

# PHASE III DRAINAGE REPORT

## ***LOT 1 LYNCH SUBDIVISION DOUGLAS COUNTY TOWN OF CASTLE ROCK***

Prepared for

**Ryan Lynch & Jamielynne Shepherd**

1320 Sweet Springs Cir. Apt 108  
Castle Pines, CO 80108

Prepared by

**David E. Archer & Associates, Inc.**

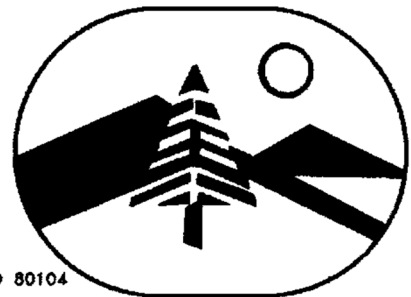
105 North Wilcox Street  
Castle Rock, Colorado 80104

Project No. 25-0097  
September 2025

Town of Castle Rock  
XXXX-00XX



105 WILCOX ST., CASTLE ROCK, COLORADO 80104



Date: September 2025  
Project Name: Park Storage  
Project No.: 25-0097  
TOC NO. XXXX-00XX

## ENGINEER'S STATEMENT

This report and plan for the Phase III drainage design of Lot 1 Lynch Subdivision was prepared by me (or under my direct supervision) in accordance with the provisions of the Castle Rock Storm Drainage Design and Technical Criteria Manual for the owners thereof. I understand that Castle Rock does not and will not assume liability for drainage facilities designed by others.

SIGNATURE:

\_\_\_\_\_  
Registered Professional Engineer

## DEVELOPER CERTIFICATION

Ryan Lynch & Jamielynn Shepherd hereby certifies that the drainage facilities for Lot 1 Lynch Subdivision shall be constructed according to the design presented in this report. I understand that Castle Rock does not and will not assume liability for the drainage facilities designed and/or certified by my engineer and that Castle Rock reviews drainage plans pursuant to Colorado Revised Statutes Title 30, Article 28; but cannot, on behalf of Lot 1 Lynch Subdivision, guarantee that final drainage design review will absolve Ryan Lynch & Jamielynn Shepherd and/or their successors and/or assigns of future liability for improper design. I further understand that approval of the Final Plat, Final Development Plan, and/or Subdivision Development Plan does not imply approval of my engineer's drainage design.

\_\_\_\_\_  
Name of Developer

\_\_\_\_\_  
Authorized Signature

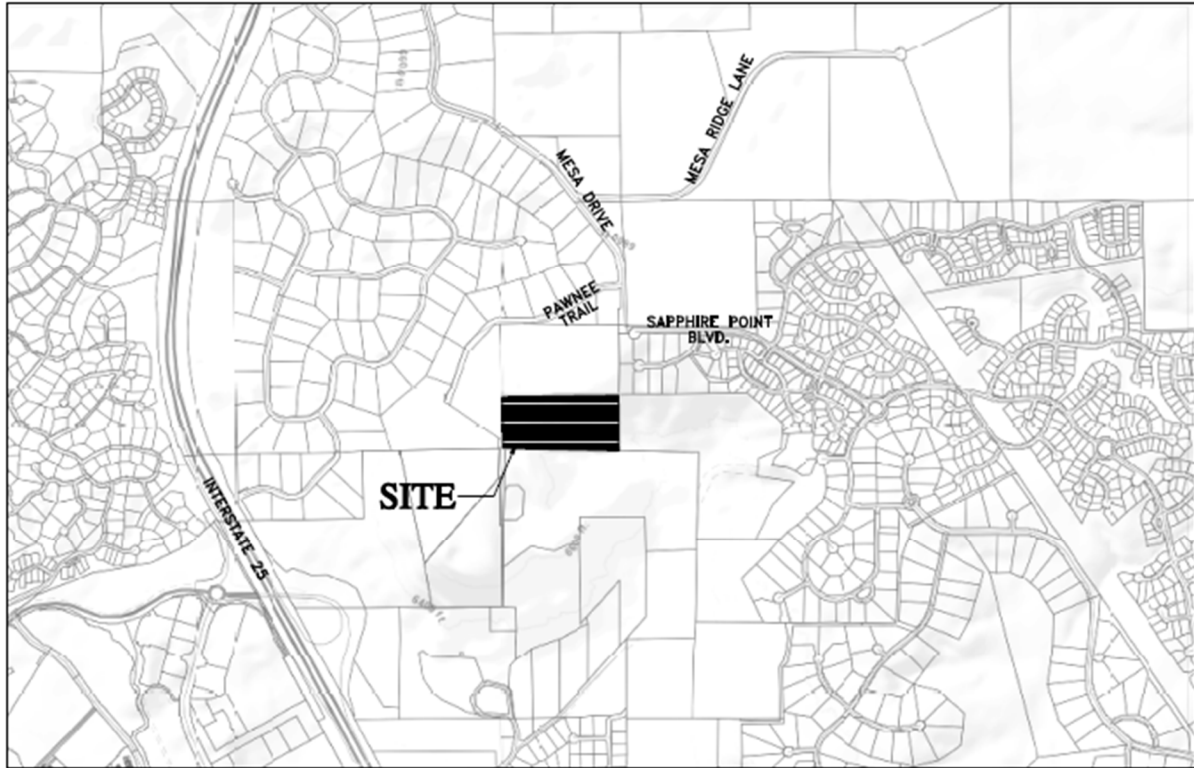
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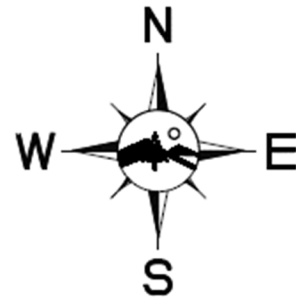
# I. GENERAL LOCATION AND DESCRIPTION

## A. Site Location

1. The site does not have a common address. The legal description of the site is Lot 1, Lynch Subdivision. See site Vicinity Map below.



– VICINITY MAP –



2. Township, Range, Section, and ¼ Section

*a) In Section 23 Township 7 South, Range 67 West of the 6<sup>th</sup> P.M.*

3. Existing and proposed streets, roadways, and highways adjacent to and within the proposed development, or within the area served by the proposed drainage improvements

*a) Pawnee Trail lies north of the property. There are no proposed roadways with this site. The site will require a driveway to be constructed to gain access to the site.*

4. Names of surrounding or adjacent developments, including land use or zoning information

*a) The site lies within the Maher Ranch PUD. Parcels to the east and south west lie within this planned development.*

*b) All neighboring properties are residential and agricultural.*

**B. Description of Property**

1. Area in Acres

*a) The site contains approximately 14.74 acres.*

2. Ground cover, vegetation, site topography and slopes

*a) The existing site is currently undeveloped naturally vegetated and sloping to the northeast.*

3. NRCS Soils Classification Map and discussion

*a) The NRCS Soils classification for the subject site is Hydrologic Group D. The site soil is comprised of Stony rough land (Su). This soil makes up approximately 51.5% of the site. This soil has a low infiltration rate. The remaining 48.5% of the site is Stony steep land (Sv). This soil has a low infiltration rate.*

4. Major and minor drainageways
  - a) *East Plum Creek lies to the southwest of the property. The drainage from the project site drains into the tributary. Ultimate discharge of the site is into East Plum Creek.*
5. Floodplains delineated by FHAD studies or on FEMA FIRM Maps
  - a) *The 100-year flood plain or floodway of East Plum Creek does not encroach upon the subject property per the FIRM Panel 08035C0186G with an effective date of 03/16/2016. See firm map in the appendices.*
6. Existing irrigation canals or ditches
  - a) *There are no canals or ditches on the site.*
7. Significant geologic features
  - a) *The site has a significant slope to the east near the centroid of the lot.*
8. Proposed land use
  - a) *The site will be used as a single family residence.*

## **II. DRAINAGE BASINS AND SUB-BASINS**

### **A. Major Drainage Basins**

1. On-site and off-site major drainage basin characteristics and flow patterns and paths
  - a) *The major basin on this site is the basin for East Plum Creek. The flow path for the runoff from the site flows to the neighboring tributary. Ultimate discharge from the site is into East Plum Creek.*
2. Existing and proposed land uses within the basins if known
  - a) *The existing land uses within the major basin are residential and business and commercial developments of lots of varying sizes.*
3. Discussion of all drainage way planning or floodplain delineation studies that affect the major drainage ways, such as FHAD Studies and Master Planning studies
  - a) *According to the FEMA Firm Map 08035C0186G the site does not fall within the floodplain. No changes to the floodplain are proposed due to the subject development.*

4. Discussion of the condition of any channel within or adjacent to the development, including existing conditions, need for improvements, and impact on the proposed development

*a) There are no existing channels within or adjacent to the development that impact the site.*

5. Discussion of the impacts of the off-site flow patterns and paths, under fully developed conditions

*a) The offsite flow patterns from the neighboring lots are fully developed. No offsite flows enter the subject site.*

## **B. Minor Drainage Basins**

1. On-site and off-site minor drainage basin characteristics and flow patterns and paths under historic and developed conditions

*a) The site is divided into two on-site basins for analysis. Basins H1 and H2 are analyzed at historic conditions using a 5% imperviousness. Basins D1 and D2 are analyzed at 10% imperviousness to represent the maximum allowable imperviousness of the site. Under section 13.1.5.5 Large Lot Single Family Sites, the proposed development will be excluded from providing water quality enhancements and full spectrum detention given the total imperviousness on site does not exceed 10%.*

*b) There are no off-site basins that flow into the subject site. The site is located next to a geographical high point. See drainage map.*

### **Basin H1**

Basin H1 consists of the western 4.25± acres of the subject site. The historic basin accepts no offsite flows. The existing flows from this basin travel overland in a northerly direction. Basin H1 was analyzed with 5% imperviousness. The calculated 5-year storm event discharge from the basin is 0.94 cfs and 11.35 cfs for the 100-year storm event. The discharge from Basin H1 is represented by Historic Design Point 1.

### **Basin H2**

Basin H2 consists of the eastern 10.48± acres of the subject site. The historic basin accepts no offsite flows. The existing flows from this basin travel overland in a northerly direction. Basin H2 was analyzed with 10% imperviousness. The calculated 5-year storm event discharge from the basin is 2.68 cfs and 32.51 cfs for the 100-year storm event. The discharge from Basin H2 is represented by Historic Design Point 2.

### **Basin D2**

Basin D2 is the developed basin located at the north boundary of the site. This basin encompasses the entry driveway and other small portions of the site that are not captured by the proposed detention facility. Basin D2 consists of 0.03± acres. The developed flows from this basin are represented by Developed Design Point 2.

Below is the complete design point table for all historic basins. See the historic drainage map in the appendices for design point and basin locations.

Historic Design Point Table

| Design Point | Contributing Basin(s) | Area (AC.) | Q 5-YR | Q 100-YR |
|--------------|-----------------------|------------|--------|----------|
| 1            | H1                    | 4.25       | 0.94   | 11.35    |
| 2            | H2                    | 10.48      | 2.68   | 32.51    |

Below is the complete design point table for all developed basins. See the developed drainage map in the appendices for design point and basin locations.

Developed Design Point Table

| Design Point | Contributing Basin(s) | Area (AC.) | Q 5-YR | Q 100-YR |
|--------------|-----------------------|------------|--------|----------|
| 1            | D1                    | 4.25       | 1.47   | 12.03    |
| 2            | D2                    | 10.48      | 4.20   | 34.41    |

2. Existing and proposed land uses within the basins

*a) The site is currently undeveloped with a proposed residence to be constructed on site.*

3. Discussion of irrigation facilities that will influence or be impacted by the site drainage.

*a) There are no irrigation facilities on the site.*

4. Discussion of the impacts of the off-site flow patterns and paths, under fully developed conditions

*a) No offsite flows will enter the site under developed conditions. The site is located adjacent to a highpoint within the major basin.*

## III.DRAINAGE DESIGN CRITERIA

### A. Regulations

1. County criteria and optional provisions selected, when applicable

*a) The drainage design outlined in this report follows those regulations outlined in the Castle Rock Storm Drainage Design and Technical Criteria Manual (CRSTDDTCM) February 2025.*

2. *MHFD Manual* criteria and optional provisions selected, when applicable
  - a) *The regulations outlined in the CRSDDTCM are consistent with the criteria outlined in the MHFD Urban Storm Drainage Criteria Manual Volumes 1-3.*

## **B. Drainage Studies, Master Plans, Site Constraints**

1. Discuss previous drainage studies or master plans for the site or project that influence the stormwater facility design
  - a) *No previous drainage studies have been completed for this site.*
2. Discuss drainage studies for adjacent developments and how those developments affect the stormwater facility design
  - a) *No drainage studies for adjacent sites impact the development of this site.*
3. Discuss MHFD Outfall Systems Plans and how recommendations in those studies affect the design
  - a) *A review of the MHFD Outfall Systems Plans does not include this area.*
4. Discuss impacts to storm water management facility design caused by site constraints, such as streets, utilities, rapid transit, existing structures, etc
  - a) *There are no proposed stormwater management facilities on site.*

## **C. Hydrology**

1. Runoff calculation method(s)
  - a) *Runoff from the Basins were calculated using the rational method, as outlined in the CRSDDTCM section 6.3, and Chapter 2 of the MHFD USDCM Vol. 1. Time of concentration was calculated utilizing the UD Rational spreadsheet and NRCS conveyance were determined for each basin.*
2. Design storm recurrence intervals
  - a) *The design storm recurrence intervals used in this hydrologic analysis for design points were 5 and 100 yr storm events.*
3. Design rainfall
  - a) *The design rainfalls used in this analysis of the site are shown in the table below per the CRSDDTCM Section 6.1.1.*

| 2-Year | 5-Year | 10-Year | 50-Year | 100-Year |
|--------|--------|---------|---------|----------|
| 1.06   | 1.43   | 1.66    | 2.26    | 2.60     |

4. Detention storage calculation method(s)

*a) There are no proposed detention facilities on site. The developed site is to remain under 10% imperviousness.*

5. Detention storage release rate calculation method

*a) There are no proposed detention facilities on site. The developed site is to remain under 10% imperviousness.*

**D. Hydraulics**

1. Methods used to determine conveyance facility capacities

*a) No hydraulic calculations were required for this project.*

2. Hydraulic grade line calculation method and discussion of loss coefficients

*a) No hydraulic calculations were required for this project.*

3. Methods used to calculate water surface profiles

*a) No hydraulic calculations were required for this project.*

**E. Water Quality Enhancement**

1. Discuss proposed Best Management Practices

*a) The site is excluded from Water Quality Enhancement and Full Spectrum Detention under section 13.1.5.5 Large Lot Single Family Sites. The proposed developed site will remain less than 10% imperviousness.*

2. Identify design procedures and WQCV

*a) A proposed developed site is over the minimum 2.5 acres and will remain under 10% imperviousness.*

3. Discuss proposed Source Controls for site activities

*a) Source controls will be implemented during the construction phase by following the Storm Water Management Plan that will be prepared at the time of construction.*

## IV. STORMWATER MANAGEMENT FACILITY DESIGN

### A. Stormwater Conveyance Facilities

1. Discuss general conveyance concepts

*a) The general drainage paths for the developed site will not change from the historic paths. The developed flows from the site will travel overland to the historic design point locations.*

2. Discuss proposed drainage paths and patterns

*a) The developed flows will follow the historic drainage paths of the site. The proposed development will not alter the existing minor basins.*

3. Discuss storm sewer design, including inlet and pipe locations and sizes, tributary basins and areas, peak flow rates at design points, hydraulic grade lines, etc.

*a) There are no proposed inlets or storm sewer designs in this project.*

4. Discuss storm sewer outfall locations and design, including method of energy dissipation

*a) There are no storm sewer outfall locations in this project.*

5. Discuss how runoff is conveyed from all outfalls to the nearest major drainageway, including a discussion of the flow path and capacity downstream of the outfall to the nearest major drainageway

*a) There are no storm sewer outfall locations in this project.*

6. Discuss open channel and swale designs, including dimensions, alignments, tributary basins and areas, peak flow rates at design points, stabilization and grade control improvements, low flow or trickle channel capacities, water surface elevations, etc.

*a) There are no open channels in this project.*

7. Discuss allowable street capacities

*a) No streets are involved with the design of this project.*

8. Discuss maintenance aspects of the design and easements and tracts that are required for stormwater conveyance purposes

*a) The maintenance of all onsite facilities will be the responsibility of the property owner.*

9. Discussion of the facilities needed off-site for the conveyance of minor and major flows to the major drainageway

*a) There are no offsite facilities required.*

## **B. Stormwater Storage Facilities**

1. Discuss detention pond designs, including release rates, storage volumes and water surface elevations for the 2-year, 100-year and emergency overflow conditions, outlet structure design, emergency spillway design, etc.

*a) There are no proposed detention facilities with this site. With a proposed imperviousness at less than 10%, detention facilities are not required.*

2. Discuss pond outfall locations and design, including method of energy dissipation

*a) There are no proposed pond outfall locations with this project.*

3. Discuss how runoff is conveyed from all pond outfalls and emergency spillways to the nearest major drainageway, including a discussion of the flow path and capacity downstream of the outfall to the nearest major drainageway

*a) There are no proposed pond outfall locations with this project.*

4. Discuss maintenance aspects of the design and easements and tracts that are required for stormwater storage purposes

*a) There are no proposed stormwater facilities with this project. No maintenance is required.*

## **C. Water Quality Enhancement Best Management Practices**

1. Discuss the design of all structural water quality Best Management Practices, including tributary areas, sizing, treatment volumes, design features, etc.

*a) Water quality enhancement will be excluded from the site. The developed site will be required to be less than 10% imperviousness the be excluded from water quality enhancement based on section 13.1.5.5.*

2. Discuss how runoff is conveyed from all pond outfalls to the nearest major drainageway, including a discussion of the flow path and capacity downstream of the outfall to the nearest major drainageway

*a) There are no proposed pond outfall locations with this project.*

3. Discuss the operation and maintenance aspects of the design and easements and tracts that are required for stormwater quality enhancement purposes

*a) There are no proposed stormwater facilities with this project. No maintenance is required. Maintenance and easements will not be required.*

4. Discuss the source controls that are necessary to prevent the potential for illicit discharge from site activities.

*a) A Storm Water Management Plan will be prepared at the time of development for this project.*

## **D. Floodplain Modification**

### *Undesignated Floodplain*

1. Discuss resources and methodology for delineation of floodplain.
  - a) *FEMA Firm Panel 08035C0186G shows the existing 100-year floodplain of Plum Creek. The floodplain does not encroach on the subject site.*

### *Designated Floodplain*

1. Discuss the source of the floodplain information and level of detail (Flood Hazard Area Delineation or FEMA Flood Insurance Rate Maps)
  - a) *East Plum Creek lies to the west of the subject site as indicated on the FIRM panel Map Number 08035C0186G with an effective date of 03/16/2016.*
2. Discuss details of floodplain modifications, including level of encroachment, velocities, depths, stabilization measures, water surface elevations, etc.
  - a) *There will be no floodplain modifications associated with this project.*
3. Discuss Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) requirements
  - a) *No CLOMR or LOMR is required with the development of this site.*
4. Discuss County floodplain development regulations and Floodplain Development Permit
  - a) *This project is not impacted by, nor will it impact any floodplains. A floodplain permit will not be required to complete this project.*

## **E. Additional Permitting Requirements**

1. Section 404 of the Clean Water Act
  - a) *No additional permitting is required with the development of the site*
2. The Endangered Species Act
  - a) *No additional permitting is required for the development of the site.*
3. Other local, state, or federal requirements
  - a) *No additional permitting is required with the development of the site*

## **F. General**

1. Discuss all tables, figures, charts, drawings, etc. that were used in design of stormwater management facilities and describe materials that are included in the appendix of the report

*a) UD Rational spreadsheets identifying the storm water runoff from each basin have been included in the Appendix A of the report.*

# **V. CONCLUSIONS**

## **A. Compliance with Standards**

1. Castle Rock Drainage Criteria

*a) The storm water management system of Lot 1 Lynch Subdivision, as outlined in this report complies with those standards regarding storm water management practices, as outlined in the Castle Rock Storm Drainage and Technical Criteria Manual.*

2. MHFD Criteria

*a) The storm water management system of Lot 1 Lynch Subdivision as outlined in this report complies with those standards regarding storm water management practices, as outlined in Urban Drainage and Flood Control District, Urban Drainage Criteria Manuals*

3. Master Plans and MHFD Outfall System Plans

*a) There are no MHFD Outfall system plans which impact Lot 1 Lynch Subdivision.*

4. Cherry Creek Reservoir Control Regulation No. 72

*a) N/A*

## **B. Variances**

1. Identify provisions by section number for which a variance will be requested or has been approved by the County (final version of Drainage Report).

a) *A variance is not required for this project.*

2. Provide justification for each variance request

a) *A variance is not required for this project.*

## **C. Drainage Concept**

1. Discuss overall effectiveness of stormwater management design to properly convey, store and treat stormwater

a) *The proposed storm water management plan as outlined in this report adheres to the drainage concepts outlined in the Castle Rock Storm Drainage and Technical Criteria Manual. The storm water runoff from the development of Lot 1 Lynch Subdivision does not adversely affect the adjacent properties surrounding the development area.*

# **VI. REFERENCES**

Castle Rock, Colorado. "Castle Rock Storm Drainage and Technical Criteria Manual." Drainage Criteria Manual, February 2025.

Urban Drainage and Flood Control District. "Urban Storm Drainage Criteria Manual, Volumes 1-3." Drainage Criteria Manual, Denver, 2009.

# **VII. APPENDICES**

## **A. Hydrologic / Hydraulic Computations**

1. Peak Runoff using Rational Method

## **B. References**

1. Soil Report
2. FIRM Map
3. Drainage Maps

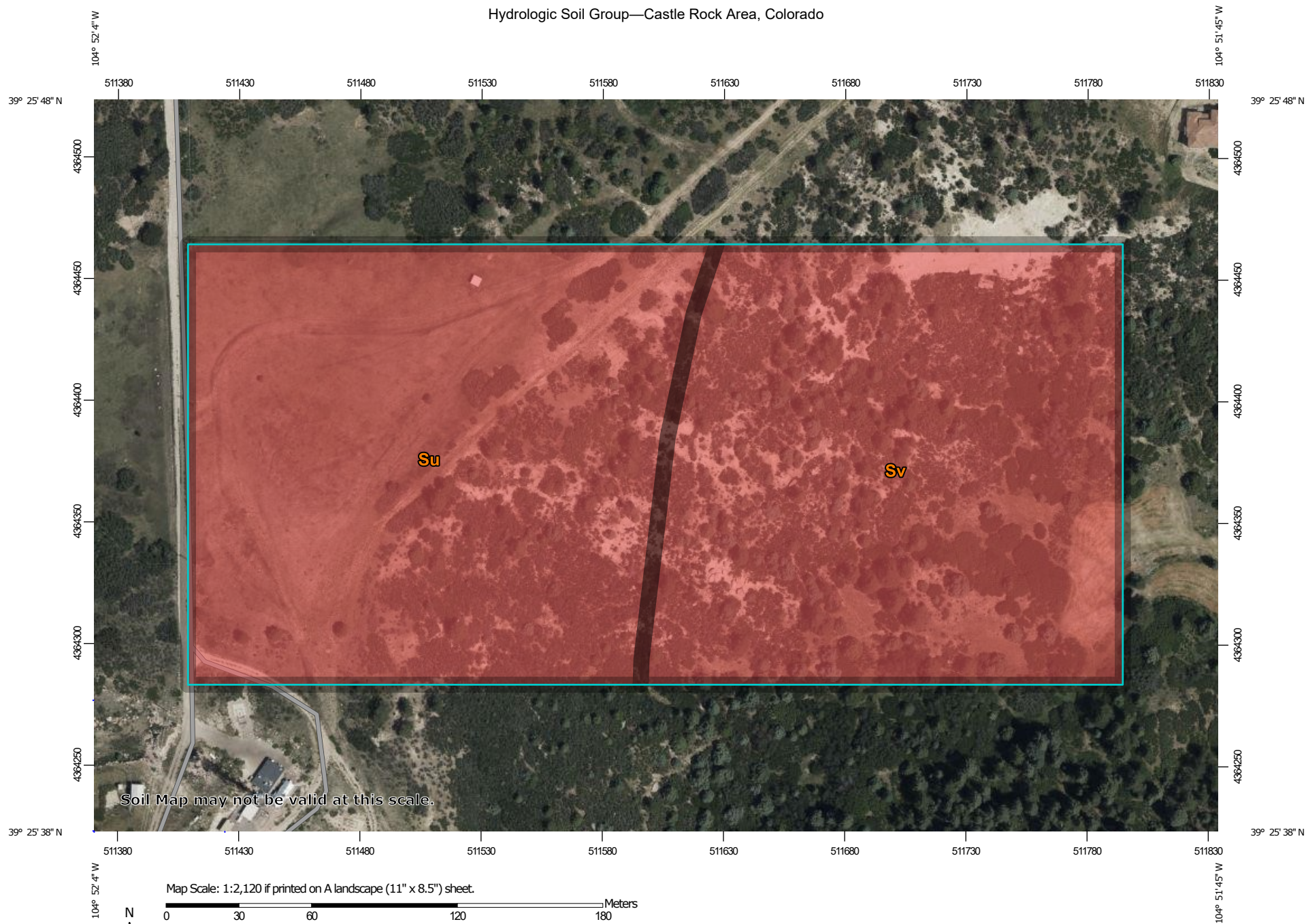
## **Appendices**

#### Calculation of Peak Runoff using Rational Method

Q(cfs) = CIA

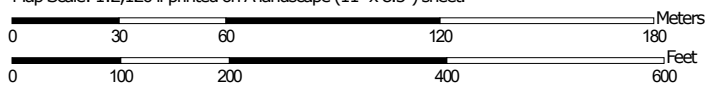
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# Hydrologic Soil Group—Castle Rock Area, Colorado



Soil Map may not be valid at this scale.

Map Scale: 1:2,120 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84



**Natural Resources  
Conservation Service**

Web Soil Survey  
National Cooperative Soil Survey

9/10/2025  
Page 1 of 4

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

#### Soil Rating Polygons

 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Lines

 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Points

 A  
 A/D  
 B  
 B/D

 C  
 C/D  
 D  
 Not rated or not available

### Water Features

 Streams and Canals

### Transportation

 Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Castle Rock Area, Colorado  
 Survey Area Data: Version 17, Aug 29, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 1, 2023—Sep 1, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Hydrologic Soil Group

| Map unit symbol                    | Map unit name    | Rating | Acres in AOI | Percent of AOI |
|------------------------------------|------------------|--------|--------------|----------------|
| Su                                 | Stony rough land | D      | 8.9          | 51.5%          |
| Sv                                 | Stony steep land | D      | 8.4          | 48.5%          |
| <b>Totals for Area of Interest</b> |                  |        | <b>17.3</b>  | <b>100.0%</b>  |

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

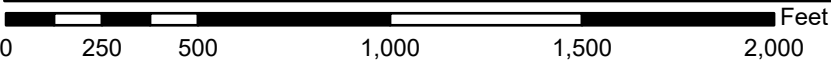
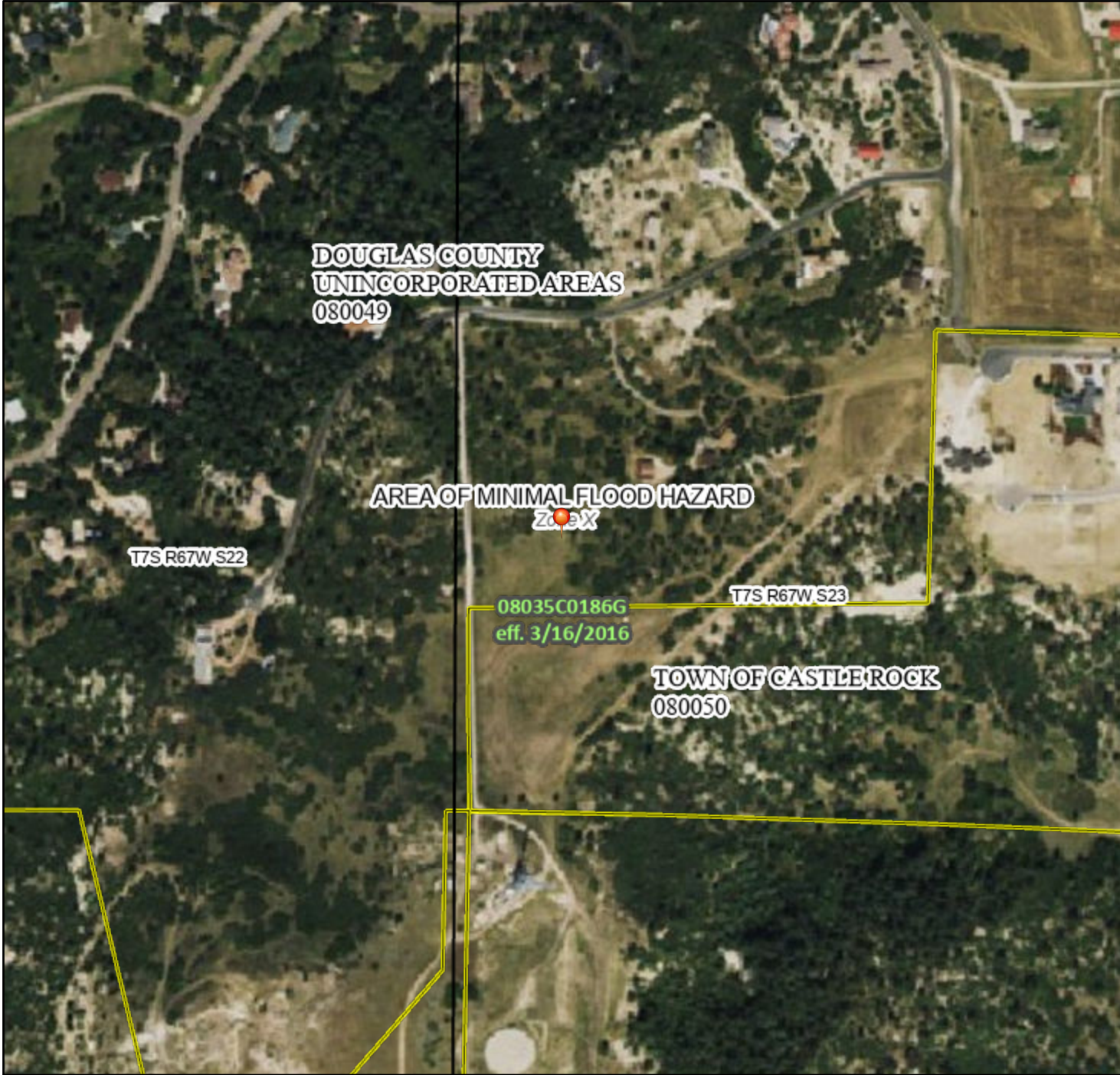
*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

# National Flood Hazard Layer FIRMMette



104°52'19"W 39°26'2"N



1:6,000

104°51'41"W 39°25'34"N

Basemap Imagery Source: USGS National Map 2023

## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

|                             |  |                                                                                                                                                                      |
|-----------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SPECIAL FLOOD HAZARD AREAS  |  | Without Base Flood Elevation (BFE)<br>Zone A, V, A99                                                                                                                 |
|                             |  | With BFE or Depth Zone AE, AO, AH, VE, AR                                                                                                                            |
|                             |  | Regulatory Floodway                                                                                                                                                  |
| OTHER AREAS OF FLOOD HAZARD |  | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile<br>Zone X |
|                             |  | Future Conditions 1% Annual Chance Flood Hazard<br>Zone X                                                                                                            |
|                             |  | Area with Reduced Flood Risk due to Levee. See Notes.<br>Zone X                                                                                                      |
|                             |  | Area with Flood Risk due to Levee<br>Zone D                                                                                                                          |
| OTHER AREAS                 |  | NO SCREEN Area of Minimal Flood Hazard<br>Zone X                                                                                                                     |
|                             |  | Effective LOMRs                                                                                                                                                      |
|                             |  | Area of Undetermined Flood Hazard<br>Zone D                                                                                                                          |
| GENERAL STRUCTURES          |  | Channel, Culvert, or Storm Sewer                                                                                                                                     |
|                             |  | Levee, Dike, or Floodwall                                                                                                                                            |
| OTHER FEATURES              |  | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation                                                                                                    |
|                             |  | 17.5                                                                                                                                                                 |
|                             |  | Coastal Transect                                                                                                                                                     |
|                             |  | Base Flood Elevation Line (BFE)                                                                                                                                      |
|                             |  | Limit of Study                                                                                                                                                       |
|                             |  | Jurisdiction Boundary                                                                                                                                                |
|                             |  | Coastal Transect Baseline                                                                                                                                            |
| MAP PANELS                  |  | Digital Data Available                                                                                                                                               |
|                             |  | No Digital Data Available                                                                                                                                            |
|                             |  | Unmapped                                                                                                                                                             |



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

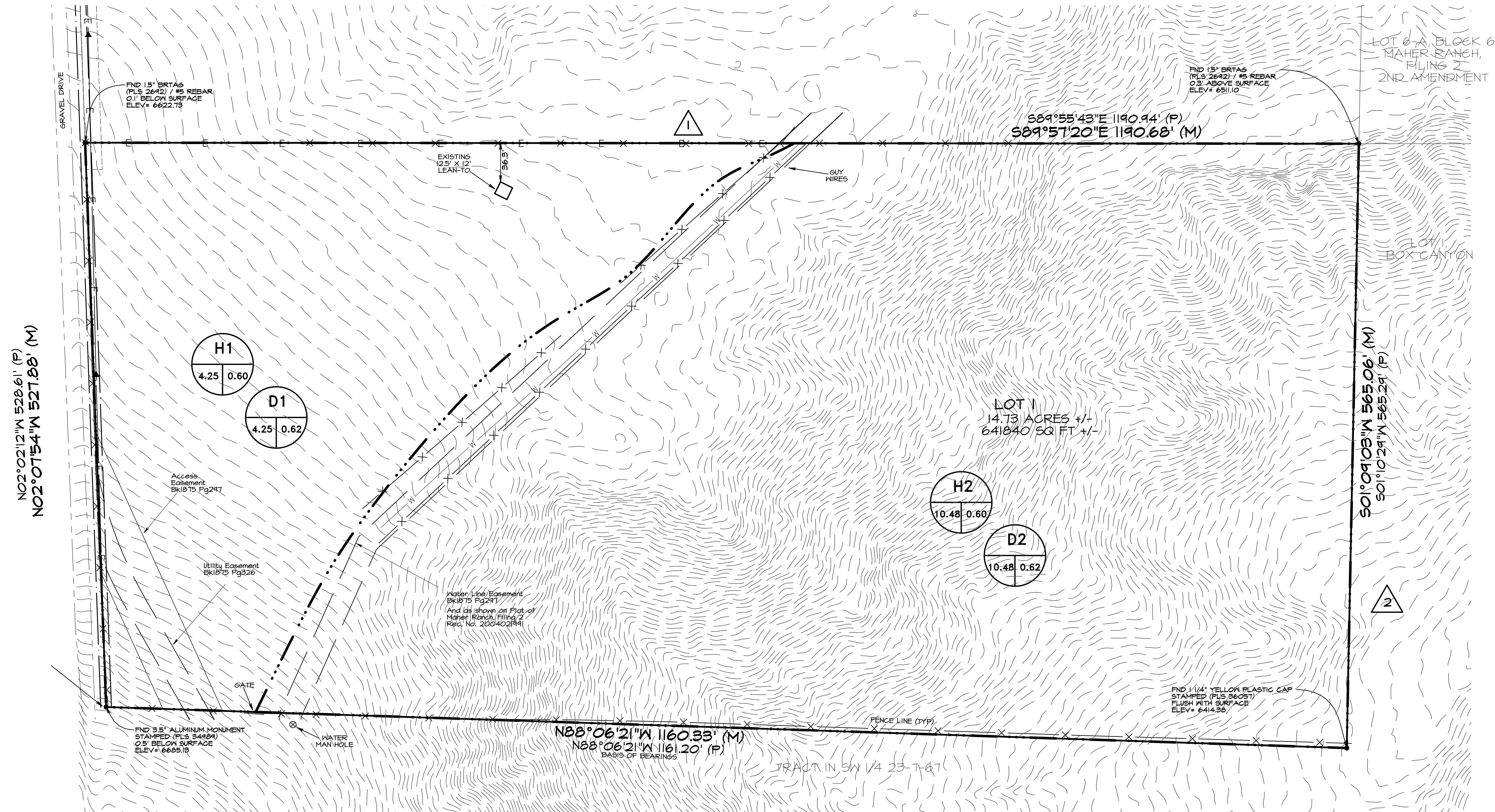
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/10/2025 at 2:11 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

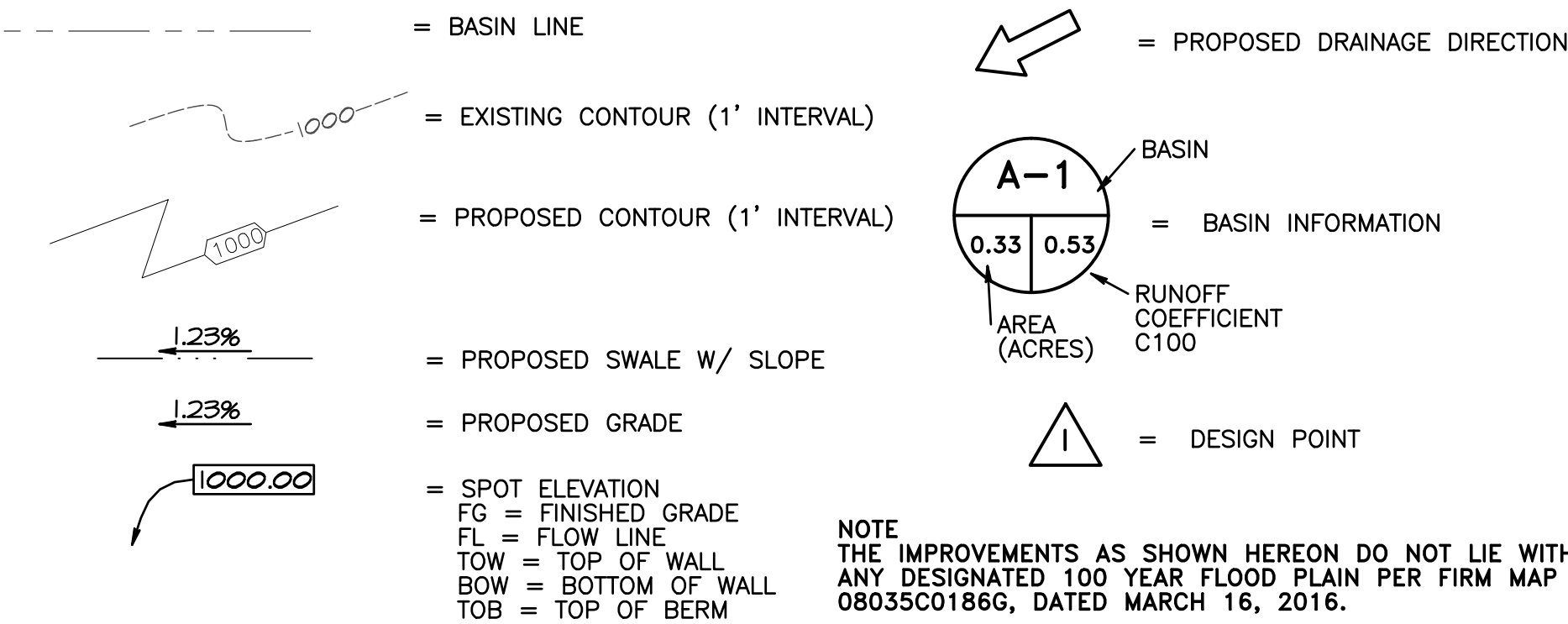
## UNCC

UTILITY NOTIFICATION  
CENTER OF COLORADO

1-800-922-1987

CALL 2-BUSINESS DAYS IN ADVANCE  
BEFORE YOU DIG, GRADE, OR EXCAVATE  
FOR THE MARKING OF UNDERGROUND  
MEMBER UTILITIES.

## LEGEND



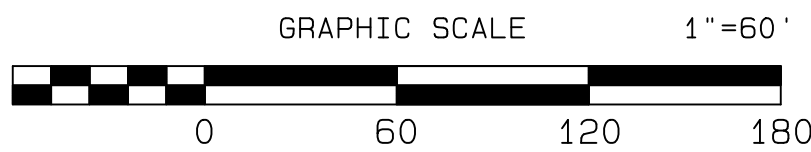
DOUGLAS COUNTY BENCHMARK:  
DCBM ECKHARDT  
ELEVATION = 6434.71 (NAVD88)

| HISTORIC DESIGN POINT TABLE |              |              |        |          |
|-----------------------------|--------------|--------------|--------|----------|
| BASIN                       | DESIGN POINT | AREA (ACRES) | 5 YEAR | 100 YEAR |
| H1                          | 1            | 4.25         | 0.94   | 11.35    |
| H2                          | 2            | 10.48        | 2.68   | 32.51    |

| DEVELOPED DESIGN POINT TABLE |              |              |        |          |
|------------------------------|--------------|--------------|--------|----------|
| BASIN                        | DESIGN POINT | AREA (ACRES) | 5 YEAR | 100 YEAR |
| D1                           | 1            | 4.25         | 1.47   | 12.03    |
| D2                           | 2            | 10.48        | 4.20   | 34.41    |

## DRAINAGE MAP

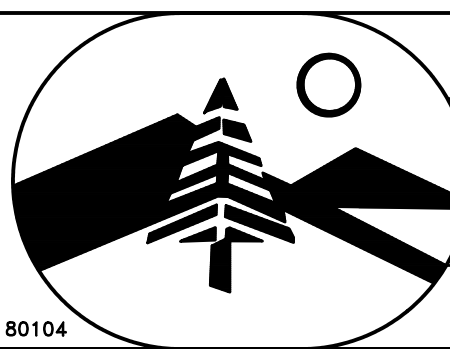
SCALE: 1"=60'



## REVISIONS

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|  |

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SCALE 1"=60'  
DATE 09/12/25  
BY: JET  
APPROVED:

## TITLE DRAINAGE MAP

TBD PAVINEE TRAIL  
CASTLE ROCK, CO 80108CLIENT  
RYAN LYNCH

Sheet 1 of 1

JOB NUMBER  
25-0097