



Revised December 19, 2018

Mr. Loren Moreland
Classic Homes
6385 Corporate Drive, Suite 200
Colorado Springs, CO 80919

**Wetland Delineation Report
The Ranch Development Project
El Paso County, Colorado**

Dear Mr. Moreland:

CORE Consultants, Inc. (CORE) was retained to complete a wetland delineation for the proposed The Ranch Development Project ("Project"). This letter presents the results of the wetland delineation for potentially jurisdictional wetlands and other Waters of the U.S. (WOUS) within the Project area boundaries ("study area"). CORE completed the following tasks for the wetland delineation:

- A desktop background review of potential study area aquatic resources;
- A formal, on-site wetland delineation to determine the presence/absence, locations, and jurisdictional potential of aquatic resources in the study area;
- Preparation of an aquatic resource/wetland location map following completion of the wetland delineation.

The purpose of the wetland delineation was to inform a preliminary determination of the potential jurisdictional status of aquatic features in the study area. CORE investigated the potential jurisdictional status of these features in accordance with Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (RHA). It is important to note that only the U.S. Army Corps of Engineers (USACE) can make determinations regarding the jurisdictional status of aquatic resources. After consideration of the jurisdictional potential of aquatic resources, the boundaries of these features were delineated and subsequently mapped using a Geographic Information System (GIS).

PROJECT LOCATION

The study area is located in the Town of Falcon, El Paso County, Colorado, and is on the U.S. Geological Survey's (USGS) Falcon NW 7.5- x 7.5-minute Quadrangle (USGS 2017a; **Attachment I: Site Location Map**). The study area is located southeast of the intersection of Raygor Road and Stapleton Drive, and is entirely within Section 35 in Township 12S, Range 65W (**Attachment I**). The study area is split between two catchment basins: the Middle Fountain Creek Watershed, 10-digit Hydrologic Unit Code (HUC) 1102000303, and the Black Squirrel Creek Watershed, 10-digit HUC 1102000402 (USGS 2017b). According to the Project sketch plan, the property is proposed to be subdivided into rural residential, school, and open space zoning (**Attachment II: The Ranch Sketch Plan**).

ECOLOGICAL SETTING

The study area encompasses approximately 630 acres within the Foothill Grasslands (Level IV) ecoregion of the Southwestern Tablelands (Level III) ecoregion (Chapman *et al.* 2006). Elevations of the study area range between approximately 7,010 feet above mean sea level (AMSL) to approximately 7,170 feet AMSL. Existing rural residential development surrounds the study area in varying densities. The Foothills Grasslands region is generally characterized by dissected and irregular plains with increasing residential development. Vegetative cover of the Foothills Grasslands is predominantly shortgrass prairie with blue grama (*Bouteloua gracilis*), buffalograss (*Bouteloua dactyloides*), green needlegrass (*Nassella viridula*), needle-and-thread (*Hesperostipa comata*), and purple three-awn (*Aristida purpurea*). Isolated areas of sand sagebrush (*Artemisia filifolia*), yucca (*Yucca* spp.), and cholla (*Cylindropuntia* spp.) also occur (Chapman *et al.* 2006). Along the more developed areas of the Front Range where the ecoregion begins to transition to the pine-oak woodlands, vegetation includes ponderosa pine (*Pinus ponderosa*), Gambel oak (*Quercus gambelii*), mountain mahogany (*Cercocarpus montanus*), skunkbush (*Rhus trilobata*), western serviceberry (*Amelanchier alnifolia*), and chokecherry (*Prunus virginiana*). Riparian areas often include cottonwoods (*Populus* spp.), willow trees and shrubs (*Salix* spp.), alders (*Alnus* spp.), and elms (*Ulmus* spp.). Wetlands may often contain typical high plains hydrophytes such as Nebraska sedge (*Carex nebrascensis*), arctic rush (*Juncus arcticus*), broadleaf cattail (*Typha latifolia*), and hardstem bulrush (*Schoenoplectus acutus*).

METHODS

The purpose of the wetland delineation was to survey and delineate the boundaries of potentially jurisdictional water features within the study area, as defined under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

Prior to the on-site assessment, a preliminary desktop analysis was performed to evaluate overall water resource characteristics of the study area and identify the locations of potentially jurisdictional wetlands and watercourses. Spatial data and aerial imagery sources reviewed included:

- National Hydrography Dataset (NHD),
- USGS topographic maps,
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps,
- Natural Resource Conservation Service (NRCS) soil survey maps,
- Federal Emergency Management Agency (FEMA) floodplain maps.

An on-site wetland delineation was conducted to determine the presence/absence of wetlands and other WOUS within the study area, and to delineate the boundaries of any potentially jurisdictional aquatic features. The delineation followed the methodology described in the USACE's 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987). Hydrologic indicators, dominant vegetation, and soil samples were examined during the field inspection in order to document any jurisdictional wetlands or other WOUS. The Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (USACE 2010) was also referenced for technical guidance and procedures regarding wetland identification and delineation. Wetland indicator status for vegetation was determined following Lichvar *et al.* (2016).

The boundaries of any potentially jurisdictional wetlands and other WOUS were located in the field and delineated using a sub-meter accuracy Global Positioning System (GPS) in order to provide maps using GIS.

BACKGROUND DOCUMENTATION REVIEW

Aerial photographs, NHD data, NWI maps, USGS topographic maps, FEMA Flood Insurance Rate Map (FIRM) panels, and County Soil Survey maps were used to document study area background information. A discussion of each evaluation process follows.

Aerial photographs dated 1999, 2003, 2004, 2005, 2006, 2011, 2013, 2015, and 2017 were obtained from the U.S. Department of Agriculture (USDA) Farm Service Agency (USDA 2017). Aerial photograph interpretation was conducted to identify potential wetlands, watercourses, and other notable landscape features within the study area. Two obvious aquatic features, both streams in the western half of the site, appeared in the aerial photographs, with two other potential streams and two ponds in the eastern half of the site.

A review of NWI maps (USFWS 2018) was conducted to determine the potential presence, location, size, and type of wetlands located within the study area. The USFWS generates NWI maps through aerial photograph interpretation. NWI maps may not accurately depict the extent or existence of wetlands or other aquatic features, nor do maps consistently and accurately identify wetland type. As such, the maps were used for preliminary analysis only. Field reconnaissance was conducted to determine the true extent and type of wetlands located within the study area, and to verify the information gathered through NWI data review. NWI data depicted as many as eight wetlands within the study area, all within or associated with streams in the Project area (**Attachment III: National Wetland Inventory Map**). Types and locations of NWI wetlands included:

- Four R4SBC (Riverine, Intermittent, Seasonally-flooded Streambed) wetlands, representing the majority of four depicted stream channels on the site
- One PUBF (Palustrine, Unconsolidated Bottom, Semipermanently Flooded) wetland, a pond on the eastern boundary of the site
- One PUSA (Palustrine, Unconsolidated Shore, Temporarily Flooded) wetland, a pond in the north-central portion of the site
- Two PEMIA (Palustrine, Persistent Emergent, Temporarily Flooded) wetlands within the east and west forks of the westernmost stream

The USGS Falcon NW 7.5-Minute Topographic quadrangle (USGS 2017a) indicates that elevations within the study area range from approximately 7,010 feet AMSL to approximately 7,170 feet AMSL (**Attachment I**). Study area contours trend lower toward the south; the highest elevations are located along the northern border of the study area, furthest upstream. All stream channels depicted on the maps generally flow from north to south in this reach.

A review of FEMA FIRM floodplain maps (FEMA 2017) was conducted to determine the existence, location, and extent of floodplains within the study area. The FIRM maps depict mapped flood zones along rivers and tributaries. The maps depict the following data: 100-year floodplains (1% chance of annual flooding) and 500-year floodplains (0.2% annual chance of flooding), the height of the base flood (Base

Flood Elevations), and risk premium zones developed from topographical information across a floodplain. FEMA generates FIRM floodplain maps for flood insurance purposes. A review of El Paso County FEMA FIRM panels indicates that the entire study area is identified as Zone X, which is outside of any 100-year or 500-year flood zones (FEMA 2017). The study area is located within FEMA FIRM panel 08041C0535G (**Attachment IV: Flood Insurance Rate Map**).

The El Paso County Soil Survey indicates the study area is located within three soil associations: Columbine gravelly sandy loam (0 to 3% slopes), Pring coarse sandy loam (3 to 8% slopes), and Blakeland loamy sand (1 to 9% slopes; **Attachment V: County Soil Survey Map**). The Columbine soil series is the predominant series within the study area, comprising approximately 76% of the study area, while the Pring and Blakeland series make up roughly 19% and 5% of the study area, respectively (**Attachment V**). All three series are classified by the Natural Resources Conservation Service (NRCS) as hydric soils in El Paso County (NRCS 2015).

RESULTS

CORE conducted the field assessment on June 28, 2018. Hydrologic indicators, dominant vegetation, and soil samples were examined on-site, and photographs were taken of surveyed features, to document presence or absence of indicators of wetlands and other WOUS. The following sections describe the results of the field surveys.

Watercourses and Wetlands

The information gathered from the desktop review indicated that as many as eight potentially-jurisdictional aquatic features may be located within the study area (**Attachment III**). Four NHD blue-line streams are depicted within the study area, all of which eventually drain into the Arkansas River (**Attachment III**). The streams depicted in the NHD data were determined to be ephemeral, only conveying water following precipitation events; in addition, these channels did not consistently possess defined streambeds or banks and would not likely be considered jurisdictional by the USACE. The NWI dataset depicts seven wetlands in the study area, all associated with the stream channels depicted in the NHD. Some of these wetlands were accurately depicted in the NWI dataset, though the PUSA pond and the two eastern stream channels in the NWI dataset were not in evidence during the site visit. The other four NWI wetlands – two ponds and two R4SBC streams – were accurately depicted (**Attachment III**). However, it is unlikely these wetlands would be considered jurisdictional by the USACE based on their lack of adjacency or significant nexus with other WOUS. The two NHD streams on the eastern half of the study area that coincide with two of the R4SBC wetlands did not possess wetland soils or vegetation, and did not display defined streambeds or stream banks. In addition, the two streams on the western half of the study area were not as extensive as shown in the NHD and NWI data. The entire study area is outside of Zone A 100-year floodplains (**Attachment IV**).

During the field assessment, six total wetlands were confirmed in the field. The westernmost streams both contained wetlands within significant portions of the stream channels; the only wetland associated with the eastern streams was the PUBF pond on the eastern boundary of the study area (**Attachment VI: Wetland Location Map**). One additional wetland not depicted in the NWI or NHD datasets was delineated in the field near the southeast corner of the study area (**Attachment VI**). This wetland (Isolated Wetland D) and the PUBF wetland (Isolated Pond E) were not associated with any other aquatic

features and appear to be isolated wetlands, presumably not jurisdictional (**Attachment VI**). Potentially jurisdictional streams in the western half of the study area possessed a well-defined streambed and banks capable of conveying significant volumes of water, but the streams are ephemeral and dry the majority of the year, and therefore likely non-jurisdictional. Portions of both tributaries of the western NHD streams were well-defined, but neither was as extensive as depicted in the NHD or NWI datasets (**Attachment III; Attachment VI**). All of the watercourses observed in the survey area were determined to be ephemeral and were considered to be likely non-jurisdictional. This included the entirety of both eastern stream channels, and the portion of the western channel below the stock pond (Isolated Pond A). Because none of these streams connect with WOUS, all the aquatic features of the site are likely non-jurisdictional. **Table I** below lists the wetlands and stream segments found within the study area.

Table I. Wetlands and Waters within the Project Area

Wetland ID	Latitude	Longitude	Wetland Type	Status ¹
Isolated Pond A	38.959241°	-104.642192°	PUBF – Palustrine Unconsolidated Bottom, Semipermanently Flooded	Isolated ²
Isolated Wetland B	38.960958°	-104.642295°	R4SBC – Riverine Intermittent, Streambed, Seasonally Flooded	Isolated ²
Isolated Wetland C	38.961610°	-104.639193°	R4SBC – Riverine Intermittent, Streambed, Seasonally Flooded	Isolated ²
Isolated Wetland D	38.955808°	-104.629858°	PEM1C – Palustrine Emergent, Persistent, Seasonally Flooded	Isolated ²
Isolated Pond E	38.968210°	-104.626287°	PUSA – Palustrine Unconsolidated Shore, Temporarily Flooded	Isolated ²

¹ Only the USACE can determine jurisdiction under Section 404 of the Clean Water Act

² Pending resolution of the EPA's Clean Water Rule issuance, isolated wetlands are not considered jurisdictional at the time of this writing

Soils

Three soil series are found in the study area – Columbine gravelly sandy loam (0 to 3% slopes), Pring coarse sandy loam (3 to 8% slopes), and Blakeland loamy sand (1 to 9% slopes); the Columbine series is the predominant soil series present (**Attachment V**). Six total soil samples were taken at soil sample points within the study area: four points within the Columbine series, and one point each within the Pring and Blakeland series (**Attachment V**). Sample points consisted mostly of sandy clay loams, sandy loams, and clay loams; hydric soils consisted mainly of clays, silty clays, and sand clay loams (**Attachment VII: Wetland Delineation Data Forms**). Positive hydric soil indicators observed at sample points included Hydrogen Sulfide (Indicator A4) and 5 cm Mucky Peat or Peat (Indicator S3; **Attachment VII**). A problematic soil was encountered at Sample Point 3 which turned out not to be hydric; this soil did not pass the criteria for TF12 – Very Shallow Dark Surface – because the soil's chroma was too high (**Attachment VII**). All three of the soil series present in the study area are listed as hydric soils in El Paso County (NRCS 2015).

Hydrology

Hydrology at the Project consists primarily of natural stream flows, slope runoff, and naturally occurring events (e.g. precipitation). Artificial sources of hydrology such as runoff from agricultural irrigation are not present. No additional natural or artificial sources of hydrology were identified (**Attachment III**). Flows in Sand Creek vary widely in accordance with precipitation events. The historic NHD-identified streams on the Project site no longer carry significant hydrologic flows, and generally do not possess a defined streambed or banks. The exceptions are the western channels upstream of their confluence at Isolated Pond A, which form a defined streambed upstream of Isolated Pond A that contains Isolated Wetlands B and C, though these channels do not connect to WOUS (**Attachment VI**).

Hydrologic indicators at the sampled locations ranged from present but weak to strongly present. At Sample Points 2 and 3, hydrologic indicators were present, though these areas were not wetlands (**Attachment VII**). Hydrologic indicators observed at the sample locations included saturation (A3), algal mat or crust (B4), hydrogen sulfide odor (C1), oxidized rhizospheres on living roots (C3), presence of reduced iron (C4), surface soil cracks (B6), sparsely vegetated concave surface (B8), and FAC-neutral test (D5; **Attachment VII**).

Vegetation

Upland areas were dominated by regionally common prairie grasses and forbs. Little bluestem (*Schizachyrium scoparium*), needle-and-thread, sideoats grama (*Bouteloua curtipendula*), western wheatgrass (*Pascopyrum smithii*), buffalograss, fringed sage, prairie pussytoes (*Antennaria neglecta*), and soapweed yucca (*yucca glauca*) were all common to abundant in upland areas. In wetlands, plants that were observed included both hydrophytes and non-hydrophytes, as well as invasive species. Commonly observed species included Nebraska sedge, clustered field sedge (*Carex praegracilis*), common spikerush (*Eleocharis palustris*), nodding bluegrass (*Poa reflexa*), foxtail barley (*Hordeum jubatum*), meadow foxtail (*Alopecurus pratensis*), hardstem bulrush, arctic rush (*Juncus arcticus*), Torrey's rush (*Juncus torreyi*), and Canada thistle (*Cirsium arvense*). Photos of the study area can be found in **Attachment VIII: Photographic Log**.

CONCLUSIONS

Two isolated watercourses, both unnamed tributaries flowing north-south through the western half of the study area, were delineated on-site; these channels do not maintain hydrologic connection to WOUS and are likely non-jurisdictional. Two other unnamed tributaries within the eastern half of the study area no longer possess a defined streambed or banks, and are also not likely to be considered jurisdictional by the USACE. Pond E, which is associated with the easternmost tributary, is also expected to be isolated and non-jurisdictional. One additional wetland (Wetland D), which was not depicted in any of the datasets, is also isolated and not a jurisdictional aquatic feature. Four wetlands identified in the NWI and NHD datasets are present in the study area, though all are expected to be considered jurisdictional (aquatic features 'A' through 'D'; **Attachment VI**). It is anticipated that there are no jurisdictional WOUS within the study area, though only the USACE can determine jurisdictional under Section 404. Accordingly, impacts to these features resulting from Project development are not expected to require permitting through the USACE under Section 404 of the CWA.

The USACE typically has jurisdiction over navigable or traditionally navigable waters, relatively permanent waters, and wetlands that abut such waters, and determines jurisdiction over other waters based

predominantly on their significant nexus to navigable or traditionally navigable waters (i.e. WOUS). Impacts to WOUS should be avoided and minimized to the extent possible. A permit under Section 404 of the CWA is required for the discharge of dredged or fill material into WOUS and mitigation may be required.

At the time of this writing, the USACE and Environmental Protection Agency (EPA) are currently proposing a new definition of "Waters of the United States" to address uncertainty resulting from the 2015 Clean Water Rule. The redefinition would presumably change the jurisdictional status of some aquatic resources that are currently considered WOUS. The agencies' proposal is currently undergoing a public comment period and is expected to be finalized in 2019. None of the aquatic resources on the Project site are expected to be affected by this ruling, which is to say that CORE expects all aquatic resources on the Project site to remain non-jurisdictional. An approved jurisdictional determination from the USACE may be obtained in order to verify CORE's findings.

If you should have any questions or require additional information, please feel free to contact our office directly at 303.730.5979.

Sincerely,

CORE Consultants, Inc.



Daniel Maynard

Senior Ecologist

ATTACHMENTS

- I. SITE LOCATION MAP
- II. THE RANCH SKETCH PLAN
- III. NATIONAL WETLAND INVENTORY MAP
- IV. FEMA FLOOD INSURANCE RATE MAP
- V. COUNTY SOIL SURVEY MAP
- VI. WETLAND LOCATION MAP
- VII. WETLAND DELINEATION DATA FORMS
- VIII. PHOTOGRAPHIC LOG

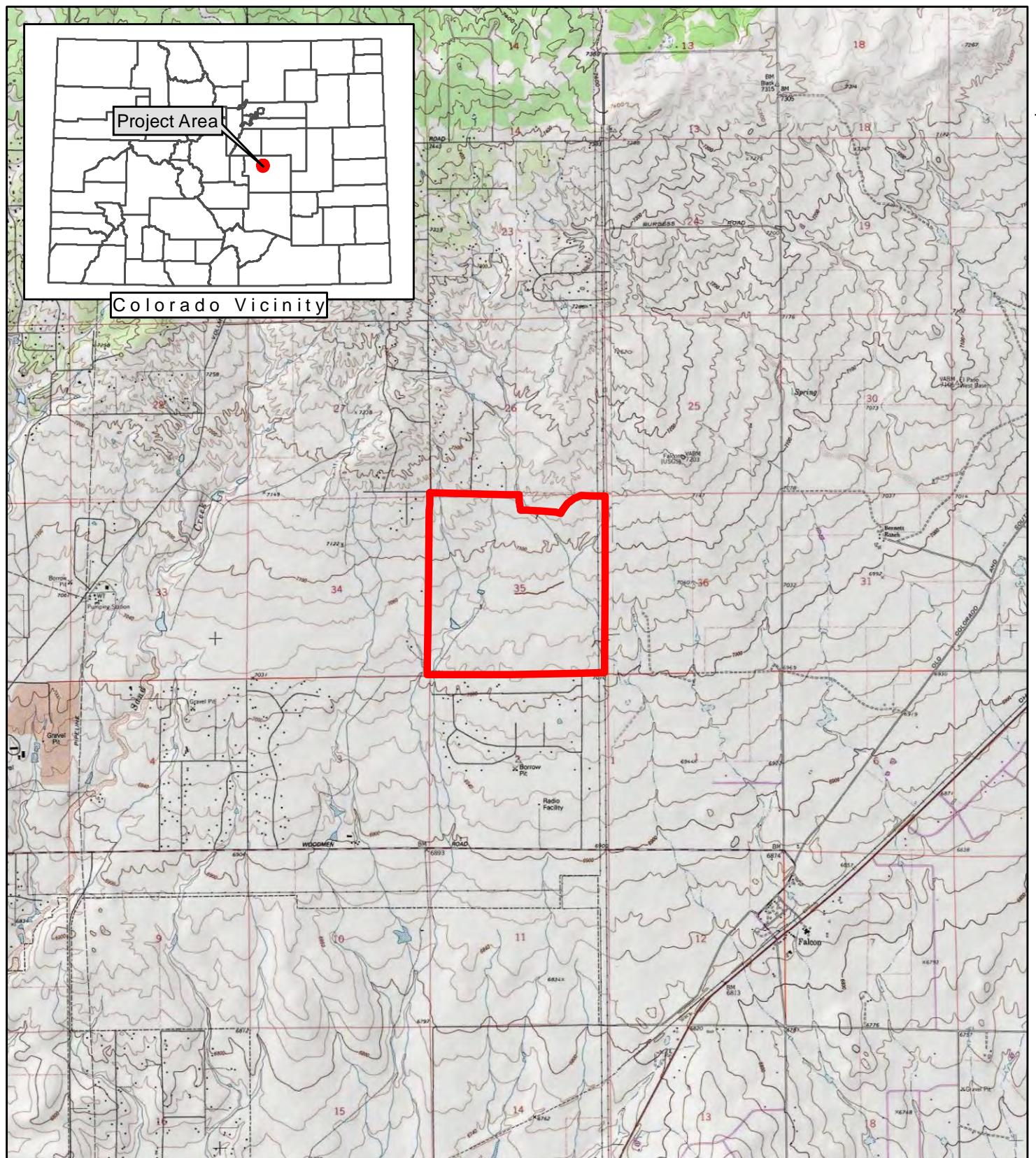
REFERENCES

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ATTACHMENT I:

SITE LOCATION MAP



The Ranch Project

Site Location Map

El Paso County, Colorado

 Study Area

Reference:
USGS 7.5 Minute
Topographic Quadrangle
Falcon NW, CO Quad

0 2,000 4,000



Feet

1 inch = 4,000 feet

Date: 7/13/2018



CIVIL ENGINEERING
DEVELOPMENT CONSULTING
NATURAL RESOURCES CONSULTING
LAND SURVEYING
303.703.4444
1950 W. Littleton Blvd., Ste. 100
Littleton, CO 80120



ATTACHMENT II:

THE RANCH SKETCH PLAN

THE RANCH SKETCH PLAN

LOCATED IN SECTION 35, TOWNSHIP 12 SOUTH,
RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN

Owner:
PRI #4, LLC
6385 Corporate Dr.,
Colorado Springs, Colorado 80919

Planner:
N.E.S. Inc.
619 N. Cascade Ave. Suite 200
Colorado Springs, Colorado 80903

Civil Engineer:
Classic Consulting Engineers & Surveyors
619 N. Cascade Ave. Suite 200
Colorado Springs, Colorado 80903

LEGAL DESCRIPTION

ALL OF SECTION 35, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, EXCEPTING THERE FROM A PARCEL OF LAND DESCRIBED AS (EL PASO COUNTY PARCEL SCHEDULE 520000325)

TRACT IN SECTION 35, TOWNSHIP 12 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS:

COMMENCING AT NORTHEAST CORNER OF SECTION 35; THENCE N 88°32'26" W, 729.86 FEET FOR THE POINT OF BEGINNING, THENCE ALONG THE ARC OF CURVE TO THE LEFT, HAVING A RADIUS OF 2060.0 FEET AN ARC DISTANCE OF 1141.84 FEET, A CENTRAL ANGLE OF 31°45'31", WHICH CHORD BEARS S 61°43'05" W, 1127.28 FEET, THENCE S 45°50'20" W, 1419.92 FEET, N 44°09'40" W, 101.04 FEET, THENCE ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 300.0 FEET, AN ARC DISTANCE OF 231.23 FEET, A CENTRAL ANGLE OF 44°09'40", WHICH CHORD BEARS N 22°04'50" W, 225.55 FEET, THENCE N 00°00'00" E, 820.43 FEET, THENCE ALONG ARC OF CURVE TO THE LEFT, HAVING A RADIUS OF 300.0 FEET, AN ARC DISTANCE OF 75.46 FEET, A CENTRAL ANGLE OF 14°24'42", WHICH CHORD BEARS N 07°12'21" W, 75.26 FEET, THENCE N 14°24'42" W, 267.87 FEET, THENCE ALONG THE ARC OF CURVE TO THE RIGHT, HAVING A RADIUS OF 300.00 FEET, AN ARC DISTANCE 75.46 FEET, A CENTRAL ANGLE OF 14°24'42", WHICH CHORD BEARS N 07°12'21" W, 75.26 FEET, THENCE N 00°00'00" E, 39.98 FEET, TO A POINT ON A LINE 30.0 FEET SOUTH OF AND PARALLEL WITH THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 35, THENCE S 88°32'51" E, 368.36 FEET TO A POINT ON THE NORTH-SOUTH CENTER LINE SAID SECTION 35, THENCE N00°28'09" E, 30.0 FEET TO THE NORTH QUARTER CORNER SAID SECTION 35, THENCE S 88°32'26" E ALONG SAID NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 35, 1884.20 FEET TO THE POINT OF BEGINNING.

ALSO EXCEPTING THERE FROM THE NORTH 30 FEET OF WEST HALF OF SAID SECTION 35, CONVEYED TO EL PASO COUNTY IN BOOK 3615 AT PAGE 387.

GENERAL NOTES

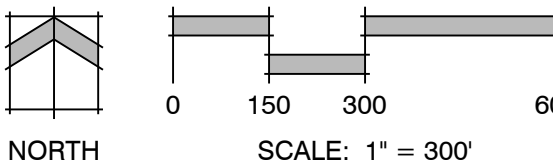
1. ALL STREET AND ROAD LOCATIONS AND ALIGNMENTS, AND INTERSECTION LOCATIONS AND OPERATIONS, SHOWN ON THIS DOCUMENT GRAPHICALLY, OR DESCRIBED IN TEXT, ARE CONCEPTUAL ONLY. FINAL LOCATIONS AND DESIGN ARE DETERMINED THROUGH THE SUBDIVISION PROCESS.
2. A METROPOLITAN DISTRICT OR H.O.A. WILL PROVIDE THE OPERATION AND MAINTENANCE OF PARKS, OPEN SPACE, TRAILS AND SOME ROADWAYS WITHIN THE DEVELOPMENT. THE DISTRICT WILL ALSO BE RESPONSIBLE FOR MAINTENANCE OF ENTRY WAY AREAS.
3. CENTRAL WATER AND SEWER SERVICES TO BE PROVIDED. THE 10 LOTS ALONG THE SOUTHERN BOUNDARY MAY BE SERVED BY WELLS, DEPENDENT ON SEWER LOCATION & DEPTH IN THE WOODMEN HILLS DRIVE CORRIDOR.
4. SIDEWALKS OR WALKWAYS WILL BE PROVIDED ALONG COLLECTOR STREETS AND INTERIOR TO DEVELOPMENT PARCELS, LINKING SCHOOL, PARKS, AND TRAIL SYSTEMS.
5. WITHIN DESIGNATED DENSITY AREAS, DENSITY FOR INDIVIDUAL DEVELOPMENTS CAN BE OVER OR UNDER THE DENSITY RANGE, PROVIDED THE AVERAGE DENSITY WITHIN THE AREA DOES NOT EXCEED THE MAXIMUM OF THE DENSITY RANGE.
6. A 25' UTILITY EASEMENT WILL BE PROVIDED FOR THE PROPOSED REGIONAL COUNTY TRAIL.
7. PHASING WILL BE FROM THE NORTH-EAST CORNER TO THE SOUTH-WEST CORNER.

LAND USE TABLE

Density/Type (DU/AC)	ACRES	UNITS	PERCENTAGE
1 DU / 2.5 AC	2.8 AC	1 Unit	0.45%
1 DU / 1 AC	56.6 AC	55 Units	9.00%
3-4.99 DU/AC	254.6 AC	1270 Units	40.47%
5-7.99 DU/AC	100.7 AC	805 Units	16.00%
8-11.99 DU/AC	20.5 AC	246 Units	3.26%
Park	24.0 AC		3.81%
OS/Drainage	107.7 AC		17.12%
School	12.8 AC		2.03%
ROW	49.4 AC		7.86%
TOTAL:	629.1 AC	2,377 Units	100 %

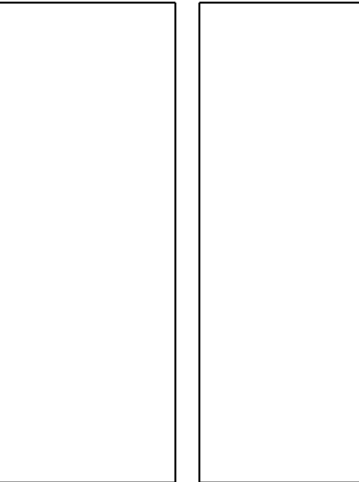
LEGEND

	PROPERTY LINE
	NON MOTORIZED TRAIL
	LAND USE BOUNDARY
	OPEN SPACE & DRAINAGE
	URBAN LOCAL ROADS (50' ROW)
	SITE ACCESS
	INTERIM EMERGENCY ACCESS
	NEIGHBORHOOD COMMERCIAL
	PARK
	UNDERPASS FOR PEDESTRIAN TRAILS
	PROPOSED REGIONAL COUNTY TRAIL



URBAN DESIGN
LAND PLANNING
& LANDSCAPE
ARCHITECTURE

619 N. Cascade Ave., Suite 200
Colorado Springs, CO 80903
Tel: 719.471.0073
Fax: 719.471.0077



DATE: 07-20-2018	COMMENTS:
DRAWN: R. SAWYER	
APPROVED: A. BARLOW	
DATE:	COMMENTS:

REVISIONS:	COMMENTS:
DATE:	
BY:	

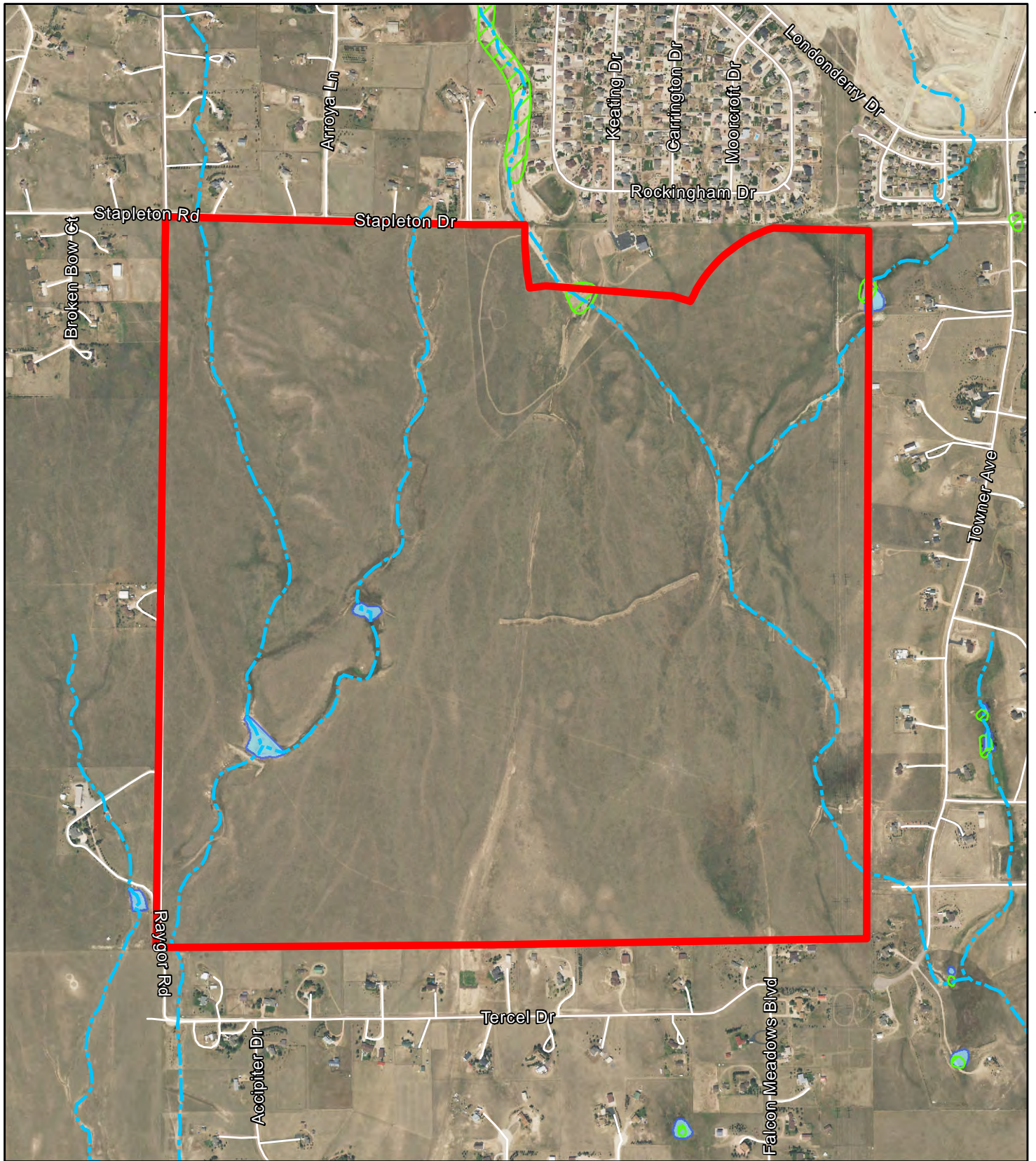
SKETCH PLAN

SHEET NO.
1
OF 1 SHEETS



ATTACHMENT III:

NATIONAL WETLAND INVENTORY MAP



The Ranch Project

National Wetland Inventory Map

El Paso County, Colorado

0 500 1,000



Feet

1 inch = 1,000 feet

- Study Area
- NHD Watercourse
- NHD Waterbody
- NWI Wetland

Date: 7/13/2018

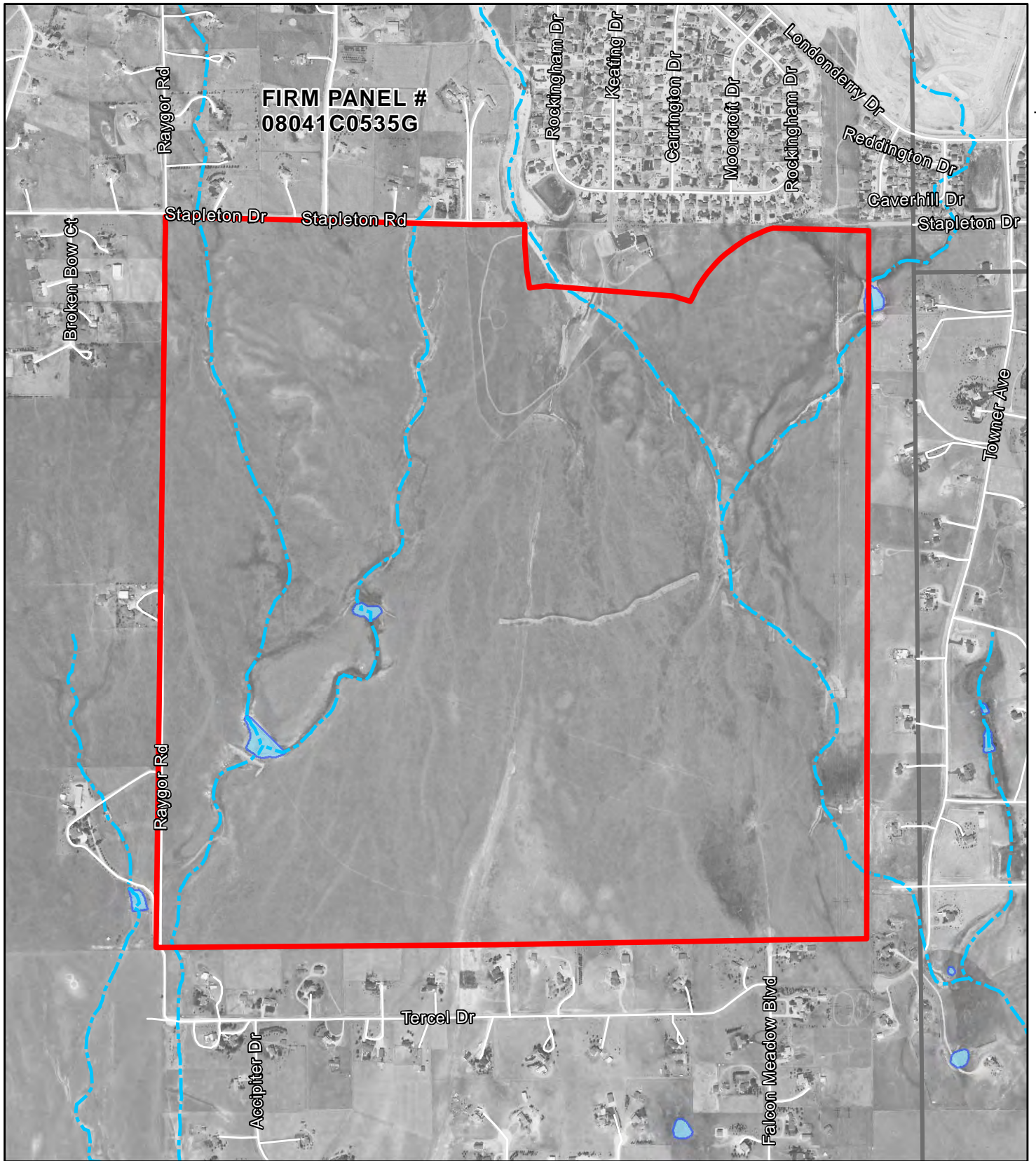


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803.703.4444
1940 W. Littleton Blvd., Ste. 100
Littleton, CO 80120



ATTACHMENT IV:

FEMA FLOOD INSURANCE RATE MAP



The Ranch Project

FEMA Flood Insurance Rate Map

El Paso County, Colorado

- | | |
|---|---|
|  Study Area |  FIRM Panel |
|  NHD Watercourse |  Zone X: Outside 100 & 500-year Floodplain |
|  NHD Waterbody | |

0 500 1,000
Feet

1 inch = 1,000 feet

Date: 7/13/2018

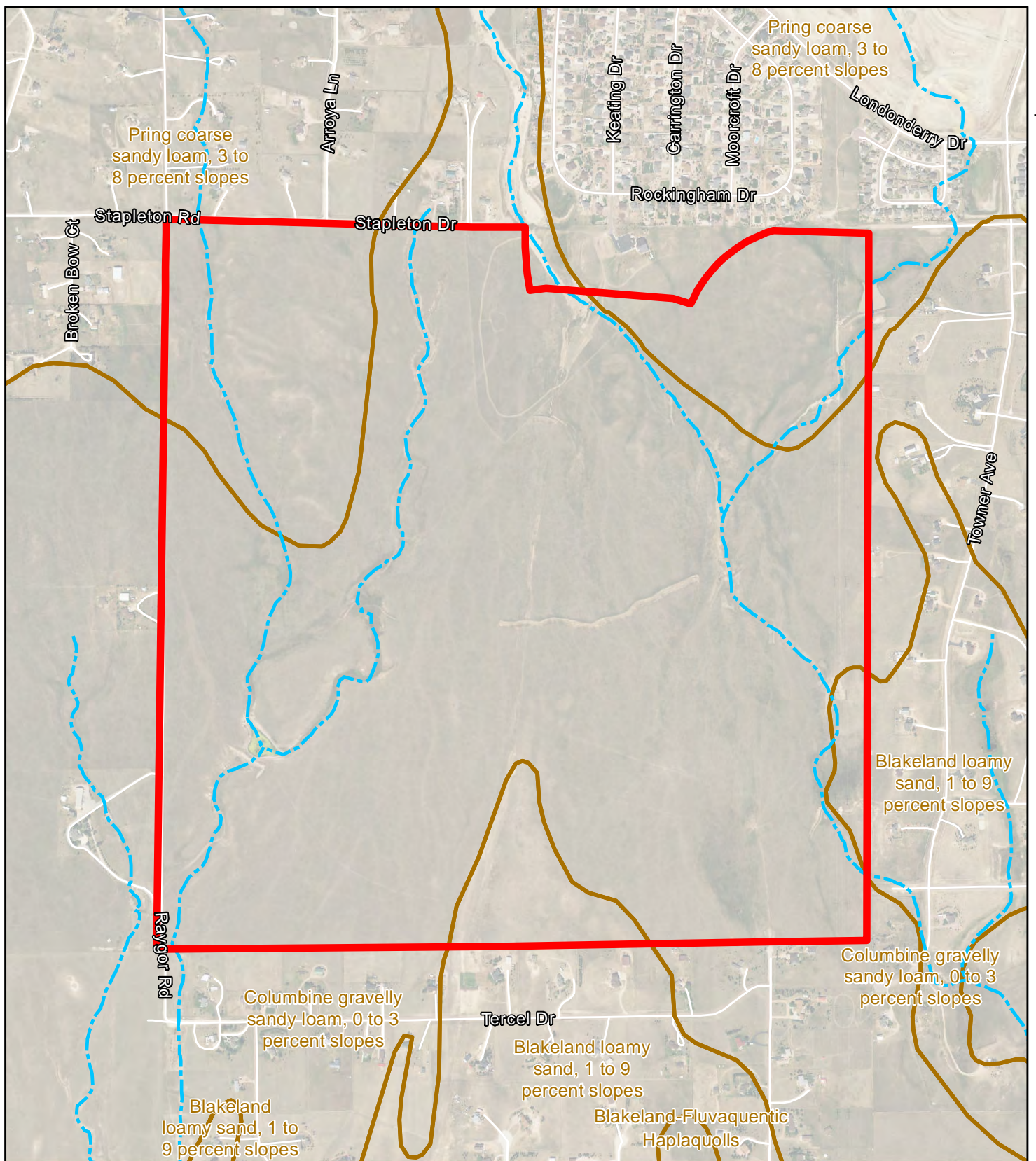


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ATTACHMENT V:

COUNTY SOIL SURVEY MAP



The Ranch Project County Soil Survey Map

El Paso County, Colorado

- Study Area
- NHD Watercourse
- Soil

0 500 1,000



Feet

1 inch = 1,000 feet

Date: 7/13/2018

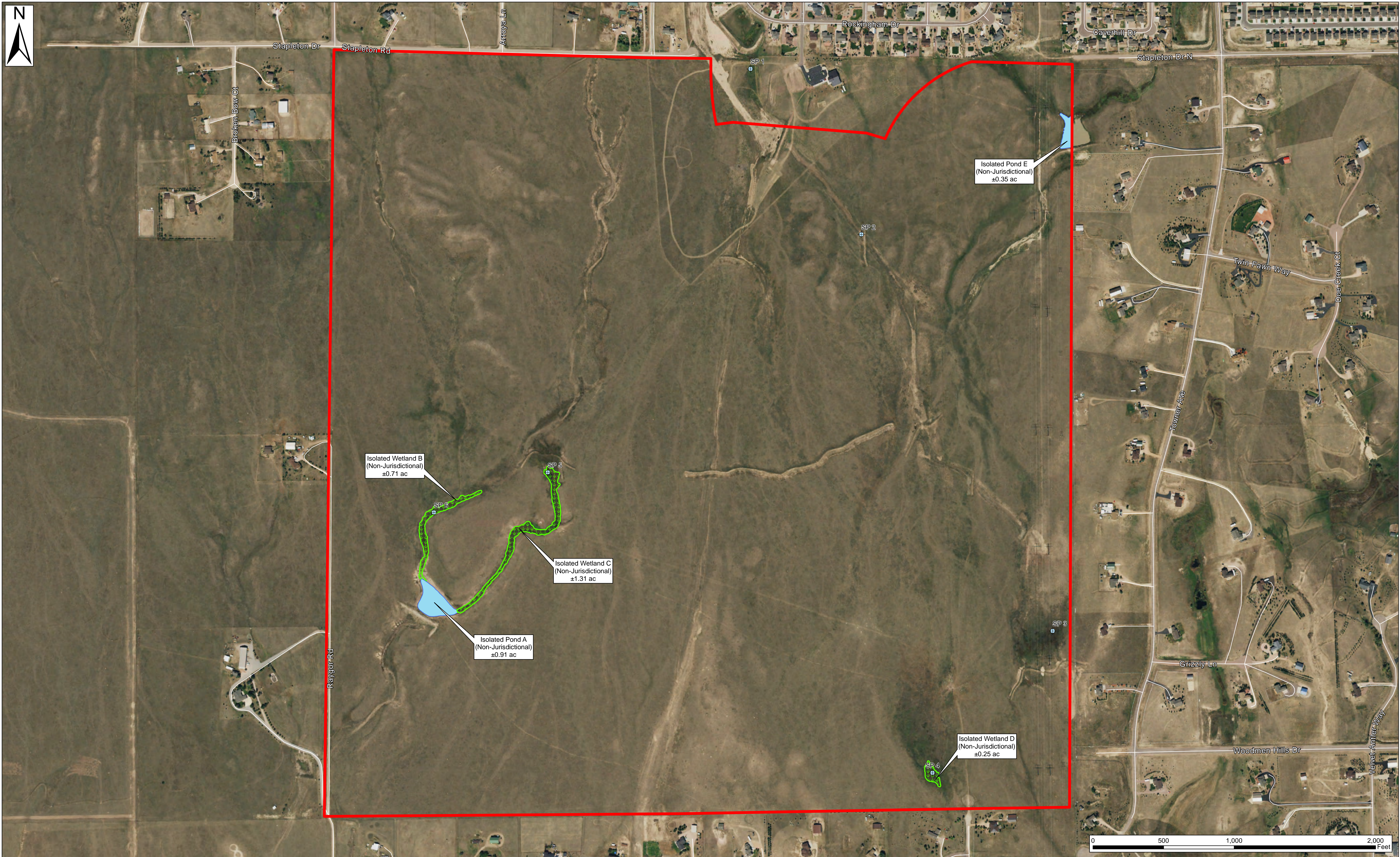


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ATTACHMENT VI:

WETLAND LOCATION MAP





ATTACHMENT VII:

WETLAND DELINEATION DATA FORMS

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: The Ranch City/County: El Paso Co. Sampling Date: 6/28/18
 Applicant/Owner: Classic Homes State: CO Sampling Point: 1
 Investigator(s): Dan Maynard & Brandon Smith Section, Township, Range: T12S, R65W, Sec. 35
 Landform (hillslope, terrace, etc.): Swale Local relief (concave, convex, none): Concave Slope (%): <1%
 Subregion (LRR): LRR G Lat: 38.969592 Long: -104.634187 Datum: NAD 83
 Soil Map Unit Name: Brng (Aridic Haplustolls) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>	
Remarks: <u>Upland swale</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 x 30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. <u>X</u>				
2. <u>X</u>				
3. <u>X</u>				
4. <u>X</u>				
Sapling/Shrub Stratum (Plot size: <u>15 x 15</u>) <u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: <u> </u> OBL species <u> </u> x 1 = <u> </u> FACW species <u> </u> x 2 = <u> </u> FAC species <u> </u> x 3 = <u> </u> FACU species <u>64</u> x 4 = <u>256</u> UPL species <u>35</u> x 5 = <u>175</u> Column Totals: <u>99</u> (A) <u>431</u> (B) Prevalence Index = B/A = <u>4.35</u>
1. <u>X</u>				
2. <u>X</u>				
3. <u>X</u>				
4. <u>X</u>				
Herb Stratum (Plot size: <u>5 x 5</u>) <u>0</u> = Total Cover				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Bromopsis inermis</u>	<u>35</u>	<u>✓</u>	<u>UPL</u>	
2. <u>Canada thistle (Cirsium arvense)</u>	<u>15</u>		<u>FACU</u>	
3. <u>Poa pratensis</u>	<u>49</u>	<u>✓</u>	<u>FACU</u>	
4. <u>unknown forb</u>	<u>1</u>			
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
Woody Vine Stratum (Plot size: <u> </u>) <u>100</u> = Total Cover				
1. <u>X</u>				Hydrophytic Vegetation Present? Yes <u> </u> No <u>✓</u>
2. <u>X</u>				
% Bare Ground in Herb Stratum <u>0</u> <u>0</u> = Total Cover				

Remarks:

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	7.5 yr 3/2	100					Sill	A horizon
7-18+	7.5 yr 2.5/1	100					SL	C Horizon

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	<input type="checkbox"/> (MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> (LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/ADepth (inches): Hydric Soil Present? Yes No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> (where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	

Secondary Indicators (minimum of two required)

<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> (where tilled)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes No X Depth (inches): Saturation Present? Yes No X Depth (inches):
(includes capillary fringe)Wetland Hydrology Present? Yes No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: The Ranch City/County: El Paso Co. Sampling Date: 6/28/18
 Applicant/Owner: Classic Homes State: CO Sampling Point: 2
 Investigator(s): Dan Maynard & Brandon Smith Section, Township, Range: T12S, R65W, Sec. 35
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): <1%
 Subregion (LRR): LRR 9 Lat: 38.966325° Long: -104.631462 Datum: NAD83
 Soil Map Unit Name: Columbine (Torriorthentic Haplustolls) NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology Y significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks: <u>Manmade impoundment causing ponding</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30' x 30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67%</u> (A/B)														
1. <u>/</u>																		
2. <u>/</u>																		
3. <u>/</u>																		
4. <u>/</u>																		
Sapling/Shrub Stratum (Plot size: <u>15' x 15'</u>) <u>0</u> = Total Cover				Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>15</u></td> <td>x 1 = <u>15</u></td> </tr> <tr> <td>FACW species <u>25</u></td> <td>x 2 = <u>50</u></td> </tr> <tr> <td>FAC species</td> <td>x 3 =</td> </tr> <tr> <td>FACU species</td> <td>x 4 =</td> </tr> <tr> <td>UPL species <u>13</u></td> <td>x 5 = <u>65</u></td> </tr> <tr> <td>Column Totals: <u>53</u></td> <td>(A) <u>130</u> (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = <u>2.45</u>	Total % Cover of:	Multiply by:	OBL species <u>15</u>	x 1 = <u>15</u>	FACW species <u>25</u>	x 2 = <u>50</u>	FAC species	x 3 =	FACU species	x 4 =	UPL species <u>13</u>	x 5 = <u>65</u>	Column Totals: <u>53</u>	(A) <u>130</u> (B)
Total % Cover of:	Multiply by:																	
OBL species <u>15</u>	x 1 = <u>15</u>																	
FACW species <u>25</u>	x 2 = <u>50</u>																	
FAC species	x 3 =																	
FACU species	x 4 =																	
UPL species <u>13</u>	x 5 = <u>65</u>																	
Column Totals: <u>53</u>	(A) <u>130</u> (B)																	
Herb Stratum (Plot size: <u>5' x 5'</u>) <u>0</u> = Total Cover																		
1. <u>Hordeum jubatum</u>	<u>25</u>	<input checked="" type="checkbox"/>	<u>FACW</u>															
2. <u>Eleocharis palustris</u>	<u>15</u>	<input checked="" type="checkbox"/>	<u>OBL</u>															
3. <u>Plantago patagonica</u>	<u>12</u>	<input checked="" type="checkbox"/>	<u>UPL</u>															
4. <u>Ratibida columnifera</u>	<u>1</u>		<u>UPL</u>															
5. <u>Other forbs</u>	<u>1</u>																	
Woody Vine Stratum (Plot size: <u>30' x 30'</u>) <u>54</u> = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
% Bare Ground in Herb Stratum <u>46</u> <u>0</u> = Total Cover																		
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																		
Remarks:																		

Sampling Point: 2

HYDROLOGY				
Wetland Hydrology Indicators:				
<u>Primary Indicators (minimum of one required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)		
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)		
Field Observations:		<div style="text-align: right; padding-right: 20px;"> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> </div>		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): _____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			Depth (inches): _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: The Ranch City/County: El Paso Co. Sampling Date: 6/28/18
 Applicant/Owner: Classic Homes State: CO Sampling Point: 3
 Investigator(s): Dan Maynard & Brandon Smith Section, Township, Range: 12S, 6SW, Sec. 35
 Landform (hillslope, terrace, etc.): Mild Concavity Local relief (concave, convex, none): Concave Slope (%): 2%
 Subregion (LRR): LRR 6 Lat: 38.958600° Long: -104.626800 Datum: WGS 84
 Soil Map Unit Name: Blakeland (Torriorthentic Haplustolls) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: <u>Shallow aquifer on shallow clay layer - could not dig beyond 6"</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30x30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>/</u>				
2. <u>/</u>				
3. <u>/</u>				
4. <u>/</u>				
Sapling/Shrub Stratum (Plot size: <u>15x15</u>) <u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>/</u>				
2. <u>/</u>				
3. <u>/</u>				
4. <u>/</u>				
Herb Stratum (Plot size: <u>5'x5'</u>) <u>0</u> = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Juncus arcticus</u>	<u>80</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
2. <u>Poa pratensis</u>	<u>20</u>	<input checked="" type="checkbox"/>		
3. <u>/</u>				
4. <u>/</u>				
5. <u>/</u>				
6. <u>/</u>				
7. <u>/</u>				
8. <u>/</u>				
9. <u>/</u>				
Woody Vine Stratum (Plot size: <u>30x30</u>) <u>100</u> = Total Cover				
1. <u>/</u>				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. <u>/</u>				
% Bare Ground in Herb Stratum <u>0</u> <u>0</u> = Total Cover				
Remarks:				

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-1"	7.5 YR 2.5/2	98	7.5 YR 6/8	5	C	PL	Organic	O Horizon
1-3"	7.5 YR 3/2	98	7.5 YR 6/8	2	C	PL	LS	A Horizon
3-6"	7.5 YR 2.5/2	98	7.5 YR 6/8	2	C	PL	SL	A Horizon

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input checked="" type="checkbox"/> Histosol (A1)	<input checked="" type="checkbox"/> Sandy Gleyed Matrix (S4)
<input checked="" type="checkbox"/> Histic Epipedon (A2)	<input checked="" type="checkbox"/> Sandy Redox (S5)
<input checked="" type="checkbox"/> Black Histic (A3)	<input checked="" type="checkbox"/> Stripped Matrix (S6)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input checked="" type="checkbox"/> Loamy Mucky Mineral (F1)
<input checked="" type="checkbox"/> Stratified Layers (A5) (LRR F)	<input checked="" type="checkbox"/> Loamy Gleyed Matrix (F2)
<input checked="" type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input checked="" type="checkbox"/> Depleted Matrix (F3)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)
<input checked="" type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Depleted Dark Surface (F7)
<input checked="" type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Redox Depressions (F8)
<input checked="" type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input checked="" type="checkbox"/> High Plains Depressions (F16)
<input checked="" type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input checked="" type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input checked="" type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input checked="" type="checkbox"/> Dark Surface (S7) (LRR G)
<input checked="" type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input checked="" type="checkbox"/> Reduced Vertic (F18)
<input checked="" type="checkbox"/> Red Parent Material (TF2)
<input checked="" type="checkbox"/> Very Shallow Dark Surface (TF12)
<input checked="" type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Clay
Depth (inches): 7"Hydric Soil Present? Yes ☐ No ☒Remarks: Problematic hydric soil did not pass TF 12 - soil chroma too high for Very Shallow Dark Surface

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input checked="" type="checkbox"/> Surface Water (A1)	<input checked="" type="checkbox"/> Salt Crust (B11)
<input checked="" type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input checked="" type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Dry-Season Water Table (C2)
<input checked="" type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input checked="" type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)
<input checked="" type="checkbox"/> Iron Deposits (B5)	<input checked="" type="checkbox"/> Thin Muck Surface (C7)
<input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Water-Stained Leaves (B9)	

Secondary Indicators (minimum of two required)

<input checked="" type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
(where tilled)
<input checked="" type="checkbox"/> Crayfish Burrows (C8)
<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input checked="" type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>
Saturation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): <u> </u>
(includes capillary fringe)		

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Prominent redox concentrations

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: The Ranch City/County: El Paso Co. Sampling Date: 6/28/18
 Applicant/Owner: Classic Homes State: CO Sampling Point: 4
 Investigator(s): DJM & BKS Section, Township, Range: T12S, R65W, Sec. 35
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 3.2
 Subregion (LRR): LRR G Lat: 38.955872 Long: 104.629823 Datum: WGS 84
 Soil Map Unit Name: Columbine (Torronean Haplustolls) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 x 30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>X</u>				
2. <u>X</u>				
3. <u>X</u>				
Sapling/Shrub Stratum (Plot size: <u>15 x 15</u>) <u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>X</u>				
2. <u>X</u>				
3. <u>X</u>				
Herb Stratum (Plot size: <u>5 x 5</u>) <u>0</u> = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Schoenoplectus acutus</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
2. <u>Eleocharis palustris</u>	<u>18</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
3. <u>Carex nebrascensis</u>	<u>3</u>		<u>OBL</u>	
4. <u>Hordeum jubatum</u>	<u>2</u>		<u>FACW</u>	
5. <u>Alopecurus carolinianus</u>	<u>47</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
6. <u>X</u>				
7. <u>X</u>				
8. <u>X</u>				
9. <u>X</u>				
Woody Vine Stratum (Plot size: <u>30' x 30'</u>) <u>90</u> = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>X</u>				
2. <u>X</u>				
% Bare Ground in Herb Stratum <u>10</u> <u>0</u> = Total Cover				

Remarks:

SOIL

Sampling Point:

4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|--|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input checked="" type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR F) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) | <input type="checkbox"/> High Plains Depressions (F16) |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) | |
- (MLRA 72 & 73 of LRR H)**

- 1 cm Muck (A9) (LRR I, J)
Coast Prairie Redox (A16) (LRR F, G, H)
Dark Surface (S7) (LRR G)
High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
Reduced Vertic (F18)
Red Parent Material (TF2)
Very Shallow Dark Surface (TF12)
Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Bedrock

Depth (inches): 18

Hydric Soil Present? Yes X No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (minimum of two required)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | (where not tilled) |
| <input checked="" type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | |

- ✓ Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Oxidized Rhizospheres on Living Roots (C3)
- (where tilled)**
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- ✓ FAC-Neutral Test (D5)
- Frost-Heave Hummocks (D7) **(LRR F)**

Field Observations:

Surface Water Present? Yes No ☒ Depth (inches): _____

Water Table Present? Yes ☐ No ☒ Depth (inches): _____

Saturation Present? Yes X No Depth (inches): 12
(includes capillary fringe)

Wetland Hydrology Present? Yes X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Saturation @ 12"

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: The Ranch City/County: El Paso Co. Sampling Date: 6/28/18
 Applicant/Owner: Classic Homes State: CO Sampling Point: 5
 Investigator(s): Dan Maynard & Brandon Smith Section, Township, Range: T12S, R65W, Sec. 35
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 2.5%
 Subregion (LRR): LRR 8 Lat: 38.961779° Long: -104.639329° Datum: NAD83
 Soil Map Unit Name: Columbine (Torriorthentic Haplustolls) NWI classification: R5UBH

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks:		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'x30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. <u>/</u>				
2. <u>/</u>				
3. <u>/</u>				
4. <u>/</u>				
Sapling/Shrub Stratum (Plot size: <u>15'x15'</u>) <u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>/</u>				
2. <u>/</u>				
3. <u>/</u>				
4. <u>/</u>				
Herb Stratum (Plot size: <u>5'x5'</u>) <u>0</u> = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Schoenoplectus acutus</u>	<u>10</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
2. <u>Carex praegracilis</u>	<u>30</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
3. <u>Carex hebrascensis</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
4. <u>Poa reflexa</u>	<u>10</u>	<input type="checkbox"/>	<u>OBL</u>	
5. <u>Alopecurus pratensis</u>	<u>5</u>	<input checked="" type="checkbox"/>	<u>FACW</u>	
6. <u>Eleocharis palustris</u>	<u>20</u>	<input checked="" type="checkbox"/>	<u>OBL</u>	
7. <u>/</u>				
8. <u>/</u>				
9. <u>/</u>				
Woody Vine Stratum (Plot size: <u>30'x30'</u>) <u>95</u> = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>/</u>				
2. <u>/</u>				
% Bare Ground in Herb Stratum <u>5</u> <u>0</u> = Total Cover				

Remarks:

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-6"	10 YR 2/1	100					Organic Fibric Material
6-9"	10 YR 3/1	100					SL Med.
9-18"	10 YR 4/1	100					Sand Coarse

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input checked="" type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> High Plains Depressions (F16)
(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): N/A

Hydric Soil Present? Yes ☒ No ☐

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input checked="" type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Water-Stained Leaves (B9)	

Secondary Indicators (minimum of two required)

<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
(where tilled)
<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Geomorphic Position (D2)
<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches):

Water Table Present? Yes ☐ No ☒ Depth (inches):

Saturation Present? Yes ☒ No ☐ Depth (inches): 2"

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: The Ranch City/County: El Paso Co. Sampling Date: 6/28/18
 Applicant/Owner: Classic Homes State: CO Sampling Point: G
 Investigator(s): Dan Maynard & Brandon Smith Section, Township, Range: T12S, R65W, Sec. 35
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): concave Slope (%): 2
 Subregion (LRR): LRR 6 Lat: 38.961028 Long: -104.642174 Datum: WGS 84
 Soil Map Unit Name: Columbine (Torriorthentic Haplustolls) NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u>X</u> No <u> </u>
Hydric Soil Present?	Yes <u>X</u> No <u> </u>		
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>		
Remarks:			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30 x 30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>X</u>				
2. <u>X</u>				
3. <u>X</u>				
Sapling/Shrub Stratum (Plot size: <u>15 x 15</u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>X</u>				
2. <u>X</u>				
3. <u>X</u>				
Herb Stratum (Plot size: <u>5 x 5</u>)				Hydrophytic Vegetation Indicators: <u>✓</u> 1 - Rapid Test for Hydrophytic Vegetation <u>✓</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> 5 - Wetland Non-Vascular Plants ¹ <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Carex nebrascensis</u>	<u>70</u>	<u>✓</u>	<u>OBL</u>	
2. <u>Eleocharis palustris</u>	<u>20</u>	<u>✓</u>	<u>OBL</u>	
3. <u>Juncus acrocarpus</u>	<u>4</u>		<u>FACW</u>	
4. <u>Poa pratensis</u>	<u>4</u>		<u>FACU</u>	
5. <u> </u>				
6. <u> </u>				
7. <u> </u>				
8. <u> </u>				
9. <u> </u>				
10. <u> </u>				
Woody Vine Stratum (Plot size: <u>30 x 30</u>)				
1. <u>X</u>				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
2. <u>X</u>				
% Bare Ground in Herb Stratum <u>2</u>				
Remarks:				

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4"	10yr 2/2	100					LS	High organic content
4-10"	7.5yr 2.5/1	100					SCL	
10"+	7.5yr 2.5/1	100					LS	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input checked="" type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/A

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____Water Table Present? Yes _____ No X Depth (inches): _____Saturation Present? Yes X No _____ Depth (inches): 10"
(includes capillary fringe)Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



ATTACHMENT VIII:

PHOTOGRAPHIC LOG

THE RANCH DEVELOPMENT PROJECT
WETLAND DELINEATION REPORT – PHOTOGRAPHIC LOG



Ephemeral stream channel from the berm below Pond A, facing southwest. Though there are a few captive populations of rushes (*Juncus arcticus*) in the channel, this stream lacks wetland vegetation, hydric soils, and hydrology. Although the stream does retain a defined streambed and defined stream banks briefly below the berm, it quickly becomes an undefined upland swale, and eventually loses all definition as a drainageway.



Looking southwest at Wetland D, an isolated depressional wetland near the southeast corner of the site that is expected to be considered non-jurisdictional by the USACE. Impacts to non-jurisdictional wetlands do not require permitting under Section 404 of the Clean Water Act at the time of this writing.



View of Isolated Wetland B facing south, showing the in-channel wetland vegetation and Pond A. Seasonally, the vegetated channel is expected to retain hydrology for portions of the year, and the pond is expected to remain flooded relatively permanently. However, the channel is not connected hydrologically to any WOUS.



View of the eastern drainage that is depicted as an NHD watercourse and a riverine NWI wetland in the datasets. Neither of the eastern drainages displayed the characteristics of a stream channel – lacking defined bed and bank and lacking significant hydrological conveyance. This drainage is best characterized as an upland swale.