL UNITS DEPICTED ON THIS TOPOGRAPHIC SITE PLAN ARE U.S. SURVEY FEET.

THE PROPERTY LINES AS DEPICTED ON THIS TOPOGRAPHIC SITE PLAN ARE BASED ON THE LOT DIMENSIONS SHOWN ON THE PLAT CREATED BY MONUMENT VALLEY ENGINEERS INC. OF SITE-221(R) SITE ADDITION TO CRYSTAL PARK SUBDIVISION NO. 2, RECORDED AT RECEPTION NO. 22315141 ON MAY 12, 2023.

NO BOUNDARY SURVEY OR LAND SURVEY PLAT WAS COMPLETED AS PART OF THIS SERVICE.

**PROJECT COLORS:**

ROOF: CMG CHARCOAL  
GUTTERS & DOWNSPOUTS: CMG DEEP BLACK SIDING (CEMENT BOARD); CMG MOUNTAIN CEDAR TRIM/FASCIA/WINDOWS/GARAGE DOOR: CMG BLACK FASCIA/EXP. BEAMS/FRONT DOOR: CMG NATURAL DOUGLAS FIR DECK BOARDS (COMPOSITE); CMG CYPRESS RAILINGS; STAINLESS STEEL CMG CABLE POSTS FOR RAILINGS; BLACK CMG ALUMINUM

**REFERENCE INFO:**

**TOPO INFO:**  
RAMPART SURVEYS, LLC  
1050 TAMARAC PKWY, WOODLAND PARK, CO 80903  
(719) 687-0930  
RUS@RAMPARTLS.COM  
BELLEAU SITE

**CLIENT/OWNER INFO:**  
CLIENT NAME: JON BELLEAU  
ADDRESS: 6165 SPRUCE ROAD (WATERFALL LOOP) MANTOU SPRINGS, COLORADO 80829  
PHONE: 662-103-1615  
EMAIL: JONTER@MAIL.COM

**SITE TERMS:**

**ABBREVIATIONS:**  
BOW=BOTTOM OF RETAINING WALL  
(E)=EXISTING TO REMAIN  
LL=LOWER LEVEL  
ML=MAIN LEVEL  
(N)=NEW CONSTRUCTION  
(R)=REMOVE  
R/O=RIGHT OF WAY  
SB=SETBACK  
SQ. FT. OR SF=SQUARE FEET  
TOP=TOP OF FOUNDATION  
TOW=TOU OF RETAINING WALL  
UL=UPPER LEVEL  
WQ=WALKOUT

REVISIONS

**LGA STUDIOS**  
201 E. Las Animas Street Suite 113  
Colorado Springs, CO. 80903  
Phone: (719) 635-0880  
Email: Office@LGAstudios.com  
Website: www.lgastudios.com

**CONTRACTOR**  
**PALACE HOMES INC.**  
228 W COLORADO AVE #700  
Colorado Springs, CO 80904  
Phone: (719) 467-9656  
EMAIL: GORDON@PALACEHOMESINC.COM

**THE BELLEAU RESIDENCE**  
6165 Waterfall Loop  
COMPUTER FILE 24-2406

DRAWN BY: NB  
CHECKED BY: LGAstudios

SITE PLAN  
VICINITY MAP  
SITE NOTES

Sheet #  
**SP1**  
OF 1 Sheets